Engaging for Good: Drivers of Social Media Engagement with Prosocial Messages

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Abstract

Over the last decade, brands have increasingly embedded societal causes into their communication with consumers. This trend has accelerated in social media, where managers often mix both traditional promotion and prosocial messages. Factors that explain consumer engagement with promotionally oriented social media messages have received significant research attention; however, few studies have examined the nature of social media engagement among prosocial messages by brands. Specifically, this research studies the effect of content design characteristics of prosocial messages on consumer engagement in social media. It draws on 762 prosocial media messages posted by eighteen brands on both Twitter and Facebook in 2014. After controlling for traditionally examined message characteristics, the results suggest that both motivation-related factors, such as mission-based goals and call-to-action effort -as well as ability-related factors, such as brand-cause fit and responsibility attribution, significantly affect social media engagement. The results differ in significant ways from prior findings in traditional media and are robust to selection- and endogeneity-related concerns.

Keywords: Prosocial Communication, Cause-Related Marketing, Corporate Social Responsibility, Green Marketing, Advertising, Social Media
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“We found an explosion in the number of companies talking about sustainability or corporate social responsibility [in social media]. Unfortunately only a few of those companies seem to have a good idea who they are talking to and what stories they should be telling.”


Over the last decade, brands have increasingly embedded societal causes into their communication with consumers. Accelerated through social media, brand managers are more often mixing traditional promotional messages with prosocial messages defined as messages that pertain to the societal benefits or contributions of a brand. For instance, Walmart’s social media activity communicates price promotions and product assortment announcements, as well as prosocial messages supporting veterans or environment-friendly business practices. Starbucks uses social media to promote new products, as well as to announce programs to reduce youth unemployment or expand supply chain fair trade practices. Despite the significant research attention given to consumer engagement topics in social media, prosocial communication has only played a tangential role as a one-dimension variable, or, as part of a broader content construct (De Vries, Gensler, and Leeflang 2012; Kumar, Bhaskaran, Mirchandani, and Shah 2013; Stephen, Sciandra, and Inman 2015). To our knowledge, no studies have specifically examined the nature of prosocial messages in social media engagement.

Focusing on prosocial messages in social media is timely and important for two key reasons. First, as consumer interest for brand contributions to society heightens, managers are enhancing the communication of social responsibility actions in their portfolios. Sustainly, a company focused on bridging sustainability and communications, in their 2013 “Social Media Sustainability Index” suggested that the number of companies including societal claims in social media messages has doubled in the last four years. Second, given social media engagement’s
important role as a precursor of consumer demand and firm profits (Kumar 2015), it is concerning that recent research finds mixed results for the effect of prosocial message content characteristics (e.g., philanthropic, cause-related) on brand engagement. Lee, Hosanagar, and Nair (2014), in a large-scale study of the relationship between message tactics and social media engagement on Facebook, found that philanthropic or social responsibility messages positively affected the number of comments made by consumers, but did not affect the number of “likes.” A second study by Stephen, Sciandra, and Inman (2015) found a positive effect in the use of a measure that combined philanthropic or charity messages, with organizational and event sponsorships. Therefore, it is difficult to assess from their study the specific contribution of prosocial communication. A third study by Malhotra, Malhotra, and See (2013) found Facebook posts using a social cause as content were not effective in generating consumer “likes.” The increased use of prosocial messages, juxtaposed with an inconsistent effect on brand engagement, makes the research presented here important and relevant for managers and scholars alike. We contribute to the issue by studying how content design characteristics of prosocial messages on Facebook and Twitter affect consumer brand engagement.

We draw on the motivation-ability framework (Merton 1957) to identify and study the effect of six content characteristics unique to the design of prosocial messages, namely (a) message goal; (b) cause materiality; (c) call-to-action effort; (d) brand-cause fit; (d) cause attribution; and, (e) treatment attribution. This study seeks to answer the following question: *How do such content characteristics affect the engagement of consumers with prosocial messages in social media environments?* Using 762 prosocial media messages by eighteen brands in 2014 on Twitter and Facebook. After controlling for traditionally-examined social media drivers, such as advertising appeal factors (Chandy, Tellis, MacInnis, and Thaivanich
2001) and message format characteristics (Lee, Hosanagar, and Nair 2014), we found that four of the six content design areas significantly stimulate consumer engagement with prosocial messages in social media. The results contribute to the prosocial marketing literature in three ways. First, the findings provide the first empirical study of the impact of content strategy decisions on consumer engagement with prosocial messages in social media. Second, examining message goals, brand-cause fit and responsibility attribution represent three new content characteristics in the study of social media communication by brands, all of which are well within brand manager control. Finally, our results differ from previous findings on the factors affecting social media engagement of promotional messages providing light into different and unique considerations for the design of pro-social messages.

**Relevant Literature**

Research on the use of prosocial claims by brands and the drivers of consumer engagement in social media appear to run in parallel and thus, the intersection of the two areas has not yet received much attention by scholars. The vast majority of studies on prosocial claims emerged from consumer behavior literature with a focus on how the adoption of societal benefit claims impacts consumer evaluation and likely adoption of products. From the perspective of claim characteristics, research found that message framing (Goldsmith, Newman, and Dhar 2014), attribute centrality (Newman, Gorlin, and Dhar 2014), message visibility (Ariely, Bracha, and Meier 2009), attributions about company intentions (Vlachos, Tsamakos, Vrechopoulos, and Avramidis 2009), and brand fit (Zdravkovic, Magnusson, and Stanley 2010) are all relevant drivers of the effect of prosocial claims on purchase intent.

In addition, researchers considered a number of customer-level characteristics that moderate the influence of prosocial claims on consumer choice for products, including abstract
vs. concrete mindset (White, MacDonnell, and Dahl 2011), cause support (Sen and Bhattacharya 2001), self-accountability (Peloza, White, and Shang 2013), and self-transcendence (Torelli, Monga, and Kaikati 2012). While claim and consumer characteristics collectively represent major progress in the understanding of the relation between prosocial claims and product preference, the relation to consumer engagement, especially in social media environments, is still an area in need of investigation.

Research to date conceptualizes consumer engagement as a consumer response phenomenon distinct from customer satisfaction and defined as a personal and motivational state arising out of an aggregation of consumer experiences with product stimuli (Bobby, Mathew, and Edward 2013; Brodie, Hollebeek, Juric, and Ilic 2011). Some scholars define it as supportive behaviors for a product or service that extend beyond customer-firm purchase transactions, and that become means of enhancing interaction and participation on the part of customers (Kumar, Novak, and Tomkins 2010). These include making recommendations via word-of-mouth, blogging, review writing, helping other customers, and participating in customer or brand communities (Bolton 2011; Van Doorn, Lemon, Mittal, Nass, Pick, Pirner, and Verhoef 2010). While these definitions largely reflect behaviors in traditional media, scholars created parallel proxies for social media environments. These include attitudinal (e.g., liking a post on Facebook) and behavioral measures of engagement (e.g., sharing or commenting on a Facebook post with friends) (Berger 2011; Kumar et al. 2013; Lee, Hosanagar, and Nair 2014; Moe and Schweidel 2015; Porter and Golan 2006; Stephen, Sciandra, and Inman 2015).
While a significant amount of research examined the attitudinal and behavioral effect of advertising design in traditional (Bertrand, Karlan, Mullainathan, Shafir, and Zinman 2009; Chandy et al. 2001; Liaukonyte, Teixeira, and Wilbur 2014; Olney, Holbrook, and Batra 1991) and digital media (Bart, Stephen, and Sarvary 2014; Danaher, Smith, Ranasinghe, and Danaher 2015; Goldfarb and Tucker 2011), the research on social media engagement is still emerging. Current research on social media engagement adapts established advertising research frameworks (Abernethy and Franke 1996; Chandy et al. 2001) to study the effect of content characteristics such as arousal, appeal mode, persuasion and information type on Facebook messages (Berger and Milkman 2012; Kumar et al. 2013; Lee, Hosanagar, and Nair 2014; Stephen, Sciandra, and Inman 2015). Indirectly related to this study, Berger and Milkman (2012) also found that high arousal inducing characteristics, such as awe, anger, and anxiety, of New York Times stories motivates greater sharing and increases the ability of the message to go viral. Other research found that the response depends on the size of the audience and type of product (Schulze, Schöler, and Skiera 2014; You, Vadakkepatt, and Joshi 2015). However, these studies did not focus on company brand messages on social media sites.

