Major Article

Using a Multimedia Social Marketing Campaign to Increase Active Bystanders on the College Campus

Sharyn J. Potter, PhD, MPH

Abstract. Objective: To evaluate the campus-wide administration of the Know Your Power bystander-oriented social marketing campaign. **Participants**: Undergraduate students at a public college were invited to participate in a public awareness survey before and after the 6-week campaign administration in February and March 2009. **Methods**: Pretest and posttests were administered ($N = 353$) to examine if exposure to the campaign changed students' stage of scale scores. **Results**: Exposure to the social marketing campaign increased participants' awareness of their role in reducing sexual and relationship violence and stalking, increased their expressed willingness to get involved in reducing the incidence these types of violence, and resulted in participants being more likely to report having taken action to reduce these types of violence. **Conclusions**: As college students explore their role as community members, it is an opportunity for college educators to design and administer prevention messages highlighting behavioral norms to be explored and adopted.

Keywords: active bystander, community health, sexual and relationship abuse, social marketing, stalking

Sexual assault of women is the most common violent crime committed on college campuses today.[1] Approximately 20% of undergraduate women have been a victim of sexual assault that occurred when they were attending college,[1,2] and these incidence rates are not in decline.[3,4] Moreover, the rates are higher for women on campus than for their noncollege peers. The majority of attempted and completed sexual assaults on college campus are perpetrated by acquaintances (eg, classmates, residence hall neighbors, dates) or intimate partners of the victim rather than strangers.[1,5] Despite the fact that college campus communities are at-risk environments for sexual and relationship violence, there is variability in the extent to which campuses are working to prevent this problem.[4] Further, although the majority of these assaults involve alcohol or alcohol with another drug,[6] few of the existing programs address the role of alcohol and other drugs in these assaults.[2] Exposure to sexual and relationship violence is a key public health issue associated with a multiplicity of negative outcomes, including increased substance use, depressive symptoms, health risk behaviors, and symptoms of posttraumatic stress disorder.[7–9] Therefore, there is an urgency to find new prevention tools.

Theoretical perspectives suggest that sexual and relationship violence will be eliminated only when broader social norms are addressed and a broader range of audiences are reached.[10,11] In recognition of this concept, the American College Health Association[12] and the Centers for Disease Control and Prevention[13] have both called for the implementation of bystander-focused prevention efforts. In recent years, the bystander framework has been used to develop strategies that engage the community in prevention efforts. To date, in-person education programs are the most commonly used bystander prevention strategy in the sexual violence field, including those by Katz,[14] Foubert and Newberry,[15] and Banyard et al.[16] The bystander approach teaches community members how to safely intervene in situations that involve sexual and relationship violence.[16] Bystander-focused in-person prevention programs provide an opportunity for skill development among bystanders, thereby widening the safety net for victims.[16,17] Yet the potential administration expense of in-person prevention programs may make reaching the broader community cost prohibitive.

Thus, employing additional methods may be helpful. Passive interventions such as social marketing campaigns are used to reach large sectors of the community for primary

***Dr Potter** is with the Department of Sociology at the University of New Hampshire in Durham, New Hampshire.*

prevention efforts.[18] Using fewer resources than in-person prevention efforts, social marketing campaigns have the potential to increase public knowledge on a given topic and provide specific directions for behavioral change.[19] Furthermore, social marketing campaigns utilize specifically focused media with which the target audience can interface on a regular basis and offers a less structured education opportunity than in-person prevention programs.

Social marketing campaigns can be especially useful on the college campus where students physically travel within campus communities from building to building where they live, take classes, study, socialize, and eat. These education campaigns can be instructive for the many college students who for the first time are living away from their families and developing new friendships and social networks.[20] Students are responding to new circumstances and living situations with varying amounts of skills in social negotiation.[21] Seeing positive messages about "expected" behavior may help students navigate their new surroundings.

Likewise, college and university administrators use social marketing techniques to address a myriad of individual and community health issues such as increased fruit intake,[22] alcohol misuse,[23] increase attendance at a college alcohol education program,[24] increase bicycle helmet use,[25] and advertise the availability and importance of a sexual assault nurse examination following a sexual assault.[26]

In recent years, social marketing campaigns have begun to raise awareness of sexual violence in the campus community. The "Stimulate Conversation Campaign" encourages college students to communicate before engaging in sexual relationships[27]; The "Voices Not Victims Campaign" asks students to think about consent and sexual and relationship violence[28]; the "Red Flag Campaign" ask students to intervene if they witness something troubling[29]; whereas the "Know Your Power Bystander Campaign" encourages students to act as an active bystander when sexual and relationship violence have the potential to occur, is occurring, or has occurred.[30–32] Social marketing campaigns can make an important contribution given that the research is clear that key elements in motivating helping behavior are awareness of the problem and responsibility to solve the problem.[17]

