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Communication Style in Medical Crowdfunding: Effect of Emotional Framing and Updates Frequency on Funding and Emotional Support

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Abstract: Despite the rise of medical crowdfunding and its benefits to patients including reducing financial hardships and providing emotional social support, limited attention has been paid to how a campaign organizer can drive performance. In this study, we investigate how the communication style used in a medical crowdfunding campaign can affect both the funding performance and emotional support received. We find that emotional framing and frequent updates have a positive effect on funding and emotional support and discuss the implications.

INTRODUCTION

More recently, online medical crowdfunding – soliciting for funds from the internet crowd - has become an increasingly common response to healthcare costs. Medical crowdfunding has been helping individuals finance medical expenses and reduce medical bankruptcy (Burtch & Chan, 2018). In addition, it has become a resource for emotional social support for patients (Gonzales, Kwon, Lynch, & Fritz, 2018; Kim, Vaccaro, Karahalios, & Hong, 2017), a positive spillover effect where the crowd also show concern, provide warmth and encouragement to the patient.

While prior crowdfunding research has explored the different drivers of crowdfunding performance (e.g. Cordova, Dolci, & Gianfrate, 2015; Mollick, 2014), and have demonstrated the importance of communication in attracting donations to crowdfunding campaigns (e.g. Wang, Li, Liang, Ye, & Ge, 2018), they have mostly focused on communication in the entrepreneurial financing context with little to no attention paid to non-entrepreneurial contexts including medical crowdfunding. However, we know that different communication styles matter in different crowdfunding contexts. For instance, Parhankangas and Renko (2017) show that the communication style that matters when crowdfunding for social projects is different from the communication style that matters when crowdfunding for commercial projects. As such, we expect that communication style may play a significant role in the performance of medical crowdfunding campaigns.

Against this backdrop, we investigate how the communication style used in a medical crowdfunding campaign relates to its performance in terms of funding level and emotional social support. Particularly, we ask the following question: *how does the emotional framing of the medical crowdfunding campaign and the frequency of interaction with the crowd affect the level of funding and emotional social support received?* We investigate the aforementioned question because the willingness to donate may still be limited due to the relative newness of medical crowdfunding and because of the limited amount of studies exploring factors that drive the dual outcomes of funding and emotional support in medical crowdfunding.

Given the altruistic nature of giving in medical crowdfunding and the fact that scholars have shown that emotions can sometimes motivate people to action more than cognition (Bagozzi & Moore, 1994; Sudhir, Roy, & Cherian, 2016), we argue that emotional framing will play a positive role in the performance of medical crowdfunding campaigns. Further, we argue that a medical crowdfunding campaign whose organizer interacts frequently with the crowd will receive more funding and emotional support because the crowd will feel better informed and connected with the campaign.

To test our hypotheses, we use a sample of 306 medical crowdfunding campaigns extracted from the YouCaring (now GoFundMe) platform. In line with our prediction, we find that communication that makes the campaign more emotional, informs and builds a connection with the crowd is associated with higher funding and emotional support.

Our study contributes to the growing literature on medical crowdfunding. While prior literature on medical crowdfunding has mostly focused on understanding some of its impact (e.g. Burtch & Chan, 2018) and potential consequences (e.g. Snyder, 2016; Snyder, Mathers, & Crooks, 2016), we take the perspective of the campaign organizer to understand how the communication style might impact the funding level and emotional support.

Beyond contributing to the literature, our findings have important implications to organizers of medical crowdfunding campaigns especially now that medical crowdfunding platforms are exploring campaign-coaching services (e.g. Giveforward.com). The subtle nuances of the organizer's communications in terms of emotional framing and frequency of updates are important to the funding performance and emotional support.

BACKGROUND AND HYPOTHESES

Medical Crowdfunding

Whereas online crowdfunding has been adapted into fundraising for medical expenses, it initially gained prominence as a mechanism through which individuals could raise funds from the internet crowd for projects and business ventures. With the growing cost of health care, medical crowdfunding, has become commonplace. Medical crowdfunding differs from crowdfunding activities targeted at entrepreneurial funding for projects and business ventures. For instance, while individuals organizing projects and business venture crowdfunding can offer different tangible incentives (e.g. rewards, equity, or interests) to motivate donors, organizers of medical crowdfunding campaigns do not offer tangible incentives and therefore may rely on donors altruism and empathy for funds.

Research on medical crowdfunding has been on the rise with studies seeking to understand its usage (Berliner & Kenworthy, 2017), impacts (Burtch & Chan, 2018), and potential consequences (Snyder, 2016; Snyder et al., 2016). For instance, while Berliner and Kenworthy (2017) documents that medical crowdfunding is utilized by financially constrained individuals, Burtch and Chan (2018) show that it can reduce financial hardship and medical bankruptcy, and Snyder et al. (2016) highlights the potential for loss of privacy for patients and fraud to donors (Snyder et al., 2016). Studies have also investigated how campaign organizers demonstrate trust and motivate the crowd to donate (e.g. Kim, Kong, Karahalios, Fu, & Hong, 2016; Snyder, Crooks, Mathers, & Chow-White, 2017). They find that organizers typically rely on close–connections, collective endorsements, and a demonstration of the patient's depth of need in order to motivate the crowd to donate. In sum, the extant literature on medical crowdfunding still has not explored how communication style drives funding and emotional support.

