A Community-Based Social Marketing Anti-littering Campaign: Be the Street You Want to See

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Chapter Overview

The "Be the Street You Want to See" (BTS) is a regional litter abatement program developed by the Bay Area Stormwater Management Agencies Association (BASMAA) in California. The program primarily targeted 14–24-year-old San Francisco Bay Area youth who had been identified as a key polluting demographic. The case study in this chapter presents this campaign and how it used the CBSM approach to reduce the problem of littering.

The program, launched in 2012, applied community-based social marketing (CBSM) techniques to a well-defined audience to reduce pollution. It focused heavily on social media and innovative outreach strategies with the end goal of promoting peer-to-peer interactions regarding littering and raising awareness of its environmental impacts. Whenever possible, the program involved the target audience themselves and invited them to recast the messaging in their own words. In this way, the content remained fresh and relatable, and the target audience felt the program was talking "with them," not "at them."

The comparison of pre- and post-campaign survey results shows increased awareness of littering among the target audience, willingness to engage others to promote pro-environmental behaviors, willingness to become environ-

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mental stewards, and to pick up the litter of others. However, demonstrating behavior change through clear metrics remains a challenge for this approach.

Campaign Background

Litter has long been recognized as a national problem. "Litter clean-up costs the US more than \$11.5 billion each year, with businesses paying \$9.1 billion"; local and state governments, schools, and other organizations combined contribute the remaining cost (Keep America Beautiful, 2010). Litter also has increasing environmental consequences. Litter moved into gutters, lawns, and landscape areas by wind, traffic, and animals; litter gathered near storm drains; litter swept into local waterways—all non-point sources of pollution which cause serious environmental contamination. The problem of non-point sources of pollution is particularly acute in high-density habitation areas such as San Francisco—exacerbated by the sizable network of water flows in the San Francisco Bay area. A recent study by BASMAA has found that "Bay Area residents pollute San Francisco Bay every year with enough trash to fill 100,000 kitchen garbage bags" (Rogers, 2012).

Geoff Brosseau, executive director of BASMAA, noted that trash "is 100 percent preventable […] If we can get people to modify their behavior, we'll make huge gains" (Rogers, 2012). To eliminate multiple sources of pollution, the city needed ambitious, outcomes-driven approaches to solving a wide range of issues—including messaging that contributes to changing from current to more sustainable forms of behavior. But San Francisco administrators faced a daunting problem: *How* to change human behavior that is a leading cause and contributor to the pollution in the San Francisco Bay area?

Studies show that information-based campaigns or approaches that promote economic self-interest do not foster sustainable behavior change in the long run (Costanzo, Archer, Aronson, & Pettigrew, 1986; McKenzie-Mohr & Smith, 1999). CBSM is proposed as an attractive alternative to these models (McKenzie-Mohr & Smith, 1999). CBSM aims at removing community-level barriers to an activity while enhancing that activity's benefits (McKenzie-Mohr, 1999).

SWOT Analysis (Strengths, Weaknesses, Opportunities, Threats)

Strengths

The campaign used CBSM as its central approach rather than a top-down, information-based one. The target audience took part in the design and dissemination of the message through various social media platforms. The social media

campaign that was at the core of the program had high levels of engagement from the target community (see Appendix 2). It was effective in changing attitudes towards social norms about littering.

Weaknesses

It is challenging to affect behavior change in a short period of time. Longitudinal research is necessary to measure the long-term effects of this campaign. Post-campaign data were collected among a small group of self-selected participants. The results are more indicative of change in social norms than the present measurable results of actual behavior change in the long run.

Opportunities

The campaign relied heavily on social media, which still remains popular among the target audience. As new social media platforms develop and become popular among young audiences, new opportunities arise. Litter continues to be an environmental problem that needs to be tackled. As environmental issues are taking more center stage of news and political debates around the world, more attention to litter pollution (e.g., The Great Pacific Garbage Patch) is given by, and available to, larger audiences.

Threats

The novelty of campaigns that require audience participation can eventually wear off; audiences start losing interest in the topic, or their excitement diminishes. Social media platforms keep losing popularity among target audiences. The campaign needs to be updated regularly to keep it relevant for the target audience or new target audiences.

Target Audience

Research suggests younger people litter more (Schultz & Stein, 2009). Stephen Groner Associates, Inc.'s (SGA) 2009 KLAB Youth Litter Study identified youth profiles and the beliefs, motivations, and barriers associated with these profiles. The statistical work helped identify five important market segments. The goal was to provide a starting point for clustering the demographic and motivational bases associated with littering behavior among adolescents and young adults, with an eye toward designing effective strategies for consistent behavior change, ultimately, to reduce littering behaviors in the target audience.