Descriptions of campaigns within the sexual violence prevention field are growing in number, yet there are few empirical examinations of their effectiveness, including their impact on target audience attitudes and behaviors. In the current study, a modification of Prochaska and DiClemente's Transtheoretical Model of Change (TTM)[33,34] was used to examine whether a social marketing campaign focused on the role of bystanders in the prevention of sexual and relationship violence and stalking can changes attitudes. The TTM has been used in diverse public health areas, such as smoking cessation[35] and adherence to exercise programs,[36] for example, to assess participants understanding and motivation for engaging in prevention.

Recently, researchers have applied the TTM to evaluate the effectiveness of prevention programs in the areas of interpersonal violence[37,38] and sexual violence prevention.[39] In addition, TTM stage of change questions were used in a study examining the efficacy of a media campaign aimed at educating members of the public (as potential bystanders) on the problems of child abuse and neglect.[40] In a recent study focusing on a sexual violence prevention program, researchers used the Bringing in the Bystander In-Person Prevention program (BITB) to model the utility of using modified TTM questions to examine the efficacy of the program. In addition to demonstrating the reliability and validity of these stage of change scale questions for evaluating the efficacy of sexual violence prevention programs, the researchers found that results from TTM questions can be used to understand the appropriateness of such prevention programs for participants based on their baseline attitudes and determine the types of outcomes that may be impacted by their participation in a program aimed at preventing sexual violence.[39] The Know Your Power bystander multimedia campaign evaluated in the current study is modeled on the tenets of BITB and has integrated the TTM goals of BITB. The modified stages of change measures were used in a previous study of the efficacy of the Know Your Power posters.[31,32]

The purpose of the current study was to empirically examine the effectiveness using the modified TTM stage of change scale questions of a multimedia bystander-oriented, social marketing campaign that was implemented for the first time on a northeastern public college campus utilizing a number of methods, including campus bus side-wraps, products with campaign logo (eg, water bottles, flashlights), computer screen pop-up images, table tents, bookmarks and 11-in × 17-in posters with the campaign images.

The following research questions were addressed in the study: (1) Does exposure to the multimedia campaign increase students' awareness of their role in the prevention of sexual violence? (2) Does exposure to a bystander multimedia campaign increase students' understanding of their role as an active bystander? (3) Does exposure to a bystander multimedia campaign increase students' reports of actual active bystander behaviors? (4) Does exposure to a bystander multimedia campaign have the unintended effect of significantly reducing students' awareness of their role in the prevention, their understanding of the bystander role, and their number of reports of actual bystander behaviors (eg, backlash)?

METHODS

Data Collection and Measurement

We used a quasi-experiment pre- and posttest design to examine whether a multimethod social marketing campaign administered campus-wide would increase students' knowledge regarding their role in reducing sexual and relationship violence and stalking, and increase their willingness to intervene and take action. Because the campaign was administered throughout the university campus, participants could not be randomized into intervention and control groups. Although this design has limitations, it is often relied upon in

applied research on program evaluation. Two weeks prior to the administration of the social marketing campaign, undergraduate students were sent an e-mail to their university account asking them to participate in a 10-minute survey of community perceptions of relationship problems that they could access on the link in the e-mail. Students were asked to create their own unique identifier so their pre- and posttest data could be matched. The social marketing campaign was then launched and maintained for 6 weeks in all areas of campus. Following the campaign period, the campaign administrators and student assistants spent 3 days removing campaign materials from campus. A second e-mail similar to the first was then sent to all students asking them to participate in another survey. Overall, 1,527 students completed the questionnaires. The study protocol and surveys were approved by the university institutional review board.

Social Marketing Campaign Development

The goal of the Know Your Power bystander-oriented social marketing campaign was to model active bystander behaviors that students could use when sexual and relationship violence and stalking has the potential to occur, was occurring, or had occurred. The multimedia campaign that was evaluated in this study was developed utilizing a 6-phase model detailed in a study examining the effectiveness of a social marketing campaign that aimed to increase the fruit intake of college students.[22] The 6-phase social marketing model included a planning phase, a second phase where materials and channels were selected, a third phase that included the development and pretesting of the materials, a fourth phase that included implementation of the campaign, a fifth phase that included an assessment, and sixth phase that used student feedback to refine the social marketing campaign.[22]