Communication and Medical Crowdfunding Performance

Research suggests that an individual's communication style can influence others (e.g. Charlton, Dearing, Berry, & Johnson, 2008). In order to identify the communication styles that attract funding and emotional support in medical crowdfunding, it is important to consider how organizers can attract and develop a relation with the crowd. Unlike donors in entrepreneurial crowdfunding who are mostly driven by incentives, donors in the medical crowdfunding are often driven by altruism, empathy, social participation, and interaction (Gerber, Hui, & Kuo, 2012; Liu, Suh, & Wagner, 2017). Hence, communication styles that draws on the crowd's empathy, provokes altruism, informs them and allows for the development of a relation are expected to boost the funding and emotional support levels of a medical crowdfunding campaign.

According to psychologists, communication styles that have the potential to evoke empathy and build rapport in individuals are often emotional (Dickert, Sagara, & Slovic, 2011; Dickert & Slovic, 2013). Empathy, an emotional response triggered by another person's misfortune has been shown to lead to prosocial behavior (Bagozzi & Moore, 1994; Batson et al., 1997). Emotional communication can trigger empathy through different mechanism like identified victim effect or in-group effect (Sudhir et al., 2016). Once triggered, prosocial behavior resulting from empathy can be an instrumental support like financial donation and/or emotional support. Hence, we expect that medical crowdfunding campaigns with more emotional framing will receive higher funding and emotional support.

H1. Higher emotional framing of the medical crowdfunding campaign will lead to higher (a) funding, and (b) emotional support.

Regular and frequent communication is necessary for relationships or connections to develop (Sias & Cahill, 1998). Regular communication and frequent communications with the crowd will keep them better informed about the campaign and patient's progress, create attachment to the patient's cause, and in turn foster confidence in the use of the donations. Regular communication through updates will create a sense of transparency and lead to increased donations (Mejia et al 2018). Hence, organizers who communicate through frequent updates provide transparency and earn crowd's trust that in turn can lead to more financial donations and emotional support. Hence, we hypothesize:

H2: Higher number of updates provided by the organizer will lead to higher (a) funding, and (b) emotional support.

DATA AND METHODOLOGY

To test our hypotheses, we extracted data from YouCaring (now GoFundMe). YouCaring was a crowdfunding platform that allowed individuals organize medical crowdfunding campaigns. Medical crowdfunding campaigns on YouCaring typically included information about the purpose of the campaign including for whom, the financial goal, and the organizer. YouCaring campaigns are typically not time bound and the organizer can withdraw funds from the campaign at any time during the campaign to help the patient. Our data consist of 306 on-going medical crowdfunding campaigns launched for breast cancer patients in 2016. The measures are presented in Table 1 and the descriptive statistics is available upon request.

Table 1: Measures

Variable	Description	Type
FundingLevel	Percentage of the funding goal raised	Dependent
EmoSupport	The number of encouraging wishes and prayers received	Dependent
Emotional	Binary indicator of whether the campaign has a high emotional framing or not. Coded by graduate students who read the campaign pitches	Independent
Updates	The number of updates in a campaign provided by the organizer	Independent
Shares	Number of social media shares of the campaign	Control
FundingGoal	The amount of money the campaign intends to raise	Control
Image	Number of images in the campaign	Control

Estimation Approach

We estimate a linear regression (OLS) model for the funding level outcome and a Tobit model for the emotional support outcome. We use Tobit model because of the censored nature of the *EmoSupport* variable. Equations (1) and (2) show the model specifications for the funding level and emotional support outcomes respectively. We report the results of our analyses in Table 2.

$$FundingLevel = \beta_0 + \beta_1 Emotional + \beta_2 Updates + Controls + \varepsilon \quad (1)$$

$$EmoSupport = \beta_0 + \beta_1 Emotional + \beta_2 Updates + Controls + \varepsilon \quad (2)$$

PRELIMINARY RESULTS AND CONCLUSION

Results from our preliminary results in Table 2 show support for all our hypotheses. Model 1 shows evidence supporting H1(a) and H2(a), while Model 2 shows evidence supporting H1(b) and H2(b). We observe that Emotional has a positive and significant effect on funding (*FundingLevel*) and emotional support (*EmoSupport*). In the same line,

we observe that Updates has a positive and significant effect on funding (*FundingLevel*) and emotional support (*EmoSuppor*t). Interestingly, we observe that the control variable *FundingGoal* has contrasting effects on funding and emotional support. While it has a negative and significant effect on funding, it has a positive and significant effect on emotional support. The positive effect on emotional support may be because large funding goals signal dire situations the crowd is further moved to offer words of encouragement.

Table 2: Results of Preliminary Analysis

	Model 1 (OLS)	Model 2 (Tobit)
	DV= FundingLevel	DV=EmoSupport
Emotional	0.5935***	10.820**
	(0.1633)	(4.354)
Updates	0.0319**	0.7844**
	(0.0145)	(0.384)
Shares	-0.2265	-0.0483
	(0.2306)	(0.1041)
FundingGoal	-0.00001***	0.0005***
	(0.0000)	(0.0000)
Image	0.0046	0.3943
	(0.0114)	(0.3038)
Observations	306	306
Adjusted R^2	0.12	
Log-Likelihood		-1467.5
Akaike. Inf. Crit.		2951.1
Note: ***p<0.01; **p<0.05; *p<0.1, Standard errors in bracket		

As medical crowdfunding continues to become commonplace due to rising healthcare costs, understanding factors that help drive funding performance and emotional support becomes important. This work-in-progress offers some insights by showing that communication style plays a significant role. Particularly, it shows that more emotionally framed medical crowdfunding campaigns evoke empathic responses from the crowd and can lead to higher funding and emotional support. Further, it shows that frequent updates can inform the crowd, create connections and show transparency, which can trigger donations and emotional support. The study adds to the growing literature on medical crowdfunding while providing practical guidelines to campaign organizers.

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