The five subgroups comprising the larger youth population are "Apathetics," "Digitally Disengaged," "Acceptance Seekers," "New Adults," and "Green Crusaders" (see Fig. 23.1 for further information). As a result of this more nuanced categorizing of subpopulations, this campaign did not seek to engage the extremely hard-to-reach groups directly and instead focused energies on the other three subpopulations most likely to change. Therefore, the target populations for this campaign included the "Green Crusaders," "New Adults," and "Acceptance Seekers." Collectively, these three groups account for 56% of the target population and became a catalyst for reaching the other two. Identifying these target populations and their profiles was a key step in moving towards tangible behavior change.

"Green Crusaders," who were found across all age groups, were least likely to litter, they felt more guilty when they did, and they were less influenced by peers. They were also found to be less likely to smoke cigarettes, to watch less TV, to spend more time volunteering, less time in organized sports, and less time playing video games. They were also generally knowledgeable about what happens to litter on the ground. They widely perceived fewer reasons for not properly disposing of litter, and they were willing to overcome greater barriers to avoid littering. They were more likely to litter if an item being discarded is biodegradable.

"New Adults," whose average age was 22, were typically working and not attending school. They had a higher probability of smoking, spent fewer hours in sports, watching TV, and playing video games. They were likely to litter when no trash cans were nearby.
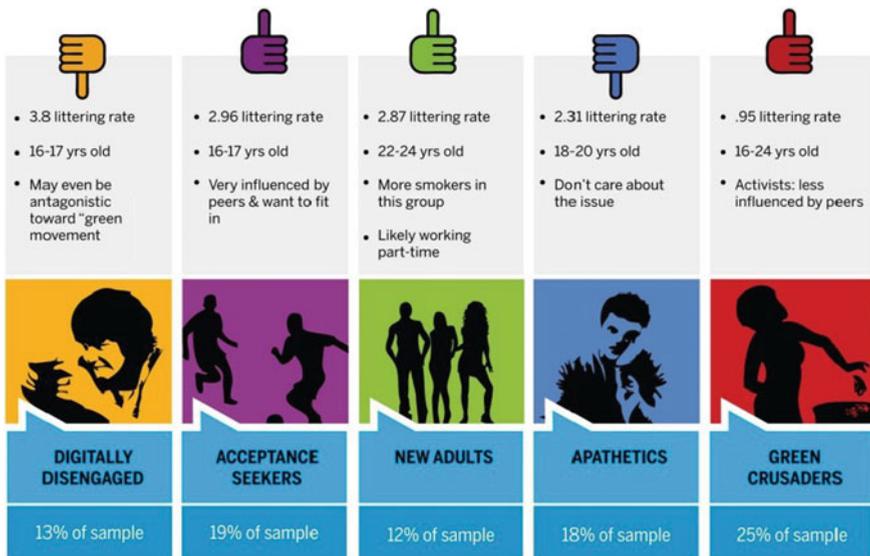

Fig. 23.1 Target market segments

Finally, "Acceptance Seekers," whose average age was 18 or younger, were typically in high school, cared about their academic performance, and were involved in sports and other organized activities. They were less likely to smoke and more likely to volunteer. They were less knowledgeable about what happens to litter on the ground and were likely to litter when there was already trash on the ground.

This strategy of approaching the definition of "audience"—one that will most likely not litter first hence easier to influence—resembles the Diffusion of Innovations Theory (Rogers, 2003). Rogers argues that innovation is communicated through certain channels over time among the members of a social system and different types of adopters accept an innovation at different points in time (Lee & Kotler, 2016). In that sense, the Green Crusaders, New Adults, and Acceptance Seekers could be likened to Innovators, Early Adopters, and Early Majority, while Apathetics and Digitally Disengaged are like the Late Majority and Laggards.

The "thumbs up" symbol represents audience subgroups that the campaign focused on reaching directly, while the "thumbs down" symbol represents audience groups that the program did not specifically reach out to but were affected through indirect interaction with the target audience groups.

Littering rates at the top of each column are based on a 10-point system calculated by three multiple regression analyses:

a. willingness to litter by various predictor variables (i.e., age, guilt about littering, concern about environmental problems),
b. willingness to litter by barrier and motivator variables (i.e., mood, being in a hurry, no trash can nearby),
c. willingness to litter and by hours of activity variables (i.e., watching TV, working).

Campaign Objectives

The overarching goal of the campaign was to develop a strategy to reduce littering via littering behavior change in its target audience. Thus, the campaign focused on delivering a set of targeted messages that not only increased the audience's awareness of trash as a pollutant but also actually reduced the audience's littering frequency. The campaign sought to walk the target audience up the path to behavior change by first raising awareness through a general advertising campaign, then producing engagement through various social media marketing strategies, and finally changing behaviors by delivering consistent and actionable messages.

