

THE EFFECT OF DESCRIPTIVE NORMS AND INVOLVEMENT ON
USER INTENTION TO ADOPT CAUSE-RELATED FACEBOOK PROFILE FILTER
AND TO DONATE TO NPOS

By

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A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

Public Relations — Master of Arts

2017

ABSTRACT

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With the prevalence in the use of the Facebook profile filter for social causes and the newly launched fund raising tool, Facebook is providing a unique opportunity for non-profit organizations (NPOs) to raise public attention and funding. The current study aims to understand how online descriptive norms and involvement affect Facebook users' behavioral intentions toward NPOs. A 2 (descriptive norms: low vs. high) X 2 (involvement: low vs. high) between-subject factorial experiment was conducted. The manipulation of involvement through geographic proximity was not successful in that it yielded a counter-hypothesized validation of the manipulation. Results showed that the interaction between descriptive norms and organizational geographic scope had a significant effect on participants' profile filter adoption intentions. Moreover, organizational geographic scope significantly influenced participants' donation intentions. The study's findings were discussed in relation to enhancing the social norms approach within the social media context and in relation to varied levels of organizational scope. Practically, the findings increase professional communicators' understanding of the nuances of using social media to influence behavioral change in relation to social causes.

Keywords: descriptive norms, involvement, non-profit organization, Facebook

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INTRODUCTION

After the U.S. Supreme Court legalized gay marriage in 2015, Facebook launched a tool allowing users to express their support for marriage equality by adding a semi-transparent filter of a rainbow flag on top of their Facebook profile picture. Over 26 million people applied the rainbow flag filter to “celebrate pride” (Dewey, 2015). This relatively new feature gained attention again in November 2015 when Facebook users used the French flag filter in response to the Paris terror attacks (Feeney, 2015). Recently, Facebook has been providing similar opportunities for users to showcase their affinity for sports teams and universities/colleges (Sanders, 2015). Whether a friend has adopted the filter or the organization promoting it pushes it through promoted newsfeed updates, Facebook users can simply click on the “try it” button to transform and redecorate their profile picture and showcase their support for the cause, event, or organization. The Facebook profile filter is a Facebook user’s explicit expression of endorsement for a social issue, sports fandom, or even a commercial brand.

People are motivated to share information on social media with which they have an emotional connection on social media (Mangold & Faulds, 2009). As an outcome of new technology, social networking sites (SNSs) are ideal platforms for users to link to and support social causes. According to Facebook (2015), more than 150 million people worldwide connect to a cause on Facebook. Therefore, the use of the Facebook filter as a promotional and awareness-raising strategy could be beneficial to both nonprofit organizations and commercial companies. The Facebook profile picture filter is a unique way of engaging with a cause. Unlike donating money to a cause that could happen in private, the use of the filter feature entails a high

degree of visibility for a SNS user's support for the cause through his/her public display of endorsement to that cause. There have been a number of causes that inspired Facebook users to change their Facebook profile pictures to show support or dissent. For example, the Childhood Cartoon Faces campaign aims to end childhood abuse by inviting participants to change their Facebook profile pictures to cartoon characters they liked when they were kids; the Breast Cancer Site motivates Facebook users to adopt the pink ribbon image as profile photo to raise awareness for the disease, especially during Breast Cancer Awareness Month each year — October; Planned Parenthood invited Facebook users to “pink out” their profile picture by adding a pink #StandwithPP filter to support women's health and rights in 2015 (Desta, 2014; Demaria, 2015). The Facebook filter function could successfully raise awareness on the topic within the online environment and help generate extensive discussion on social media (Sanders, 2015). The question, then, becomes: How can nonprofits motivate Facebook users to adopt a profile picture filter? And what effect does this adoption have on evaluations of and behavioral intentions toward both the organization and the cause?

Lapinski and Rimal (2005) explicated that perceived popularity of a behavior strongly influences human behavior. The ways in which perceived prevalence among one's social group governs his/her own behavior has been long studied under the social norms approach (Cialdini et al., 1991; Borsari & Carey, 2003; Schultz et al., 2007). On SNSs like Facebook, the prevalence and acceptance of a social norm can be visible to users through displays of the number of likes, shares, comments, and even adoption of a profile filter. As descriptive norms deal with the perceived prevalence of a certain behavior among one's social group, displays of the descriptive norm via SNSs can influence both online and offline behaviors (Alhabash et al., 2015). To this

end, the current study manipulates descriptive norms by varying the number of Facebook friends who have already adopted the Facebook profile picture filter.

While the effect of social (descriptive) norms has been well documented (Rivis & Sheeran, 2003; Bosari & Carey, 2003; Baumgartner et al., 2011), other factors come into play in determining one's online and offline behaviors. Involvement with the brand, issue, or cause has been shown to affect both attitudes and behavior (Hajjat, 2003; Bigné-Alcañiz et al., 2010). Rimal and Lapinski (2015) argued that involvement moderates the effect of descriptive norm on behavior according to the theory of normative social behavior (TNSB). The current study manipulates involvement with the non-profit organization and investigates its main effect and interaction with descriptive norms on behavioral intentions.

This paper starts with a review of the use of social media marketing by non-profit organizations. Second, the study reviews the social norms approach with a focus on descriptive norms as a predictor of behavior. The third section conceptualizes involvement as a moderator of the effect of social norms on behaviors using TNSB. The fourth section describes the experimental method. The fifth and sixth sections reports and discuss the study's findings, respectively.

LITERATURE REVIEW

Social Media Marketing for Non-profit Organizations

The advent of new media platforms brought new modes of communication with vast opportunities to foster relationships among users, as well as among consumers, businesses, and organizations. Spreading commercial messages and interacting with consumers via social media make it easier for marketers to perform integrated marketing activities with less cost (Kim & Ko, 2012). Research showed that social media marketing benefits organizations and brands in terms of creating online communities, distributing content, increasing exposure, gaining website traffic, generating two-way communication with audience members, and building brand awareness and reputation (Kaplan & Haenlein, 2010; Kim & Ko, 2010; e-Marketer, 2010; Michaelidou et al., 2011). Social media have become essential to marketers as they harness relationship building among the brand or the cause and consumers, users, and stakeholders. Given the exponential growth of social media adoption and use, businesses have capitalized on its power to effectively reach users. In 2014, 13% of digital marketing spending of U.S. was allocated to social media; estimated to reach 16% in 2019 (Forrester Research, 2014).

Social media have generated similar opportunities for non-profit organizations (NPOs) by galvanizing two-way communication with various stakeholders, which serves to strategically and efficiently mobilize the public (Briones et al., 2010; Lovejoy et al., 2012). With limited resources, NPOs largely rely on general public awareness for their causes, volunteer support, and donations to advocate for social, health, political, policy, and economic changes (Auger, 2013). Witman (2013) argued that social media are beneficial for NPOs because of the combination of low marketing costs to promote social causes and cultivate relationships with stakeholders (Witman, 2013). Nonprofit Benchmarks Study (2016) stated that social media were mainly used in

branding, new donor acquisition, and existing supporter conversion. Stakeholders' online interaction with NPOs, including those taking place via social media, blogging, and journaling, increase money contributions both online and offline (Mano, 2014). Pressrove and Pardun (2016) further argued that building a social media-based connection with stakeholders has a significant impact on their offline behavioral intentions to support the NPO such as the intentions to volunteer and donate.