Consumer engagement research in social media, De Vries, Gensler, and Leeflang (2012) examined company managed brand fan pages and identified prominence of the post, interactivity and vividness as drivers of engagement metrics such as likes or comments. More recently, Stephen, Sciandra, and Inman (2015) developed a typology of fourteen social media content characteristics and found that relevance and information type drive engagement, while overt persuasion and adoption of an advertising-tone hurt it. It is important to note that these two studies do not distinguish between commercial posts and prosocial posts, which is the focus of this study. Drawing on the seminal classification of Resnik and Stern (1977) and the advertising
content literature (Chandy et al. 2001), Lee, Hosanagar, and Nair (2014) found that persuasive content has both a direct positive and moderating effect on engagement, measured as likes and comments. Information content, on the other hand, reduces engagement, but positively interacts with persuasive content in influencing engagement. Key to our research, this study includes philanthropic content as a dimension of persuasive content and finds that it has positive impact on comments and insignificant impact on “likes” in Facebook. However, the measure of prosocial messaging is limited to a binary code for presence of philanthropic content, regardless of its type. In contrast, a managerial study by Malhotra, Malhotra, and See (2013) reports that embedding content about a social cause into Facebook communication led to lower levels of engagement as measured by the amount of “likes” generated among consumers.

Taken together, these studies demonstrate the important role of content characteristics on customer engagement in social media. While they identify critical drivers of engagement, they do not distinguish between promotional and prosocial communication. The exceptions (Lee, Hosanagar, and Nair 2014; Stephen, Sciandra, and Inman 2015) do not measure the unique and manager-controlled content dimensions that differentiate prosocial messages from other forms of brand communications. Moreover, these studies are limited to Facebook, while Twitter has grown both in scope and scale as a social media option for corporate brand posts. As shown in Figure 1, this study is (1) positioned as the first study to address social media engagement for prosocial messages, and (2) considers a wide array of content design choices, relevant to prosocial messages in explaining social media engagement.

[Figure 1 About Here]

Conceptual Framework
To organize the conceptual framework for our study, we followed the motivation-ability framework that possesses wide applicability to research in marketing strategy (Boulding and Staelin 1995), channels (Grewal, Comer, and Mehta 2001), and sales (Sabnis, Chatterjee, Grewal, and Lilien 2013). In the most closely related application, MacInnis, Moorman, and Jaworski (1991) argue that the consumer’s motivation, ability, and opportunity to process brand information during or immediately after the moment of exposure influences the level of advertising processing. We applied their framework to the social media context by identifying factors that contribute to the motivation or ability of consumers to process and engage with prosocial messages. We proposed three factors that could affect the motivation of consumers to process a prosocial message, and hence, influence its engagement, namely, (a) message goal; (b) cause materiality; and, (c) call-to-action effort. Separately, we argue for three factors that could affect the ability of consumers to process a prosocial message, namely: (a) brand-cause fit; (b) cause attribution; and, (c) treatment attribution. In turn, we conceptualized social media engagement in both attitudinal (i.e., likes and favorites) and behavioral dimensions (shares and retweets). Next, we discuss the relationship delineated in the model and depicted in Figure 2.

Motivation Based Hypothesis

Message goal. Prior research described three types of campaigns used by companies when designing advertising with a social dimension (Drumwright 1996). The first type is non-economic campaigns, where messaging primarily announces a philanthropic agenda or report on social responsibility actions or progress. The second is economic campaigns, similar to promotional campaigns in that the objective is to increase sales or build brand equity. A third type is a mixed campaign, with both non-economic and economic objectives. Using this scheme,
we proposed three categories of prosocial messages based on their inferred goal: 1) information-based goal (IBG); 2) transaction-based goal (TBG); and, 3) mission-based goal (MBG). Prosocial messages designed with an IBG aim to increase consumer awareness of the societal actions or contributions of a company or brand. In that sense, they are analogous to non-economic campaigns. For instance, Coca-Cola has used Facebook messages to communicate how they are repurposing aspects of their supply chain to distribute medicines in hard-to-reach African communities. Similarly, Chipotle has used Facebook to announce donations to youth sport programs in communities across the United States. As illustrated by these examples, IBG’s are distinguished by their message orientation and composition traits. First, the orientation is unidirectional from the company to the marketplace. Second, the focus is on announcing the company action or contribution, not on advocating for change or promoting action on the part of market agents, be they consumers, government, or other stakeholders. As a result, there are low or no requirements for consumer participation built into the messages. Together, messages with IBG’s resemble the non-economic campaigns of corporate social responsibility used by companies in traditional advertising form and described in the literature (Drumwright 1996; Turker 2009). Given that the orientation and composition of the message does not take into account consumer interests or needs, it is more likely that they will include societal causes that, while being important to managers, are unlikely to resonate with consumers (Berman, Levine, Barasch, and Small 2015). Finally, these type of messages are absent of the type of interactivity or entertainment characteristics associated with social media engagement (De Vries, Gensler, and Leeflang 2012). They also rely on facts, news, or reports of interest to the company, which is a content approach that has not been associated with increases in social media engagement.
metrics such as likes or comments (Lee, Hosanagar, and Nair 2014). Therefore it is unlikely that IBG’s are an effective content strategy to increase social media engagement among consumers.

Messages with a transaction-based goal (TBG) are analogous to economic campaigns in that they incorporate a purchase-based donation in the design of the brand communication in social media. They are messages with an economic goal (Drumwright 1996) and closely resemble the definition of cause-based marketing programs (Varadarajan and Menon 1988). TBG’s are messages that entice consumers to participate in revenue generating activities based on the promise of a positive societal action by the brand, which typically involves a charity donation. Brands that link donations to product sales tend to generate more self-serving attributions by consumers, and thus lower the perception of value (Ellen, Webb, and Mohr 2006). In addition, social media studies found that messages with promotional content, such as price discounts, special deals, or consumer promotions, have a negative effect on likes and comments on Facebook (Lee, Hosanagar, and Nair 2014). Given the promotional nature of TBG messages, we predict they will not be effective in generating consumer engagement for prosocial messages in social media.

For the third goal type we deviate from the campaign categories introduced by Drumwright (1996) and use the term Mission-Based Goals (MBG’s) to define prosocial messages where the brand is actively promoting a societal change, rather than announcing societal benefits or stimulating revenue-generating activity. Here, the brand takes a role usually assigned to social marketing conducted by not-for-profit organizations, where the emphasis lays on calling attention to a social need or change, instead of calling attention to a product. In other words, in MBG communication, the brand acts like an advocate for a cause instead of an advertiser for a product. However, the advocacy focuses on mobilizing people to improve a
particular social condition, rather than generating donations through transactions, as in the case of TBG’s. For instance, Always, the brand of feminine products, actively used Facebook messages to gain support for a program designed to strengthen the self-esteem of girls as they entered puberty. In another example, Patagonia, a fashion brand, used prosocial messaging to increase consumer participation in the United States electoral process, supported candidates that carry an environmentally conscious policy agenda. In both examples the brand message serves to advocate for societal change, not as advertisers of a company social responsibility program, or a consumer promotion with a cause related theme.

We expect that MBG’s will be more effective than IBG’s or TBG’s in generating consumer engagement in social media for the following reasons. First, MBG do not directly promote products or company actions, but rather values in society to help a particular social issue. Research has found that consumers respond more positively to prosocial efforts perceived to be driven by “values” or “strategy” rather than by “stakeholders” or “egoistic” intentions (Ellen, Webb, and Mohr 2006; Stengel 2012; Vlachos et al. 2009). In addition, by promoting values, MBG’s stimulate a desire to live up to a standard, which activates a sense of self-accountability. This effect can be particularly present in a social media context given the visibility that message engagement behavior in the form of likes and shares, has among the social network of consumers. Increases in self-accountability are associated with higher levels of preference for ethical attributes (Peloza, White, and Shang 2013), generating a favorable attitude reflected in the choice by consumers to like a message. Finally, although campaigns designed to encourage the adoption of products with societal claims increasingly highlight self-interest (e.g., the economic benefits of reduced energy and water use by Tide HE Turbo clean smart suds), recent research suggests that such appeals may not be as effective as those highlighting the self-
transcendent benefits of the same offering (Goldsmith, Newman, and Dhar 2014). As a result, we expect that MBG messages would outperform TBM’s and IBM’s in stimulating consumer engagement in social media. From a social media perspective, MBG messages place the content focus on the societal cause, not the brand or promotional activity. We believe such design strategy is less likely to induce commercial attributions by consumers, and hence avoid the negative effect on engagement. Formally:

\[ H1: \text{Prosocial messages focused on promoting a societal mission will be more effective in driving consumer engagement in social media than prosocial messages focused on (a) providing information about a corporate social responsibility action and (b) on promoting a product purchase to support a cause} \]

\textit{Cause materiality.} Prior research in traditional media finds that consumers support causes that they perceive as important or deserving (Cleveland, Kalamas, and Laroche 2005). Along similar lines, we investigate if the materiality of the societal cause, as perceived by consumers, can be a factor in stimulating social media engagement. We define cause materiality as the perceived effect a given societal need can have on people’s lives. In particular, we propose that consumers will react asymmetrically to causes in support of the wellbeing of the environment than causes in support of the wellbeing of people. We expect that norms of behavior in social settings will make causes perceived as impacting people’s needs generate greater engagement than causes in support of environmental needs.