Given that in the BASMAA study, 97% of respondents reported littering was a problem, the logical conclusion is that littering is already perceived to be a problem by the vast majority of the general public (Astone, 2007). This information provides a meaningful directive for developing potential messaging. The goal then should

not be to convince the target audience that littering is a problem; rather, the messaging should impart that littering is a *more important and solvable* problem than this audience currently often perceived.

Positioning

"BTS" was carefully branded to connect with its target audience. The brand was developed to be youthful, vibrant, and engaged. The messaging encouraged youths to take ownership of the state of their community and actively shape their environment. In this campaign, the "street" was a reflection, for better or worse, of the youth who use it. Rather than passing the blame on to peers, adults, or others, BTS asked that individuals take action to clean up and invigorate their surroundings. The program was positioned as "a campaign by the people for the people." Whenever possible, the program involved the target audience in the campaign itself and invited individuals to recast the messaging of the campaign in their own words. The target audience felt the program was talking "with them," not "at them."

Marketing Strategy

This section provides a brief overview of the marketing strategy. (More detailed information is provided in the following section titled "Community-Based Social Marketing Campaign.")

Product

The goal of the anti-litter campaign was to reduce littering, promote peer-to-peer interaction regarding littering, and raise awareness of pollution related to the audience found to be most often littering, namely 14–24-year-olds. The benefit that the audience would gain was a clean environment, freedom from litter, and an element of pride in the community. By exploring and engaging problems and solutions to community and environmental issues, street-by-street, participants would be rewarded with the pride, and the fun, of having created the kind of "street" they have always wanted to live on.

Price

The cost of participating in the campaign and a key step in building behavior change is the time required for participants to create the videos and images for the video and meme contests. In the long run, the main cost is disposing of litter properly.

Place

The campaign's geographic location was the San Francisco Bay Area. The campaign took place mostly online at various social media platforms like Facebook, Instagram, and YouTube.

Promotion

The litter abatement program developed by the Bay Area Stormwater Management Agencies Association in California first attracted participants through Facebook ads. It relied heavily on social media, some being more successful than others. Initially, a web site was created, which later was replaced by the campaign's Facebook page. A YouTube video contest and Instagram meme contest were also created. See Appendix 2 for a complete list of promotional elements.

Community-Based Social Marketing Campaign

BTS was built upon the principles of CBSM. CBSM realizes that awareness of an issue is often not sufficient to initiate behavior change and more is required than simply providing people with information. CBSM is a framework that is specifically tailored to help researchers identify how to isolate attitudes and behaviors and to focus a campaign's strategies on changing behaviors. CBSM is positioned both as a contestation of information-based campaigns, which often drive the wider social marketing mix of strategies, and as an antidote to the assumption that increased knowledge and economically motivated forms of self-interest can, or often do, drive changes in behavior. McKenzie-Mohr (1999) identifies the central insight of the approach: "a variety of barriers can deter individuals from engaging" in behavior desired by society (and/or social marketers). A strategy that incorporates effective behavior modification will attempt to use specific tools to uncover, or discover, those barriers at the level of community-based field research. The approach then uses community-based feedback to create targeted outreach tactics and develop key messages likely to reach a specific, well-defined audience; that is, the audience itself participates in answering questions of how to overcome the barriers identified in the research process. Identifying an audience's barriers and motivators in encouraging certain types of behaviors is central to CBSM approaches.

Another hallmark of the CBSM is the introduction of multiple perspectives and methodologies from social psychology, behavioral theory, economics, and other social science-based research approaches. McKenzie-Mohr (2011) provides a 5-step guide for CBSM that includes "carefully selecting the behavior to be promoted; identifying the barriers and benefits associated with the selected behavior; designing

a strategy that utilizes behavior change tools to address these barriers and benefits; piloting the strategy with a small segment of a community; and finally; evaluating the impact of the program once it has been implemented broadly" (p. 8).

Step 1: Selecting Behaviors

The first step starts with collecting information to determine which sector(s) merit targeting as well as identifying barriers and motivators (McKenzie-Mohr, 2011). The program began with an exhaustive study and literature review designed to discover who was littering and why they were doing it. Studies indicate that littering is both an individual and community-environment behavior (Schultz & Stein, 2009). At the individual level, age is predictive of littering; at the contextual level, perceived cleanliness of the community environment is a major factor in individuals' awareness of their own littering behaviors.

