

Reconsidering Motorcycle Safety at Purdue: A Case Study Integrating Campaign Theory and Practice

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Abstract

Motorcycle Safety at Purdue is a health communication campaign developed and launched by a university faculty member and health communication graduate students. The campaign goal is to increase awareness about motorcycle safety and ultimately make the campus and surrounding roads safer for everyone. The process of planning, implementing, and evaluating this campaign is described, as is its theoretical basis. The Messaging Model of Health Communication Campaigns¹ underpinned the campaign at all stages from the needs assessment and development of the strategic plan, to the development of campaign promotional items, and message testing. Furthermore, the case study illustrates how this campaign aims to encourage changes in individual-level attributes, including knowledge, attitudes and behaviors regarding motorcycle safety. The campaign limitations are explored from the reflexive perspectives of the campaign practitioners, and suggestions for creating best practices for integrating campaign theory and practice are proposed.

Background

The Motorcycle Safety at Purdue Campaign came about literally by accident. While motorcycle riding with a small group of friends on a gorgeous fall day, a professor's academic and personal life were changed forever. A collision with a semi truck caused severe injuries to the professor, including a severed leg. After a life-saving emergency helicopter transport, a month-long stay in a trauma unit, and several months in rehabilitation and recovery, the professor returned to campus scheduled to teach a graduate course on evaluating campaign messages. Students, however, encouraged the development of a two course graduate level sequence on health campaigns culminating in the design, implementation, and evaluation of a motorcycle safety campaign. Since that fateful fall day, experiences spawned from an unfortunate accident have informed health communication pedagogy, campaign model building, ap-

plied research, dissertation projects, funding opportunities, and community outreach.

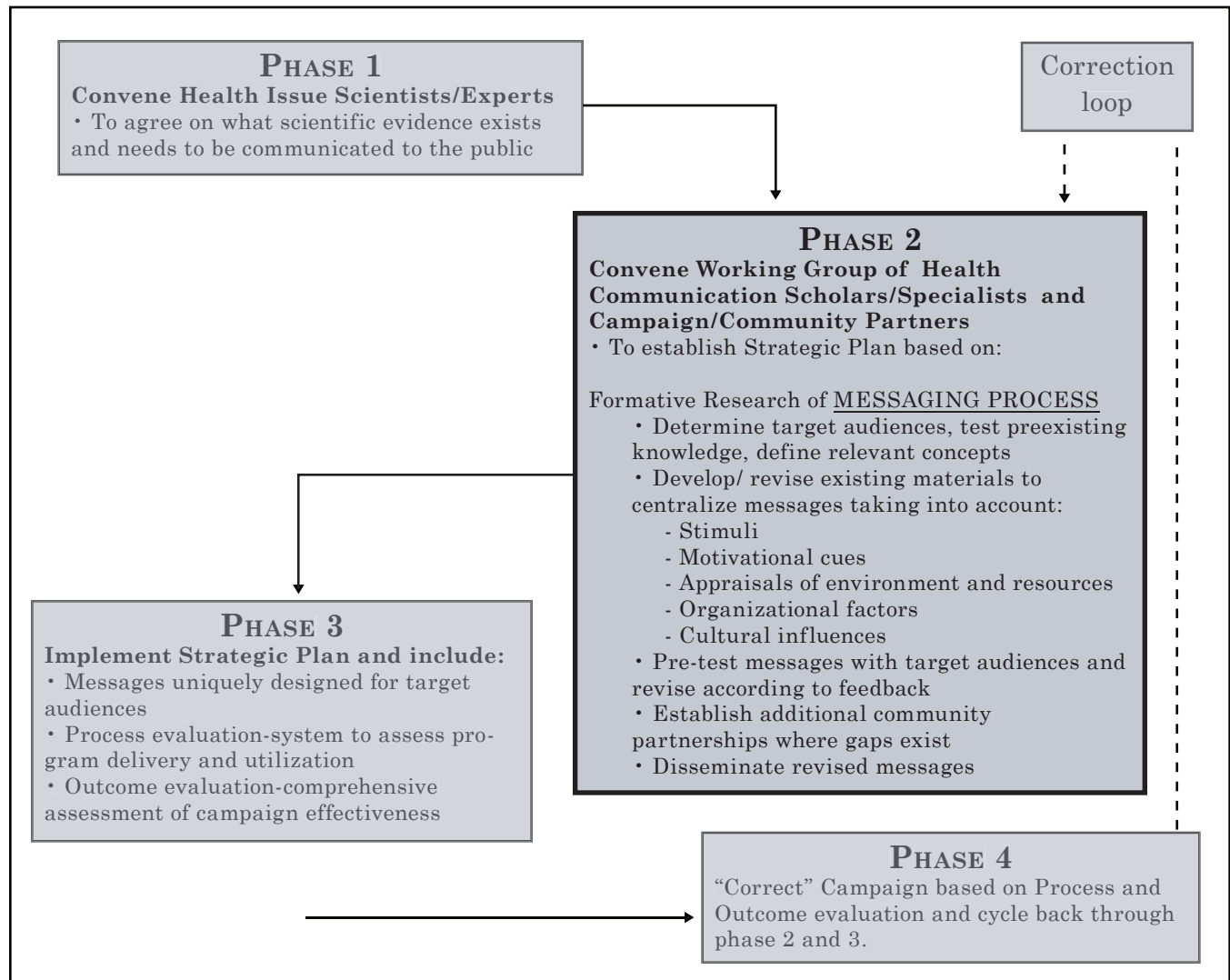
The Motorcycle Safety at Purdue campaign is grounded in an extension of the social marketing framework referred to as the Messaging Model for Health Communication Campaigns (MMHCC).^{1, 2} This ongoing campaign targets Purdue University students, faculty and staff, but there is also spillover into the surrounding community. Within this campus community three target audiences have been identified including motorcycle riders, friends and family of riders, and drivers of cars and trucks. This case study analyzes a snapshot of the campaign; it revisits the strategic planning, implementation and evaluation process, and offers specific suggestions for its application to other safety campaigns.