Extant research found that campaigns face two challenges from products supporting environmental causes. First, consumers perceive environment-friendly products to be less effective in performing core tasks (Lin and Chang 2012). Such a decrease in effectiveness perception can lead to a lower degree of engagement with the message. Furthermore, in situations with higher social accountability and visibility, consumers will engage more with benefits of society-oriented messages than environmental benefits (Green and Peloza 2014).
Expected social norms that consider public expression of preoccupation for human needs to be more appropriate than concern for environmental needs appears to influence such behavior (Ariely, Bracha, and Meier 2009). Given that people in the consumer’s social network can observer their choice to engage with a social media message, we expect people, on average, to behave consistently with expected social norms. Therefore, we predict consumers will express greater support for prosocial messages perceived to benefit the needs of people over other areas of societal need such as the natural environment. Support for this conjecture is found in studies of choice context where preference for environmental causes was lower than community causes revealing a tension between what individuals want to do and what they think they should do, particularly when observed by others (Kahneman and Ritov 1994). In line with this quandary, a recent study found that human-related causes (e.g., health, education) appear to generate more favorable attitudes than causes benefiting animals or the environment (Lafferty and Edmondson 2009). Therefore, we formally predict:

\[ H2: \text{The greater the association of a cause with a benefit to human life, the greater its social media engagement.} \]

**Call-to-action effort.** Researchers have investigated a number of incentives to motivate people’s engagement in social media environments. For instance, how providing information about another group’s activity (Ren, Harper, Drenner, Terveen, Kiesler, Riedl, and Kraut 2012) or participation by other individuals (Aral and Walker 2012) affected the degree of activity and engagement by individuals in online settings. Scholars have also begun to investigate the effects of effort associated with expressed calls-to-action as a vehicle to entice consumer participation. In one study, researchers found that consumers requiring an effortful task (e.g., tagging a picture) to participate in a website consequently demonstrated a greater engagement with website activities (Drenner, Sen, and Terveen 2008). More recently, researchers found that the order of
the calls-to-action, particularly when it corresponds to the likelihood that users will voluntarily engage in the actions, enhances participation (Zalmanson and Oestreicher-Singer 2015). The choice of calls-to-action is particularly relevant for a study of prosocial messages because brands often associate the use of social causes with the need to invite or promote participation by consumers. For instance, the ALS Ice Bucket challenge, the Starbucks Race Together campaign, or the Susan G. Komen Foundation Pink Ribbon campaign are all prosocial programs designed to stimulate consumer participation. However, research to date is unclear on the effect of different levels of participation expectations on engagement.

It is possible that requesting greater levels of involvement would deter consumers from engaging with the message due to higher processing requirements. It is easy to like a post, but much more is required to attend an event or participate in a promotion to demonstrate support for a cause. Particular to a social media context, the social utility generated by consumers from associating with a cause is likely to be satisfied by low levels of interaction such as liking, sharing, or commenting on a post. In fact, higher levels of involvement may create disutility because others in their social network may not observe consumer’s actions. Extant research finds that public signaling plays an important role in influencing consumer’s decision to engage in prosocial behavior (Bénabou and Tirole 2010; Ellingsen and Johannesson 2011; Harbaugh 1998; Lacetera and Macis 2010). A recent study of social media messages found an inverse relation between calls-to-action and engagement among promotional brand messages (Stephen, Sciandra, and Inman 2015).

Finally, scholars also found that for causes perceived as virtuous, people are more likely to respond without incentive when their support takes place in a public setting observed by others. Incentives work better for private prosocial messages (Ariely, Bracha, and Meier 2009).
Given that prosocial messages on Facebook and Twitter occur in a social environment, it is possible to expect a similar effect on engagement. Therefore, we predict the following:

\[ H3: \] The greater the perceived effort associated with a call-to-action, the lower the social media engagement with prosocial messages.

**Ability Based Hypothesis**

*Brand-cause fit.* In the marketing literature, fit is defined from the consumer perception of similarity, complementarity, or transferability of intangible associations between two entities, be it a brand and line extension, or a brand and sponsored entity (Aaker and Keller 1990; Lichtenstein, Drumwright, and Braig 2004). Simply put, fit between two entities is high when consumers perceive them as making sense together. We build on this line of work and propose that the perceived brand-cause fit in a prosocial message will lead to higher levels of consumer engagement in social media. We can find support for this proposition in prior studies where brand fit has had a positive effect on the participation of consumers in cause-marketing campaigns (Nan and Heo 2007). Additionally, a literature review finds that in 13 of 16 studies fit generally improves stakeholder attitudes toward the firm (Peloza and Shang 2011). Research also found that similar factors, including an overlap between the brand and the cause in terms of target markets, missions, and geography, positively impacted consumer perception and attitudes toward a social cause (Zdravkovic, Magnusson, and Stanley 2010). Brand-message fit has not received much attention in the social media literature to date. A reduced form of the construct measuring only conceptual fit and as part of a broader construct, finds a positive effect on social media engagement metrics (Stephen, Sciandra, and Inman 2015). We expect brand-cause fit to enhance the information processing ability of consumers, leading to greater conceptual fluency and therefore, a more positive response (Lee and Labroo 2004), reflected in the propensity by
consumers to like or share the message. Social sponsorship research suggests that low levels of fit are associated with less favorable attitudes toward the brand and greater cognitive processing effort, which lead to lower evaluations of the sponsorship activity by consumers (Simmons and Becker-Olsen 2006). Altogether, the evidence from other relevant consumer behavior outcomes leads us to predict the following,

\( H4 \): Brand-Cause fit will have a positive effect on the social media engagement of prosocial messages by consumers.

Responsibility attribution. In addition to perceptions of congruency between a brand and a cause, consumers also have expectations about the role of institutions, be the government or from the private sector, in addressing different societal issues. We use two responsibility attribution types from the political science literature (Iyengar 1989) as structure for our hypotheses, mainly: causal and treatment attributions of responsibility. Causal attribution refers to the association between agent and cause of societal problems. A high causal attribution would be indicative of consumer perception that a brand is partly to blame for the existence of the societal need it seeks to support. For instance, Walmart launched a Facebook campaign to support the return of manufacturing activity to the United States. However, over the past decade, media coverage has singled out Walmart procurement policies as enabling the trend toward manufacturing jobs moving away from U.S. cities to Asian countries, particularly China. In fact, according to an article by Robert Scott of the Economic Policy Institute on Walmart’s effect on U.S. manufacturing, close to 200,000 jobs were lost due to its focus on Chinese imported goods. Therefore, consumers may attribute a causation responsibility to that particular prosocial message, possibly leading to a negative association and response to Walmart’s well-intended campaign. Prior research found that preferences and evaluations are often negative when the public perceives individuals or institutions as agents of causation (Iyengar 1989).
In contrast, treatment attribution refers to the extent by which consumers perceived a particular agent as responsible for solving a problem. In the context of this study, we define treatment attribution as the degree by which consumers believe that solutions to a societal cause are in part the responsibility of institutions rather than individuals. Consumer treatment attribution occurs for many societal causes. In a 1989 study, Iyengar found significant differences in the attribution of responsibility between individuals and institutions across issues of poverty, crime, racial inequality, and terrorism. More recently, a 2013 Pew Research Center study reported that, while a majority of consumers (67%) sees obesity as a serious public health concern, only 42% believe that institutions like the government should play a significant role in addressing it. Our contention is that if a brand selects to support a societal cause perceived by consumers as an institutional responsibility, it would enhance the ability of consumers to understand and process the brand message, increasing the likelihood of engagement. Prior attribution of responsibility studies, particularly in the context of political science, supports this conjecture. In that context, researchers found that congruency in the attribution of responsibility can moderate or drive the effect on presidential, congressional, and Supreme Court evaluation and approval levels (Grosskopf and Frye 2012). Closer to marketing, congruency in the attribution of responsibility has a positive effect in the performance of prosocial positioning strategies by brands (Osterhus 1997). Taken together, the above-mentioned lead us to the following predictions:

\( H_5 \): Causation attributions between a brand and a cause will lead to a decrease in social media engagement of prosocial messages.