With 1.71 billion active monthly users and more than one billion using it daily, Facebook is the world's leading social networking site (Facebook Newsroom, 2016). It allows users to build profiles about themselves, connect to their social connections within the system, and create, view and share user generated content on it (Boyd & Ellison, 2007; Kaplan & Haenlein, 2010). Facebook has become an important marketing tool, following its exponential user growth after the site expanded its registration beyond Ivy League college campuses (Facebook Newsroom, 2006). More than 150 million people worldwide connect to a social cause on Facebook (Facebook Newsroom, 2015), which makes Facebook an ideal platform for NPOs to raise awareness and funds. According to a University of Massachusetts Dartmouth (2014) report, of the top 400 charities and NPOs, 92% have adopted Facebook to distribute content. On average, NPOs post to Facebook 1.3 times per day. However, when NPOs post on Facebook, the post might only reach 10% of their Facebook fans and gain 5.4% of engagement rate (Nonprofit Benchmarks Study, 2016). With the Facebook profile filter, NPOs can extend awareness-raising efforts beyond the boundaries of their registered fan base on the site, where a multiplier effect is generated through adoption of a cause-related Facebook filter. In doing so, a Facebook user not only endorses the issue, but this endorsement is shared publicly with his/her network of Facebook friends. Considering the potential for a multiplier effect, the current study investigates

the ways in which Facebook users become motivated to adopt the Facebook filter and donate to NPO via Facebook. The study questions whether the presence of descriptive norms cues, recorded through the number of Facebook friends who have adopted the Facebook filter, would affect their willingness to adopt the filter themselves. The next section uses the social norms approach to conceptualize the effect of descriptive norms.

The Social Norms Approach

Perceptions of what other people are doing and what should be done are strong drivers of human behavior (Cialdini et al., 1991; Lapinski et al., 2015). Cialdini et al. (1991) distinguished two types of social norms — descriptive norms and injunctive norms. These social norms provide evidence of what is adaptive in the social group and could guide human behavior (Reno et al., 1993; Lapinski & Rimal, 2005). Descriptive norms refer to one's perception of the behavior's prevalence among others in the social group (Cialdini et al., 1991; Rimal & Real 2005). It can serve as a heuristic cue in providing a decisional shortcut to govern one's behavioral outcome (Lapinski et al., 2015). On the other hand, injunctive norms refer to perceptions of “what ought to be done” (Cialdini et al., 1991, p. 203; Lapinski & Rimal, 2005). It expresses the perception of which behavior is and is not acceptable among member of the social group (Bosari & Carey, 2003). The main difference between descriptive norms and injunctive norms is that social sanction is involved in injunctive norms if one fails to perform a widely accepted behavior (Rimal & Real, 2005; Lapinski & Rimal, 2005). Previous studies showed that descriptive norms and injunctive norms have direct (Lapinski et al., 2007; Mollen et al., 2013) effects on human behavior.

Social norms are formed and propagated via communication within a social group (Kincaid, 2004; Lapinski & Rimal, 2005). Social media platforms can serve as a communication

context for social norms to be formulated and communicated. Yee et al. (2006) argued that social norms govern how individuals behave in the digital world in a similar fashion as it does in the physical environment. On social media, high numbers of likes, shares, comments and views signify a high level of acceptance of a message and it was supported to influence people's online and offline civic behavioral intentions (Alhabash et al., 2015). Adopting an NPO-themed profile filter on Facebook is a visible endorsement of NPO-congruent attitudes and behaviors, and it also constitutes a form of online behavior in and of itself. If a user has not yet adopted the NPO-themed filter while his/her friends have done so, a sponsored story (often paid for by the promotion entity, i.e., NPO) can appear with persuasive messages such as an explicit indication of the number of friends who have already adopted the filter (Loomer, 2013; Facebook Business, n.d.). Therefore, I argue that the prevalence of a filter – indicated by the number of friends who have adopted it – signals the descriptive norm. Users are able to adopt filters based on whatever social causes they care about, but no social sanction is involved. Ravis and Sheeran's (2003) meta-analysis documented medium to strong positive associations between descriptive norms and behavioral intentions (Ravis & Sheeran, 2003). For example, research has also shown that perceived descriptive norms strongly affect college students' alcohol consumption (Borsari & Carey, 2003; Larimer et al., 2004; Ridout & Campbell, 2014; Rimal, 2008).

Interestingly, Alhabash et al. (2013) found that descriptive norms expressed in number of likes and shares could backfire in terms of driving favorable evaluations of the message in which messages with low virality (low likes and low shares) result in more favorable evaluations. A similar counter-intuitive finding was that YouTube cyberbullying videos with low views were better at driving civic actions (the intentions to like, share, and comment on a social media post) in certain situations (Alhabash et al., 2015). Alhabash et al. (2015) argued that novelty of content

and the need to be a social media pioneer could explain why social media posts with low views were more successful at driving online and offline behaviors. It is also possible that for participants, a social issue-related video with low views results in a feeling of an important social issue that has not gained the attention it deserves, which leads to a stronger civic behavioral intention. With these counter-intuitive results, Alhabash et al. (2013) suggested that the effect of online descriptive norms should be explored with other contexts that vary regarding user involvement and other message formats.

The current study examines the effect of descriptive norms on individuals' intention to adopt the NPO-themed Facebook filter. To manipulate descriptive norms, scholars have manipulated the numbers in the descriptive norm messages. In the context of Facebook, how viral a message is can demonstrate its prevalence of it and a descriptive norm can be manipulated through number of likes or shares (Alhabash et al., 2015). Similarly, the current study will manipulate descriptive norms by changing the number of Facebook friends who have already adopted the filter. Hence, I hypothesize:

H1a: Participants will be more likely to adopt the NPO-themed Facebook profile filter if a high than a low number of Facebook friends are using it.

In July 2016, Facebook officially launched a new tool — Fundraisers — for NPOs to raise money (Facebook Newsroom, 2015). NPOs can add a donate button on their pages or posts to raise money. Previous studies provided evidence on how social norms influence individuals' donation behavior intention (Park & Smith, 2007; Martin & Randal, 2008, 2009; Croson et al., 2009). These studies consistently showed a significant influence of descriptive norms on donors' contributing behavior. Individuals' perception of others' donation results in intention to donate and higher average donation amount (Martin & Randal, 2008, 2009). Croson et al. (2009) further

support that if existing donors are informed that others are making high contributions, they tend to donate more. Thus, I hypothesize:

H2a: Participants will express greater donation intentions to the non-profit organization if a high than a low number of their Facebook friends have adopted the NPO-themed Facebook filter.

