

Factors Driving Prosocial Online Behavior

Emergent Research Forum Paper

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Abstract

In this article, we draw from the Social Identity Theory and the Theory of Reasoned Action to propose a research model that postulates Social Similarity, Perceived Status Enhancement, and Social Norm to be important drivers of people's prosocial online behavior. We also provide an outlook on three experiments that we plan to use to evaluate our hypotheses. Overall, our study promises important practical implications for multiple parties such as non-governmental organizations and nonprofit organizations. More specifically, if successful, our study would emphasize the importance of several factors that would help drive prosocial online behavior: (1) matching beneficiaries with benefactors' demographic background, (2) providing a functionality that enables benefactors to share their prosocial actions with others, and (3) displaying information about other benefactors.

Keywords

Perceived Status Enhancement, Prosocial Online Behavior, Social Identity Theory, Social Norm, Social Similarity, Theory of Reasoned Action.

Introduction

In Italy, there is a custom called *caffè sospeso*: The customer purchases a coffee and pays a second "pending coffee" in advance, as an anonymous act of kindness for someone who may not be able to afford it. For the person that pays the coffee forward, there is no instant feedback or any form of connection to the recipient. In 2013, the *caffè sospeso* went online when Jonathan Stark developed the idea of a shared Starbucks card (Stark 2011). The card's data was posted on his website, making it easy to either buy a coffee on the card's credit or to deposit cash on its account. The card's balance was constantly published on Facebook and Twitter. When the experiment ended, the card had received a total of 8,700 USD (Wassermann 2011), illustrating one instance of what we call prosocial online behavior.

Prosocial behavior, in general, can be defined as behavior that is "intended to benefit one or more people other than oneself" (Batson and Powell 2003, p. 463). Due to modern technology, prosocial behavior has now gained the ability to spread to new shores. More specifically, the Internet enables people to act prosocially without restrictions in terms of time or place. The possibilities for such prosocial *online* behavior are manifold. For example, people can donate money on dedicated online donation platforms (Sproull et al. 2013) or contribute to open-source software (Rodriguez Aseretto et al. 2013).

Although there is a large body of research that studies prosocial behavior in the offline context (e.g., Andreoni and Scholz 1998), studies of prosocial online behavior are rare and the drivers of this kind of behavior remain largely unknown (cf. Klisanin 2011). Knowing which factors drive prosocial online behavior promises important insights from several viewpoints. For instance, organizations such as non-governmental organizations and nonprofit organizations are often dependent on donations and use the Internet as a place to raise funds. Indeed, knowing how to stimulate prosocial online behavior can help them increase their funds. From a socioeconomic view, prosocial online behavior can also contribute to the general welfare of a society through a voluntary redistribution of income, and is hence worthy of promotion.

In order to address the identified research gap, we draw from both the Social Identity Theory as well as the Theory of Reasoned Action to introduce Social Similarity, Perceived Status Enhancement, and Social Norm as potential positive influence factors of prosocial online behavior. In the next section, we will

introduce the two theories and provide an overview of the most common types of prosocial online behavior. We will then present our research model. Finally, we will outline the planned empirical evaluation of our model as well as its potential practical implications.

Theoretical Background

Forms of Prosocial Online Behavior

Overall, there are many possibilities available for acting prosocially on the Internet. Thanks to search engines and dedicated platforms, people can find those in need and help each other in a variety of ways. Contributions can be either tangible (e.g., financial donations) or intangible (e.g., sharing knowledge). Table 1 provides an overview of the most common forms of prosocial online behavior.

