Association for Information Systems

AIS Electronic Library (AISeL)

PACIS 2019 Proceedings

Pacific Asia Conference on Information Systems (PACIS)

6-15-2019

How Social Experience Encourages Donation Intention to Charitable Crowdfunding Projects on Social Media: Empathy and Personal Impulsiveness

Boying Li

University of Nottingham, boying.li@nottingham.edu.cn

Fangfang Hou

Nottingham University Business School China, fangfang.hou@nottingham.edu.cn

Zhengzhi Guan

University of Nottingham, Ningbo, China, zhengzhi.guan@nottingham.edu.cn

Alain Chong

University of Nottingham (Ningbo Campus), alain.chong@nottingham.edu.cn

Follow this and additional works at: https://aisel.aisnet.org/pacis2019

Recommended Citation

Li, Boying; Hou, Fangfang; Guan, Zhengzhi; and Chong, Alain, "How Social Experience Encourages Donation Intention to Charitable Crowdfunding Projects on Social Media: Empathy and Personal Impulsiveness" (2019). *PACIS 2019 Proceedings*. 195.

https://aisel.aisnet.org/pacis2019/195

This material is brought to you by the Pacific Asia Conference on Information Systems (PACIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in PACIS 2019 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

How Social Experience Encourages Donation Intention to Charitable Crowdfunding Projects on Social Media: Empathy and Personal Impulsiveness

Completed Research Paper

Boying Li

Nottingham University Business School China

199 Taikang East Road, Ningbo, China boying.li@nottingham.edu.cn

Zhengzhi Guan

Nottingham University Business School China

199 Taikang East Road, Ningbo, China zhengzhi.guan@nottingham.edu.cn

Fangfang Hou

Nottingham University Business School China

199 Taikang East Road, Ningbo, China fangfang.hou@nottingham.edu.cn

Alain Yee-Loong Chong

Nottingham University Business School China

199 Taikang East Road, Ningbo, China alain.chong@nottingham.edu.cn

Abstract

Embedding charitable crowdfunding into social media is a new practice that encourages prosocial behaviors. The rich social experience in charitable crowdfunding on social media distinguishes this context from other conventional contexts like charity fundraising websites. Specifically, this study incorporates social experience, empathy and personal impulsiveness to investigate donation intention in this new context. By analyzing survey data collected in China, this study finds that empathy mediates the effects of interaction with fundraiser and perceived proximity with donatee on a user's donation intention. Social influence on social media platform is found to have positive influences on empathy and on donation intention. This study also investigates how empathy's influence on donation intention varies by personal impulsiveness. It contributes to extant literature by highlighting the mediating role of empathy and the moderating role of personal impulsiveness. It also provides practical insights to encourage pro-social behaviors.

Keywords: Charitable crowdfunding on social media, donation intention, empathy, social experience, personal impulsiveness

Introduction

Crowdfunding is the information technology (IT)-enabled process that harnesses the power of a large number of people for many relatively small contributions (Liu et al. 2018). An increasing number of non-profit organizations and charities are raising money via crowdfunding, which is known as the charitable crowdfunding. Charitable crowdfunding refers to the IT-enabled process that collects donations and financial supports from the crowd where each person mainly makes small amount of donation (Gerber and Hui 2013; Li et al. 2018). In 2015, charitable crowdfunding managed to collect USD 2.85 billion donations all over the world (Liu et al. 2018).

Recently, there is an emerging trend for embedding the charitable crowdfunding into social media. Different from conventional charitable crowdfunding where the call for donation are made to a large number of single and independent individuals, charitable crowdfunding on social media leverages the highly connected social network on social media platforms. This new practice of combining charitable crowdfunding and social media is characterized with several novel features. First, each user on the social media can serve not only as a donator but also as an endorser who can invite their friends on social media to provide support together. Comparing to inviting friends to donate in the offline context, such endorsement is salient and visible to everyone within and beyond the existing social network of the endorser. Second, each user on the social media can observe who in his or her current social network has donated to or endorsed the charity project. Third, each user on the social media can interact with the fundraiser for charity project details through both comments and instant messaging enabled by the social media platform (Liu et al. 2018).

The new practice of charitable crowdfunding on social media is becoming increasingly important. Social media serves as a valuable platform for charities, non-profit organizations and individuals in need to collect donations. According to the China Online Donations Report, charitable crowdfunding on social media raised more than RMB 428 million (i.e. around USD 64 million) donations in 2014 (Song 2016). Charitable crowdfunding on social media allows non-profit organizations and individual fundraisers to access a large scale of connected audiences promptly, to update charity project information timely and to encourage donation easily. Moreover, social media users can have easy access to a wide range of online charity projects, and the donation can be made easily with online payment (Li et al. 2018). Through charitable crowdfunding on social media, social media platforms are able to encourage and facilitate their users to help those in need. Therefore, understanding the donation behavior in charitable crowdfunding on social media is of great importance for encouraging pro-social behaviors and can benefit the society.

The novel features of charitable crowdfunding on social media cultivate the social experience of users, which distinguishes this context from other contexts such as charity fundraising websites. Though prior research has noticed the importance of social experience as the motivation in online donation, there is a lack of systematic investigation in the role of social experience with different stakeholders in the context (Choy and Schlagwein 2016). This study thus seeks to understand how a user's social experience with different stakeholders influences her or his donation intention in charitable crowdfunding on social media. A user of charitable crowdfunding on social media may develop social experience with three main stakeholders - the donatee, the fundraiser and other social media users. Therefore, this study aims to investigate how social experience influences donation intention to charitable crowdfunding projects on social media by examining the roles of perceived proximity with donatee, interaction with fundraiser and social influence on social media.