Across all age groups, the most powerful factor in understanding littering behaviors is the influence of perceived social norms—what is perceived as the "right" thing to do based on social norms, or "what everyone else is doing" (Schultz & Stein, 2009). Part of the difficulty of disaggregating contributing factors to individual behaviors is that a variety of perceptual and cognitive mechanisms contribute to behavior. One such mechanism is the perception of a social norm through the impact of human behavior on the environment in which individuals most often find themselves. For example, Keizer, Lindenberg, and Steg (2008) concluded that the very presence of disorderly items in an environment, whether or not they are examples of outright littering, implies that others are engaging in disorderly behavior, thus augmenting the likelihood of others littering. On the other hand, Bator (1997) found that social disapproval is a strong motivator of individuals' decisions not to litter, particularly when a visual cue in the environment is repeated in a public messaging campaign. Bator's findings are echoed in the 2007 BASMAA Public Opinion Survey, where 92% of those surveyed who do not litter cite the belief that littering is morally and socially wrong as their primary reason not to litter (Astone, 2007).

Step 2: Identifying Barriers and Benefits

The campaign began in spring 2012, with a short, pre-campaign online survey which assessed littering behavior, contextual factors related to littering, peer-to-peer interactions about littering, and willingness to participate in varied, proposed campaign activities. A total of 353 individuals out of the initial 416 who began the survey were eligible for inclusion in the sample population based on age (14–24 years) and residence (provided zip code within the BASMAA region). Recruitment for the survey included outreach to Bay Area high schools and colleges, and placement of an ad on the social networking website Facebook. The sample was 60% female, had a mean age of 17 years, and almost all respondents

were in high school. The 5-min survey was available 24 h per day, 7 days per week, from January through March 2012. Some of the specific questions the survey included were as follows: what type of litter was most commonly and least commonly littered?; in what contexts were respondents relatively more likely to litter?; to what extent were respondents willing to participate in campaign activities?; and, what did participants perceive as barriers to avoiding littering?

Context, or one's social and physical environment, is one of the most significant factors in driving *and* curtailing littering behaviors. While general social and physical context remains a strong factor in CBSM approaches, often less visible factors such as individual preferences play a much larger role in youth littering behaviors. Precedents set by a friend or known peer's behavior may be indicative of an especially salient social norm (SGA, 2009). In SGA's youth littering study for KLAB, survey results revealed that the most impactful, non-situational factor in determining individuals' likelihood of littering was the littering habits of their friends. Moreover, in this demographic, friends' littering behaviors were found to be twice as impactful as the littering habits of their parents (Appendix 1).

In leveraging this discovery, a distinction should be made between a social norm and "peer pressure." In the 2007 BASMAA Public Opinion Survey, the least-cited cause for appropriate trash disposal behavior was "peer pressure" (Astone, 2007). The principal difference between peer pressure and perceived social norms is the concerted participation of separate parties in the attempt to influence certain behaviors—that is, peer pressure is defined as an individual or group of individuals that are actively trying to influence their peer's behaviors. Social norms are defined as those effects stemming from the perceived behavior of others by the individual; thus, social norms theory (Berkowitz, 2005) "describes situations in which individuals incorrectly perceive the attitudes and/or behaviors of peers and other community members to be different from their own, when in fact, they are not" (p. 193). It is important to make this distinction when identifying the social norms acting on the target population; equally important is understanding the difference to mobilize those norms to activate the desired behavior change.

Step 3: Developing Strategies

The overarching goal of the marketing campaign strategy was to encourage the target population to curb and eventually eliminate their littering behaviors. In promoting this behavior change, the campaign applied a series of strategies to encourage the viral spread of anti-littering messages through peer-to-peer networks of communication. This grassroots approach sought to incite action among the target youth audience, allowing for engagement and empowerment in the peer-to-peer distribution of campaign messages. By promoting these specific, action-oriented messages, the campaign was better equipped to mold the behaviors of the target population by attempting to influence the social norm.

Program leaders focused heavily on social media in an effort to promote peer-to-peer interactions to reduce littering and raise awareness of the link between

the target population's behavior and the environmental impacts of those behaviors. The program began with raising awareness of the newly launched, youth-focused campaign. Targeted advertising via Facebook encouraged 14–24-year-old viewers to visit a website or enter a meme and/or short video contest. The ultimate goal of the advertising campaign was to involve this group in the program, either by joining a Facebook page, entering a contest, or contributing posts or photographs. Connecting with this target population through social media would allow marketers to continue engaging the participants throughout the life of the campaign.