| Forms of POB | Explanation |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Online Donation | Online donation(s) (platforms) enable people to make donations on the Internet (Shier and Handy 2012). In addition to financial donations, there are also platforms that enable people to donate other valuable resources such as furniture (Sproull et al. 2013). |
| Click-to-Donate | Click-to-donate websites enable people to indirectly donate money for a charitable project by clicking on a banner or button. More specifically, third parties such as companies act as sponsors and commit to donate money to specific causes based on the total number of clicks (Klisanin 2011). |
| Information Sharing | Information sharing on the Internet includes the contribution to social network sites (e.g., Facebook), dedicated knowledge-sharing platforms (e.g., Wikipedia) as well as participation in online discussion groups. By giving information or sharing knowledge, people can help others with their specific problems or just inform them in specific fields of interest. |
| Reputation and Rating Systems | Using reputation and rating systems ¹ on the Internet enables people to provide feedback about products or providers. As a result, others might gain important insights on whether to buy a certain product or whether to buy from a certain provider. |
| Open-Source Software Development | The Internet also enables people to contribute to the development of so-called open-source software (OSS) such as Linux or LibreOffice. OSS's source code is open and licensed to be changed and improved by anyone with programming skills. Indeed, community-driven reviews, correction and evolution of software are the centerpiece of most OSS (Rodriguez Aseretto et al. 2013). |
| Hardware Resource Sharing | People can also use the Internet to share their unused computer power to scientists and organizations in order to enable them to analyze large data files through grid-computing ² . In order to do this, people usually have to download a specific software as well as scientific data. Once the computer is idle, the software starts processing their part of data and, once finished, uploads the results to a central server (Sproull et al. 2013). |

Table 1. Overview of the Most Common Forms of Prosocial Online Behavior (POB)

¹ Reputation systems usually refer to two-sided evaluations (e.g., eBay), whereas rating systems refer to one-sided evaluations (e.g., Amazon, Yelp).

² Grid computing describes the combination of computing resources from multiple locations for a common goal such as scientific analyses.

We will now introduce the two theories that provide the theoretical foundations for our proposed research model as to why people might engage in prosocial online behavior: the Social Identity Theory and the Theory of Reasoned Action.

Social Identity Theory

According to Social Identity Theory (Tajfel and Turner 1979; Tajfel and Turner 1986), individuals seek to gain a positive social identity, which is defined as the “part of an individual’s self-concept which derives from his knowledge of his membership of a social group (or groups) together with the value and emotional significance attached to that membership” Tajfel (1981, p. 255). A social group is “a collection of individuals who perceive themselves to be members of the same social category ...” (Tajfel and Turner 1986, p. 15).

As a result of their search for social identity, people favor their own social groups, try to achieve a positive concept of themselves within the relevant groups by increasing their status within the group, and think and act in group-oriented ways (Hertel and Kerr 2001; Hornsey 2008; Tajfel and Turner 1986). As a consequence of this, people tend to care for the welfare of their own social groups and, hence, strive for the welfare of the whole group instead of the maximization of their own individual benefit (Batson 2010).

Theory of Reasoned Action

The Theory of Reasoned Action (Fishbein and Ajzen 1975) postulates that Social Norm is an important positive influence factor of people’s behavior. It can be defined as the degree to which a person believes “that most people who are important to him think he should or should not perform the behavior in question” (Fishbein and Ajzen 1975, p. 302).

The postulated influence is in line with the Social Identity Theory. Indeed, as described above, people think and act in group-oriented ways due to their search for social identity (Hertel and Kerr 2001; Hornsey 2008; Tajfel and Turner 1986). More specifically, norms are firmly rooted in groups and affect people through self-categorization (Terry and Hogg 1996). They influence people because they prescribe appropriate, expected and socially-approved behaviors for group members.

Additionally, the Theory of Reasoned Action also postulates that an individual’s behavior is influenced by his/her particular beliefs concerning the behavior’s consequences. More specifically, if someone believes that a specific behavior will result in a positive outcome for himself/herself, he/she will perform the behavior in question.

Research Model

In the following section, we will outline our hypotheses. More specifically, we draw from the Social Identity Theory and the Theory of Reasoned Action to postulate positive influences of Social Similarity, Perceived Status Enhancement, and Social Norm on the prosocial online behavior of individuals.

Social Similarity

According to Social Identity Theory, people favor their own social groups and care for their welfare (e.g., Batson 2010; Tajfel and Turner 1986). More specifically, people have a higher motivation to act prosocially in the context of what they perceive to be their own social groups.