Moreover, empathy has been identified as an important driver of charity donation in the offline context (Cialdini et al. 1997; Lee et al. 2014). However, interaction and communication online can be different from those offline, and the empathy may play different roles in the online context. Yet, relatively limited attention has been paid to the role of empathy in online fundraising. Therefore, this study also seeks to investigate how empathy can be influenced by social experience and substantially contribute to donation intention in charitable crowdfunding on social media. In addition, individuals with different traits may act differently when experiencing empathy. Personal impulsiveness, a personal trait that is influential on online user behavior, is thus incorporated as a potential moderator in this study (Bennett 2009).

This study has several contributions. Theoretically, we investigate the donation behavior in an unconventional application of social media – charitable crowdfunding on social media. Moreover, we identify three dimensions of social experience in this new context (i.e. social influence on social media platform, interaction with fundraiser and perceived proximity with donatee) and examine their effects on donation intention. Furthermore, we extend the understanding on empathy by examining its mediating role in online fundraising and how personal impulsiveness moderates the effect of empathy on donation intention. Practically, our findings can be used to guide the non-profit organizations and individual fundraisers to better form strategies to increase donations; meanwhile, the findings can also help social media platforms to encourage pro-social behaviors.

This paper is organized as follows. The next section reviews relevant theory and literature. Section 3 develops the research model and hypotheses. Section 4 presents the data collection and analysis. After that, section 5 discusses our findings. Finally, section 6 summarizes our conclusions, highlights our contributions and discusses some potential directions of future research.

Theoretical Background

Empathy

Empathy is considered as having both affective and cognitive components. Cognitively, empathy has been defined as the cognitive capacity of being aware of another person's internal state (Bagozzi and Moore 1994; Lee et al. 2014). Affectively, empathy has been considered as the sharing of perceived emotions or feelings of other people (Damon 1996). In this study, empathy, as a psychological state, refers to the extent to which an individual shares the feelings with a specific target in an online charity project. It is generated from the apprehension of other people's feelings or emotional states and creates an affective state that is congruent with the perceived state of others (Lee et al. 2014). Empathy has been found to be closely associated with thoughts and behaviors (Damon 1996). Prior research has shown that empathy can create the desire to care for another and stimulate the performance of pro-social behaviors in the offline context (Lee et al. 2014; Twenge et al. 2007). For example, the study of Dovidio et al. (1990) has found that empathy can lead to altruistic motivation to help. The study of Coke et al. (1978) has also shown that empathy mediates the relationship between arousal manipulation and helping decisions. More recently, empathy has been investigated in the context of online fundraising (Liu et al. 2018); however, limited research has investigated how empathy can be affected by different social experience and lead to donation intention online.

Personal Impulsiveness

Personal impulsiveness refers to the personality trait that one tends to behave unreflectively and spontaneously (Rook and Fisher 1995). An impulsive person is likely to experience emerging urge to make on-spot decision and to act on such feeling without fully evaluating the consequence of the action (Parboteeah et al. 2009; Rook and Fisher 1995; Wells et al. 2011). She or he has the inclination to get the gratification through acting immediately. Personal impulsiveness has been frequently investigated as the core explanatory variable of impulsive purchase in shopping context (Bennett 2009; Elizabeth Ferrell and Beatty 1998). It has also been considered as a key criterion for customer segmentation for discriminatory pricing strategy (Bennett 2009; Elizabeth Ferrell and Beatty 1998). Recently, researchers have started to use personal impulsiveness to explain pro-social behavior such as online donation (Bennett 2009). Although the influences of personal impulsiveness in online and offline contexts have drawn increasing attention, most of extant studies have focused on its direct effect on behavioral intention (Bennett 1990; Wells et al. 2011). It has been suggested that personal impulsiveness and emotional state may interact to shape behavior (Koff and Lucas 2011). However, the moderating effect of personal impulsiveness on the relationship between the emotional experience and donation intention has received limited attention (Lee and Yi 2008).

Hypotheses Development

Social Influence on Social Media Platform and Donation Intention

Social influence refers to one's social experience of the influence from important others such as close friends(Venkatesh et al. 2012). Social influence consists of three processes, namely compliance, internalization and identification (Cheung et al. 2011). In the compliance process, one thinks that others expect her or him to conduct certain behaviors which are associated with rewards. In the internalization process, one accepts and follows common self-guides to achieve certain goals that are shared with others. In the identification process, one accepts influence so that she or he can create or maintain satisfying relationships with others.

Social influence can shape an individual's attitudes and actions because of the compliance process. It may affect the degree to which an individual considers others to approve her or his behavior (Hsu and Lin 2008). Considering that donating is a pro-social behavior and will benefit others and the society, the public may think highly of someone who donate. Therefore, a user may think that others expect her or him to donate and such donating behavior may bring him compliments and good reputation (Twenge et al. 2007). The donation behavior is more visible to the social networks on social media than that in offline world. When people see a person donate to charitable crowdfunding projects on social media, they tend to have positive impressions towards the donator, favor and respect the donator, and leave positive comments or 'like' the donation record. These are all the potential rewards that the donator may receive. Therefore, in the context of charitable crowdfunding on social media, when a user perceives that other users want her or him to donate to charity projects and that the donation behavior will bring in recognition and compliments, the user is more likely to donate. Therefore, we propose that:

H1a: Social influence on social media platform is positively associated with donation intention to charitable crowdfunding projects on social media.