\( H_6 \): Treatment attributions between institutions and a cause will lead to an increase in social media engagement of prosocial messages.

**Empirical Setting and Data**
We tested our conceptual framework with a sample of social media messages posted on Facebook and Twitter by eighteen brands in the U.S. The brands were selected based on their social media competence and prosocial activity. We determined social media competence by the activity rankings reported on the site Social Bakers (socialbakers.com). We selected the top thirty consumer brands, as of December 2014. We complemented the list with brands recognized by the business press as active in prosocial messaging during 2014. A review of news coverage from Advertising Age, an online marketing trade publication, and the advertising section of the New York Times led us to add four additional brands to the sample. A team of research assistants collected the data for all social media messages posted on Twitter and Facebook for each brand, including the content of the post, the number of likes and shares on Facebook, and the number of favorites and retweets on Twitter. We collected 11,138 social media posts, 43% from Twitter and 57% from Facebook.

Research assistants classified each post as prosocial message or not based on the presence of specific social dimensions (Drumwright 1996). Social dimensions can be of many types. Therefore, we created a framework to define their scope and characteristics by reviewing the sustainability reports of companies in our sample. We chose social dimensions related to three areas of societal need – environmental, animal and community wellbeing.

First was environmental wellbeing, which included messages addressing problems related to the natural environment, such as water pollution, the protection of forests, sustainable agricultural practices, or the limitation of CO\textsubscript{2} emissions. Second was animal wellbeing, referring to messages about the needs of domestic or wild animals, such as the protection of wildlife or endangered species, as well as the ethical treatment of animals by food companies. Community wellbeing was chosen as the third area, categorized by messages related to the
continuum of Maslow’s hierarchy of needs, from physiological, such as providing food and shelter to homeless people, to esteem and self-actualization, such as building esteem and confidence among youth. We also selected two categories of activity areas - “front-end” and “back-end.” Back-end messages were messages that related to the value chain activities of the firm. For instance, messages informing consumers about the adoption of fair trade practices in ingredient procurement or the use of environment-friendly manufacturing processes. We defined front-end activities as prosocial messages focused on community topics unrelated to the brand’s own value chain. The Dove “Real Beauty” brand campaign that promote self-esteem among girls best illustrate the “front-end” type of prosocial message. Both types of activities, back-end and front-end, were considered in the identification of prosocial messages. Out of the original sample of thirty, eighteen brands were determined to use prosocial messaging in their communication efforts with consumers. We identified 762 prosocial posts, which form the bases of the sample used for the analysis.

Given the data consisted of company Facebook and Twitter posts, not direct responses from individual respondents, researchers collected qualifying messages a minimum of one month after they were posted. Doing so increased the likelihood that we captured the total amount of engagement achieved by the posts. According to Lee, Hosanagar, and Nair (2014), after fifteen days, virtually 99% of all engagement is accounted for. In part, this is because brands typically do not remove posts and hence, Facebook and Twitter algorithms more heavily weight posts less than a month old, which significantly lowers the likelihood of posts older than a month being seen (Stephen, Sciandra, and Inman 2015).

**Operationalization of Constructs**
The dependent variable of our study is consumer engagement, measured by two different metrics commonly used among practitioners and increasingly by scholars in social media studies (Lee, Hosanagar, and Nair 2014; Stephen, Sciandra, and Inman 2015). As an attitudinal indicator of consumer engagement, we used the number of “likes” each message received on Facebook or the equivalent measure of “favorites” that a message received on Twitter. As a behavioral measure of consumer engagement, we used the number of “shares” received by a message on Facebook and the number of “retweets” received by a message on Twitter. While generated by different social media platforms, likes and favorites or shares and retweets correspond to similar expressions of attitudinal or behavioral engagement with a message.

We operationalized message goals based on the orientation of the content. Messages oriented toward the creation of awareness about a social responsibility action by the brand were coded as IBG’s and represented 20% of the sample. Messages that announced or discussed a consumer promotion, or a transaction-based donation, were coded as TBG’s. Eleven percent of the messages in the database met this description. Finally, 13% of messages in the database included content promoting moral or ethical values and were coded as MBG’s. Table 2 provides a sample of each message type across the three goal categories. Messages that did not meet any category criteria were coded as undefined message goals (UMG’s) and served as the base of comparison in the analysis.

[Table 1 About Here]

To establish measures of materiality we developed a list of 102 distinct societal needs included in the prosocial messages by the brands in our sample. We recruited a 100-person sample from AMT to review ten societal needs and using a five-point Likert scale, answer the following: a) To what extent would you agree that progress in each of the following areas would
help improve human life? Importantly, the participants in this classification exercise were not exposed to the actual social media post, only to the societal need; thus, avoiding potential bias generated by content characteristics of the message, but unrelated to the societal need itself.

To measure the call-to-action effort we build on the approach taken by Stephen, Sciandra, and Inman (2015), where they coded two calls-to-action, namely calls to engage via a “like” or to “share” a message, and calls to enter a competition, such as a sweepstakes or giveaway. While the authors associated the call-to-action effect on social media engagement to consumer effort, they did not measure the perceived effort by consumers of the different call-to-action types. To do so, we first identified all the different calls-to-action used in the sample of prosocial messages, which amounted to eleven distinct calls-to-action. Fifty participants recruited via AMT were asked to evaluate each of the eleven calls-to-action, using a seven-point scale, based on two questions: (a) How much effort do you think would be required to comply with the following requests in a Facebook post? (no effort–great effort), (b) how difficult would it be for you to comply with the following requests in social media messages? (not difficult–very difficult). We then created a measure of effort for each call-to-action by taking the mean from all fifty respondents across the two questions.

For the measure of brand-cause fit we follow Kuo and Rice (2015) who proposed that both conceptual (i.e. relation to brand positioning or image) and perceptual fit (i.e. relation to colors, size, and shape) were dimensions of the overall effect of fit on a social cause. Our combined measure was developed in two steps. In the first step, research assistants classified, in binary terms, whether a posted message included one or more of the following: brand logo, image of the product package, image of the product, recognized brand icons (e.g., brand mascots or characters), or the brand visual identity (e.g., colors and font type). In a second step, we
created a brief description for each of the societal needs that each brand in the sample included in their messages. For instance, the brand Patagonia included messages related to the protection of wildlife and the environmental effect of water dams. The brand Always included messages related to the self-esteem of girls upon reaching puberty. Finally, the Budweiser brand included messages supporting veterans returning home from Iraq and Afghanistan. We created a list of brand-societal need combinations, including all societal needs covered by each brand’s portfolio of prosocial messages. We recruited a random sample of 180 people via Amazon’s Mechanical Turk (AMT) to answer three questions for each of the eighteen brands. Participants evaluated one brand each and rated them on a five-point Likert scale (strongly disagree - strongly agree). The ratings measured the extent to which the brand-societal issue combination (1) appeared to be an authentic message; (2) was consistent with brand expectations; and, (3) was credible coming from the company. These questions were adapted from the items used by Kuo and Rice (2015). The measure of conceptual fit takes the mean across the three questions (alpha = .95).

Importantly, individuals recruited to classify the messages were not exposed to the actual social media post, but only to a statement describing the societal areas used by the brands. This allowed for a measurement of conceptual fit between the brand and the societal need, without risk of confounding the evaluation with the presence of symbolic fit. We created a final measure of fit by adding the total classification for the symbolic and conceptual fit.

Finally, the measures for treatment and causal attribution were established following similar protocols to the one used for the Materiality and the Conceptual Fit measures. For causal attribution we used the list of brand-cause combinations and asked a sample of AMT participants to indicate, with a five-point Likert scale, the extent to which they agree that the brand-cause combination “would seem as if the company is trying to compensate for problems they
themselves have created in that area.” We used the mean response for each brand-cause combination as our measure of causal attribution. For treatment attribution, the list of 102 societal needs was used to ask the AMT respondents the following question: which of the following segments of society is most responsible for providing support to the following social causes? Segments included government, non-profit organizations, for-profit companies, individuals, and all areas. The mode of the responses for each of the societal needs area was used as the measure of treatment attribution.