Messaging Model for Health Communication Campaigns

The MMHCC is situated within social marketing but extends the traditional framework by enhancing relevant messaging components during the health communication campaign process. As **Figure 1** depicts, the phases of the MMHCC remain consistent with social marketing, but messaging is fore-

grounded with an emphasis on message success variables during the messaging process. The messaging process is defined by Mattson & Basu¹ as the dynamic and iterative practice of creating, disseminating, and sharing meaning through messages. The messaging process, therefore, is not restricted to assem-

Figure 1. Messaging Model of Health Communication Campaigns



bling message variables for dissemination, but also creates meaning and should involve relevant cultural and organizational factors which shape messages, message dissemination choices, and impact evaluation strategies.

Although messaging is primarily embedded in Phase 2 of the model, Phases 1, 3, and 4 also are integral to the messaging process and will be briefly mentioned. In Phase 1, issue experts should be convened to decide what evidence exists about the health issue and needs to be communicated to the public. This information is then provided to a working group of communication specialists and campaign partners who, during Phase 2, develop a strategic plan that incorporates what is known about the health issue and what communication materials must be designed to meet the needs of the target audience(s). Phases 3 and 4 involve implementation of the strategic plan for the campaign, including an audience-grounded orientation to messages and a comprehensive evaluation and correction of the campaign.

More specifically, Phase 2 involves developing a strategic plan based on formative research. Aspects of formative research include traditional social marketing elements (e.g., testing audience knowledge, audience segmentation). The focus of formative research, however, is on designing and testing messages while taking into account the essential messaging components of stimulus, motivational cues, appraisals of the environment and resources,³ organizational factors,⁴ and cultural influences.^{5, 6} These components are now described.

- ◆ *Stimulus* refers to the saliency of the message and, by design, its inherent capability to encourage the exposed audience to take

notice, attend to, and retain the message.^{3,7}

- ◆ *Motivational cues* embedded in a message aid the target audience in processing the message and deciding whether it should be acted upon.³ Perceived fear, threats, severity and susceptibility can serve as motivators to action. However, message designers need to be cognizant of the delicate balance necessary to ensure fear is used by the audience as a motivation to change rather than a reason to ignore the message.⁸ Too little fear may lead to the message not being regarded as salient, while too much fear without a sense of efficacy may lead the target audience into a defensive avoidance reaction, or perception of immunity to the harm alluded to in the message.
- ◆ *Appraisal of environment and resources* refers to taking into account the context and resources available to target audience members when crafting messages.³ This involves further reflection on audience members' perceptions of efficacy, in addition to their perceptions of norms, benefits, and barriers. When considering campaign messages, audience members, in an informal cost/benefit analysis, will weigh the options at their disposal to avert the health threat and the degree to which they will be able to use the options to cope with the threat. Thus, when crafting messages, the health campaign message designers must: (a) explicitly and accurately demonstrate that the prescribed response consistently works, (b) help audience members maximize confidence in their ability to adopt the prescribed health behavior, and (c) accommodate audience members' beliefs, barriers, collective norms and enablers, and guide them to adopt the advocated behavior.