The audience knew that littering was/is inappropriate behavior. This finding in the pre-campaign phase of the initiative provided a key insight into how to structure the campaign. Since the campaign goal was to change behavior, messaging tactics aimed at achieving a shift in attitudes about littering, in general, were avoided. Instead, the campaign strategy focused on the link between social mores and inclusivity: A grounding assumption was that any young adult expressing a lack of ownership of their environment was more likely to litter; and any communication perceived to be coming from the government, whether local or federal, would be met with suspicion. Surveys showed that the target audience would be disengaged by direct connections with government agencies; therefore, the brand created needed to provide programmatic credibility and consistency to this specific audience. BTS did this by avoiding direct "messaging" between the government and its target audience, and instead, encouraged members of the target group to create enough participatory messaging on their own to suggest that "not littering" was the norm among the target population.

The pre-campaign research was clear: The target population was likely to respond only to materials and communication coming from other teenagers and young adults. The communication strategy, then, was twofold: First, the tone of the entire campaign had to feel like it belonged to someone born during the Clinton administration; and second, the initiative had to mobilize crowdsourcing, a distinct interweaving of social media communication and activity organization, among the majority of members in the target audience.

Step 4: Piloting

A six-month-long pilot social media campaign using Facebook was conducted prior to the launch of the actual campaign. The main reason for conducting the pilot on social media was that these forms of communication and interaction could provide a solid base for data and a secure medium for gaining feedback through analytics. Messaging, tone, and motivators were tested by putting out different posts and tactics at events. Social media responses were tracked to gage engagement.

Step 5: Broad-Scale Implementation and Evaluation

BTS engaged with the target population primarily through social media to deliver inspirational and educational content. This content included a YouTube video contest with a live stream award show, interactive photo booths, a meme contest, and the development of a mobile app that gamified environmental awareness and sent users into the streets to complete challenges, win points, and get prizes.

The meme and video contests attracted the audience and encouraged individuals to develop materials that would be used in the advertisements. Memes are a critical means of communication for today's digital youth. Consisting of a picture and a caption (generally sarcastic in nature), memes are an easily shared, often socially critical material that becomes viral through social media. The audience was asked to make memes (Fig. 23.2) which would be used as advertising.

As with the meme contest, the audience was asked to produce 15–20 s videos as entries; perhaps, more importantly, friends of the audience were also asked to produce content—but by word-of-mouth, in person, and through social media. Winning entries would be used as paid advertising, which later appeared on Pandora, Spotify, and YouTube. Fifty-two entries were received, representing active participation from more than 700 kids and young adults. More than 5000 unique

Fig. 23.2 Sample meme

votes for best video and more than 40,000 YouTube views were received. All fifty-two can be seen on the BTS YouTube page (https://www.youtube.com/user/BetheStreet/videos).

The campaign developers were able to honor their voices and learn from their messages, while fostering actual behavior change. Thus, the campaign designed messaging not from a top-down, authoritarian position, but from networking or organic, evolutionary metaphor of message and behavior adoption and transmission. Both the meme and video contests drew participants through active, direct engagement in the production of positive messaging, rather than direct messaging that provided information or chided current behaviors by deploying a negative, declarative style for either denotative or connotative messaging among the target population.

At this point, the messaging in the meme and video contests turned into demonstrated behavior adoption; thus, each step of the campaign was an attempt to engage target populations not only at the level of ideas or conceptual reframing, but also at the level of encouraging increased participation in actual behavior change. This design in the campaign reflects the CBSM credo of creating and measuring behavior change itself—not merely exposure to messaging, or adoption of ideas devoid of behavior that could accompany "new thinking."

Program Evaluation

The data collected in the pre-campaign surveying served as a baseline against which follow-up survey data could be measured to help determine the overall impact of the BTS program. A follow-up survey was conducted during the summer of 2014 through Facebook and through traditional intercept outreach. The survey was designed to mirror the baseline survey to ensure data comparability. Only respondents who fit the target demographic of the program were included in the analysis. A total of 60 responses which fit these criteria were collected. Thus, this response rate is an issue in substantiating claims of the campaign's efficacy in changing behaviors in its target population.

> **Key Findings of Post-Campaign Survey**
> **Exposed are nearly 3X as likely to pick up litter.** 90% of exposed respondents reported that they were "very likely" or "likely" to pick up someone else's litter, while only 38% of unexposed respondents reported the same.
>
> **Exposed are nearly 2X as likely to disapprove of friends littering.** 94% of exposed respondents reported they "strongly disapprove" or "disapprove" of their friends littering, while only 52% of unexposed reported the same.

Exposed are nearly 1.5X as likely to voice that disapproval. 70% of exposed respondents reported that they were "very likely" or "likely" to voice disapproval when their friends litter, while only 48% of unexposed respondents reported the same.