Social Influence on Social Media Platform and Empathy

Social influence can change one's attitudes and affective responses. A user in social media may accept social influence so that he can create or keep a satisfying relationship with other members in the social media (Cheung et al. 2011). Such identification process may strengthen the bonding between the user and the social media community. In this case, the user's perception may be affected by the community. She or he may share the feelings of other members on the social media, including the affective response to the charity project donatee. When the user feels that others expect her or him to show compassion, she or he is inclined to empathize towards the charity project donatee. In addition, prior research has also suggested that social influence can have impact on moral development and that empathy is one expression of morality (Damon 1996). Therefore, we propose that social influence from other users on social media may lead to empathy:

H1b: Social influence on social media platform is positively associated with empathy.

Interaction with Fundraiser and Donation Intention

According to Wan et al (2017), interaction on digital platforms incorporates three aspects, namely interactivity, engagement and information sharing. Interactivity represents how interactive users can be with each other on the platform (Nambisan and Baron 2009; Ou et al. 2014). Engagement refers to users' participation in online group activities (Islam and Rahman, 2017). Information sharing can be defined as the exchange of opinions and personal experience with others on social media platforms (Kuo et al. 2009). In our study, interaction with fundraiser refers to the user's perceived social interaction experience with the fundraiser of a charitable crowdfunding project on social media. The fundraiser, unnecessary to be the donatee, is the one who initiates the project and speaks on behalf of the donatee. The fundraiser posts relevant information of the charitable crowdfunding project on social media, explains the details to the users who may concern, and updates the project situation.

The interactivity, engagement and information sharing enabled by social media platforms can make people feel socially connected, which may further lead to the establishment of attachment between interacting parties. It has been stated that when the frequency of interaction increases, the probability of certain behavior such as purchase will rise accordingly (Fiedler and Sarstedt 2014). In the context of charitable crowdfunding on social media, users' experience of interaction with the fundraiser may shape their subsequent actions. Through the interaction with the fundraiser, the user can have a better understanding of the charity project and feel attached. In that case, she or he is more willing to provide financial support. Thus, it can be proposed that interaction with the fundraiser is positively associated with users' donation intention.

H2a: Interaction with fundraiser is positively associated with donation intention to charitable crowdfunding projects on social media.

Interaction with Fundraiser and Empathy

Active interaction allows users to get a deep understanding on others' opinions and feelings. It has been investigated that people are likely to establish emotional bond with others in an interactive online community (Yuqing et al. 2012). In online environment, interaction can be the foundation of comprehending another person's emotion. Through appropriate interaction, it is possible for an online user to share feelings with others. In the context of charitable crowdfunding on social media, users are likely to get familiar with the situation of the donatee via active interaction with the fundraiser. In that case, it can be possible for them to have empathetic emotion towards the donatee. Hence, it is expected that users' experience of interaction with the fundraiser is likely to evoke their empathy. We hypothesize that:

H2b: Interaction with fundraiser is positively associated with empathy.

Perceived Proximity with Donatee and Donation Intention

Perceived proximity is a dyadic and asymmetric construct which refers to one person's feeling of how close another person is (Wilson et al. 2008). Different from physical proximity which is objectively measurable (e.g., geography distance measured in miles), perceived proximity describes one's subjective experience (O'Leary et al. 2014). Developed in social contexts, perceived proximity reflects one's perceptions and attitudes about how close her or his relationship is with specific others, regardless of the physical distance. Perceived proximity consists of cognitive and affective components (Wilson et al. 2008). The cognitive component refers to one's mental assessment of how far another one seems. The affective component reflects that instead of a purely rational assessment, one's sense of perceived proximity is subject to emotions. Prior research has shown that perceived proximity can positively affect relationship quality (O'Leary et al. 2014).

In the online environment, the proximity one feels towards others reduces the sense of uncertainty, lowers self-defensive mechanism and provides feelings of genuineness (Edwards et al. 2009). In the context of social media, it has been found that people who perceive a sense of closeness are more inclined to have altruistic behaviors towards the target (Lee et al. 2018). In terms of the charitable crowdfunding project on social media, perceived proximity with donatee refers to a user's subjective experience of how close the donatee is. When users feel the donatee is close, they tend to perceive the charity project to be more influential and trustworthy (Hernández-Ortega 2018). In that case, they are more likely to perform supportive behaviors towards the charity project such as donating. Therefore, it is expected that the perceived proximity with the donatee of the charitable crowdfunding project on social media may induce donation intention. It is proposed that:

H3a: Perceived proximity with donatee is positively associated with donation intention to charitable crowdfunding projects on social media.

Perceived Proximity with Donatee and Empathy

The perceived proximity can reduce discriminatory views and generate strong emotional responses (Lee et al. 2018). Prior literature has suggested that reducing the distance one feels towards others can

lead to the enhancement of caring and pro-social behaviors (Small and Simonsohn 2007). In the context of charitable crowdfunding on social media, when people feel close to the donatee, they are more likely to relate themselves to the donatee and imagine how the donatee feels. It enhances their understanding of the donatee's sufferings or misfortune and leads to the feelings of compassion and concern. Therefore, it is expected that perceived proximity may lead to the tendency to empathize. It is proposed that:

H3b: Perceived proximity with donatee is positively associated with empathy.