◆ *Organizational factors* such as reach, execution quality, and message quality need to be incorporated into message design in conjunction with stimuli, motivational cues, and appraisals of environment and resources. Reach ensures exposure of the target audience to the message and execution quality refers to the extent to which an intervention helps its audience comprehend and remember campaign messages. Along with encouraging the audience to adopt the desired health behavior, campaign messages should motivate the audience to sustain the behavior. More specifically, according to Kiwanuka-Tondo & Snyder,⁴ financial resources are related to message execution quality, goal specificity and audience participation. Improved training of campaign planners and staff is related to better research, use of multiple message dissemination channels, greater target audience participation and greater supervision of outreach workers. Further, formality of organizational structure also

influences campaign quality, and greater audience and outreach worker participation increases the quality of campaign messages.

◆ *Sensitivity to cultural influences* in the conceptualization and implementation of messages is also vital to campaign effectiveness. The cultural context of the target audience including the target audience's cultural values, health beliefs, community rules, and traditions must be recognized and integrated into messages to have maximum reach, impact, and recall.⁶

Although presented here in a rather discrete and linear way, the elements of messaging inform, and are informed by, all phases of the campaign.

With the MMHCC as backdrop, the case study will next present how this model was applied to the design and implementation of the Motorcycle Safety at Purdue campaign.

Formative Research

In order to create a successful campaign, it was essential to gather background information about potential consumers of the campaign, their attitudes, beliefs, behaviors, and informational needs. One of the first steps, prior to even solidifying the idea for a campaign, was to conduct focus groups with motorcycle riders. This initial research was extremely important because most of the campaign team members were not riders and were not familiar with motorcycle riding culture. The focus groups consisted of faculty, staff, and student riders, and were used to probe riders about their beliefs concerning various safety behaviors such as wearing a helmet and other gear, safe riding practices, as well as their opinions about the necessity of a safety campaign.

One of the main themes that emerged from the focus groups was riders' strong resistance to being told what to do. Even those who regularly wore helmets and took other safety measures, wanted doing so to remain a choice by the individual rider. (Note: this campaign takes place in a state without a mandatory helmet law.) Riders also adamantly voiced concern that other vehicles on the road posed a greater threat to motorcycle safety than motorcyclists themselves. For example, one rider commented that he recommended other riders consider all other vehicles on the road as if they were actively trying to hit motorcycles. (Focus group participant, oral communication, November 2005.) There was a common opinion that crashes and injuries were most often the fault of drivers of other vehicles who were either inattentive or driving aggressively. In

terms of a safety campaign, riders felt that it should be aimed at educating drivers of other vehicles to be more aware of motorcycles and how to safely share the road. Another important opinion that emerged from the focus groups was riders' respect for the American Bikers Aimed Toward Education (ABATE) riding course. ABATE is funded by the state to conduct motorcycle training. Some even suggested that a rider course should be mandatory in order to obtain a motorcycle driving license.

Based on this initial research, the team considered creating a safety campaign targeting a more broad audience than motorcycle riders. It conducted further research which revealed that over half of all fatal motorcycle crashes involve a collision with another vehicle.⁹ The team also determined that because riders harbor strong beliefs and values associated with motorcycling, a campaign to encourage riders to stop riding would not be effective. Instead, it decided to focus efforts on a harm reduction approach by persuading riders to ride safely. The focus group results and supplemental research indicated that the campaign should begin with an emphasis on the Purdue University campus and target three audiences: motorcycle riders, drivers of other vehicles, and friends and family members of motorcycle riders. The friends and family audience consisted of anyone in the campus community who knew or was related to a motorcycle rider, even if that rider did not reside on campus.

To further understand the university community's requirements for a comprehensive

motorcycle safety campaign, a needs assessment was conducted. Needs assessments are useful because “program efforts can be based on reported needs, changes and trends can be assessed over a period of time, individuals and target audiences can be involved in purposeful activities, and the target audience can be more accurately characterized.”¹⁰ For these reasons, the campaign team adopted an inductive approach to campaign message design by first learning the attitudes, behaviors, and needs of the three target audiences.

The needs assessment for the friends and family audience found that the majority of those surveyed, almost 80 percent, supported their friend or family members’ riding. Many, however, desired that their friend or family member ride more safely. This desire exposed an integral way to reach motorcycle riders through their loved ones who wanted them to wear safety gear and ride safely. The needs assessments also revealed that although friends and family members felt comfortable talking to motorcyclists they knew, they did not believe that the conversation would bring about change in the motorcyclists’ behavior. This was an indication that this group needed not only techniques for successfully persuading their friend or family member, but also self-efficacy messages that helped them feel capable of having a successful conversation.