Involvement

Involvement refers to the importance of the particular issue to an individual (Apsler & Sears, 1968; Kiesler et al., 1969; Petty & Cacioppo, 1979; Sherif et al., 1965). Involvement has long been linked to an individual's self-concept. Johnson and Eagly (1989) noted that even though involvement is "a motivational state induced by an association between an active attitude and the self-concept" (p.290), it can be triggered by different aspects of the self-concept. Johnson and Eagly (1989) reviewed different bodies of involvement studies including social judgment-involvement approach (Sherif & Hovland, 1961; Sherif et al., 1965), Zimbardo (1960)'s response involvement and a series of works from Petty and Cacioppo in which the construct was termed as issue involvement or personal involvement (Petty & Cacioppo, 1979; Petty et al., 1981; Petty & Cacioppo, 1981). Johnson and Eagly (1989) categorized involvement into three types: (1) value-relevant involvement which is rooted in one's intrinsic values; (2) impression-relevant involvement, which concerns public perception of the self; and (3) outcome-relevant involvement, which refers to "the relevance of an issue to one's current important goals or outcomes" (p. 292). Each type of involvement is thought to yield different persuasive effects.

Zaichowsky (1985, 1986) re-conceptualized involvement within the framework of an attitude object's relevance to an individual based on his/her inherent needs, values, and interests. Zaichowsky (1985, 1986) explicated three antecedents to involvement: (1) personal

characteristics regarding inherent interests, needs, or values; (2) physical characteristics of the object; and (3) situational characteristics that can have an impact one's interest toward the object. While Zaichowsky's definition is widely accepted in the field of advertising, it is usually limited to differentiating products, product categories, and brands as a function of their personal relevance to the individual (e.g., smartphone vs. toothpaste; Zaichkowsky, 1987; Lockshin et al., 1997; McWilliam, 1997; Lin & Chen, 2006). The current study attempts to keep the issues for which the NPOs advocate constant while varying involvement as a function of the organization's importance to the participant. Past studies (Pelsmacker et al, 2002; Park et al., 2007; Te'eni-Harari et al., 2009; Kong & Zhang, 2013; Te'eni-Harari, 2014) documented that individuals are more likely to behave in accordance with the persuasive message if they feel personally involved with the attitude object. Based on this, I hypothesize:

H1b: Participants assigned to the high involvement condition will be more likely to adopt the NPO-themed Facebook filter than those assigned to the low involvement condition.

H2b: Participants assigned to the high involvement condition will express greater donation intentions to the NPO than those assigned to the low involvement condition.

Involvement and Descriptive Norms

Rimal and Real (2005) proposed the theory of normative social behavior (TNSB) to further distinguish between descriptive norms and injunctive norms and to explain how injunctive norms, outcome expectation, and group identity work as moderators of the effect of descriptive norms on behavioral intentions. The underlying assumption of TNSB is that one is more likely to perform a prevalent behavior if he/she believed doing so could lead to the desired

benefits (Rimal & Lapinski, 2015). Additional moderators such as ego-involvement (Lapinski & Rimal, 2005) and behavioral identity (Rimal, 2008) have also been documented in relation to investigating the relationship between descriptive norms and behaviors. Rimal and Lapinski (2015) expanded the scope of TNSB by categorizing potential moderators into individual-level and group-level factors that moderate the effect of norms on behavior. Individual-level variables include involvement, self-monitoring, self-efficacy, among others, whereas group-level variables include group proximity and independence. Even though involvement was identified as an individual-level moderator, it hasn't been fully explored in descriptive norms studies and it is "conceptually confusing" (Lapinski et. al, 2015, p.2).

Lapinski and Rimal (2005) argued that if one believes the behavior is consistent with his/her self-concept, descriptive norms would compel the person to perform the behavior. They adopted Johnson and Eagly's (1989) concept of value-relevant involvement and defined ego-involvement as "the extent to which individuals' self-concept is connected with their position on a particular issue and forms an integral part of how individuals define themselves" (Lapinski & Rimal, 2005, p.136). Ego-involvement will have direct effect on human behavior and moderate effect on descriptive norm-behavior relationship (Rimal et al., 2004; Lainski & Rimal, 2005). It is hypothesized that descriptive norms' influence on behavior will be stronger for people who have higher level of ego-involvement with a behavior (Lapinski & Rimal, 2005). However, Gockeritz et al. (2010) reported inconsistent results with TNSB regarding the moderating effect of personal involvement on the relationship between descriptive norms and behavior. Based on the work of Thomsen et al. (1995), personal involvement refers to "individuals are personally involved with an issue, event, object, or person to the extent that they care about that entity and

perceive it as important” (p. 517). Results showed that positive descriptive norms-behavior relationship was stronger as personal involvement was low.

In Lapinski et al. (2015), the moderating effect of value-relevant involvement, impression-relevant involvement, and outcome-relevant involvement has been studied across different contexts, such as alcohol consumption, fast food consumption, and recycling (Johnson & Eagly, 1989; Cho & Boster, 2005; Lapinski et al., 2015). Results showed that the moderating effect of value-relevant involvement varies across different behavioral domains. When value-relevant involvement is low, the descriptive norm-behavior relationship is stronger in fast food consumption condition but no significant moderation effects were found in the other two conditions — alcohol consumption and recycling (Lapinski et al., 2015). In addition, the interaction between outcome-/impression-relevant involvement and descriptive norms to influence behavior was not significant across any of the three contexts. As Marshall et al. (2008) demonstrated, the effect of involvement on behavioral outcomes varies due to different behavioral attributes such as if the behavior happens publicly or not (Marshall et al., 2008; Rimal et al., 2011). Thus, authors also suggested that involvement’s moderating role should be tested in other behavioral domains (Lapinski et al., 2015; Rimal & Lapinski, 2015).

Past research findings (Gockeritz et al., 2010; Lapinski et al., 2015) were inconsistent with the prediction of TNSB (Lapinski & Rimal, 2005), and instead were interpreted using Elaboration Likelihood Model (ELM; Petty & Cacioppo, 1986). ELM posits that individuals process persuasive information through the activation of either the central route or the peripheral route. Central route processing is thought to involve greater elaboration and allocation of cognitive resources to processing, while peripheral route processing relies on heuristic cues and cognitive shortcuts for what is thought to be less-effortful processing. Petty and Cacioppo (1996)

argued that highly involved participants are more likely than those with low levels of involvement to engage in central route processing of persuasive information, which is thought to lead to more stable attitude. Thus, the prevalence of a behavior is not sufficient enough to influence highly involved people's behavior. On the other hand, when involvement is low and peripheral route is activated for information processing, descriptive norms might serve as a heuristic cue to provide a shortcut for an individual's attitude and behavior change. Thus, descriptive norms could have stronger influence on one's behavior if the individual has lower levels of involvement (Petty & Cacioppo, 1986; Lapinski et al., 2015). Lapinski et al. (2015) noted that the moderating role of involvement should be examined in different behavioral domains. Therefore, I hypothesize:

- H1c: Participants assigned to the low involvement condition will express greater intentions to adopt the NPO-themed filter when the descriptive norm is high than low compared to those in high involvement conditions who will express equal likelihood of adopting the filter across both descriptive norms conditions.*
- H2c: Participants assigned to the low involvement condition will express greater donation intentions to the NPO when the descriptive norm is high than low compared to those assigned to the high involvement conditions who will express similar donation intentions across both descriptive norms conditions.*

METHOD

Study Design & Independent Variables

The study used a 2 (descriptive norm: high vs. low) X 2 (involvement: high vs. low) between-subject factorial design. Participants were exposed to non-profit organization themed Facebook profile filter promotion posts with similar persuasive messages that were created for this study.