Controls
In addition to the variables of interest to our study, the analysis also controlled for content characteristics found to be associated with consumer social media engagement. We followed coding descriptions developed in Lee, Hosanagar, and Nair (2014) and Stephen, Sciandra, and Inman (2015). Metrics were defined for the use of visual stimulus, length of the post, use of spokespersons, use of information content, and inclusion of persuasive content. Additionally, we controlled for the number of times the same image, or text, was used by a brand in prior posts. Table 3 offers a summary of statistics for the measures in our study.

[Table 2 About Here]

Analysis Consideration and Approach
To test the conceptual model and hypotheses, we addressed the following considerations that emerged because of the data and data generation process. First, because of our focus on prosocial posts, we addressed the possibility that a firm’s decision to use such a message was a strategic choice, ignoring this decision could bias the results. Consequently, we conducted a first stage Heckman selection analysis. In this step, we separated the posts into prosocial (coded as 1) and promotional posts (coded as 0). We then estimated a maximum likelihood probit model to
assess the effects of brand size, brand social responsibility association, brand innovativeness association, as well as product category and social media platform fixed effects. We expected all of these would influence the firm’s likelihood of using prosocial messages in their social media posts. From this analysis, the inverse mills ratio (IMR)\(^1\) was included as an additional variable in the subsequent analysis to account for potential endogeneity of the post’s use of social media messages in the consumer engagement model.

Second, because the two dependent variables were counts with large variances the application of count distributions (e.g., Poisson) was less appropriate, as supported by Stephen, Sciandra, and Inman (2015). Instead, we applied a logarithmic transformation of the variables prior to using them in the analysis.\(^2\) Third, as we do not have access to Facebook’s algorithm, which determines the posts users see, we followed the recommendation from the literature to include a one-post lag dependent variable as a control variable, because the prior post engagement level influences the reach of the subsequent posts (Stephen, Sciandra, and Inman 2015). Fourth, we included brand fixed effects to account for differences in the size of the social media network for each brand as well as capture the brand specific social media capabilities, which are inherently unobserved and could serve as omitted variables, the exclusion of which could bias the main model estimates Wooldridge (2010). Fifth, we addressed the likelihood that the content design factors of the prosocial messages were endogenous decisions. While we took steps to address possible issues around the strategic choice of using prosocial messages with a selection correction model and included brand specific effects to proxy latent marketing

\(^1\) The inverse Mill’s ratio \((\lambda_\text{w})\) is calculated as \(\lambda_\text{w} = \phi (\beta_\text{w})/\Phi (\beta_\text{w})\), where \(\phi\) is the standard normal density function, \(w\) and \(\beta\) are, respectively, the vector of independent variables and coefficients from the probit model, and \(\Phi\) is the standard normal distribution function.

\(^2\) Consistent with Stephen, Sciandra, and Inman (2015), a dependent variable \(y\) was transformed via log \((1+y)\) where \(1\) is added to avoid taking logs of 0 values.
capabilities, other unobserved factors could have existed that drove content design choice. To address this source of endogeneity, we closely followed the approach taken by Stephen, Sciandra, and Inman (2015) and Danaher et al. (2015) in implementing the Petrin and Train (2010) control function method. Depending on the nature of the variable, we estimated a probit or tobit regression model for each of the content design measures. The model used the lag dependent variable, the lag of all the other content decision variables, and the control variables that were part of the main engagement model as independent variables. We believe that this was an appropriate method to address the potential for endogeneity for the following two reasons. First, as Stephen T. et al. (2015) argued the lagged content variables serve as instruments, because while they influence current content decisions, they are unlikely to influence the current engagement outcomes. Second, the control function also helps partition each content decision variable into endogenous and exogenous components (Danaher et al., 2015). As Danaher et al. (2015) noted, the inclusion of the probit residuals as additional controls in the main consumer engagement model substantially reduces endogeneity. In addition, the 2008 simulation by Terza, Basu, and Rathouz (2008) found that control residuals from a probit model outperforms predicted values from a 2SLS equation. As most of our content decision variables were binary, the model benefited from the strength of this approach. Formally in Equation 1, similar to Stephen T. et al. (2015), we modeled the control function approach for each content variable, \( C_{h,i} \), where \( h \) indexes the six content decision factors (from 1 to \( L \)), \( I \) indexes the brand (1 to \( N \)), and \( j \) indexes the post (1 to \( J \)) as:

\[
C_{h,i} = \gamma_{h,0} + \sum_{l=1}^{L} \gamma_{h,l} x_{l,i} + \sum_{n=1}^{N} \tau_{h,n} U_{n,i} + \psi_{h,i} \tag{1}
\]

For content variables measured on the 1-5 scale, we used a tobit model and for binary measures, we used a binary probit model.
Whereas, j-1 refers to the previous post made by brand I; U_{n,ij} refers to the nth control variable used in the engagement equation, and \( \psi_{h,ij} \) is the residual from the equation. We then include, \( x_{i,ij-1} \) and \( \psi_{h,ij} \) in the engagement model following Danaher et al. (2015). Finally, because the attitudinal and behavioral dependent variables are likely to be correlated, the consumer engagement model was estimated jointly with a system-of-equations tobit model as follows:

\[
\text{Log (Likes/Favorites +1)}_{ij} = \alpha_0 + \beta_1 \text{Lag(Log (Likes/Favorites)}_{ij}) + \beta_2 X_{ij} + \beta_3 \text{Controls}_{ij} + \beta_4 \text{Brand Fixed Effects}_{ij} + \beta_5 \psi_{h,ij} + \beta_6 \text{Inverse Mills Ratio}_{ij} + e_{ij} \\
\text{Log (Shares/Retweets +1)}_{ij} = \gamma_0 + \gamma_1 \text{Lag(Log (Shares/Retweets)}_{ij}) + \gamma_2 X_{ij} + \gamma_3 \text{Controls}_{ij} + \gamma_4 \text{Brand Fixed Effects}_{ij} + \gamma_5 \psi_{h,ij} + \gamma_6 \text{Inverse Mills Ratio}_{ij} + e_{ij}
\]

Whereas, \( X_{ij} \) represents a vector of control variables; \( \text{Controls}_{ij} \) represents a vector of control variables; \( \text{Brand Fixed Effects}_{ij} \) represents a vector of brand fixed effects; \( \psi_{h,ij} \) represents a vector of control function residuals, and \( \text{Inverse Mills Ratio}_{ij} \) represents the inverse Mills ratio calculated from the Heckman sample selection model.

**Results**

The results for the independent and simultaneous equations are reported in Table 4.

[Table 3 About Here]

The findings from the control measures in the model are largely consistent with recent studies in social media engagement (Lee, Hosanagar, and Nair 2014; Stephen, Sciandra, and Inman 2015). For instance, as expected, the use of video and photos has a positive and significant effect (Likes/Favorites: \( \beta=0.45, p<0.05 \); Shares/Retweets: \( \gamma=0.50, p<0.05 \)) on consumer engagement. The results for persuasive content (Likes/Favorites: \( \beta=0.23, p<0.05 \); Shares/Retweets: \( \gamma=0.25, p<0.05 \)) and informative content (not significant) are directionally consistent with prior studies.
The findings for repeated content and third party endorsements provide some novel insights about a relevant difference between social media engagement for prosocial messages and research in traditional media. Prior advertising literature suggests that content repetition is an important facilitator of message processing and persuasion (MacInnis, Moorman, and Jaworski 1991). However, our results suggest that content repetition in the social media context could work against audience engagement, specifically as a deterrent of “likes/favorites.” (Likes/Favorites: $\beta = -0.57$, $p<0.05$; Shares/Retweets: $\gamma = -0.28$, $p=0.34$). A similar result is found for the use of third party endorsers, which has been found to be important in increasing persuasion of traditional advertising messages, yet we find it to have a negative effect on the social media engagement for prosocial message (Likes/Favorites: $\beta = -1.50$, $p<0.01$; Shares/Retweets: $\gamma = -1.24$, $p<0.01$).