As defined above, social groups are „a collection of individuals who perceive themselves to be members of the same social category ...” (Tajfel and Turner 1986, p. 15). Social categories regularly include age, gender, race, and home country (cf. Andreoni and Scholz 1998). Drawing from Social Identity Theory, we believe that Social Similarity, which we describe as the degree to which a potential benefactor is similar to a potential beneficiary with regards to their social categories, positively influences his/her prosocial online behavior. We hypothesize that:

H1: Social Similarity is a positive influence factor of prosocial online behavior.

Perceived Status Enhancement

The Internet offers multiple possibilities for sharing one's online behavior³ and, hence, also enables people to present their prosocial online behavior to others. It has been shown that offline charitable activities are potentially able to present monetary status (Glazer and Konrad 1996). However, as described above, prosocial online behavior is not only about tangible contributions but also includes sharing knowledge, etc. As a result, prosocial online behavior not only displays monetary status but also status with regards to intelligence or knowledge.

The Social Identity Theory postulates that people are motivated to increase their status within their social groups (Hertel and Kerr 2001; Hornsey 2008). Moreover, the Theory of Reasoned Action (Fishbein and Ajzen 1975) postulates that an individual's behavior is influenced by his/her particular beliefs concerning the behavior's consequences

As a result, we believe that Perceived Status Enhancement, which we describe as the extent to which a person believes that prosocial online behavior has positive consequences on his/her status within their social group, is a positive influence factor of prosocial online behavior. We hypothesize that:

H2: *Perceived Status Enhancement is a positive influence factor of prosocial online behavior.*

Social Norm

Finally, the Theory of Reasoned Action postulates that Social Norm positively influences people's behavior. In line with this, the Social Identity Theory emphasizes that people act in group-oriented ways and that norms prescribe appropriate, socially-approved behaviors (Hertel and Kerr 2001; Hornsey 2008; Tajfel and Turner 1986). As a result, Social Norm can be expected to be a positive influence factor of prosocial online behavior. We hypothesize that:

H3: *Social Norm is a positive influence factor of prosocial online behavior.*

Outlook

We are currently planning to empirically evaluate our hypotheses via three experiments in the context of a website that enables visitors to donate money to individual people. More specifically, in order to evaluate our hypothesized influence of Social Similarity, we plan to implement a simple, four-question questionnaire that asks the visitors to provide their age, gender, race, and home country on the website. After completing the questionnaire, the visitors will be randomly assigned to the treatment and control group and correspondingly redirected to a specific subpage. Both subpages will show the image and personal information of a specific person currently in need and will provide the possibility of making a donation to that person. For the treatment group, the characteristics of the shown person will match the four social categories collected in the earlier questionnaire. For the control group, none of the characteristics of the shown person will match the social categories collected in the earlier questionnaire.

A second experiment will be used to evaluate the potential influence of Perceived Status Enhancement on prosocial online behavior. This time, there will be no questionnaire and the people in need will be randomly shown to every visitor. Whereas the treatment group's subpage will include functionality that allows the visitor to post his/her potential donation action to different social network sites such as Facebook and/or on the dedicated donors page of the organization, the control group's subpage will not include this functionality.

Finally, in order to evaluate the influence of Social Norm on prosocial online behavior, the people in need will be yet again randomly shown to every visitor. Whereas the treatment group's subpage will include the

³ For example, Social Network Sites (SNSs) such as Facebook regularly provide so-called plugins that enable third parties to integrate some of the SNSs' functionalities into their own websites. As a result, actions performed by visitors on third-party websites can be shared with one click to all the visitor's SNS friends.

pictures and personal information of certain individuals who previously donated money to the organization, the control group's subpage will not include this information.