Descriptive Norms. Descriptive norm was manipulated by varying the number of Facebook friends who have adopted the filter/donated in the message. Prior to stimuli exposure, participants reported the number of their Facebook friends. Per the random assignment to low or high descriptive norms conditions, they received tailored messages with either 1% (low) or 25% (high) of their Facebook friends who have adopted the profile picture filter. An automatic calculator was set up on the Qualtrics survey system to calculate the number of friends who have adopted the filter.

Involvement. Participants were also randomly assigned to one of two involvement conditions that was manipulated through organization geographic proximity (Petty & Cacioppo, 1984). Participants read the cover story of the charity prior to stimuli exposure. For the high involvement condition, the cover story introduced the NPO as the Greater Lansing Chapter including brief history, mission of the NPO and how the NPO will help communities in Greater Lansing area. For low involvement group, the cover story provided general information including brief history and mission of the NPO that was headquartered in New York City and mainly focused on the organization's international work.

Participants

Participants (N=275) were recruited from MSU SONA online survey system and received extra credit for participation. Participants were mostly female (66.9%). Participants' age

ranged from 17 to 25 years old with ($M = 20.35$, $SD = 1.78$). As for current class standing, 39.6 percent of participants reported being juniors, followed by seniors (30.2%), sophomores (18.5%), freshman (10.9%), and graduate students (0.7%). In terms of the ethnic background, the majority of participants (67.3%) reported being White, followed by Asian (20%), Black or African American (6.2%), Hispanic or Latino (3.3%), and other ethnicities (3.3%). The majority of participants reported being religious (73.8%), including Catholic (33.8%), Protestant Christian (18.9%), Jewish (6.9%), Buddhist (5.5%), Hindu (0.7%), Islam (0.7%) and other religion (7.3%).

Dependent Variables

Filter Adoption Intentions. Willingness to adopt the NPO themed Facebook profile filter was measured using four seven-point Likert-type scale items anchored with strongly disagree to strongly agree: I intend to adopt the [NPO name] Facebook profile filter; I plan to adopt the [NPO name] Facebook profile filter; I am thinking about adopting the [NPO name] Facebook profile filter; and I will adopt the [NPO name] Facebook profile filter (Park & Smith, 2007). Upon satisfactory factor and reliability (see Table 1 in Appendix), the mean value for filter adoption intentions were computed for each participant.

Donation Intentions. Donation intentions were measured using four seven-point Likert-type scale items anchored with strongly disagree to strongly agree: I intend to donate to [NPO name]; I plan to donate to [NPO name]; I am thinking about donating to [NPO name]; and I will donate to [NPO name] (Park & Smith, 2007). Upon satisfactory factor and reliability (see Table 1 in Appendix), the mean value for donation intentions were computed for each participant. Each participant was also given \$100 virtual cash. They were informed that they would be seeing a Facebook message, and would be asked to allocate the amount of money in donation to the NPO.

Upon exposure to the stimuli, participants were asked: “how much money out of \$100 are you willing to donate to [NPO name]?” with a slider ranged from \$0 to \$100.

Control Variables

The study included the following variables as controls:

Preexisting Attitudes toward the Issue/Organization. Preexisting attitude toward the issue were measured using MacKenzie and Lutz’s (1989) attitudes toward the ad scale and Yi and Yoo’s (2011) attitudes towards brand scale, where participants were asked to indicate their evaluations of the organization using four seven-point semantic differential scales: bad/good, unfavorable/favorable, unpleasant/pleasant, harmful/beneficial. Upon satisfactory factor and reliability (see Table 1 in Appendix), the mean value for attitudes toward the issue and organization were computed for each participant.

Preexisting Involvement with the Issue. Preexisting involvement with the issue was measured using Zaichowsky’s (1985) seven-point semantic differential involvement scale: unimportant/important, boring/interesting, irrelevant/relevant, unexciting/exciting, means nothing/means a lot to me, unappealing/appealing, mundane/fascinating, worthless/valuable, uninvolving/involving, not needed/needed. Factor analysis showed that the loadings of six items were below 0.6 which were deleted. Four items (unimportant/important, irrelevant/relevant, worthless/valuable, not needed/needed) remained and upon satisfactory factor and reliability (see Table 1 in Appendix), the mean value for involvement with the issue was computed for each participant.

Familiarity of the Facebook Filter Function/Organization. Familiarity with the Facebook filter function/organization were measured using a seven-point semantic differential scale anchored with “not at all familiar” and “extremely familiar.”

Previous Volunteering and Donation Behaviors. Previous volunteering and donation behaviors were measured using questions adopted from Reuveni and Werner (2015): “have you ever volunteered for any NPOs in the past” and “have you ever donated to any NPOs in the past?” (yes or no).

Facebook Usage Intensity. Facebook general usage was examined by six seven-point Likert scale items anchored with strongly disagree to strongly agree: Facebook is part of my everyday activity; I am proud to tell people I’m on Facebook; Facebook has become part of my daily routine; I feel out of touch when I haven’t logged onto Facebook for a while; I feel I am part of the Facebook community; I would be sorry if Facebook shut down (Ellison et al., 2006). Upon satisfactory factor and reliability (see Table 1 in Appendix), the mean value for Facebook usage intensity were computed for each participant.

Altruism. Altruism was measured using Morgan and Miller’s (2002) 11 seven-point Likert scale items anchored with strongly disagree to strongly agree: I enjoy doing small favors every day for the people I care about; helping others is one of the most important aspects of life; I enjoy working for the welfare of others; my family tends to do what we can to help those less fortunate than ourselves; overall, I tend to be a cheerful person; I am not what I would call a warm-hearted person; when people hurt me, I usually hold a grudge for a long time; I am an affectionate and tender person; I am generally a sincere and truthful person; if I could help save somebody’s life, I would do everything possible; I agree with the old saying, “It is better to give than to receive.” Factor analysis showed that the loadings of three items (“my family tends to do what we can to help those less fortune than ourselves”, “I am not what I would call a warm-hearted person” and “when people hurt me, I usually hold a grudge for a long time”) were below

0.6. After dropping the items, upon satisfactory factor and reliability (see Table 1 in Appendix), the mean value for altruism was computed for each participant.

Pretest

To select NPOs to develop stimuli for this study, a pretest was conducted ($N = 57$) to test the familiarity and attitudes toward 11 NPOs and related issue involvement toward corresponding social causes. NPO familiarity was tested using a single item measured with a seven-point semantic differential scale anchored with “not at all familiar” and “extremely familiar.” I also measured participants’ attitudes toward the NPO using MacKenzie and Lutz’s (1989) attitudes toward the ad scale and Yi and Yoo’s (2011) attitudes towards brand scale, where participants were asked to indicate their evaluations of the organization using four seven-point semantic differential scales: bad/good, unfavorable/favorable, unpleasant/pleasant, harmful/beneficial (Cronbach’s $\alpha = .92$). Finally, to select issues of moderate involvement and without variability among a student population, the study measured issue involvement using Zaichowsky’s (1985) seven-point semantic differential involvement scale: unimportant/important, boring/interesting, irrelevant/relevant, unexciting/exciting, means nothing/means a lot to me, unappealing/appealing, mundane/fascinating, worthless/valuable, uninvolving/involving, not needed/needed (Cronbach’s $\alpha = .94$).