The needs assessment for the motorcycle riders built on the information obtained during the initial focus groups by further probing riders’ attitudes, beliefs and behaviors, and determining the best channels for reaching riders. Two key ideas were reaffirmed through the riders’ needs assessment. One

was riders’ deep respect for ABATE and motorcycle training courses, and another was riders’ strong belief that drivers of other vehicles posed the greatest threat to motorcyclists. One rider explained, “I think we need a campaign for drivers to pay more attention to their driving, instead of the cell phone, the radio, the cigarette, the makeup. Distractions cost lives.” (Focus group participant, oral communication, November 2005.) Additionally, riders identified the best channels and life path points for reaching motorcycle riders, which included motorcycle dealerships, charity rides, and motorcycle clubs. The needs assessment also found that there were 2496 registered motorcycles in the county and during the previous year, 86 motorcyclists were killed in the state, a 25 percent increase from the previous year.¹¹

The needs assessment findings stressed that drivers of other vehicles (who did not also ride a motorcycle) had negative perceptions of motorcycle riders. Other drivers believed that motorcyclists, rather than the drivers of cars or trucks, were the cause of most accidents, and that motorcyclists posed a threat to other drivers on the road. The majority of this target audience believed that a campaign addressing both other drivers and motorcyclists would be most effective in reducing the number of accidents. In addition, the needs assessment revealed that other drivers lacked knowledge of how to adapt their own driving in order to safely share the road with motorcycles (e.g., how closely to follow a motorcycle, whether to alter speed when driving in the presence of motorcycles). Findings from the needs assessment parlayed into the development of a strategic plan.

Strategic Plan

The campaign team crafted a formal strategic plan to guide campaign activities through the planning, implementation, and evaluation phases. One of the first steps in the planning process was to craft a comprehensive problem statement for the campaign. Based on the formative research, the following problem statement was composed: “The number of motorcycle related injuries and deaths is rising each year due to lack of helmet use, unlicensed motorcycle riders, the changing demographics of motorcycle riders, and inattentive and aggressive drivers of other vehicles. Therefore, it is imperative that motorcycle riders, other drivers, and friends and family of riders understand the safety risks and how to avoid accidents.” The team continued to create its strategic plan using CDCynergy guidelines.¹² CDCynergy is a CD-Rom produced by the Centers for Disease Control and Prevention that provides a step-by-step process for developing and implementing a social marketing campaign. The strategic plan included a detailed timeline with target dates for pre-test and post-test evaluation, message design, website development, materials production, campaign launch, and campaign events. Dates incorporated into the timeline were considered both feasible and sensitive to the Midwest motorcycle season which runs from early spring to mid-fall. The strategic plan also included a budget based on available funding sources that allocated money for research, promotional items, and events.

One of the most important components of the strategic plan was the communication mix which specified the messages, the channels to disseminate those messages, and the timeline for dissemination. Two messages used on posters and promotional items were “It Involves You!” and “Gear Up Purdue!” The strategic plan also specified communication channels such as the campus television station, flyers, local newspapers, a website and other promotional literature. Final decisions for the communication mix were based on feedback obtained during focus groups and campaign budget limitations. For example, the campaign team decided to use bus signs as the primary means of mass advertising realizing it would be cost effective as well as viewed by a large number of students. As the campaign addressed three distinct audiences, a communication mix was developed for each target audience. **Table 1** (next page) describes the communication mix.

In addition to focusing on the external communication with the target audiences, the strategic plan also outlined an internal communication plan (a step intended to maximize the effectiveness of the campaign team as well as minimize errors due to communication failures.) The plan specified meeting frequency and the procedure for taking and distributing meeting minutes. Overall, the plan stressed the importance of keeping all team members aware of campaign happenings and issues in a timely and thorough manner.

Table 1.

AUDIENCE	MESSAGE	CHANNEL
MOTORCYCLE RIDERS	GEAR UP PURDUE!	BUS SIGNS BOILER TV BOOTH AT EVENTS WEBSITE
OTHER DRIVERS	<ul style="list-style-type: none">• WATCH FOR MOTORCYCLES EVERYWHERE• INTERSECTIONS: MOTORCYCLE SAFETY IS WHERE AWARENESS AND RESPECT INTERSECT• CAUTION SIGN	BUS SIGNS BOILER TV BOOTH AT EVENTS FLYERS WEBSITE
FRIENDS & FAMILY	CONVERSATION STARTERS	POST CARDS WEBSITE

The final area the strategic plan addressed was the formation and maintenance of strategic partnerships. Some of the primary partnerships that were considered were ABATE, the Purdue University football team, and the local bus company. For example, by partnering with ABATE, a widely respected rider organization, the safety campaign was able to obtain legitimacy and appear less threatening to motorcycle riders. The campaign team also decided to partner with the Purdue University football team for several reasons: the team is popular on campus and in the community, the football season coincides with a portion of the motorcycle season, and football gear protects football players just as motorcycle gear protects motorcycle riders.