During the first or planning phase of the Know Your Power Bystander Campaign, a group of faculty, staff, and students met biweekly for a 6-month period to identify and design a message.[30] The medium and distribution strategy was developed during the second phase. In fact, the "tag line" for the bystander-oriented social marketing campaign, "know your power, step in, speak up, you can make a difference," was designed during this phase. In the third phase, images from the social marketing campaign were piloted using 2 first-year residence halls as control and experimental groups. After incorporating changes gleaned from the pilot study, the campaign images and text were refined and the campaign images were administered campus-wide in the fourth development phase during the following spring.[31,32] During the fifth phase of development, an evaluation of the campaign images were administered and analyzed by a research team that included faculty, staff, and students. In the sixth phase, the campaign was modified using data from the campus-wide campaign evaluation and expanded to include additional delivery mediums. The campaign has been evaluated at every development phase through the use of facilitated focus groups and surveys (in-person and online).[41] This has enabled 500 undergraduate students to formally provide input on all aspects of the campaign design, enabling the campaign developers to ensure that the images reflect the experiences of the target audience members, including context and appearance of the poster actors. Preliminary research on this campaign shows that the active bystander message is more likely to resonate with the target audience members when they report that the actors in the images look like them and their friends and the context is familiar.[32]

Social Marketing Campaign Description

The 8 images in the Know Your Power bystander social marketing campaign highlights actors modeling active bystander behavior and safely intervening before, during, or after the occurrence of sexual and relationship violence and stalking. The content of each of the 8 images is compatible with a campaign described as one aimed at educating students about the continuum of violence and thus aimed at reducing sexual and relationship violence and stalking on campus. The scenarios utilize place and context that is familiar to the target audience.

Two of the 8 campaign images depict bystanders identifying a situation where sexual violence has the potential to occur, highlighting how to intervene if alcohol is going to be used to facilitate an unwanted sexual experience. The message that alcohol is the number one date rape drug appears on the image. Few college sexual violence prevention programs make the explicit link between sexual violence and alcohol use.[2] The campaign images attempt to make this link without blaming the victim, an important piece of the message as noted in previous research.[2] The first image depicts a house party scene in which a man is leading an apparently drunk woman upstairs to a bedroom. In the forefront of the party scene, 2 friends "discuss" the condition of the woman and decide on a strategy to make sure that the man does not take the woman any further up the stairs. In the second image, 3 college-aged men are standing around a pail of alcohol punch. One of the men declares that he plans to get 1 of the women guests drunk and have sex with her. The 2 bystanders tell him that he will need to leave the party if these are his intentions (Figure 1).

Three more of the 8 images model ways for bystanders to safely intervene when sexual and relationship violence and stalking is occurring. One depicts an incident where young men in a car yell profanities at an attractive woman walking down the college town street. The male bystander in this situation coolly admonishes the men in the car for their behavior. The fourth image depicts an argument between intimate partners occurring in a room in a residence hall. Outside the room, 2 residents go over potential strategies for intervening in the situation. In the final of this set of 3 images, 2 friends are sitting in front of a computer screen and smart phone that displays stalking messages from a peer in one of the victim's classes. The bystander reinforces that that the 100 unwanted text messages that her friend is receiving fit the legal definition of stalking and that they need to save all the e-mails, texts, and instant and other messages and contact the police (Figure 2).

FIGURE 1. Know Your Power bystander social marketing campaign college party scene (color figure available online).