If successful, our study will provide important practical implications. First, it will allow us to determine if matching specific beneficiaries to the benefactors' demographic backgrounds is an effective way of driving prosocial online behavior. Second, it will allow us to determine if providing benefactors the ability to share their prosocial actions with others can be used to stimulate them to act prosocially online. Finally, it will allow us to determine if displaying information about other benefactors might help positively influence prosocial online behavior. Overall, our findings may provide organizations such as non-governmental organizations and nonprofit organizations with important insights into how to stimulate individuals to act prosocially online, and thus increase their online funding sources.

References

- Andreoni, J., and Scholz, J. K. 1998. "An Econometric Analysis of Charitable Giving with Interdependent Preferences," *Economic Inquiry* (36:3), pp. 410-428.
- Batson, C. D. 2010. *Altruism in Humans*, New York, NY: Oxford University Press.
- Batson, C. D., and Powell, A. A. 2003. "Altruism and Prosocial Behavior," in *Handbook of Psychology – Volume 5: Personality and Social Psychology*, I. B. Weiner, T. Millon and M. J. Lerner (eds.), Hoboken, NJ: John Wiley & Sons, pp. 463-484.
- Fishbein, M., and Ajzen, I. 1975. *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*, Reading, MA: Addison-Wesley.
- Glazer, A., and Konrad, K. A. 1996. "A Signaling Explanation for Charity," *The American Economic Review* (86:4), pp. 1019-1028.
- Hertel, G., and Kerr, N. L. 2001. "Priming in-Group Favoritism: The Impact of Normative Scripts in the Minimal Group Paradigm," *Journal of Experimental Social Psychology* (37:4), pp. 316-324.
- Hornsey, M. J. 2008. "Social Identity Theory and Self-Categorization Theory: A Historical Review," *Social and Personality Psychology Compass* (2:1), pp. 204-222.
- Klisanin, D. 2011. "Is the Internet Giving Rise to New Forms of Altruism?," *Media Psychology Review* (3:1), pp. 1-11.
- Rodriguez Aseretto, D., Di Leo, M., de Rigo, D., Corti, P., McInerney, D., Camia, A., and San-Miguel-Ayanz, J. 2013. "Free and Open Source Software Underpinning the European Forest Data Centre," *Geophysical Research Abstracts Vol. 15*.
- Shier, M. L., and Handy, F. 2012. "Understanding Online Donor Behavior: The Role of Donor Characteristics, Perceptions of the Internet, Website and Program, and Influence from Social Networks," *International Journal of Nonprofit and Voluntary Sector Marketing* (17:3), pp. 219-230.
- Sproull, L., Conley, C. A., and Moon, J. Y. 2013. "The Kindness of Strangers: Prosocial Behavior on the Internet," in *The Social Net: Understanding Our Online Behavior*, Y. Amichai-Hamburger (ed.), Oxford, UK: Oxford University Press, pp. 143-164.
- Stark, J. 2011. "Get a Coffee, Give a Coffee - Jonathan's Card." Retrieved 04-19, 2017, from <http://jonathanstark.com/card>.
- Tajfel, H. 1981. *Human Groups & Social Categories: Studies in Social Psychology*, Cambridge, UK: Cambridge University Press.
- Tajfel, H., and Turner, J. C. 1979. "An Integrative Theory of Intergroup Conflict," in *The Social Psychology of Intergroup Relations*, W. G. Austin and S. Worchel (eds.), Monterey, CA: Brooks/Cole, pp. 33-47.
- Tajfel, H., and Turner, J. C. 1986. "The Social Identity Theory of Intergroup Behavior," in *Psychology of Intergroup Relations*, S. Worchel and W. G. Austin (eds.), Chicago, IL: Nelson-Hall, pp. 7-24.
- Terry, D. J., and Hogg, M. A. 1996. "Group Norms and the Attitude-Behavior Relationship: A Role for Group Identification," *Personality and Social Psychology Bulletin* (22:8), pp. 776-793.
- Wassermann, T. 2011. "Starbucks Card Guy Solicits \$8,700 in Coffees for Strangers." Retrieved 04-19, 2017, from <http://mashable.com/2011/08/10/jonathans-card-starbucks>.