The campaign team recognized the importance of effectively communicating with these partners in order to successfully execute joint projects. Therefore, it was included in the strategic plan that it is necessary to keep all partners, funders, and stakeholders who express an interest in the campaign informed of our decisions and progress throughout the duration of the campaign. The plan listed the events such as a campus activities fair, homecoming, and spring festival events in which the campaign team involved partners. The plan also called for the cultivation of additional partnerships with local businesses, including motorcycle dealerships, to increase the campaign's credibility among riders and campus community members. These partnerships would also increase the resources available to successfully implement and maintain the campaign.

Messages and Promotional Items

The process of developing campaign messages and promotional items for the Motorcycle Safety at Purdue campaign was closely linked with social marketing and the MMHCC.¹ It involved three stages. The first stage of message development utilized information gleaned from formative research to develop draft versions of possible messages and promotional items. The second stage was to test the draft messages with members of the three target audiences. The purpose of the third stage was to finalize campaign messages by combining information from the target audiences, scholarly research on effective message components, and the informed judgments of the campaign personnel.

According to the MMHCC,¹ a campaign team should develop campaign messages while taking into account stimuli, motivational cues, appraisals of environment and resources, organizational factors, and cultural influences that pertain to the campaign's target audiences. When developing the first draft of messages for the Motorcycle Safety at Purdue campaign, the campaign team specifically considered the stimuli (what would get target audiences to attend to messages), the resources (what target audiences need from messages), and cultural factors of the target audiences. Because the Motorcycle Safety at Purdue campaign is campus based, the majority of the audience consists of traditional college-aged students. During the formative research process, students indicated that they were exposed to an overwhelming number of advertisements and messages in the forms of flyers, posters, television and radio commercials, and even

emails. The campaign team realized that in order to get the attention of college students the campaign messages would need to stand out among all the other messages this audience receives.

Turning attention to the resources aspect of message development, the campaign team learned through the needs assessment that the campaign messages had to fulfill a different need for each target audience. For motorcycle riders, the messages needed to convey the importance of safety gear and safe riding practices; for drivers of other vehicles, the messages needed to increase awareness of motorcyclists on the road; for friends and family members of motorcyclists the messages needed to encourage communication with riders about safety. Finally, taking into consideration cultural aspects of the target audiences gleaned from focus group feedback, the team realized that both the motorcyclists and college students could be described using adjectives including risk taking, edgy, and controversial.

Keeping in mind the stimuli, resources and culture of the target audiences, as outlined by the MMHCC,¹ the Motorcycle Safety at Purdue campaign team developed numerous messages and ideas for promotional items. One of the favorite messages aimed at the friends and family target audience, was a picture of a wildly unattractive female with the saying, "You wouldn't let your friend go home with that ugly girl from the bar, why would you let him ride unsafely? Talk to your friends about riding safely." (Figure 2, next page). The campaign team was confi-

Figure 2.



dent that this was the risqué, edgy message that would grip the attention of the target audience and compel them to pay attention. In addition to this and eight other messages, the campaign team also developed three versions of the campaign logo, a website, and numerous ideas for promotional items including t-shirts, pens, and air fresheners.

The second stage of the process was testing the draft messages and promotional items developed by the campaign team. The MMHCC¹ stresses the importance of pre-testing messages with members from the target audiences before utilizing the messages in the campaign. The messages and promotional items that were developed by the campaign team were pre-tested in six focus groups consisting of members of the target audiences. Participants in the focus groups were students, faculty, staff, and community

members who were recruited through flyers posted around campus. Two focus groups for each of the three target audiences were conducted. Attendees were shown sample messages, logos, websites, and promotional items and were asked to share their opinions. Information from the focus groups led to major revisions of the campaign messages and ideas for promotional items. Much to the campaign team's dismay, the favorite message previously described received overwhelmingly negative feedback from all focus groups. The message was considered too wordy, required too much thought and time to process, was offensive, and no one liked the picture of the unattractive girl.