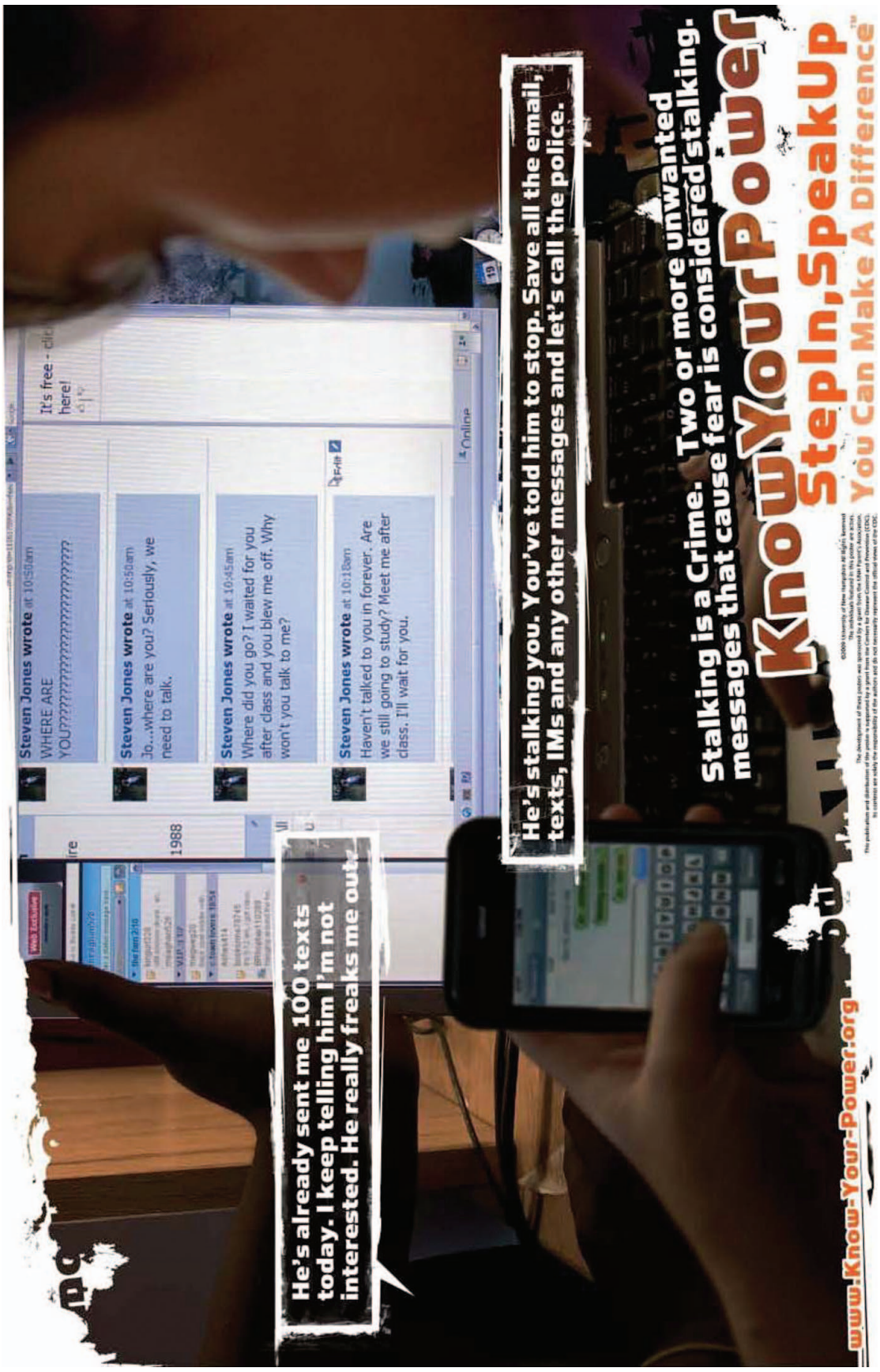

FIGURE 2. Know Your Power bystander social marketing campaign stalking scene (color figure available online).

Finally, the last 3 images in the 8-image series portray bystanders intervening following the occurrence of sexual and relationship violence. One image depicts 3 scenes with 3 sets of friends listening and caring for friends who have experienced sexual and relationship violence. Another image has 2 scenes. In the first scene, 2 friends are discussing the bruises that keep appearing on their friend, Mike. The friends realize that Mike's explanations of falling off his skateboard are cover up stories and concur that Mike's boyfriend is beating him. In the second scene, one of the friends (a proactive bystander) listening to Mike discloses that his partner has been hurting him. The bystander offers to take his friend to the campus crisis center for help (Figure 3). The final image takes place in a campus dining hall where 3 men are eating lunch. One of them describes an incident involving his friend Jeff having sex with a highly intoxicated woman. Instead of celebrating Jeff's behavior, the 2 men tell the third man that his friend Jeff committed rape. In this image, as in the other 7 images, the active bystanders help to diffuse a situation, support a friend who is a victim and label the incidents as unacceptable or as crimes. On each poster, there is a statement reinforcing the power of bystanders to prevent and reduce sexual and relationship violence and stalking. For example, on the image described immediately above, the statement reads: "Speak up when you hear stories that glorify sexual violence. Your responses can make a difference."

In this article, the term *victim* rather than *survivor* is used to describe a person following an assault. This often follows the legal definition.[42] In other research, the 2 terms are used interchangeably,[43] and in other research the term *survivor* is used to describe a person who has been a victim and is in the process or have reclaimed the power that was taken away by the perpetrator.[44]