Exposed are more than 2X as likely to disapprove of their own littering. 58% of exposed respondents reported the "strongly disapprove" or "disapprove" of their own behaviors when they have littered in the past, while only 29% of unexposed reported the same.

Unexposed are nearly 2X as likely to litter in the future. 19% of unexposed respondents reported that they were "very likely," "likely," or "somewhat likely" to litter in the next month, while only 10% of exposed respondents reported the same.

Unexposed litter more than 2X as often. 8% of unexposed respondents reported littering at least a few times a week, while only 4% of exposed respondents reported the same.

"Baseline" refers to the data collected in 2012 prior to the start of the BTS program. "Exposed" refers to respondents captured in the 2014 follow-up survey who reported being aware of the BTS program. "Unexposed" refers to respondents captured in the follow-up survey who reported being unfamiliar with the BTS program. The difference between unexposed and exposed demonstrates the impact of the program.

In addition to the statistical differences demonstrated in the box above, the BTS program had significant levels of engagement (Appendix 2). Thanks to content rooted in a somewhat sardonic teen style, with pop culture references or anchors for the campaign, and a focus on community empowerment, BTS's Facebook and Instagram pages became the most trafficked, most active social media outlets in the history of California municipal efforts at addressing the stormwater/pollution prevention efforts—more than 5500 fans and 11,000 interactions ("Likes," comments, and shares) in a period of about two years.

The campaign was deemed highly successful by its sponsor, BASMAA, in reaching its goal of reducing littering behaviors in the San Francisco Bay area and won the "Outstanding Regional Stormwater News, Information, Outreach and Media Award" given by The California Stormwater Quality Association (CASQA), which found it to be "extraordinary in both its levels of engagement and the innovative use of social media and breadth of technology used to cultivate a dedicated user base" (CWEA, 2014).

Discussion and Lessons Learned

The metrics by which the program has been evaluated suggest that, given youth's involvement in brand development, as well as their interest in social causes (Furlow, 2011), marketers could use multiple characteristics of the case study presented here in the design and implementation of environmental sustainability strategies as well as campaigns promoting the public good. In order to maximize success in social marketing campaigns, researchers and marketers should seek target communities to involve directly in both the design and implementation of a behavior change program. Such a tactic not only increases the community's ownership over the campaign's outcome but also a shared commitment to the cause driving the need for behavior change.

It should be noted that numbers show the social norm, not the behavior change. Demonstrating behavior change remains a challenge. The target audience was eager and willing to engage on social media, lend their name and voice to the movement, and click buttons. They were reluctant, however, to take the very substantial next step and document themselves undertaking the desired behavior. During community events where the audience interacted with staff, they were less reluctant to take that additional step and document their actions. The fact that this part of the campaign was not successful does not suggest that a causal connection can be made between "documenting new behaviors" and experiencing a behavior change. To address closing the loop on the link between a study of this nature and the behavior change it produces, future campaigns designed along CBSM principles should not seek to achieve documented behavior change through social media platforms. Rather, additional studies should consider what types of behavior changes can reasonably be expected to create success in soliciting evidence of a campaign's success. Community events should be utilized to achieve documented behavior changes.

As Schuster, Kubacki, and Rundle-Thiele (2016) note, "increasing the visibility of the [targeted] behavior in the community ensures that the social norms of an appropriate reference group, the community in which the target audience resides," can be among the most significant of actions promoted (p. 6). The BTS follow-up survey indicates that the *visibility* of behaviors, desirable and undesirable, was pronounced and was perhaps the most successful component of the campaign; however, the BTS campaign's steps do not allow for a clear demarcation between shifts in attitudes and shifts in (observed) behaviors. Accurately measured differences in both attitude and behavior remained difficult to isolate in the campaign, and more complex designs of steps 4 and 5 in the CBSM model are necessary. This conundrum, closing the gap between "attitudes" and "behaviors," is the key to environmental sustainability—arguably the most complex set of phenomena targeted for behavior change. The metric for establishing a causal link between the campaign and result in the community is difficult to establish due in part to the complexity of understanding distinctions between the individual and the larger

social and physical environment. Simply put, these are difficult to isolate from one another. Social marketing researchers must take this reality into account in order to develop more effective strategies.