Four NPOs (Charity: Water, Disabled American Veterans, Teach for America and Human Rights Watch) were comparable in terms of issue involvement ($F [3,168] = 1.94$, ns), and attitude toward the NPO ($F [3,168] = 2.30$, ns). However, the four selected NPOs varied in familiarity ($F [3,168] = 8.76$, $p < 0.01$). Charity: Water was finally selected as the only NPO that was used in the experiment because of the ongoing drinking water contamination issue in Flint, Michigan, which started in 2014. The experiment was conducted in the State of Michigan where

participants are involved and familiar with the local issue of drinking water safety. Therefore, the manipulation on involvement with Charity: Water Greater Lansing Chapter would be more likely to be successful. On the other hand, in the high involvement condition, the cover story would introduce Charity: Water as a national organization headquartered in New York, which is a city that geographically further.

Procedure

Participants were recruited through the College of Communication Arts & Sciences online subject pool (SONA system). Participants took part in the study online via www.Qualtrics.com. After signing the consent form, participants were asked to answer demographic questions, Facebook usage related question, previous usage and familiarity of the Facebook profile filter function, previous volunteer and donation behaviors, altruism, and attitude toward and involvement with the social issue of drinking water safety. Participants were then randomly assigned to one of the four conditions: (1) high descriptive norms and high involvement; (2) high descriptive norms and low involvement; (3) low descriptive norms and high involvement; and (4) low descriptive norms and low involvement. In their respective conditions, participants were presented with a cover story of an NPO featuring either the Greater Lansing Chapter of the NPO (high involvement) or general information about the NPO headquartered in a different city (low involvement). Secondly, they were exposed to the NPO themed Facebook profile filter promotion post with either a high number or a low number of Facebook friends who have already adopted the filter (descriptive norms). The faces appearing in the stimuli were matched to the participant's race demonstrated in the demographic information to alleviate any confounding cross-racial effects (see Appendix for stimuli and face selection). Following stimuli exposure, participants answered questions about their intentions to adopt the

filter and indicated the amount of money they were willing to allocate to the NPO. Finally, participants were asked to answer questions about their involvement with the issue of having clean and safe drinking water, attitude toward and involvement with the NPO, and routed back to the SONA system for automatic linking of credit.

RESULTS

Descriptive Results

All of the participants reported having a Facebook account. Participants indicated that they have 594 Facebook friends on average ($M = 593.99$, $SD = 462.44$), and use Facebook for less than one hour daily on average ($M = 42.73$ minutes, $SD = 32.98$). More than half (53.1%) of participants reported having heard of the Facebook profile filter function and 28 percent of participants have previously used a profile filter. In terms of volunteering and donation experience, the majority of participants reported having volunteered (69.5%) or donated (68.7%) for NPOs in the past. The average previous donation amount was 51.85 dollars ($SD = 52.93$).

Manipulation Check

To verify the manipulation on descriptive norms, participants were asked to evaluate the number indicated in the Facebook post was small or large and to evaluate if the post was popular or not on two seven-point semantic differential scales. Two Independent Samples T-tests were conducted to compare the means of high and low descriptive norms conditions. Results showed that there was a significant difference between high and low descriptive norms conditions on both items: Number: $t(273) = -4.98$, $p < .001$) and Popularity: $t(273) = -3.53$, $p < .001$. Participants reported higher mean value in the high descriptive norms condition ($M_{\text{Number}} = 4.04$, $SD = 1.54$ and $M_{\text{Popularity}} = 4.01$, $SD = 1.49$) than in the low descriptive norms condition ($M_{\text{Number}} = 3.14$, $SD = 1.44$ and $M_{\text{Popularity}} = 3.38$, $SD = 1.52$). Based on this, the manipulation of descriptive norm was successful.

For involvement, data for organizational involvement were submitted to an Independent Samples T-test. Results showed that there was significant difference between the two involvement conditions, $t(273) = 2.73$, $p < .05$. Interestingly, participants in the high

involvement condition reported lower involvement scores ($M = 5.82$, $SD = 1.26$) than those in the low involvement condition ($M = 6.21$, $SD = 1.11$). Therefore, the manipulation of involvement through geographic proximity was not successful in that it yielded counter-hypothesized validation of the manipulation. The manipulation failure of involvement will be further discussed in the discussion section. Nonetheless, the following report includes results related to the two manipulated factors, irrespective of the failed manipulation.

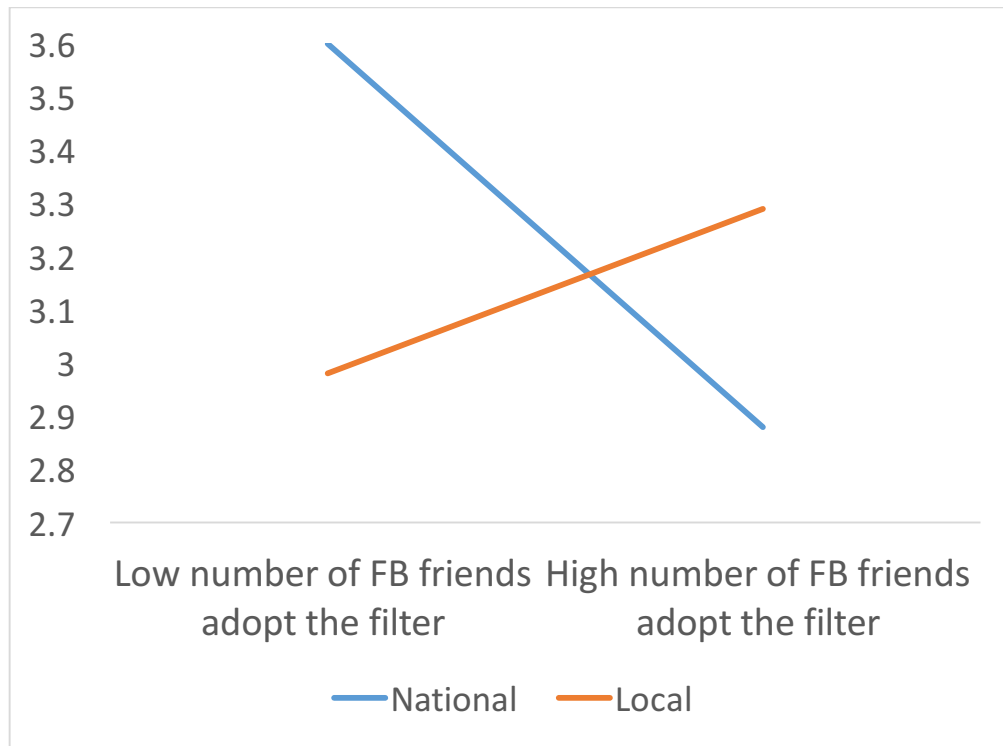
Hypotheses Testing

Hypotheses 1a-c predicted the main effects of descriptive norms and involvement and the interaction effect between them on Facebook users' intentions to adopt the cause-related profile filter. To test the hypotheses, data for filter adoption intentions were submitted to a 2 (descriptive norms) \times 2 (involvement) univariate analysis of covariance (ANCOVA), co-varying out the effect of gender, religion, altruism, attitude toward the issue, involvement with the issue, Facebook usage intensity, attitude toward the organization, organization familiarity, profile filter familiarity, previous volunteer and donation experience, and Facebook friend number. Organization familiarity ($F(1, 257) = 13.81$, $p < .001$, $\eta^2_p = .05$), and Facebook friend number ($F(1, 257) = 5.67$, $p < .05$, $\eta^2_p = .02$) were significantly related to filter adoption intention.