**Motivation hypotheses.** Hypothesis H1 relates to the goals of the prosocial messages. In particular, we considered three different motivational goals used by brands: information-based, transaction-based, and mission-based. We find support in line with H1’s expectation that mission-based goals would be more effective in generating consumer engagement than transaction-based and information-based goals. Social media messages with a mission-based goal had a positive and significant effect on Likes/Favorites ($\beta=0.89$, $p<0.001$) and Shares/Retweets ($\gamma=0.48$, $p<0.10$). In contrast, messages with information-based goals and transaction-based goals had no effect on the attitudinal and behavioral social media engagement measures. These findings suggest that if a brand’s goal in social media is to generate consumer engagement, their communication program should be framed as a mission-based message by promoting values or social change. This is instead of using their communication to simply report their progress on sustainability initiatives or promote cause-based promotions.
With H2, we tested the effect of materiality of the societal issues on consumer engagement. Materiality was defined as the perceived impact of the societal issue mentioned in the message on the quality of people’s lives. While we find results that are directionally consistent with our prediction, they are not statistically significant. Unfortunately, our dataset did not allow us to test the perception of materiality among the people exposed to the messages, which may be contributing to the non-significance of the effect in the analysis.

The final motivation hypothesis predicted a negative effect of the perceived effort associated with a call-to-action on consumer engagement. We find partial support for our measure of call-to-action effort in that it has a negative and significant effect on Likes/Favorites ($\beta = -0.06$, $p<0.05$), and negative, but not significant, effect on Share/Retweets ($\gamma = -0.04$, $p=0.18$).

**Ability hypotheses.** In line with H4, we find strong support for the effect of brand-cause fit across both measures of engagement (Likes/Favorites: $\beta = 0.10$, $p<0.05$; Shares/Retweets: $\gamma=0.09$, $p<0.10$). H5a explored the role of responsibility attribution on influencing social media engagement. Specifically, we proposed that engagement would be greater among prosocial causes that consumers attributed as the responsibility of institutions, instead of individuals. Our results support this prediction in that societal issues, which consumers perceive as the responsibility of the government or the private sector, generate greater social media engagement than societal issues perceived as the responsibility of individuals (Likes/Favorites: $\beta = 0.27$, $p<0.05$; Shares/Retweets: $\gamma=0.22$, $p<0.10$). Finally, in H6 we tested the effect of cause attribution defined as the degree to which the brand is perceived as responsible for the societal issue they are trying to solve. While we find results in a direction consistent to our prediction, we fail to find statistical support.
Discussion, Theoretical and Managerial Implications

Investigations on the effect of content characteristics on social media engagement have gained significant research attention, but have yet to focus on the unique factors affecting the communication of prosocial messages by brands. Analogously, there is a rich literature exploring consumer attitudes and behavior following the work on prosocial communication and cause marketing, but not specific to the social media environment. The present study is an effort to connect both streams of work and provide one of the first explorations of the factors that influence the generation of social media consumer engagement with prosocial messages. This is an area of growing interest to managers and academics as issues of corporate social responsibility continue to become interlinked with consumer marketing efforts.

The research uses the motivation-ability framework to study the effect of information processing on consumer social media engagement with prosocial messages. It does so by integrating the established prosocial literature on consumer behavior and the research on advertising content characteristics, with the emerging social media literature on consumer engagement. The research uses a sample of 762 posts from eighteen brands to address a single question, namely, What is the impact of motivation and ability content characteristics of prosocial messages on social media engagement?

A primary area of contribution lies in the examination of different type of prosocial message goals. Prior research studied in a limited or unspecific way the effect of philanthropic or cause-related messages in social media (Lee, Hosanagar, and Nair 2014; Stephen, Sciandra, and Inman 2015), but there has not been an attempt to identify the different types and effects within the broad category of prosocial messages. The study finds that the message goal can be an important influence on the generation of social media engagement. While the literature has
generally separated information-based messages such as corporate social responsibility
announcements from transaction-based messages such as cause marketing programs, this is the
first study to consider how different types of prosocial message goals impact consumer response.
Research has found that consumers respond more positively to prosocial efforts judged as driven
by “values” or “strategy” than those perceived to be driven by “stakeholders” or “egoistic
intentions” (Ellen, Webb, and Mohr 2006; Vlachos et al. 2009). At the same time, consumer
behavior scholars have recently proposed that self-transcendent claims can be more effective in
generating consumer interest than products with self-interest claims (Goldsmith, Newman, and
Dhar 2014). We investigate the direction suggested by these earlier studies on the context of
social media messages and propose that transaction-based goals, due to their resemblance to self-
interest and information-based goals and due to their association with egoistic intentions, would
not be effective in generating consumer engagement in social media. We propose a third
category of prosocial messages, namely ones with mission-based goals. By focusing on
promoting social values or social change, rather than the announcement of brand actions or
cause-marketing promotions, these messages are more likely to be perceived as strategic or
driven by brand values, rather than external stakeholder pressure or opportunism. Our study
finds this type of prosocial message goal as the only type effective in stimulating social media
engagement among consumers. There are many motivations for companies to use prosocial
messages, and not all include the generation of social media engagement. However, our results
suggest that if the brand’s goal is to stimulate consumer engagement by either “liking” or
“sharing” their message with others, a mission-based content design would be a superior
alternative.
Another aspect of consumer motivation we consider is the effect of perceived effort on the effectiveness of call-to-action tactics. Extant research finds that designers of prosocial messages often rely on overt and a direct persuasive tone to stimulate participation among the public (Kronrod, Grinstein, and Wathieu 2011), and that using more suggestive language can be more effective when promoting a cause that is seen as being of lower importance. In addition to persuasive tone, social media messages are characterized by the frequent use of calls-to-action, which can vary along a continuum of effort. Recent studies on the effect of content characteristics on consumer engagement in social media compared two types of calls-to-action: presumed low-effort calls-to-actions in the form of requests to “like” or “share” a message with presumed high-effort calls-to-action like invitations to participate in a promotion. They found that the calls-to-action with presumed higher effort had a negative effect on engagement (Lee, Hosanagar, and Nair 2014; Stephen, Sciandra, and Inman 2015). However, these prior studies do not measure the level of perceived effort by consumers generated by each call-to-action. We build on both of these studies by directly studying the perceived effort associated with eleven call-to-action tactics used by brands in our sample. We find that the greater the effort associated with a call-to-action, the lower the social media engagement. A third motivational hypothesis is tested to study the effect of perceived materiality of the societal issue on consumer engagement. Our results are directionally consistent with the prediction, but the effect is only weakly significant.

We consider three hypotheses to test the effect of content characteristics on the ability of consumers to process prosocial messages. First, the perceived fit between the brand and the cause. This area has received considerable attention in the cause-marketing literature. Prior studies have found that the perceived fit between the brand and the societal cause, either
conceptual or symbolic, can have a positive effect on consumer attitude toward a cause-marketing program by aiding the sense-making process. The current study accounts for both types of fit and finds brand-cause fit to also be an important driver of consumer engagement for prosocial messages in a social media environment. Given that both symbolic and conceptual fit play a role in the configuration of cause-brand fit, this suggests that managers need to be concerned with fit considerations at two different moments in the planning process. First, it is a critical criterion in the selection of the societal cause to support where the propensity for conceptual fit is generated. However, it is also an important consideration at the time of designing the social media content execution when perceptual fit would be more greatly impacted. As a result, it is important not only to create the opportunity of fit by selecting the right societal cause for a brand, but to protect and promote the perception of fit in the tactical design of the message.

A novel factor in the social media and cause-marketing literature is proposed in the form of attribution of responsibility. Extant research in prosocial positioning strategies finds that personal attributions of responsibility play an important moderating role on their impact on consumer behavior (Osterhus 1997). We find that prosocial messages of societal issues perceived to be the responsibility of institutions, be they corporations or government, provide a more fertile ground for generating consumer engagement than causes that consumers attribute responsibility to citizens or individuals. Congruency in the responsibility attribution and the social cause can facilitate consumer processing of the message, increasing the likelihood of engagement.

Finally, in general terms, our results with regard to behavioral engagement such as Shares/Retweets, while directionally similar, are statistically weaker than the results for
attitudinal engagement (Likes/Favorites). It is possible that they point to a limitation of prosocial messages in that they may be more effective in driving attitudes than behavior among consumers.

**Implications for Theory in Marketing**

Our first theoretical contribution lies in the definition of prosocial messages and the identification of material differences between types of prosocial messages and consumer engagement in social media. Prosocial marketing is an umbrella concept that incorporates actions of corporate social responsibility, philanthropy, cause-related marketing, and ethical business practices or product claims. Existing literature has specifically addressed unique aspects of each dimension; however, few studies try to contrast and understand the effects of different types of prosocial marketing activities. We contribute to this need by introducing a more formal description of the scope and type of prosocial messages and investigating the relative effect of each on social media engagement.