One message that tested very positively with the focus groups surprised the campaign team because it was one of the team's least favorite messages. This message showed a

picture of intersecting street signs including popular campus streets as well as “awareness” and “respect” as the top two street names on the pole. The accompanying message stated, “Motorcycle safety is where awareness and respect intersect” (**Figure 3**). The campaign team had little confidence in this message because they felt it was not edgy enough to capture the attention of the target audiences. However, the focus groups concluded that the straightforward, simple but clever message emphasized the point of motorcycle safety and made the message relevant to the campus campaign by using local street names. Based on the focus group feedback, the campaign team revised the original messages. Sample promotional items were also tested during the focus groups and the campaign team quickly learned that college students as well as faculty and staff value free items that are useful. Therefore, the most popular promotional items identified in the focus groups included t-shirts, pens, and key chains.

The third stage of the message development process was the finalization of campaign messages and promotional items for the initial launch of the campaign. This stage was challenging for the campaign team because it required them to synthesize the feedback received from the focus groups, the information gleaned from scholarly research on message design, and their informed judgments to determine what messages and items should be disseminated. Based on the synthesis of this information, the team selected three messages to begin the campaign. These messages included the intersecting street signs message described previously, a motorcycle caution sign with the message, “Watch for Motorcycles Everywhere,” (**Figure 4**, next page) and a football themed message, “Gear Up Purdue,” which was accompanied by a digitally enhanced picture of a football player dressed in football gear on half of his body and motorcycle gear on the other half (**Figure 5**, next page). These messages all tested well in the

Figure 3.

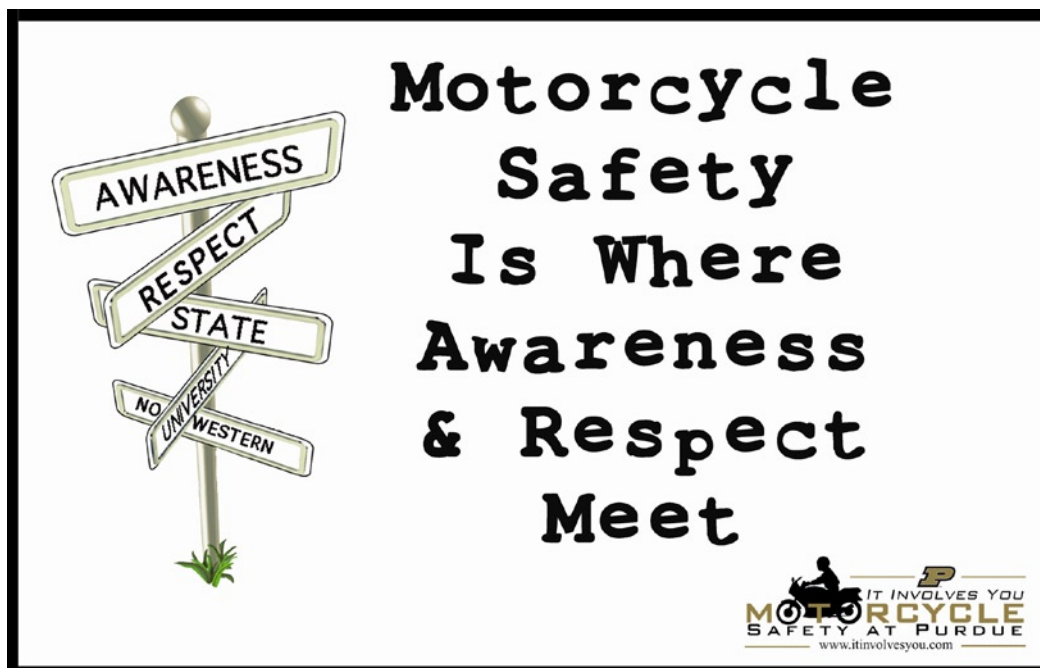


Figure 4.



focus groups and were liked by the campaign team. The campaign team decided on promotional items including t-shirts, pens, bumper stickers, motorcycle tank magnets, puzzle booklets, and key chains. The decision regarding the type of key chain illustrates a situation where it was difficult to synthesize the feedback from focus groups and the campaign team's judgment. The majority of focus group participants indicated that their favorite key chains were those that doubled as bottle openers. However, the campaign team was concerned that distributing bottle openers would encourage drinking and perhaps counter the message of safe riding and driving practices. Therefore, the campaign team made the difficult decision to go against the feedback from the target audiences and follow their judgment to distribute plain gel-type key chains instead of bottle openers. Though determining the final campaign messages and promotional items was a challenging task, the decisions made by the campaign team, but informed by research, seem to be effective.

Figure 5.