The main effect of descriptive norms ($F(1, 257) = .88$, ns) and involvement (geographic scope) ($F(1, 257) = .62$, ns) were not significant. Therefore, H1a and H1b were not supported. However, the interaction effect of descriptive norms and involvement (geographic scope) on filter adoption intentions was significant, $F(1, 257) = 8.36$, $p < .05$, $\eta^2_p = .03$. Participants exposed to a post by the national organization expressed greater filter adoption intentions if a low number of Facebook friend had adopted the filter ($M = 3.60$, $SD = 1.69$) than a high number ($M = 2.88$, $SD = 1.50$), and this difference was significant, $t(139) = 2.66$, $p < .01$. As for

participants exposed to the post by a local organization, they expressed greater filter adoption intentions when a high ($M = 3.29$, $SD = 1.53$) than a low ($M = 2.98$, $SD = 1.48$) number of Facebook friend adopted the filter, but this difference was not significant, $t(139) = -1.16$, ns (see Figure 1). Therefore, H1c was not supported.

Figure 1: Interaction Effect of Descriptive Norms and Geographic Scope on Adoption Intentions



Hypotheses 2a-c predicted the main effects of descriptive norms and involvement (geographic scope) and the interaction effect between them on donation intentions measured through four seven-point semantic differential scales and the amount of money participants intended to donate to the NPO. To test the hypotheses, donation intentions were submitted to two 2 (descriptive norms) x 2 (involvement) univariate analyses of covariance (ANCOVA), co-varying out the effects of gender, religion, altruism, attitude toward the issue, involvement with the issue, Facebook usage intensity, attitude toward the organization, organization familiarity, previous volunteer and donation experience, and Facebook friend number. Results showed that

altruism ($F(1, 257) = 10.62, p < .05, \eta^2_p = .04$), attitude toward the organization ($F(1, 257) = 12.90, p < .05, \eta^2_p = .05$) and organization familiarity ($F(1, 257) = 5.46, p < .05, \eta^2_p = .02$) were significantly related to donation intentions.

Organizational geographic scope had a significant effect on donation intentions, $F(1, 257) = 5.18, p < .05, \eta^2_p = .02$. Participants expressed greater donation intentions upon exposure to a post by the national organization ($M = 4.27, SD = 1.55$) than a local one ($M = 3.82, SD = 1.35$). Despite the fact that this effect is significant, yet it was not in the direction hypothesized, thus H2a was not supported. Neither descriptive norms ($F(1, 257) = 1.52, ns$) nor the interaction between descriptive norms and geographic scope ($F(1, 257) = 1.60, ns$) had significant effects on donation intentions. Thus, H2a and H2c were not supported.

With regard to the amount of money participants intended to donate to the NPO, ANCOVA yielded similar results. Attitude toward the organization was significantly related to donation amount ($F(1, 256) = 12.65, p < .05, \eta^2_p = .05$). Organizational geographic scope was significantly related to amount of money that intended to donate ($F(1, 256) = 5.43, p < .05, \eta^2_p = .02$). Participants allocated a greater monetary amount to donate to the NPO when it had a national ($M = \$38.39, SD = 32.02$) which is 31.9% more than the amount they were willing to donate to the local chapter ($M = \$29.10, SD = 24.02$). Again, the main effect of descriptive norms ($F(1, 256) = .58, ns$) and interaction effect between descriptive norms and involvement (geographic scope) ($F(1, 256) = 1.25, ns$) on donation amount were not significant.

DISCUSSION

The current study explored the effects of online descriptive norms and organizational involvement on Facebook users' behavioral intentions toward NPOs, specifically, on intentions to adopt a NPO-themed Facebook profile filter and donate. It aimed to expand the theory of normative social behavior by examining how the interaction between involvement and descriptive norms affect individuals' behavioral intentions within online context. Meanwhile, the current study helped NPO marketers to better understand cause-related behavioral change on social media. The following discussion provides a summary of the study's main findings and offers theoretical and practical implications for them.

Summary of Findings

The result of manipulation on involvement was contrary to expectation. Participants assigned to Charity: Water Greater Lansing Chapter (local scope) condition indicated lower involvement compared to those assigned to the Charity: Water (national scope) condition. There are a number of plausible explanations for this failed manipulation. First, it is possible that participants perceived national Charity: Water as more influential than local organization so that they expressed higher involvement toward it, since previous studies found that people tend to identify themselves with prestigious social entities such as organizations or brands to meet the need of self-enhancement and positive self-views (Dutton et al., 1994; Bhattacharya & Sen, 2003; Kuenzel & Halliday, 2008). Thus, it is plausible that participants who were exposed to information and breadth of experience nationally and internationally from the NPO with a national scope showed higher organizational involvement, which rendered the manipulation of involvement using geographic scope not successful. Another plausible explanation is that the national NPO charity: water is an actual organization, whereas the localized chapter was a

fictitious one. It is plausible that participants' familiarity, or inability to retrieve information about the local chapter, resulted in greater believability for the national chapter and lack of validity for the local chapter and thus exacerbated varied and counter-hypothesized involvement perceptions. Finally, it is also plausible that associating with a national chapter of an NPO provides greater exposure and better impression management via social media, thus the issue is viewed more favorably.

For the first set of hypotheses, the interaction between online descriptive norms and organizational geographic scope affected participants' intention to adopt the NPO-themed Facebook profile filter. Interestingly, the effects of descriptive norms were different as a function of the NPOs' geographic scope. For participants who were exposed to the post by the local chapter of the NPO, descriptive norms worked in the hypothesized direction, where the greater number of Facebook friends adopted the filter resulted in higher filter adoption intentions. This is consistent with the elaboration likelihood model (Petty & Cacioppo, 1981), which indicated that at times individuals rely on heuristic cues to process persuasive messages and make decisions. Despite the fact that we hypothesized the local NPO would activate greater involvement due to geographic proximity, the findings showed the opposite, where those participants reported lower organizational involvement. Hence, from an ELM perspective, this low-involving, yet geographically proximal situation yielded heuristic or peripheral route processing that relied on descriptive norms to inform online behavioral intentions. Descriptive norms imply the prevalence and acceptance of the behavior so that they could serve as heuristic cue to influence one's behavior (Petty & Cacioppo, 1981). It is important, however, to mention that despite the fact that the means indicated in the results were in the hypothesized direction, yet the differences were not significant. However, inconsistent with Gockeritz et al. (2010) and Lapinski et al.