The current study also builds four executional cue strategies to the original application of the motivation-ability framework for the study of advertising effectiveness in traditional media (MacInnis, Moorman, and Jaworski 1991). First, in the original work the authors proposed that an appeal to intrinsic hedonic needs, such as sexual sources or appetizing appeals would motivate consumers to attend to an ad. Through our study, we propose intrinsic societal needs, expressed via messages of advocacy for a societal need, as an additional motivational dimension. Moreover, this study proposes that reducing the perceived effort associated to a call-to-action statement is a new form of strategic cue to enhance the motivation for consumers to process the prosocial message. Interestingly, a number of the strategic cues identified in the original framework including message complexity and the use of prominent/figural cues, particularly in
the use of celebrities, do not seem to apply when the goal is the generation of social media engagement in prosocial messages. In fact, our results point to an opposite effect in which the use of celebrities or association with other prominent cues (e.g., holidays) are counterproductive when seeking to stimulate consumer engagement with prosocial communication in social media. The presence of celebrities or prominent cues could induce commercial or egotistic associations with the prosocial messages, increasing consumer skepticism, and eroding their attitudinal or behavior support for it. These results contribute to the general understanding that the design of prosocial messages in a social media context requires a set of unique appeal strategies.

Ability in the study of advertising effectiveness refers to the presence of prior knowledge that enables consumers to interpret brand information in an advertisement (MacInnis, Moorman, and Jaworski 1991). The measures of brand-fit and attribution of responsibility point to strategic cues that facilitate the relationship and association that consumers can make between the message and the brand. In both cases, prosocial messages in line with consumer expectations, be they brand meaning or cause responsibility, appear to stimulate greater engagement. Therefore, instead of providing a context for the message, both message design choices fit existing expectations in consumer appreciation of a brand message. As a result, they can be viewed as a new executional cue strategy to enhance consumer’s ability to access the type of relevant or related knowledge structure that contributes to social media post effectiveness. In summary, the present study adds a number of unique and novel dimensions to the use of the motivation-ability framework for the study of prosocial brand communications.

Finally, we extend the social media literature and its effort to understand consumer engagement through our focus on a specific type of message, mainly messages with a prosocial dimension. To date, the social media literature has made significant progress in explaining...
consumer engagement with social media messages, but has not attempted to understand how the effect of content characteristics might vary by different type of messages. In our case, we distinguish from promotional messages and prosocial messages and find results that support our conjecture that they should be part of distinct studies.

**Implications for Practice in Marketing**

The use of prosocial messages as a strategy to generate consumer engagement and brand preference is on the rise. An increasing number of brands are adopting the practice as part of their communication strategies. This study uncovers important considerations that could differ from the design of traditional or promotional messages in social media environments. First, while extant research has studied a general effect of philanthropic or cause-based messages on consumer engagement, no attention has been given to the different types of prosocial messages and their impact on consumers. We find that a previously undefined messaging goal, which we name as mission-based, represents the more effective approach to stimulate likes and shares in Facebook or favorites and retweets in Twitter. Yet, designing mission-based messages can introduce new planning requirements to brand managers. For instance, when designing messages with information-based goals, companies covered a variety of topics. However, messages with mission-based goals were more focused and consistent. A case in point is the brand of personal products “Always.” While they had a number of mission-based messages, they were all in support of a singular mission to support the development of self-esteem among girls in puberty. This suggests that a communication strategy founded on mission-based goals can be more path dependent, increasing the requirements for commitment and consistency with regard to messaging by the brand in social media contexts. Also, while the design of information-based or transaction-based messages requires little understanding of the societal
cause, the design of mission-based messages may require brand managers to achieve a deep understanding of the societal changes they are advocating as part of their social media activity. This is necessary because adopting a position of advocacy for a cause can also attract greater scrutiny among stakeholders and potential critics. Consequently, it shifts the role of the brand in the pro-social cause closer to that of the role of non-profit organizations.

Our findings also points to the somewhat counterintuitive implication that brand managers need to design their pro-social messages with a lower level of expectation regarding involvement in order to generate higher levels of engagement among their intended audience. In other words, cause-based activism by a brand in the form of promoting active involvement by consumers will be less engaging than cause advocacy, where a less pronounced invitation to act is used as part of the message. In addition, our study also provides new considerations in the important decision by managers on which societal cause to support with their brands. Specifically, if consumer engagement is part of the desired goals for adopting a pro-social communication strategy, our study suggests that the cause decision must be made in close coordination with the expectations and perceptions of the intended consumer audience in two areas. First, it is important that managers understand the attribution of responsibility that consumers associate with the societal cause. Selecting a cause that consumers perceive to be the responsibility of individuals instead of institutions could result in an unintended barrier to social media engagement. Consumer perceptions also need to be accounted for when designing the tone of calls-to-action. In particular, a social media message that approximates the tone of activism, promoting an active and effortful participation by consumers may be less effective in driving engagement than more passive advocacy messages where consumers are asked to contribute with low or moderate levels of involvement.
Importantly, all the content variables in our study are elements of message design which are under the control of brand managers. For instance, they influence the selection of a societal cause, the definition of the message goal, and the design of the message tactics like call to action levels. The results also suggest that brand managers should not rely on third party as drivers of engagement and that diversity in content rather than repetition of messages would be more effective message management tactics to stimulate engagement by consumers.

**Limitations and directions for Future Research**

The study is subject to several limitations that serve as opportunities for future research. First, we developed a sample based on the most active social media brands. While the coverage of a broad range of industries, sizes, and periods of time provide a satisfactory level of variation, it is not necessarily a representative sample of all the brands active in social media. Similarly, while the study data are collected from two of the most popular social media platforms (Facebook and Twitter), we ignore emerging platforms, such as Pinterest and Instagram. Consequently, these two aspects limit us from making broad generalizability claims.

Second, the study uses a limited set of dependent variables. While, the ones in the study are widely adopted in practice, future research could examine other metrics of social media engagement, such as number of comments, sentiment of comments, number of clicks, and audience reach.

Third, the results with the behavioral measure of engagement, while consistent, are weaker. This suggests that other content and non-content factors may be driving engagement behaviors in social media that warrant future examination. Fourth, we do not have data on whether the brands sponsored the posts. Sponsored posts can be targeted at specific audiences and by the nature of Facebook’s advertising algorithm, be exposed to more consumers, hence
generating greater engagement. While we use a control function approach to address the potential for bias, future research could examine if consumer characteristics moderate the engagement response to the content characteristics of social media posts.

Looking forward, we see three particular areas of fruitful exploration for scholars. First, given our study is among the first to focus on the relationship of engagement and prosocial messages, the locus of our attention was on the main effects in the relation between content design factors and social media response by consumer. One clear area of opportunity would be to explore brand or situational characteristics moderating the relationships we uncovered here. For instance, it is possible for brand personality and reputation to be a relevant moderator of the effect of mission-based goals. Some brands may be well positioned to advocate for societal needs in the way described in our study, while others may be more engaging if they adopt a less direct method of communicating their societal contributions. Finally, we use aggregate engagement data and do not observe engagement behavior at the respondent level or over time for each post. Another important future opportunity would be to understand the time or individual effects that may be affecting the relationship between content characteristics and consumer response. In addition, we focus on examining prosocial posts in this study. Brands use a mix of both promotional and prosocial posts in their social media communications strategy. Future research could examine the relation between promotional and prosocial messages, along with comparing how different content strategies affect engagement for each content type.
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Figure 1
Area of Contribution

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<td>Chandy, Tellis, MacInnis, and Thaivanich 2001</td>
</tr>
<tr>
<td></td>
<td>MacInnes, Moorman and Jaworski 1991</td>
</tr>
<tr>
<td></td>
<td>Olney, Holbrook and Batra 1991</td>
</tr>
<tr>
<td></td>
<td>Resnik and Stern 1977</td>
</tr>
<tr>
<td>Traditional Media</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stephen, Sciandra and Inman 2015</td>
</tr>
<tr>
<td></td>
<td>Lee, Hosanagar, and Nair 2014</td>
</tr>
<tr>
<td></td>
<td>Malhotra, Malhotra, and See 2013</td>
</tr>
<tr>
<td></td>
<td>DeVries, Gensler and Lelang 2012</td>
</tr>
<tr>
<td></td>
<td>Berger 2012</td>
</tr>
</tbody>
</table>
Figure 2
Conceptual Framework