Empathy and Donation Intention

In the context of charitable giving, empathy usually represents how compassionate a person feels on others (Lee et al. 2014). It has been argued that people with empathic feeling are inclined to provide aids towards the targets in need. This is because they aim to reduce the distress of others and providing help may give them emotional gain. Therefore, empathy is considered as an essential motivator of people's moral deeds and pro-social behaviors (Eisenberg and Miller 1987). Extant studies have already tested the role of empathy in offline charitable giving, and recently increasing attention has been paid to the influences of empathy in the online context (Lee et al. 2014). With texts, pictures and videos enabled by the social media platform, users may share solid feelings and emotions with others. In the context of charitable crowdfunding on social media, when users have shared feelings with the donatee, they have the tendency to reduce the distress of the donate. Thus, they are likely to give financial support which generates emotional gain. It is thus expected that empathy will lead to donation to charitable crowdfunding projects on social media. We hypothesize that:

H4: Empathy is positively associated with donation intention to charitable crowdfunding projects on social media.

Moderating Role of Personal Impulsiveness

Impulsive people usually behave unreflectively and spontaneously (Rook and Fisher 1995). They are more sensitive and responsive to external stimuli. Therefore, they are more likely to take actions when being stimulated. For example in shopping context, when exposed to stimuli such as sales campaigns, impulsive people tend to be more open to unexpected purchase (Wells et al. 2011). In charity context, it is found that one's impulsiveness increases the tendency to donate in charity websites (Bennett 2009). Similarly, in the context of charitable crowdfunding on social media, people with high level of personal impulsiveness are also more likely to be responsive and take actions when being stimulated than those with low level of personal impulsiveness. Empathy is an emotion triggered by external stimuli (Liu et al. 2018). When experiencing empathy, impulsive users are more likely to be stimulated to provide financial support so as to get immediate gratification. Thus, we hypothesize that:

H5: The association between empathy and donation intention to charitable crowdfunding projects on social media can be strengthened by personal impulsiveness.

Methodology

Measurement Development and Data Collection

To test the hypotheses, data was collected using questionnaire survey. Measures of all constructs in this study were adapted from validated instruments and modified to fit the current research context. Specifically, items for social influence were adapted from Venkatesh et al (2012); items for perceived proximity were adapted from O'Leary et al. (2014); items for empathy were adapted from Batson and et al. (1983); items for personal impulsiveness were adapted from Bennett (2009); and items for interaction and donation intention were adapted from Wan et al. (2017). All constructs were measured using multi-item perceptual scales and were measured on a seven-point Likert scale (1 = strongly disagree; 7 = strongly agree). As the study was conducted in China and all the respondents were Chinese, we followed the back-translation method: the questionnaire was first translated into Chinese by a researcher, and then the Chinese questionnaire was translated back to English by different

researchers. The two English versions were compared to ensure that the degree of correspondence was high. Eight experienced social media users were invited to check the questionnaire for the clarity in wording and format.

The data used for analysis was collected from Sina Weibo users. A survey company was hired to distribute the survey. Sina Weibo was selected because it is one of the most popular social media platforms in China with a charitable crowdfunding platform incorporated into its microblogging service, called Sina Micro-Philanthropy (He 2012). Through the charity platform embedded, Sina Weibo users can initiate charity projects and donate to the charity projects they want to support. The novel application of social media turns out to be quite successful (Song 2016).

At the beginning of the questionnaire, we deployed a screening question about whether respondents had knowledge of Sina Micro-Philanthropy. Respondents who answered 'no' would be led to the end of the questionnaire. In total 389 responses were received, and 211 respondents of them had knowledge of Sina Micro-Philanthropy. After excluding invalid ones, we obtained 206 valid responses at the end. Among the 206 respondents, 71.84% were females and 28.16% were males. In terms of the age, 28.64% were between 18 and 25, 27.67% were between 26 and 30, 29.61% were between 31 and 35, 11.17% were between 36 and 40, and 2.91% were above 40 years old. With regards to education, 4.85% were high school or below, 85.44% had bachelor's degree, and 9.71% had Master's degree or higher. The sample was consistent with the composition of users of Sina Micro-Philanthropy who were dominantly female, young and well-educated (Sohu 2018).

Assessment of Measurement Model

To validate the measurement model, reliability, convergent validity and discriminant validity were assessed. The loadings of all the items exceeded the required 0.70 (Hair et al. 2016). Reliability of the measurement model was tested using Cronbach's Alpha and composite reliability (CR). As shown in Table 1, the Cronbach's Alphas and the CR values were all above 0.70, thus indicating a good reliability (Hair et al. 2016). The average variance extracted (AVE) values were all above the acceptable threshold 0.5, exhibiting a good convergent validity (Table 1). As shown in Table 2, the square roots of the AVEs for all constructs were greater than their correlations with other constructs. Thus, the Fornell-Larcker criterion was met, supporting the discriminant validity of the measurement model.