Social Marketing Campaign Dissemination

Federal funding was obtained to support the large-scale campus rollout of the Know Your Power bystander social marketing campaign for a 6-week period during the Spring 2009 semester using a variety of media to maximize exposure. The 8 images described above were printed on 11-in by 17-in posters that were displayed throughout the campus (eg, academic buildings, recreation facilities, student apartments, local businesses, residence hall lobbies, and the inside of the doors of the bathroom stalls). The images were enlarged and printed on full-side bus wraps for 6 on-campus buses that continuously shuttle students in the campus area. The images were designed to fit in the table tent holders that are set on every table in all campus dining halls and restaurants. The table tent designs were rotated throughout the campaign period so that the table tent image changed frequently. The campus libraries and the campus bookstore and local downtown bookstore distributed bookmarks featuring the campaign images and slogan. The university information technology department placed the campaign images on the login screen of the 650 student use computers that are found throughout the university. The 8 designs rotated on a regular basis. Twice per week, the Residence Life staff and student campaign assistants ensured that the campaign remained in place by checking, logging, and replacing damaged or missing posters. All campaign posters and materials were removed at the end the 6-week period.

As is the case with other social marketing campaigns, the Know Your Power campaign materials may have triggered a *victim* of violence. In consideration of this possibility, this issue was proactively dealt with in 2 ways. First, the campaign Web site address was featured on all campaign material, including images and products. The Web site featured educational information and contact information for local, state, and national resources that would be helpful for victims and secondary *victims* of sexual and relationship violence and stalking. Second, residence hall staff and the staff in the counseling center, on-campus sexual assault crisis center, and student services were informed about the campaign prior to its dissemination so that they would be aware of the campaign's potential impact for *victims* of violence.

Survey Instrument

In both the online pre- and posttest surveys, students answered questions about attitudes and knowledge related to relationship violence prevention developed by Banyard and her colleagues[39] for use in bystander prevention evaluation and 9 more items developed for this survey about stalking. Participants were also asked 10 demographic questions including sex, class year, and residence. The posttest was slightly longer and was divided into 3 parts. The first section contained the same questions as the pretest, which focused on the participants' willingness to engage in bystander prevention. In the second section of the posttest, participants were shown pictures of the 8 images and asked whether they had seen them or not. Participants who answered "no" were advanced to demographic questions; those who answered "yes" were sent to a series of questions about their familiarity with the image content. In the third part of the posttest, participants were asked 3 additional demographic questions as well as a measure to gauge social desirability.

Measures

Three "stage of change" variables were used to measure participants' readiness to engage in bystander behaviors in relation to preventing sexual and relationship violence and stalking.[39] The scale was then divided into 3 subscales that assess the magnitude of change that participants express willingness to make: Precontemplation, Contemplation, and Action based on Prochaska and DiClemente's Readiness for Change Model of health behavior change.[34] For each of 3 subscales, there were 4 separate items that assessed attitudes about sexual and relationship violence and stalking for a total of 12 questions. The correlations of each subscale for each of the 3 types of violence were examined. Because the

FIGURE 3. Know Your Power bystander social marketing campaign disclosure scene (color figure available online).

intercorrelations between subscales for the 3 types of violence were high, the subscales were collapsed so that that Precontemplation, Contemplation, and Action scales had 4 items each that focused on each form of violence (sexual and relationship violence and stalking). On each of the 12-item subscales, participants responded on a 5-point scale ranging from (1) *not true at all* to (5) *very much true*. As described above these stages of change scales used by the author of this article were used in previous research that assessed the efficacy of the Bringing in the Bystander In-Person Prevention Program[39] and an earlier version of the Know Your Power bystander social marketing campaign that was limited to 11-in $\times$ 17-in posters.[31]

Precontemplation Subscale

This 12-question scale assessed participants' awareness of their role in prevention of sexual and relationship violence and stalking on campus. For example, the 4 stalking items on the Precontemplation subscale for stalking are (1) "I don't think stalking is a big problem on campus," (2) "I don't think there is much I can do about stalking on campus," (3) "There isn't much need for me to think about stalking on campus," and (4) "Doing something about stalking is solely the job of the crisis center." The lower score indicated the participant's greater knowledge about their role in preventing sexual and relationship violence and stalking on the campus. They are less likely to report that the prevention of these types of violence is the sole responsibility of others (eg, police, rape crisis centers). The Cronbach's alpha on this scale was .85 for this sample.

Contemplation Subscale

The 12-question Contemplation scale assesses the participant's willingness to get involved in reducing sexual and relationship violence and stalking. For example, the 4 stalking items on the Contemplation subscale are (1) "Sometimes I think I should learn more about stalking," (2) "I have not yet done anything to learn more about stalking," (3) "I think I can do something about stalking," and (4) "I am planning to learn more about the problem of stalking on campus." Question 3 was recoded to make it consistent with the pattern of the other questions in the scale. Higher scores indicated greater the willingness of the participant to get involved. The Cronbach's alpha on this scale was .78 for this sample.