Campaign Implementation

For the implementation of the Motorcycle Safety at Purdue campaign, the campaign team focused on three major factors: timing, breadth, and depth. This section describes how these factors were crucial to the implementation of the campaign and how the team capitalized on opportunities to increase campaign exposure while influencing target audience members.

The timing of the Motorcycle Safety at Purdue campaign launch was crucial for two reasons; first, it needed to coincide with the beginning of an academic semester at the university and second, it needed to be during motorcycle riding season. Launching the campaign at the beginning of an academic semester was imperative to campaign evaluation. During the first week of the Fall 2006 semester the campaign team administered pre-campaign surveys to a randomly selected sample of the university population (n=556). After the pre-test survey period was completed, the campaign was rolled out on campus. It was also crucial that the campaign was launched during motorcycle riding season which, in the state of Indiana, is between the months of March and October. Had the campaign been implemented during the off-season it would not have made much sense to the target audiences. The campaign was therefore strategically launched in August to coincide with the beginning of an academic year and prime motorcycle season.

The second consideration for campaign implementation was breadth or exposure. The campaign team crafted messages specifically designed for the target audiences, but needed

a way to get these messages to the audiences. To accomplish this, campaign messages were run on Boiler TV (the campus television station) and messages were displayed inside the city buses that served the campus. The messages placed on Boiler TV were run on a continuous loop for the maximum number of times per day (which changes daily based on programming schedules.) There were two bus signs placed inside each of the 30 campus buses. These two strategies were utilized to distribute the campaign messages to a large number of audience members at low cost. The campaign team also submitted a press release to local news outlets, and in response, news stories were run in the campus newspaper, the surrounding community newspaper, and on the local public radio station. These news stories helped bring campaign exposure to campus as well as to the surrounding community.

The final consideration when implementing the Motorcycle Safety at Purdue campaign was depth or influence of the messages. The campaign team realized that simply posting signs and presenting ads would not influence the target audience to the extent necessary; therefore, the campaign provided a booth at three campus events in order to have face-to-face interactions with audience members. The interactive booth included a table-top display containing the campaign messages, a raffle to win items donated by campaign sponsors, giveaways of promotional items and a representative from a local motorcycle dealership with a motorcycle and safety gear. The raffle and the presence of the motorcycle and safety gear were utilized to

draw people's attention to the booth. Once people approached the booth, campaign team members would strike up a conversation and determine which target audience the individual represented in order to spread the appropriate motorcycle safety message. The table-top display was utilized to illustrate the safety messages during conversation, and promotional items, including puzzle

booklets and conversation starters, were distributed so that visitors could take away the motorcycle safety message. The interactive booth at campus events provided an opportunity for the Motorcycle Safety at Purdue campaign team to not only spread campaign messages to numerous people, but to influence through interpersonal communication, as many people as possible.

Process Evaluation and Campaign Improvements

Process evaluation for the Motorcycle Safety at Purdue campaign has been an evolving process. The strategic plan of the campaign outlined the importance of inventory tracking. This aspect of the process evaluation has occurred as scheduled. The campaign team keeps track of the number of promotional items ordered and distributed in an attempt to establish the reach of the campaign as well as to make decisions regarding the effectiveness of each promotional item. For example, according to inventory tracking, only 145 of 500 motorcycle tank magnets have been distributed after three very successful campus events. This illustrates to the campaign team that this promotional item has not been as popular as expected and is not serving the purpose of disseminating the campaign message. Therefore, once all the in-stock magnets are distributed they will be phased out and no longer utilized as a promotional item.

This process evaluation also helps to determine approximately how many people the campaign is reaching overall. By tracking the number of promotional items distributed as well as counting the number of people who approach the campaign booth during events,

the campaign has reached approximately 686 individuals. This approximation is a conservative estimate, however, because this process evaluation method does not include an accurate technique to estimate the number of individuals who have been reached by bus signs, newspaper advertisements or BoilerTV advertisements.

Because the Motorcycle Safety at Purdue campaign is still in its first year there have been few other changes or improvements implemented thus far. The campaign team plans to continue inventory tracking to make decisions regarding promotional items. It also continues to analyze feedback from members of the target audiences to improve the campaign. Post-test surveys will be distributed at the end of the Spring 2007 semester and the data will be used to evaluate and improve the campaign. The post-test surveys ask participants to indicate to which target audience they belong, and indicate their familiarity with the campaign. The information from these post-test surveys will allow the campaign team to determine an approximation of the number of people from each target audience the campaign has reached.