Motivation
- Mission-Based Goal
- Call to Action Effort
- Cause Materiality
  - (+)
  - (-)
  - (+)

Ability
- Brand-Cause Fit
  - (+)
- Treatment Attribution
  - (+)
- Causal Attribution
  - (-)

Social Media Engagement for Pro-Social Messages
## Table 1
Description of Prosocial Message Goals

<table>
<thead>
<tr>
<th>Goal type</th>
<th>Brand</th>
<th>Example of Social Media Message</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Information-Based Goal</strong></td>
<td>Chipotle</td>
<td>We are proud to announce our continued #CultivateFoundation partnership with the International Rescue Committee and the New Roots Program. This partnership will help expand the MicroProducer Academy, giving refugees a literal taste of home and a</td>
</tr>
<tr>
<td></td>
<td>Whole Foods</td>
<td>Our Co-CEO, Walter Robb, has accepted the challenge to help raise awareness and donations for #ALS with the #IceBucketChallenge.</td>
</tr>
<tr>
<td></td>
<td>Hyundai</td>
<td>Just days to go until @NYAutoShow #NYIAS! We’ll not only reveal #NewSonata, but also launch @HopeOnWheels’ 16th year. #EndChildhoodCancer</td>
</tr>
<tr>
<td><strong>Transaction-Based Goal</strong></td>
<td>Macy's</td>
<td>Support women with the purchase of your fave Gucci scent! Help @ChimeforChange today! #ChimeIn</td>
</tr>
<tr>
<td></td>
<td>Dr Pepper</td>
<td>Long hike across campus? Pepper up. Learn about the Dr Pepper Tuition Giveaway here: <a href="http://t.co/zV12EFM9p8">http://t.co/zV12EFM9p8</a> <a href="http://t.co/31xA4ryrU2">http://t.co/31xA4ryrU2</a></td>
</tr>
<tr>
<td></td>
<td>Patagonia</td>
<td>Need last-minute gift ideas? Socks are out, protecting the planet is in. Consider dedicating a donation to 1% for the Planet and we'll match it. 1% for the Planet</td>
</tr>
<tr>
<td><strong>Mission-Based Goal</strong></td>
<td>Always</td>
<td>What does it mean to do things #LikeAGirl? We asked a group of people just that, and their answers may surprise you.</td>
</tr>
<tr>
<td></td>
<td>Dove</td>
<td>We are all different. We are all beautiful.</td>
</tr>
<tr>
<td></td>
<td>Mastercard</td>
<td>Whether you're at @NYCPride or celebrating from afar, tell us why #AcceptanceMatters to you!</td>
</tr>
</tbody>
</table>
Table 2
Summary Statistics

<table>
<thead>
<tr>
<th>Area</th>
<th>Variable</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent Variables</td>
<td>Like/Favorite (log)</td>
<td>5.31</td>
<td>2.23</td>
<td>0.00</td>
<td>12.26</td>
</tr>
<tr>
<td></td>
<td>Share/Retweet (log)</td>
<td>3.38</td>
<td>1.79</td>
<td>0.00</td>
<td>10.95</td>
</tr>
<tr>
<td>Motivation</td>
<td>Information-Based Goal</td>
<td>0.17</td>
<td>0.38</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Transaction-Based Goal</td>
<td>0.10</td>
<td>0.30</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Mission-Based Goal</td>
<td>0.11</td>
<td>0.31</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Cause Materiality</td>
<td>4.21</td>
<td>0.30</td>
<td>2.00</td>
<td>4.78</td>
</tr>
<tr>
<td></td>
<td>Call to Action Effort</td>
<td>1.84</td>
<td>1.98</td>
<td>0.00</td>
<td>5.36</td>
</tr>
<tr>
<td>Ability</td>
<td>Brand-Cause Fit</td>
<td>5.94</td>
<td>1.32</td>
<td>2.00</td>
<td>8.00</td>
</tr>
<tr>
<td></td>
<td>Treatment Attribution</td>
<td>0.48</td>
<td>0.50</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Cause Attribution</td>
<td>0.08</td>
<td>0.28</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Controls</td>
<td>Third Party Endorsement</td>
<td>0.15</td>
<td>0.36</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Social Media Platform</td>
<td>1.73</td>
<td>0.45</td>
<td>1.00</td>
<td>2.00</td>
</tr>
<tr>
<td></td>
<td>Number of Characters (log)</td>
<td>0.46</td>
<td>0.59</td>
<td>-1.87</td>
<td>2.63</td>
</tr>
<tr>
<td></td>
<td>Video/Photo content</td>
<td>0.85</td>
<td>0.36</td>
<td>0.00</td>
<td>2.00</td>
</tr>
<tr>
<td></td>
<td>Repeated Content</td>
<td>0.12</td>
<td>0.32</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Informative Content</td>
<td>0.91</td>
<td>0.88</td>
<td>0.00</td>
<td>3.00</td>
</tr>
<tr>
<td></td>
<td>Persuasive Content</td>
<td>1.00</td>
<td>0.97</td>
<td>0.00</td>
<td>4.00</td>
</tr>
</tbody>
</table>
Table 3
Summary of Results

<table>
<thead>
<tr>
<th>DV: Likes / Favorites</th>
<th>DV: Likes / Favorites</th>
<th>DV: Shares / Retweets</th>
<th>DV: Shares / Retweets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent Tobit</td>
<td>Simultaneous Equation</td>
<td>Independent Tobit</td>
<td>Simultaneous Equation</td>
</tr>
<tr>
<td>Coef.</td>
<td>SE</td>
<td>Coef.</td>
<td>SE</td>
</tr>
<tr>
<td>Motivation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information-Based</td>
<td>0.23 0.16</td>
<td>0.20 0.15</td>
<td>0.09 0.17</td>
</tr>
<tr>
<td>Transaction-Based</td>
<td>0.09 0.22</td>
<td>0.10 0.22</td>
<td>-0.05 0.23</td>
</tr>
<tr>
<td>Mission-Based Goal</td>
<td>0.89 0.21 ***</td>
<td>0.89 0.26 ***</td>
<td>0.43 0.22 **</td>
</tr>
<tr>
<td>Materiality</td>
<td>0.24 0.20</td>
<td>0.23 0.17</td>
<td>0.23 0.22</td>
</tr>
<tr>
<td>Call to Action Effort</td>
<td>-0.05 0.03 *</td>
<td>-0.06 0.03 **</td>
<td>-0.05 0.03</td>
</tr>
<tr>
<td>Ability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brand-Cause Fit</td>
<td>0.10 0.05 **</td>
<td>0.10 0.05 **</td>
<td>0.09 0.05 *</td>
</tr>
<tr>
<td>Treatment Attribution</td>
<td>0.27 0.14 **</td>
<td>0.27 0.12 **</td>
<td>0.20 0.15</td>
</tr>
<tr>
<td>Cause Attribution</td>
<td>-0.20 0.27</td>
<td>-0.17 0.28</td>
<td>-0.06 0.29</td>
</tr>
<tr>
<td>Controls</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lag DV</td>
<td>0.06 0.03 **</td>
<td>0.06 0.02 ***</td>
<td>0.10 0.04 ***</td>
</tr>
<tr>
<td>Number of Characters (log)</td>
<td>-0.10 0.17</td>
<td>-0.11 0.17</td>
<td>0.06 0.18</td>
</tr>
<tr>
<td>Social Media Platform</td>
<td>-1.89 1.86</td>
<td>-1.54 1.51</td>
<td>-6.04 1.99 ***</td>
</tr>
<tr>
<td>Video/Photo content</td>
<td>0.48 0.22 **</td>
<td>0.45 0.19 **</td>
<td>0.48 0.24 **</td>
</tr>
<tr>
<td>Repeated Content</td>
<td>-0.58 0.22 ***</td>
<td>-0.57 0.27 **</td>
<td>-0.27 0.24</td>
</tr>
<tr>
<td>Informative Content</td>
<td>0.01 0.09</td>
<td>0.01 0.08</td>
<td>0.02 0.09</td>
</tr>
<tr>
<td>Persuasive Content</td>
<td>0.25 0.08 ***</td>
<td>0.23 0.09 ***</td>
<td>0.24 0.09 ***</td>
</tr>
<tr>
<td>Third Party Endorsement</td>
<td>-1.43 0.16 ***</td>
<td>-1.50 0.19 ***</td>
<td>-1.21 0.18 ***</td>
</tr>
</tbody>
</table>

*** p < 0.01    ** p < 0.05    * p < 0.10