Action Subscale

The 12 questions on this scale assess whether or not participants have taken action to prevent sexual and relationship violence and stalking. The 4 stalking items on the Action subscale are (1) "I have recently attended a program about stalking," (2) "I am actively involved in projects to deal with stalking on campus," and (3) "I have recently taken part in activities or volunteered my time on projects focused on ending stalking on campus," and (4) "I have been or am currently involved in ongoing efforts to end stalking on campus." Higher scores indicated a greater likelihood that the participant had taken action to prevent sexual and relationship violence and stalking. The Cronbach's alpha on this scale for this sample was .96.

Backlash

For each of the 3 stages of change outcome variables, a separate variable was created to determine whether the participant's score improved, worsened, or stayed the same in order to check for the occurrence of a backlash effect. It was important to determine if exposure to the social marketing campaign changed participant's attitudes in an unintended direction, for instance, making them less willing to participate in sexual and relationship violence and stalking prevention efforts between the pre- to posttest times. Backlash was measured by examining whether the participant's pre- to posttest outcome scores changed by 1 standard deviation or more. One standard deviation is one fourth of the difference between the minimum and maximum outcome scores, a sizable change. The backlash effect was used in the evaluation of the Bringing in the Bystander In-Person Prevention Program.[45]

Grouping Variables

In addition to grouping pre- and posttest outcomes by sex, a *social self-identification* variable examined whether or not participants indicated that the actors featured in the posters look like people with whom participants are likely to spend their time. Because the categories were too small for sufficient statistical power to examine the 5 Likert groups, the scale was collapsed. Additionally, a dosage grouping indicated how often participants saw the social marketing campaign images (more than once a day or once a day or less). Participants could choose 1 of 8 responses regarding exposure to the campaign images. These 8 categories were collapsed into 2 scores, since the 8-point scale does not fit the requirements for true interval–ratio/normally distributed scores, and that the use of just 2 categories avoids possible problems with these assumptions. The variables were used in previous research utilizing different samples.[31,32] Finally, the posttest included the Social Desirability Scale 17 (SDS 17)[46] to insure that participants were not providing answers that they thought were socially desirable rather than providing answers based on their experiences and attitudes. The Cronbach's alpha for the full sample at posttest was .66 and .64 for the participants who completed both the pretest and posttest.

RESULTS

Participants

There were 353 participants who completed both the pretest and posttest. The mean age of these students was 19.98 ($SD = 1.44$). Twenty-nine percent of the participants were male and 71% were female. Comparing the sample demographic statistics to the university statistics, the sample

has more women, 71% versus 56%, and slightly more students who identified as white, 95% versus 92%. Of the 1,327 participants who completed pretests prior to the administration of the social marketing campaign, 353 completed a posttest (26% retention rate), and 200 additional participants completed the posttest. Independent *t* tests were conducted to examine differences between the 2 groups who participated in the pretests and the 2 groups who participated in the posttest. The demographics of the 2 pretest groups and the 2 posttest groups did not vary significantly on their demographics, indicating that there was not a systematic reason for why participants remained in the study. Because the "stage of change" outcomes did not significantly vary for the 2 posttest groups (the posttest group that completed a pretest and the posttest group that did not complete a pretest), it was concluded that the pretest was not a component of the intervention and that the administering of a pretest prior to the intervention did not result in "pretest effects."

Stage of Change Variables

A repeated-measures multivariate analysis of variance (MANOVA) was calculated to examine whether there was a change in the participants' attitudes regarding their role in the prevention sexual and relationship violence and stalking after being exposed to the social marketing campaign. First the impact of socially desirable responding was investigated. Because the SDS 17 measures and the 3 outcome scores were not correlated, the SDS 17 was not used as a covariate in the MANOVAs. These mean and standard deviations for the Stage of Change scale scores were assessed at the pretest and posttest times for all 3 groupings (sex, social self-identification, and dosage) (Table 1).