One significant limitation of the BTS campaign is, simply, that littering behaviors often appear to be "upstream"—that is, behaviors that surface as littering at point-of-origin often have their origins in assumptions about the limitlessness of earth's processes. These attitudinal adhesions are difficult to isolate in social science research paradigms and account for the difficulty of using campaigns limited to providing "information" to target audiences. As Lynes, Whitney, and Murray (2014) observe, the application of social marketing principles—even when understood through the CBSM lens—"is relatively new" (p. 112). Bates (2010) expresses a more pointed critique, as well as articulates a limitation that is embedded in the BTS approach: He notes the "paucity of empirical studies that examine social marketing campaigns for sustainability and inconsistencies in program design and implementation that inhibit empirical evaluation" (Bates, 2010). For example, in the summer of 2014, there was only one post-campaign survey to document the impact of the campaign on the target audience's behavior; similarly, this part of the campaign reached a very small audience—sixty direct participants—a response rate that contributes little to the call to end the "paucity" of empirically based studies. In part, this limitation of the BTS campaign illustrates the difficulty of integrated approaches to step five of CBSM approaches when researchers attempt to study the efficacy of changing behavior in environmental sustainability contexts. Although the campaign attempted to measure changes in behavior at different stages of the implementation phase, and thereby eliminated some strategies to focus on others (i.e., elimination of the development of a website and a re-focusing of the campaign on Facebook), the small response rate to the follow-up survey suggests empirically based decision-making presented problems for the campaign at varying stages in its implementation. The two-year cycle of feedback begs the question: How much time passes before behaviors can be "proven" to have changed in the long-term?

Lynes et al. (2014) have also recognized that the "application of social marketing models in environmental sustainability is still in its infancy in comparison to other contexts such as public health and safety" (p. 130). Thus, campaigns that target the adoption of sustainable behaviors (and the reduction or elimination of un-sustainable behaviors and attitudes) are hampered by both the complexity of the links between wider social contexts beyond individuals' control and the relative lack of similar campaigns upon which to build.

Another limitation of the 2014 follow-up survey: Respondents self-reported the changes they themselves were observing in both their attitudes and behaviors; however, the veracity of self-reporting on attitudinal changes is difficult to isolate in respondents' answers, in part due to the wording of questions in the survey instrument. The prevalence of single-method data collection (predominantly self-reported surveys) and lack of multiple method formative research studies in social marketing has been a noted issue (Carins et al., 2016). While "using a single method during formative research […], or combining methods that emerge from a single perspective […], may provide valuable insights *from an audience's*

perspective, [it] may not provide the required depth of understanding needed to create strategies that initiate and foster sustainable behavior change" (Carins et al., 2016, p. 1084).

Conclusion

This case study has presented a campaign that would allow marketers to envision campaigns that can take advantage of regional social norm differences. As a regional outreach program, the target audience was of a sufficient size that critical mass of participants could be achieved. Through social media, the "likes" of thousands of similarly situated youth vouched for the program and helped it spread. Further studies can and should address the issue of measuring behavior change, but despite the limitations in measurable, quantifiable results in the main goal of the campaign, the results of this ground-breaking effort suggest a powerful approach for engaging not simply a target population's ideas of itself and its surroundings, but also its behaviors for producing, and changing, that environment.

Discussion Questions

1. Find other anti-littering campaigns. Analyze what type of approach they use. Do they use an informational approach to educate people? Do they use fun approach to entertain to change behavior? In your opinion, which approach is more effective? Why?
2. It has been several years since the BTS campaign was launched. It relied primarily on Facebook and YouTube to reach to its target audience of Gen Y. Evaluate how effective these social media platforms would be in today's digital environment. Suggest other apps for today's Gen Y and Gen Z who were born between 1995 and 2012.
3. One of the challenges social marketing campaigns face is the sustainability of the campaigns in the long-run. Many campaigns are abandoned after a period of time or become ineffective. What can the BTS campaign do to keep the campaign fresh?
4. How is an advertisement for anti-littering different from a community-based social marketing campaign like Be the Street? An example of an anti-littering ad campaign is by Johannesburg Zoo by Y&R from 2011 with the slogan "Animals Can't Be Recycled. Please Don't Litter."
5. If you were given the task to design an anti-littering campaign in your region similar to the BTS program, how would you go about creating and implementing the campaign? Who would be the target audience? What strategies would you use?

6. Think of other social issues that can be addressed by community-based social marketing strategies. Create a strategy outline. Who would be the target audience? What strategies would you choose?
7. Think of other social issues that can use social media campaigns (e.g., video and meme contests) applied in the BTS program. Give suggestions for how they can be implemented.