(2015), results of the current study showed that descriptive norms were negatively associated with participants' intentions to adopt NPO-themed filter when the organization had a national and wider geographic scope. Specifically, when descriptive norms were low, participants indicated higher adoption intentions compared to participants exposed to the post by the national NPO with more Facebook friends have adopted the filter. This finding was consistent with previous studies (Alhabash et al., 2013; Alhabash et al., 2014) in which participants indicated higher civic behavioral intentions toward cyberbullying YouTube videos with low share/likes. One possible explanation is that social media users tend to engage with novel content that is not yet popular (LaRose & Eastin, 2004; Lang, 2006; Alhabash et al., 2013; Alhabash et al., 2015). This is especially important as it applies only to NPOs of national geographic scope and not a localized scope because with the local scope, descriptive norms influenced users' behavioral intentions. Another possible reason would be that participants exposed to the post by the national chapter of the NPO and who also felt more involved with the organization, as indicated by the manipulation check scores, saw the need to support a cause and an organization they care about at a time when its online post was not having considerable attention (Alhabash et al., 2015). This finding showed evidence that online and offline descriptive norms might act differently on guiding one's behavioral intentions. Taken together, we see that descriptive norms were more influential when the NPO had a national and not a local geographic scope. A plausible explanation is that for the national NPO, there could be a higher expectation of greater virality and online engagement due to its supposed national and international reach, yet these same parameters were not seen variably when the scope of the organization was local.

Second, for donation intentions, the only significant effect found was for the main effect of geographic scope. Participants were more likely to donate to an NPO that has national than

local scope. Previous studies have found that personal relevance with a cause/issue positively associated with donation intentions (Reubsaet et al., 2001; Bea & Kang, 2008). Similarly, this study's findings showed that geographical proximal NPOs (low involved) did not activate the desire to donate to the NPO to the extent that participants indicated donation intentions to the national NPO. There are a number of plausible explanations for this particular trend of findings. First, donating to the national NPO might be associated with greater impact for the donation amount and a greater reach for their civic participation. In other words, participants could have been thinking that by donating to the national NPO, they would be having a bigger impact that transcends their immediate environment. Another plausible explanation stems from a possible limitation of the study in that we chose an issue that has been heavily covered in local and national press associated with the Flint water crisis. This association, and the potential exhaustion from media coverage of the issue might have resulted in a boomerang effect and withdrawal intention from contributing locally. Additionally, participants might have thought that given the great media attention, their contribution would not be as impactful to the local water-related NPO.

Descriptive norms played a role in influencing filter adoption intentions on Facebook rather than donation intentions might due to the different behavior characteristics. Changing profile filter on Facebook can be visible to all of one's Facebook friends, which is a public endorsement that is performed publicly. On the other hand, donation behaviors often happen privately. Rimal and Lapinski (2015) argued that in the social environment or when a behavior is social in nature, descriptive norms have stronger impact on behaviors. It is possible that individuals are motivated to build a positive personal image on social media by publicly supporting a social cause/NPO, while factors such as financial status, attitudes toward charitable

giving behavior could be weighted more heavily when making personal donation decisions. Another explanation might be that in the current study, participants were only exposed to the message showing descriptive norms of filter adoption. In other words, they did not have an accurate sense of the prevalence of donation behavior. Therefore, descriptive norms of filter adoption might not be strong enough to influence participants' donation intentions. Smith et al. (2007) argued that one of the reasons for descriptive norms predict volunteering (Warburton & Terry, 2000) instead of charitable giving could be that individuals usually lack knowledge as to what extent other people have engaged in this behavior, since donation is more of a private pro-social behavior.

Theoretical and Managerial Implications

The current study offers both theoretical and managerial implications. This paper investigated how online descriptive norms and involvement influence people's charitable behavior intentions on social media. Based on the theory of normative social behavior (TNSB), the current study applied Zaichowsky's (1985) involvement on NPO and expanded the literature regarding moderators of the relationship between descriptive norms-behaviors relationship. Second, manipulating descriptive norms within the social media environment, the current study showed a "backfire effect" of online descriptive norms, expressed through the number of friends that have partaken in the advocated behavior, on individuals' behavior intentions. Results suggested that online descriptive norms act differently on changing behaviors compare to previous studies in which descriptive norms were manipulated within offline context. More research on comparing effects of descriptive norms in different media environment is needed. Third, this study found that descriptive norms had influence on advocating behavior intentions instead of charitable giving and discussed why this influence might due to different behavior

characteristics. The finding adds more evidence to theorizing varying normative influences on behaviors with various characteristics.

From the managerial standpoint, the current study showed that social media provide a great opportunity for NPOs who need to raise public awareness. Social media users tend to show more support when fewer people have engaged in the cause when the organization has a national scope. Moreover, the geographic scope of the organization plays a role in influencing both advocacy and charitable giving behavioral intentions. Emphasizing the virality of an online behavior about a local organization might not be as important as instances when the organization has a national scope. As for national NPOs, social marketers should capitalize on the aspect of novelty and the feeling of innovativeness related to online behaviors of consumers. At a national level, being first or among a few showed greater online behavioral intentions. Marketers could also address more personal relevance information in persuasive messages aiming to increase audiences' perceived involvement with the social cause.

Limitations and Future Studies

A few of limitations exist in this study. First, the current study used a student sample. Thus, the generalizability of the results is limited. Meanwhile, a student sample generally has limited financial ability, which could potentially decrease their intentions to donate to NPOs. A future study could replicate the experiment with groups representing a wider range of age, occupation, race, etc. Second, although the manipulation check showed that there was a significant difference between two involvement groups, the manipulation on proximity for involvement was not successful. Besides manipulating proximity, a future study could explore more on involvement manipulation, such as using messages with customized information that address salience personal relevance. Moreover, a future study could explore the reason of

participants indicated higher involvement with NPO headquarter instead of the local chapter. Third, participants in the current study were only exposed to Facebook post featuring filter adopting descriptive norms. The recent launched fundraising tool — Facebook Fundraiser, which is able to show the number of people who have donated to a certain cause/NPO, makes the descriptive norms on donation accessible to Facebook users. This provides a great opportunity for future studies to explore how online descriptive norms could influence individuals' donation intentions.

In the current study, the backfire effect of high descriptive norms for participants in the high involvement condition was consistent with the findings in Alhabash et al. (2013) and Alhabash et al. (2015). It suggested that online and offline descriptive norms might influence one's behavioral intentions differently. Future studies could further examine how online descriptive norms affect individuals' behavioral intentions and the underlying reasons for the different effects of online and offline descriptive norms. Finally, the current study found that descriptive norms had an influence on different supportive behaviors toward NPOs. One of the possible reasons could be different behavioral characteristics (public vs. private in the current study) (Rimal & Lapinski, 2015; Lapinski et al., 2015). It is suggested that future studies could focus on comparing the effect of descriptive norms on behaviors with different characteristics, such as public vs. private, social vs. non-social, the ease of performing the behavior (anti-drinking vs. supporting social cause by sharing/commenting on social media).