As this study involved self-reported responses collected from a single setting, procedural and statistical remedies were employed to address common method variance, a potential threat to internal validity (Podsakoff et al. 2003). In the questionnaire design, the order of items was counter-balanced, some items were reverse-scored, and the demographic items were located at the end of the questionnaire. It could reduce acquiescence and avoid transient moods like boredom and fatigue (Lindell and Whitney 2001). Statistically, Harman's single-factor test was applied, and the results showed that the number of emerged factors from unrotated solution was more than one and the most significant factor accounted for less than 50% of the variance. Hence, common method variance was not a concern in this study.

Table 1. Cronbach's Alpha, Corporate Reliability and Average Variance Extracted

	Cronbach's Alpha	CR	AVE
Social Influence (SI)	0.796	0.880	0.711
Interaction (INT)	0.804	0.885	0.719
Perceived Proximity (PP)	0.845	0.894	0.679
Empathy (EM)	0.708	0.837	0.631
Personal Impulsiveness (PI)	0.765	0.856	0.665
Donation Intention (DI)	0.764	0.849	0.584

SI INT PP **EM** PΙ DI SI 0.843 INT 0.323 0.848 PP 0.309 0.398 0.824 0.354 0.352 0.423 0.795 **EM** PΙ -0.089-0.322-0.164-0.0600.815 DI 0.477 0.292 0.313 0.345 -0.2860.764

Table 2. Fornell-Larcker Criterion

Assessment of Structural Model

SmartPLS 3.0 were used to test the hypothesized relationships. Two PLS models were used to test whether mediation was occurring. The first one contained only direct paths and the second contained both direct and mediated paths. The results are demonstrated in Table 3. According to the results of Model 1, the relationships between social influence and donation intention (p<0.001), between interaction and donation intention (p<0.05), and between perceived proximity and donation intention (p<0.05) were all significant in the absence of the mediator empathy. Thus, H1a, H2a and H3a were supported. According to the results of Model 2, when empathy was included, the direct effect of social influence was still significant (p<0.001) while the direct effects of interaction and perceived proximity became insignificant. In addition, the path coefficients of social influence (p<0.001), interaction (p<0.01), and perceived proximity (p<0.001) on empathy were all significant, corroborating H1b, H2b and H3b. The result further revealed that the relationship between empathy and donation intention was positive and significant (p<0.05), supporting H4. Moreover, the moderating effect of personal impulsiveness on the relationship between empathy and donation intention was also positive and significant (p<0.05). Thus, H5 was supported. Figure 1 and Figure 2 provide the hypothesis testing results.

The results of mediation tests are presented in Table 4. Sobel tests of the indirect effects of social influence, interaction and perceived proximity on donation intention via empathy were conducted. According to the results of Sobel tests, the indirect effect of social influence and the indirect effect of interaction were significant at 0.1 level, and the indirect effect of perceived proximity was significant at 0.05 level. To assess the magnitude of the indirect effects, we also calculated the variance accounted for (VAF) (Armstrong et al. 2015). Based on the results, 33.5% of the total effect of interaction and 30.3% of the total effect of perceived proximity on donation intention were explained by the mediator empathy. In addition, 8.5% of the total effect of social influence was explained via empathy. According to Hair et al. (2014), VAF between 20% and 80% could be characterized as partial mediation, while VAF less than 20% indicated that no mediation occurred. Therefore, empathy was found to partially mediate the relationship between interaction and donation intention. It also partially mediated the relationship between perceived proximity and donation intention. However, it was not a mediator between social influence and donation intention.

To better explain the moderating effects of personal impulsiveness, the interaction of personal impulsiveness and empathy on donation intention was plotted. Figure 2 revealed that for people who were more impulsive, donation intention increased more rapidly when empathy increased. It indicated that when impulsive people experienced the feeling of empathy, they were more likely to donate.

Table 3. Hypotheses Tests (Path Analysis Results)

	Model 1: Excluding Empathy	Model 2: Full Model			
H1a: SI -> DI	0.355***	0.359***			
H1b: SI -> EM		0.210***			
H2a: INT -> DI	0.113*	0.053 ns			
H2b: INT -> EM		0.168**			
H3a: PP-> DI	0.144*	0.107 ns			
H3b: PP -> EM		0.292***			
H4: EM -> DI		0.159*			
H5: EM*PI -> DI		0.159*			
Note: ***p<0.001 **p<0.01 *p<0.05, ns: not significant.					

Table 4. Mediation Tests

Mediating effect	Variables	Path Coefficient	Standard Error	p-value for Sobel's test for mediation	VAF	
SI-EM-DI	SI-EM	0.210***	0.058	0.057	8.5%	
	EM-DI	0.159*	0.071			
	SI-DI	0.359***	0.057			
INT-EM-DI	INT-EM	0.168**	0.064	0.088	33.5%	
	EM-DI	0.159*	0.071			
	INT-DI	0.053 ns	0.06			
PP-EM-DI	PP-EM	0.292***	0.063	0.044	30.3%	
	EM-DI	0.159*	0.071			
	PP-DI	0.107 ns	0.075			
Note: ***p<0.001 **p<0.01 *p<0.05, ns: not significant.						