Appendix 1: Review of Barriers, Motivators, and Marketing Tactics

Identifying and overcoming barriers	
Barrier	**How to overcome**
Social norms that encourage littering such as: *Context:* A littered/disorderly environment prompts others to litter *Peers:* Littering friends increase the likelihood of littering	Reframe the norm so that it is more aligned with the desired behavior utilize the norm of social disapproval, but do not vilify the offenders
FORGETFULNESS: Individuals may engage in passive littering as opposed to active littering; i.e., littering is not the intention; rather the individual forgets to dispose of an item	PROMPTS: Utilize visual cues near the trash receptacle to encourage individuals to remember to dispose of waste
Lack of proper repositories	Place additional repositories or utilize signs to clearly indicate repository locations
Lack of knowledge about litter: *Definition* (i.e., plastics are perceived as litter, but organics may not be) *Fate* (environmental/social consequences)	Identify the most prevalent misconceptions with regard to litter's definition or fate and target messages to address these specific information gaps
Emotional states: Bad mood, laziness, hurried. These emotional states can make people more prone to littering	Elevate motivators to demonstrate that litter prevention is more important than fleeting emotional states
The teenage brain is still under construction	Capitalize on the extremes of teenage behavior (i.e., idealism) to create social change
Age greatly influences littering behaviors, even within the small bracket of the target age group	Make littering unappealing by demonstrating that littering is something that "KIDS" do
Identifying and utilizing motivators	
Motivator	**How to utilize**
Social norms that encourage litter prevention	Align social norms with litter prevention behaviors (i.e., show responsible behavior as the norm and encourage others to follow suit)

(continued)

Concern for the environment among certain groups within the target audience	Demonstrate through messaging that litter prevention protects the environmental integrity
OWNERSHIP: desire to be involved and engaged among certain groups	Involve the target audience into program design and/or implementation
The desired behavior resonates with the underlying cultural values of the audience	Incorporate culture-specific messaging in the strategic direction of the campaign
The desired behavior is perceived as being "COOL"	Allow the campaign to be "owned" by the target audience and encourage the constant change and evolution of the message and/or brand
The desired behavior is perceived as being "FUN"	Include playful, interactive elements
How to get messages across	
Use ONLINE PLATFORMS as a central mechanism to message distribution	
SOCIAL NETWORKING, ON- AND OFF-LINE: Empower the audience to become a vehicle of communication through peer-to-peer messaging via social networking sites and word of mouth	
GET MOVING, GO MOBILE: Utilize text messaging and mobile advertising to reach the target audience	

Appendix 2: Promotional Tools Evaluation Outcomes

Promotional element	Evaluation outcomes
Facebook	More than 11,000 engagements including 5475 "likes" (July 2014). In two years since its creation, the BTS page has achieved 150% the "likes" of the similarly situated San Francisco Environment Facebook page. The Facebook engagement far exceeded the initial goals of the campaign, and this success was due in large part to using social media to reach the intended audience (https://www.facebook.com/BetheSt/)
Meme contest	The program initiated a meme contest in early 2014 that took place on Facebook. The meme contest asked the target audience to develop visual jokes or memes with pro-environmental messaging. A total of 104 user memes (from a goal of 100) were created and entered into a contest. More than 683 votes were cast and thousands of views and referrals were driven to the Facebook page as users promoted their memes to their friends and social networks
Instagram	This part of the campaign attracted more than 1626 interactions with fans and 113 followers across 185 posts. Of all of the outreach channels used, Instagram proved the most successful in encouraging peer-to-peer conversations. While many Facebook posts received comments, Instagram was the channel most likely to develop long, sustained conversations between fans

(continued)

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Promotional element	Evaluation outcomes
YouTube	As with the meme contest, the audience (and more importantly, the audience's friends) was asked to produce 15–20 s videos as entries. A total of 56 videos published on the BTS YouTube channel including 52 fan-submitted videos for the anti-litter video contest. This competition received more than 4800 votes cast and had 593 unique views of the 25-min awards show. At the conclusion of the video competition, the channel had received a total of nearly 16,000 views. Since then, total views on the channel have risen to more than 42,000, a 260% increase (July 2014). This element of the campaign suggests that the "participatory messaging" of the campaign will be operable long after the campaign organizers cease to design and initiate new activities. All 52 can be seen on the BTS YouTube page (https://www.youtube.com/user/BetheStreet/videos)
Mobile app	The app did not achieve the anticipated number of active players upon its launch. This shortfall is attributed to the development of the app taking longer than projected, leaving an insufficient amount of time for promotion. Here, too, the organizers of the campaign followed CBSM techniques: *be flexible in your approaches!*
Photo booths	The program developed a mobile photo booth that could be relocated across community events and allow fans to take pictures to be uploaded to varied social media outlets. For example, more than 750 photographs were taken and shared on Facebook. The photographs reinforced the social norm aspect of the campaign and literally "put a face to the campaign"
Website	The website has received more than 40,000 page views despite not being a key platform for communication with the target audience (i.e., traffic was driven predominantly to Facebook and Instagram) (website removed few years after the campaign due to lack of funds but Facebook page remains)

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