APPENDICES

APPENDIX A

Factor Loading of Variables

Table 1: Factor Analysis Results for Evaluations of Positive Status Updates (with Varimax Rotation)										
Item	Factor Loading							Eigen-value	% of Var. Explained	Cronbach's α
Adoption Intention 1	.917							3.69	89.25	.96
Adoption Intention 2	.923									
Adoption Intention 3	.864									
Adoption Intention 4	.908									
Donation Intention 1		.874						3.49	88.24	.96
Donation Intention 2		.894								
Donation Intention 3		.837								
Donation Intention 4		.870								
Issue Attitude 1			.958					3.89	91.96	.97
Issue Attitude 2			.934							
Issue Attitude 3			.911							
Issue Attitude 4			.956							
Organization Attitude 1				.868				3.44	87.83	.95
Organization Attitude 2				.869						
Organization Attitude 3				.882						
Organization Attitude 4				.855						
Issue INV 1					.840			3.96	39.54	.92
Issue INV 3					.798					
Issue INV 7					.849					
Issue INV 9					.851					
Facebook Usage Intensity 1						.864		4.20	69.10	.91
Facebook Usage Intensity 2						.772				
Facebook Usage Intensity 3						.869				
Facebook Usage Intensity 4						.815				
Facebook Usage Intensity 5						.839				
Facebook Usage Intensity 6						.767				
Altruism 1							.773	5.17	44.50	.89
Altruism 2							.751			
Altruism 3							.700			
Altruism 5							.669			
Altruism 8							.662			
Altruism 9							.768			
Altruism 10							.727			
Altruism 11							.666			

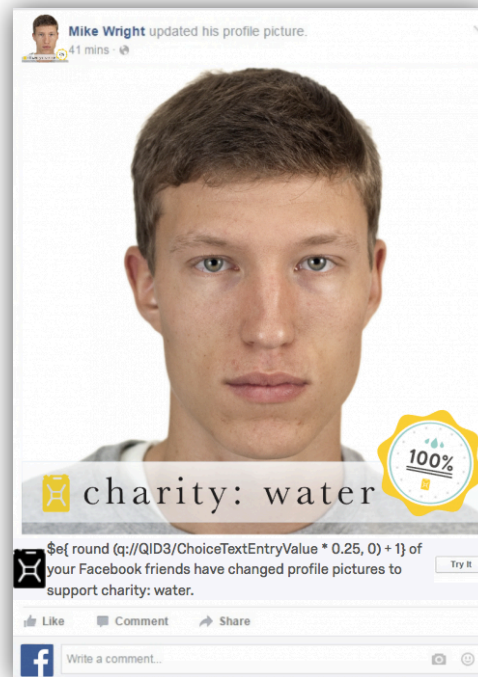
APPENDIX B

Stimuli

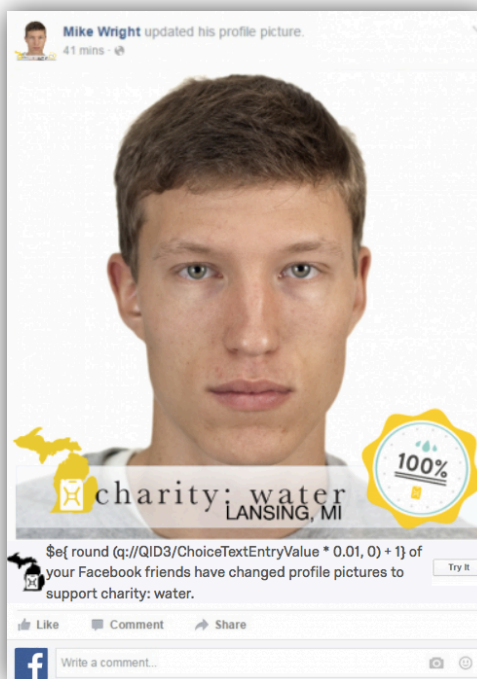
Figure 2: Stimuli Example for Four Conditions (Descriptive Norms X Involvement)



Low Descriptive Norms
Low Involvement



High Descriptive Norms
Low Involvement

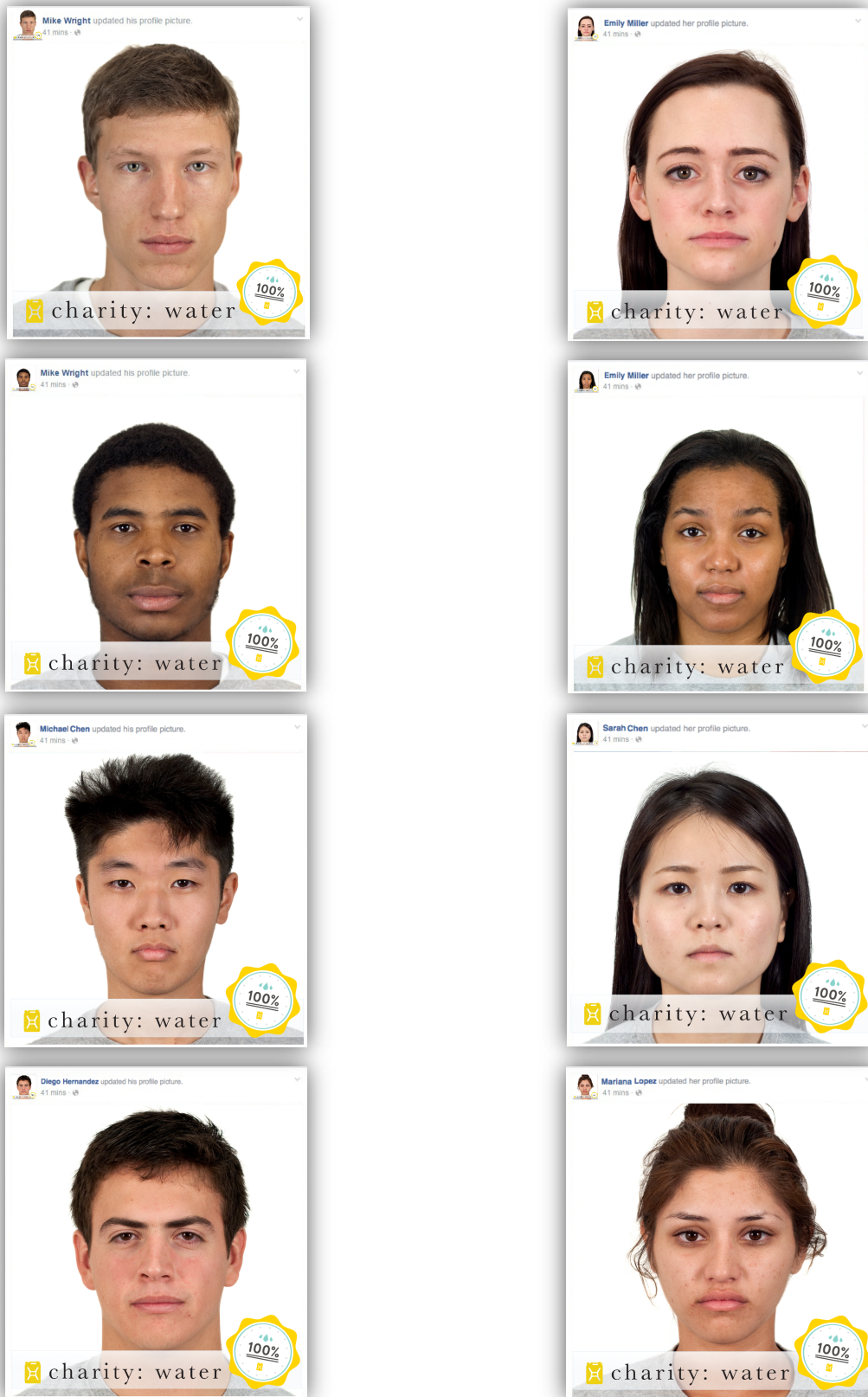


Low Descriptive Norms
High Involvement



High Descriptive Norms
High Involvement

Figure 3: Face Selection to Match Participants' Gender and Race



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