Precontemplation

Three MANOVAs were calculated to determine whether exposure to the social marketing campaign impacted the participant's Precontemplation Stage of Change scale score. The first analysis simply examined change in scores over time. There was a significant main effect for time ($F_{1,333} = 5.19$, Wilks' $\lambda = .985$, $p < .05$, $\eta_p^2 = .015$), and a significant between-subject effects for sex and precontemplation ($F_{1,331} = 22.15$, $p < .001$). The Precontemplation scores changed for both men and women who completed the pre- and posttest. In particular, mean scores decreased over time indicating that exposure to the social marketing campaign increased both men and women's understanding of their role in preventing sexual and relationship violence and stalking on their campus. In the second MANOVA, social self-identification was used as a grouping variable. Participants who strongly agreed or agreed with the statement that the people in the campaign images looked like them were grouped together, whereas the participants who disagreed or strongly disagreed with this statement composed the second group. There was a significant main effect for time ($F_{1,330} = 4.56$, Wilks' $\lambda = .986$, $p < .05$, $\eta_p^2 = .014$), and a significant between-subject effects for social self-identification and precontemplation ($F_{1,328} = 9.56$, $p < .01$). Again scores decreased over time for the overall sample. Further, participants who identified with the actors in the images had lower scores than those who did not see themselves in the marketing campaign images. In the third MANOVA, the frequency of poster exposure or dosage was used as the grouping variable (more than once a day, or once a day or less). There was a significant main effect for time ($F_{1,332} = 7.33$, Wilks' $\lambda = .978$, $p < .01$, $\eta_p^2 = .022$), and a significant between-subject effects for dosage and precontemplation ($F_{1,330} = 10.75$, $p < .01$). Again scores decreased for the entire sample; however, participants who reported seeing the image more than once a day had lower scores than those participants who were exposed to the image once a day or less.

Contemplation

Three MANOVAs were conducted to determine whether exposure to the social marketing campaign impacted the participant's Contemplation Stage of Change scale score. There was a significant main effect for time ($F_{1,333} = 15.24$, Wilks' $\lambda = .956$, $p < .001$, $\eta_p^2 = .044$), and a significant between-subject effects for sex and contemplation ($F_{1,331} = 16.44$, $p < .001$). In the second MANOVA for contemplation, social self-identification was used as the grouping variable. There was a significant main effect for time ($F_{1,330} = 6.42$, Wilks' $\lambda = .981$, $p < .05$, $\eta_p^2 = .019$), and significant between-subject effects for social self-identification ($F_{1,328} = 4.94$, $p < .05$). In the third MANOVA for contemplation using the dosage grouping, there was a significant main effect for time ($F_{1,332} = 8.53$, Wilks' $\lambda = .975$, $p < .01$, $\eta_p^2 = .033$), and significant between-subject effects for dosage ($F_{1,330} = 5.97$, $p < .05$). In all 3 MANOVAs, the participant's Contemplation scores increased between the pretest and posttest times as participants increased their willingness to get involved in reducing sexual and relationship violence and stalking. There was not an interaction by time for the 3 grouping variables as the contemplation scores increased for the sample. Again women had higher Contemplation scores than men, as did participants who identified with the actors in the images compared to participants who did not and participants who were exposed to the images more than once a day had higher scores than participants who were exposed to the images once a day or less.

Action

Finally, 3 MANOVAs were conducted to determine whether exposure to the social marketing campaign impacted the participant's Action Stage of Change scale score. In the first MANOVA, there was a significant main effect for time ($F_{1,332} = 15.63$, Wilks' $\lambda = .955$, $p < .001$, $\eta_p^2 = .045$). In the second MANOVA for action, social self-identification was used as the grouping variable and there was a significant main effect for time ($F_{1,330} = 16.84$, Wilks' $\lambda = .951$, $p < .001$, $\eta_p^2 = .049$). In the third MANOVA, dosage was

TABLE 1. Outcome Measures by Group and Time for Participants Who Saw Posters ($n = 353$)

	All participants		Precontemplation					Contemplation					Action				
			Pretest		Posttest			Pretest		Posttest			Pretest		Posttest		
	n	%	*M*	*SD*	*M*	*SD*	*t*	*M*	*SD*	*M*	*SD*	*t*	*M*	*SD*	*M*	*SD*	*t*
Sex																	
Female	236	71%	29.9	7.5	28.9	7.8	2.4*	33.5	8.0	34.6	7.8	−2.6**	16.2	8.4	17.9	9.6	−3.2**
Male	97	29%	33.8	8.1	33.0	8.1	1.2	29.5	8.1	31.6	8.2	−2.8**	15.7	7.2	17.8	8.9	−2.7**
Social self- identification[a]																	
Yes	269	82%	30.4	7.7	29.5	7.6	2.4*	32.7	8.2	34.1	7.7	−3.5***	16.0	8.2	17.6	9.1	−3.3***
No	61	18%	33.7	8.5	32.5	9.6	1.1	30.7	8.4	31.7	8.5	−1.1	15.6	7.7	18.6	10.3	−3.0**
Campaign dosage																	
Saw campaign images more than once a day	230	69%	30.1	7.7	29.3	7.8	1.9†	32.9	8.3	34.6	7.7	−3.8***	16.1	8.1	17.8	9.0	−3.1**
Saw campaign images once a day or less	102	31%	33.2	8.0	31.7	8.5	1.9†	31.3	8.3	31.9	8.1	−.9	15.8	8.0	18.1	10.1	−3.1**