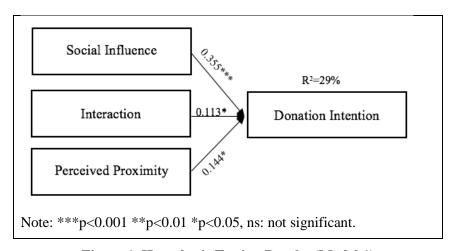


Figure 1. Hypothesis Testing Results (Model 1)

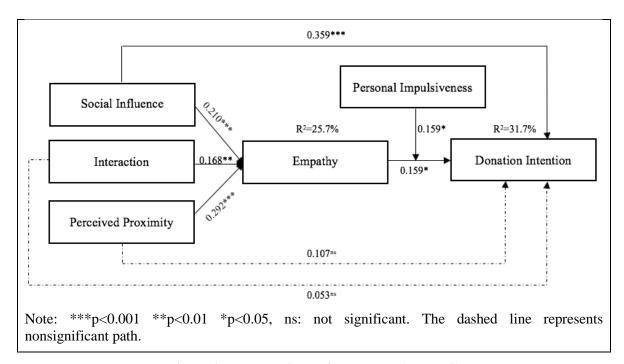


Figure 2. Hypothesis Testing Results (Model 2)

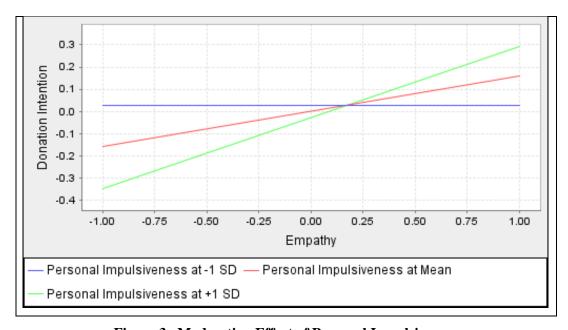


Figure 3. Moderating Effect of Personal Impulsiveness

Discussion

This study attempts to understand what drives people's behavioral intentions to donate to charitable crowdfunding projects on social media platforms. The empirical results reveal several interesting findings. First, it is found that the three dimensions of people's social experience on the social media platform (i.e., social influence on social media platform, interaction with fundraiser and perceived proximity with donatee) can positively affect their intention to donate. Specifically, in terms of social influence, the result is in accordance with the findings of Li et al. (2018), stating that social influence encourages people's donation to charity projects. For interactivity, the result is consistent with prior studies which assert that social interactions shapes people's emotions donating intentions (Merchant

et al. 2010). As to perceived proximity, the result also fits prior research which finds that perceived proximity stimulates people's participation in social media activities and accounts for altruistic behaviors (Lee et al. 2018). The importance of social influence and perceived proximity also aligns with the donator motivations identified by Choy and Schlagwein (2016). Specifically, social influence reflects the social motivation aspect and perceived proximity denotes the individual motivation aspect.

Second, empathy is found a significant mediator between people's social experience and their behavioral intentions to donate. Specifically, the results reveal that interaction with fundraiser and perceived proximity with donatee contribute to the intention to donate through the mediation of empathy and the mediation effects have different strengths. The finding agrees with prior research which suggests that empathy is a critical factor affecting people's altruistic behavior (Cialdini et al. 1997; Eisenberg and Miller 1987).

Furthermore, this study takes the social media user's personality trait of personal impulsiveness into account because people with different traits may behave differently when faced with abundant information on social media. It is found that personal impulsiveness positively moderates the relationship between empathy and intention to donate. The result indicates that for more impulsive people, the effects of empathy on donation intention are stronger. It is in line with the study of Koff and Lucas (2011) suggesting that personal impulsiveness and emotional state can interplay with each other and shape user behavior together.

Conclusion and Future Research

This study investigates donation intention in the context of charitable crowdfunding on social media. It finds that empathy partially mediates the influences of interaction with fundraiser and perceived proximity with donatee on donation intention respectively. Social influence on social media platform is found to have positive effects on empathy and donation intention. Nevertheless, there is no evidence showing that empathy mediates the effects of social influence on donation intention. Moreover, it is confirmed that personal impulsiveness significantly moderates the relationship between empathy and donation intention.

The contributions of this study can be fourfold. First, this study validates the effects of three dimensions of social experience (i.e., social influence on social media platform, interaction with fundraiser and perceived proximity with donatee) on donation intention. It highlights the salience of a user's social experience with three main stakeholders in the unconventional usage of charitable crowdfunding on social media. Second, it contributes to empathy literature by examining the mediating role of empathy in the online context. This study illustrates the mechanism where interaction with fundraiser and perceived proximity with donatee lead to donation intention through empathy. Moreover, this study further advances our understanding of empathy through investigating how the effects of empathy on donation intention vary by personal impulsiveness. Finally, this study explores user pro-social behavior in an unconventional application of social media – charitable crowdfunding on social media – and provides insights into people's donation intention.

Based on our findings, the following suggestions can be made to cultivate charitable crowdfunding project on social media and to encourage donation. First, we recommend social media platforms to incorporate users' existing network when designing the functions of charitable crowdfunding applications. For example, the platform can show a user how many people in her or his network have provided financial support and/or commented on a charity project. This can facilitate the cultivation of empathy and encourage online donation. Second, it is also suggested that social media platforms should enable real-time interaction and allow different forms of information (e.g. video, pictures and text descriptions) so that users can establish emotional bond with the donatee and/or fundraiser. Third, with users' permission, social media platforms may also consider sending short survey quiz to identify the impulsiveness of the users. In doing so, information about charitable crowdsourcing can be recommended to impulsive users in priority. This may help fundraisers find the appropriate target and get support in time. In addition, we suggest that the non-profit organizations and individual fundraisers should consider using charitable crowdfunding on social media and actively respond to and interact with social media users.