Critical Analysis of the Motorcycle Safety at Purdue Campaign

As with any health campaign, implementation brings to light campaign successes and failures. Throughout the campaign process, the campaign team strove to follow the tenets of social marketing and the MMHCC. One of the central principles of social marketing is to know the audience and to adapt campaign messages and activities accordingly.¹³ The motorcycle safety campaign was able to do this from the very beginning by conducting a thorough needs assessment and segmenting the audience into three distinct target audiences. Not only did the needs assessment determine the target audiences' informational needs, but it also uncovered the attitudes and beliefs that the campaign needed to change. It also revealed attitudes and beliefs that the campaign could build upon, such as the riders' belief that motorcycle training courses were beneficial.

Although the needs assessment provided baseline data and direction for the campaign, there were some limitations to the research. One of the greatest challenges the campaign team experienced was obtaining accurate local statistics. Most of the statistics available were from the state and national levels. There was some county-level data from which the team could extrapolate, but there were no statistics regarding the number of registered motorcyclists on campus. In addition, a large portion of the audience was students who did not permanently reside in the county, so it was very likely that their motorcycles were registered elsewhere. Without local statistics includ-

ing motorcycle registrations and number of accidents, it was impossible to determine the actual size of the motorcycle rider segment and it was difficult to assess the extent of the problem. Ultimately, this affected the team's ability to craft locally and personally relevant messages.

Due to resource limitations, the team had to rely on a convenience sample for the needs assessment, so it was uncertain if the responses of those interviewed and surveyed were representative of the larger audience segment. One of the most difficult audience segments to gain access to was motorcycle riders because their relative numbers were smaller than the other two target audiences. By making contact with more riders, the needs assessment may have revealed different information, or identified subgroups within this audience segment. Other groups in the campus community that were under-represented across all of the target audiences during the needs assessment were faculty and staff. Gaining access to faculty and staff was more challenging because the university does not offer a centralized way to contact them and request participation. This caused concern because the attitudes, beliefs, and behaviors of these groups were probably different from those of the students.

The development of the strategic plan was an important component of this campaign because it required that the team consider the many facets of the campaign prior to becoming immersed in the implementation.

The strategic plan also was helpful because it directly connected the audience research to the various components of the campaign, including the messages, website design, and partnership implementation. However, one of the major limitations, which led to continual revisions to the strategic plan, was that some of the aspects of the campaign, such as the budget and timeline, were based on estimated funding or anticipated timing.

Another positive aspect of this campaign was that it utilizes quality messages that have been tested and approved by target audience members. Thorough testing of these messages prior to campaign implementation and message dissemination ensured that only effective messages were utilized for the campaign. Had such strenuous message testing not been conducted, messages may have been disseminated that did not resonate with the target audiences. The example of the “ugly girl” poster described earlier illustrates the importance of thorough message testing to avoid using ineffective messages. Although the messages for this campaign were rigorously tested and approved by the target audiences, the critique can be made that these messages lack substance (e.g., facts and statistics pertinent to motorcycle safety). It can be argued that the signs and ads used to generate the greatest amount of exposure for the campaign lack important facts and statistics that may be more persuasive than the messages currently in use. While the campaign team realizes the importance of

generating exposure for the campaign, they are concerned about relying on a few campus activities and a few key messages to relay the substance and complexity of the motorcycle safety issue to the target audiences.

Although the timing of the campaign implementation seemed logical, each reason used by the team can be countered. Launching a campaign at the very beginning of not only a new academic semester, but also a new academic year, may not be the best timing. This is an especially busy time for people on a college campus and they may not attend to a campaign survey or campaign messages. Also, launching a safety campaign in the middle of motorcycle riding season may seem illogical to audience members. It may have made more sense to launch in March which is the very beginning of a new motorcycle riding season.

A final positive aspect of the campaign is that it was created as the result of a personal experience. This is helpful when interacting with audience members because team members can tell the story and try to personalize the issue of motorcycle safety for audience members. However, this also has been a challenging aspect of developing the campaign; the team members are so personally involved with the issue of motorcycle safety it has at times been difficult for them to make decisions based on research or consumer opinions rather than their personally held attitudes and beliefs.

Conclusion

The Motorcycle Safety at Purdue campaign was developed and launched with the goal of increasing awareness about motorcycle safety and ultimately making the campus and surrounding roads safer for everyone. Guided by the Messaging Model of Health Communication Campaigns, an extension of the social marketing framework, the Motorcycle Safety at Purdue campaign exemplifies the successful integration of campaign

theory and practice. Through a discussion of the planning, implementation, and critical analysis of the campaign, this case study can be used to develop best practices. Although the Motorcycle Safety at Purdue campaign came about by accident, it has uniquely informed health campaign pedagogy, campaign model building, research, and community outreach.

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