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What's in it for me? Self-serving versus other-oriented framing in messages advocating use of prosocial peer-to-peer services*



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ABSTRACT

We present a study that investigates the effectiveness of self-serving versus other-oriented motivational framing of messages designed to persuade people to sign up for a prosocial peer-to-peer (P2P) service. As part of the study, volunteer message senders were incentivized to recruit people to sign up for one of three types of prosocial P2P services. Senders were given an option of choosing one of four pre-designed invitation messages to send to their contacts, two framed for self-serving motivations and two framed for other-oriented motivations. We found that recipients were more attracted to click on messages emphasizing self-serving benefits. This may not match the expectation of senders, who generally prioritized other-oriented motives for participating in prosocial P2P services. However, after recipients clicked the messages to investigate further, effects of self versus other-framing messages depended on the nature of the service. Our findings suggest that, even for prosocial services, messages offering self-serving motivations are more effective than altruistic ones on inspiring interests. But the overall persuasive effect on conversion may be more nuanced, where the persuasion context (service type) appears to be a critical moderator.

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1. Introduction

In the new peer-to-peer (P2P) economy (Botsman and Rogers, 2010) people provide a wide range of tangible goods and services directly to one another and there are a variety of possible motivations for participation (Bellotti et al., 2015). For recipients of goods and services, such as accommodation, transportation, clothing, odd jobs and so on, motivations for participation are often self-serving; a room to stay in Paris, a ride to the airport, a clean basement, etc. Likewise providers of these goods and services can earn supplementary income as self-sufficient "micro-entrepreneurs" (Wong, 2012). However, an emerging category of P2P services are more altruistic or "prosocial" in philosophy, allowing people to provide help and resources to others. Examples include, Freecycle, where people donate items that they no longer need, Repair Café, where volunteers gather to fix broken machines and other items, WellSquad, which matches people with volunteer workout partners and trainers, and timebanks, where people provide services to others in the community.

With its cashless nature, prosocial P2P services often face challenges becoming self-sustaining. A business model with a reliable revenue Recently, companies like Near-Me, ShareTribe, and MyTurn have appeared, offering platforms (e.g., ready-to-use websites or mobile apps for service exchange) as turn-key solutions for those who want to set up a prosocial P2P business. This lowers one of the significant hurdles a prosocial P2P service faces to bootstrap itself. However, marketing is still the remaining hurdle. In this paper, we aim to contribute insights for removing this hurdle by studying viral marketing strategies of prosocial P2P services. P2P services have been defined as platforms that support

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stream such as commissions on transactions in a marketplace (common to successful services like AirBnB, Uber and TaskRabbit) can attract venture capital as well as a steady user base in the expectation of incomes. Without such a revenue stream, prosocial P2P services often have to rely on donations to cover the costs of scaling up. Freecycle, for example, has to take donations from the Waste Management garbage collection company. Repaircafe.org solicits donations on its website, and hOurworld timebank network advises its member timebanks to seek grants and donations in order to fund themselves. Meanwhile, as with most volunteer-based endeavor, prosocial P2P services are reported to face challenges in member recruitment and retention (Clary et al., 1992). This is especially problematic considering that success of these services is premised on reaching a critical mass.

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assets and/or services exchange between individuals, often in the physical world, enabled by web or mobile technologies (Bellotti et al., 2015). For prosocial P2P services, we adopt a broad definition of "prosocial" by considering P2P services where people contribute to others' welfare without receiving financial benefits in return.

As with most volunteer-based services, recruiting for prosocial P2P services relies primarily on word-of-mouth (WOM) viral marketing as an economical way to spread the word. Meanwhile, P2P services' focus on online transactions naturally leads them to exploit electronic word-ofmouth (e-WOM) — word-of-mouth marketing spread in online channels such as email, messaging service, and social media. For example, AirBnB and Uber encourage its users to share sign-up links with friends or on social media and reward both the senders and successful converts (i.e. those signing up through the shared links) with free credits. This kind of formal e-WOM promotion is currently less common among prosocial P2P services. We speculate that one reason is that these services could not provide financial rewards to either attract converts or to prompt current users to spread the messages in large quantities. Therefore, while we believe that e-WOM would largely benefit prosocial P2P services, we postulate that viral marketing strategies for these services should emphasize design of message content to make it more persuasive. And one way to do so in a prosocial context is to invoke the "motivations for helping". Below we review the theoretical framework for such motivations and discuss research questions we attempt to answer through a field experiment.