This study can be extended in the following ways. Although this study has confirmed the importance of empathy in online donation, empathy is not the only motivator that influences donation intention. Future research is suggested to look at the effects of other factors such as moral value and justice. Second, this study tests the effects of social experience; however, the design features of the platform and the charitable crowdfunding project campaign are not examined, which can be explored in future research. Furthermore, the data in this study is collected in China. Future research can test the model in other cultural contexts.

Acknowledgement

This research is partially supported by Major Collaboration Program 2017 funded by Ningbo Science and Technology Bureau (reference number: 2017D10032).

References

- Armstrong, D. J., Brooks, N. G., and Riemenschneider, C. K. 2015. "Exhaustion From Information System Career Experience: Implications for Turn-Away Intention," *MIS Quarterly* (39:3), pp. 713–727.
- Bagozzi, R. P., and Moore, D. J. 1994. "Public Service Advertisements: Emotions and Empathy Guide Prosocial Behavior," *Journal of Marketing* (58:1), pp. 56–70.
- Batson, C. D., and et al. 1983. "Influence of Self-Reported Distress and Empathy on Egoistic versus Altruistic Motivation to Help," *Journal of Personality and Social Psychology* (45:3), pp. 706–718.
- Bennett, R. 2009. "Impulsive Donation Decisions during Online Browsing of Charity Websites," *Journal of Consumer Behaviour* (8:2–3), pp. 116–134.
- Bennett, S. 1990. *Theatre Audiences: A Theory of Production and Reception*, New York: Routledge. Cheung, C. M. K., Chiu, P. Y., and Lee, M. K. O. 2011. "Online Social Networks: Why Do Students Use Facebook?," *Computers in Human Behavior* (27:4), pp. 1337–1343.
- Choy, K., and Schlagwein, D. 2016. "Crowdsourcing for a Better World: On the Relation between IT Affordances and Donor Motivations in Charitable Crowdfunding," *Information Technology and People* (29:1), pp. 221–247.
- Cialdini, R. B., Brown, S. L., Lewis, B. P., Luce, C., and Neuberg, S. L. 1997. "Reinterpreting the Empathy- Altruism Relationship: When One Into One Equals Oneness," *Journal of Personality and Social Psychology* (73:3), pp. 481–494.
- Coke, J. S., Batson, C. D., and McDavis, K. 1978. "Empathic Mediation of Helping: A Two-Stage Model," *Journal of Personality and Social Psychology* (36:7), pp. 752–766.
- Damon, W. 1996. "The Lifelong Transformation of Moral Goals through Social Influence," in *Interactive Minds: Life-Span Perspectives on the Social Foundation of Cognition*, P. B. Baltes and U. M. Staudinger (eds.), New York, NY: Cambridge University Press, pp. 198–220.
- Dovidio, J. F., Allen, J. L., and Schroeder, D. A. 1990. "Specificity of Empathy-Induced Helping: Evidence for Altruistic Motivation," *Journal of Personality and Social Psychology* (59:2), pp. 249–260.
- Edwards, S. M., Jin Kyun, L., and La Ferle, C. 2009. "Does Place Matter When Shopping Online? Perceptions of Similarity and Familiarity As Indicators of Psychological Distance," *Journal of Interactive Advertising* (10:1), pp. 35–50.
- Eisenberg, N., and Miller, P. A. 1987. "The Relation of Empathy to Prosocial and Related Behaviors," *Psychological Bulletin* (101:1), pp. 91–119.
- Elizabeth Ferrell, M., and Beatty, S. E. 1998. "Impulse Buying: Modeling Its Precursors," *Journal of Retailing* (74:2), pp. 169–191.
- Fiedler, M., and Sarstedt, M. 2014. "Influence of Community Design on User Behaviors in Online Communities," *Journal of Business Research* (67:11), pp. 2258–2268.
- Gerber, E. M., and Hui, J. 2013. "Crowdfunding: Motivations and Deterrents for Participation," *ACM Transactions on Computing-Human Interaction* (20:6).

- Hair, J. F., Hult, G. T. M., Ringle, C., and Sarstedt, M. 2016. *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, (2nd ed.), California: SAGE Publications Inc.
- He, D. 2012. "Sina Weibo Launches New Charity Platform," *China Daily*. (http://www.chinadaily.com.cn/china/2012-11/12/content_15918865.htm, accessed May 2, 2019).
- Hernández-Ortega, B. 2018. "Don't Believe Strangers: Online Consumer Reviews and the Role of Social Psychological Distance," *Information and Management* (55:1), Elsevier B.V., pp. 31–50.
- Hsu, C. L., and Lin, J. C. C. 2008. "Acceptance of Blog Usage: The Roles of Technology Acceptance, Social Influence and Knowledge Sharing Motivation," *Information and Management* (45:1), pp. 65–74.
- Koff, E., and Lucas, M. 2011. "Mood Moderates the Relationship between Impulsiveness and Delay Discounting," *Personality and Individual Differences* (50:7), Elsevier Ltd, pp. 1018–1022.
- Kuo, Y. F., Wu, C. M., and Deng, W. J. 2009. "The Relationships among Service Quality, Perceived Value, Customer Satisfaction, and Post-Purchase Intention in Mobile Value-Added Services," *Computers in Human Behavior* (25:4), pp. 887–896.
- Lee, A. R., Hon, L., and Won, J. 2018. "Psychological Proximity as a Predictor of Participation in a Social Media Issue Campaign," *Computers in Human Behavior* (85), Elsevier Ltd, pp. 245–254.
- Lee, G. Y., and Yi, Y. 2008. "The Effect of Shopping Emotions and Perceived Risk on Impulsive Buying: The Moderating Role of Buying Impulsiveness Trait," *Seoul Journal of Business* (14:2), pp. 67–92.
- Lee, S., Winterich, K. P., and Ross, W. T. 2014. "I'm Moral, but I Won't Help You: The Distinct Roles of Empathy and Justice in Donations," *Journal of Consumer Research* (41:3), pp. 678–696.
- Li, Y. Z., He, T. L., Song, Y. R., Yang, Z., and Zhou, R. T. 2018. "Factors Impacting Donors' Intention to Donate to Charitable Crowd-Funding Projects in China: A UTAUT-Based Model," *Information Communication and Society* (21:3), pp. 404–415.
- Lindell, M. K., and Whitney, D. J. 2001. "Accounting for Common Method Variance in Cross-Sectional Research Designs," *Journal of Applied Psychology* (86:1), pp. 114–121.
- Liu, L., Suh, A., and Wagner, C. 2018. "Empathy or Perceived Credibility? An Empirical Study on Individual Donation Behavior in Charitable Crowdfunding," *Internet Research* (28:1), pp. 623–651.
- Merchant, A., Ford, J. B., and Sargeant, A. 2010. "Charitable Organizations' Storytelling Influence on Donors' Emotions and Intentions," *Journal of Business Research* (63:7), Elsevier Inc., pp. 754–762.
- Nambisan, S., and Baron, R. A. 2009. "Virtual Customer Environments: Testing a Model of Voluntary Participation in Value Co-Creation Activities," *Journal of Product Innovation Management* (26:4), pp. 388–406.
- O'Leary, M. B., Wilson, J. M., and Metiu, A. 2014. "Beyond Being There: The Symbolic Role of Communication and Identification in Perceptions of Proximity to Geographically Dispersed Colleagues," *MIS Quarterly*, pp. 1219–1243.
- Ou, C. X., Pavlou, P. A., and Davison, R. M. 2014. "Swift Guanxi in Onlie Marketplaces: The Role of Computer-Mediated Communication Technologies," *MIS Quarterly* (38:1), pp. 209–230.
- Parboteeah, D. V., Valacich, J. S., and Wells, J. D. 2009. "The Influence of Website Characteristics on a Consumer's Urge to Buy Impulsively," *Information Systems Research* (20:1), pp. 60–78.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., and Podsakoff, N. P. 2003. "Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies," *Journal of Applied Psychology* (88:5), pp. 879–903.
- Rook, D. W., and Fisher, R. J. 1995. *Normative Influences on Impulsive Buying Behavior*, (22:December), pp. 305–313.
- Small, D. A., and Simonsohn, U. 2007. "Friends of Victims: Personal Experience and Prosocial Behavior," *Journal of Consumer Research* (35), pp. 532–542.
- Sohu. 2018. "2018 User Aanlysis of Sina Micro-Philanthropy (in Chinese)," *Sohu.com*. (http://www.sohu.com/a/233566303_267454, accessed May 2, 2019).

- Song, J. 2016. "Chinese Philanthropy Boosted by Internet-Based Charity," *China Daily*. (http://www.chinadaily.com.cn/opinion/2016-02/28/content_23671020.htm, accessed May 2, 2019).
- Twenge, J. M., Ciarocco, N. J., Baumeister, R. F., DeWall, C. N., and Bartels, J. M. 2007. "Social Exclusion Decreases Prosocial Behavior," *Journal of Personality and Social Psychology* (92:1), pp. 56–66.
- Ul Islam, J., and Rahman, Z. 2017. "The Impact of Online Brand Community Characteristics on Customer Engagement: An Application of Stimulus-Organism-Response Paradigm," *Telematics and Informatics* (34:4), pp. 96–109.
- Venkatesh, V., Thong, J. Y. L., and Xu, X. 2012. "Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology," *MIS Quarterly* (36:1), pp. 157–178.
- Wan, J., Lu, Y., Wang, B., and Zhao, L. 2017. "How Attachment Influences Users' Willingness to Donate to Content Creators in Social Media: A Socio-Technical Systems Perspective," *Information and Management* (54:7), Elsevier B.V., pp. 837–850.
- Wells, J. D., Parboteeah, D. V., and Joseph S. Valacich. 2011. "Understanding the Interplay between Consumer Impulsiveness and Website Quality," *Journal of the Association for Information Systems* (12:1), pp. 32–56.
- Wilson, J. M., O'Leary, M. B., Metiu, A., and Jett, Q. R. 2008. "Perceived Proximity in Virtual Work: Explaining the Paradox of Far-but-Close," *Organization Studies* (29:7), pp. 979–1002.
- Yuqing, R., Harper, F. M., Drenner, S., Terveen, L., Kiesler, S., Reidl, J., and Kraut, R. E. 2012. "Building Member Attachement in Online Communities: Applying Theories of Group Identity and Interpersonal Bongroup Behaviords," *Management Information Systems Quarterly* (36:3), pp. 841–864.