2. Theoretical framework and research questions

To begin with, we note that altruism is not the only motivation underlying prosocial behaviors. Psychologists have had a longstanding interests in understanding why people help others. What they found is a diverse, and for a long time, puzzling, set of motives. This can be traced back to Comte (1868), who first coined the term "altruism". By differentiating between people's motivation and behavior, Comte pointed out that the motivation for engaging in prosocial behavior can be both altruistic — when the ultimate goal is to increase another's welfare, and egoistic — when the ultimate goal is to increase one's own welfare. This pluralism of motivations for prosocial behaviors have been widely shared by contemporary social psychologists, meanwhile expanding this view to encompass broader set of motives. Specifically, empathy, collectivism, seeking idealism are some of the other-oriented motives for engaging in pro-social behaviors. Seeking instrumental rewards (e.g., through reciprocity), building reputation, and avoiding guilt are some of the self-serving motives behind pro-social behaviors (see review in Batson, 1987; Batson and Powell, 2003; Batson and Shaw, 1991), These theories have inspired communication and marketing scholars, most notably research on utilizing both self-serving and other-oriented rewards in recruiting volunteers and generating charitable support (Bennett and Kottasz, 2001; Phillips and Phillips, 2011; White and Peloza, 2009). Recently, HCI researchers reported similar plurality of motivation to volunteer for both online and offline peer-production groups (Hars and Ou, 2001; Kuznetsov, 2006; Liao et al., 2016).

In the case of prosocial P2P services, we anticipate the pluralism of altruistic and egoistic motivations as well. While empathetic altruism — "helping others in need" — is at the core of the vision of these services, there are certainly opportunities to satisfy self-serving motives, such as getting rid of clutter in Freecycle (HowStuffWorks, 2016), learning new skills in Repair Café and earning reciprocal services in a timebank (Botsman and Rogers, 2010; Cahn and Rowe, 1992; Cahn, 2000; Seyfang, 2002; Shih et al., 2015). Interestingly, although not exclusively focusing on prosocial P2P services, a recent survey study of motivations for the use of P2P services (Bellotti et al., 2015) reported a divergence of motivational focus between system providers and system users. While system providers place greater emphasis on community (others) oriented motivations — the common ideal center to the notion of P2P

services or sharing economy, users are primarily looking for instrumental values to satisfy personal needs.

Based on the theoretical framework of pluralism of motivations for helping, in this paper, we compare the effectiveness of viral marketing strategies for prosocial P2P services with self-serving and other-oriented framing. Our research contributions are two-folds. First, to the best of our knowledge, we set out to conduct the first study to inform viral marketing strategies in the emerging and growing area of prosocial P2P services. We argue that although these services, in essence, promote altruistic outcomes, there are still plenty of opportunities for people to obtain self-serving benefits while at the same time contributing to the common good. It may be important, even necessary, to highlight the existence of these self-serving benefits at the recruiting stage, as they may not be self-evident for prosocial services. However, the effect needs to be empirically tested in a prosocial context, considering the evidence showing that mentioning instrumental rewards can sometimes backfire and discourage people's autonomous motivations (e.g., helping others) (Amabile, 1993; Ryan and Deci, 2000).

Meanwhile, there is no conclusion on whether self- or other-framed messages are more persuasive, as their effectiveness was reported to be complicated by many moderating factors, including recipients individual differences and sender-recipient relationships (Bennett and Kottasz, 2001; Maner and Gailliot, 2007; Simpson and Willer, 2008; White and Peloza, 2009). A less studied factor is the nature of the task, and in our context, the service to recruit for. As some argue that outcomes of prosocial behaviors should be considered on a continuum instead of a dichotomy of altruism and egoism (Krebs, 1991), some prosocial P2P services would appear to provide more or less self-serving benefits than others. We note that, among the many kinds of prosocial P2P services on the market, some are mainly to recruit "helpers". For example, repair café recruits repairers, and local support groups recruit people to provide help for those in need (e.g., older adults). Some other services imply more "reciprocity" that one can easily see the potential instrumental, albeit non-monetary, rewards. For example, by joining a health community like WellSquad, by providing services to others (e.g., workout partner, recovery support), people can improve their own health conditions as well. In this study, we will examine the persuasive effect of self-other framing across different prosocial P2P services.

Second, we contribute a field study that systematically investigates how message framing impacts the progress of e-WOM. Our study is based on the multi-stage model of e-WOM influence proposed by De Bruyn and Lilien (2008). According to the model, e-WOM starts at the awareness stage when a message reaches an recipient. Next is the interest stage, in which the recipient decides to open the message and investigate the service or product. Finally, the recipient reaches the decision stage of acquiring the product or service. To capture activities of these stages, we built a web platform to seed and disseminate viral marketing messages in the real world, and collect data on the behaviors of senders, recipients and the interpersonal relations between them. We focus on examining how message framing on self-serving versus otheroriented motives impacts the key stages of e-WOM—sender's pass-along decision, recipient's interest in the message, and recipient's convert decision. Meanwhile in all these stages we pay attention to the mediating effect of service type to recruit for. Specifically, we ask:

RQ1. How do senders choose between self-serving or other-oriented motivations to persuade their contacts to join a prosocial service? How does the preference differ for different services?

RQ2. Are self-serving or other-oriented motivations more effective in raising recipients' interest to investigate further? How does the effect differ for different services?

RQ3. Are self-serving or other-oriented motivations more effective at getting interested recipients to sign up for such a service? How does the effect differ for different services?

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