[a]Agreed with the following statement: Actors featured in the posters look like people with whom participants are likely to spend their time.
†$p < .10$; *$p < .05$; **$p < .01$; ***$p < .001$.

used as a grouping variable and there was a significant main effect for time ($F_{1,332} = 17.21$, Wilks' $\lambda = .950$, $p < .001$, $\eta_p^2 = .050$). The between-subject effects for the 3 groupings and action were not significant. In all 3 MANOVAs, the participant's Action scores increased between the pretest and posttest times as participants reported that they were actually involved in reducing sexual and relationship violence and stalking. There was not an interaction by time for the 3 grouping variables as the Action scales scores increased for the sample.

Backlash

A Backlash score was calculated for each participant by determining whether the participant's pre- and posttest outcome scores worsened or improved after exposure to the social marketing campaign. Almost 14% (13.8%) of the participants' Precontemplation outcome scores improved by a minimum of 1 standard deviation and 9.6% worsened by 1 standard deviation. Fifteen percent of the participants' Contemplation outcome scores improved by a minimum of 1 standard deviation and 8.4% worsened by 1 standard deviation. Finally, 14.7% of the participants' Action outcome scores improved by a minimum of 1 standard deviation and 5.1% worsened by 1 standard deviation.

COMMENT

It is critical to ensure a social marketing campaign conveys the intended message in an effective manner.[47] In the current study, the impact of exposure to a campus-wide administration of a multimedia social marketing campaign that models active bystander behaviors would increase students' awareness of their role, willingness to intervene, and actual intervention in the prevention of sexual and relationship violence and stalking on campus is examined. Pre- and posttests were used to evaluate the campaign impact as this has been shown to be an effective evaluation strategy.[48]

Examining the difference in the 3 Stage of Change scale scores between the pre- and posttest periods, there is evidence that exposure to the social marketing campaign increased participants' awareness of their role in reducing sexual and relationship violence and stalking, increased their expressed willingness to get involved in reducing the incidence these types of violence, and resulted in participants being more likely to report that they have taken action to reduce these types of violence. In all 3 MANOVAs, there is not an interaction effect between time and the 3 groupings (sex, social self-identification, and dosage), indicating that the social marketing campaign improves the 3 outcome scores regardless of the participant's grouping. For example, although both male and female groups increase their knowledge about their role as a bystander during the campaign period, they start at different places, with women being less likely than men to view the prevention of sexual and relationship violence and stalking as a problem that is someone else's responsibility (precontemplation). Further, at pretest time, women are more likely to acknowledge a willingness to become involved (contemplation) than men, but both women and men increase their Contemplation outcome score regardless of their score at the pretest time. Previous research supports these findings as female students generally have a greater awareness of the problems of sexual and relationship violence and stalking than their male peers.[16]

Unlike merchandize marketing advertisements that offer "cool" or appealing products, social marketing campaigns ask target audience members to act in ways that can be uncomfortable or difficult.[49] The Know Your Power bystander social marketing campaign images ask audience members to tell a peer that they do not agree with their behavior or that they have done something wrong. Research on the late adolescent period highlights the importance of the student's peer group to their self-esteem and sense of well-being[50,51] and hints that these type of interactions can be difficult. Participants who identified with the actors in the images, compared to participants who did not identify with the actors in the images, indicated that they thought that the prevention of these types of violence was their responsibility and indicated an increased willingness to get involved to reduce these type of violence at the posttest time. Yet it also could be that students with higher levels of awareness are more likely to see themselves in the posters. More research is needed to study these nuances.

Further, targeted exposure to the social marketing campaign did not change attitudes of the majority of students exposed to the campaign in an unintended direction, providing evidence that the campaign can cause backlash effects. Exposure to the campaign did not decrease most target audience members' empathy to the problems of sexual and relationship violence and stalking; participants were not less willing to take action to reduce these types of violence. The importance of the action taken by college students when their friend is a victim of sexual and physical violence and stalking is highlighted in previous research. Rather than disclose to university authorities, college students who were victims of stalking[52] and college students who were victims of sexual assault[53,54] disclosed to their friends. It is critical that friends and bystanders identify and label sexual and relationship violence and stalking. In an effort to inform students of their significant responsibility as friends, 3 of the images highlight the important role that friends have in supporting victims of stalking and sexual and relationship violence.

Limitations

A major limitation with this study was the lack of opportunity to have a control group. Because the social marketing campaign was administered on a campus-wide basis and purposely designed to permeate the campus, it was difficult to find undergraduates who did not see the campaign and could serve as a control group. When the demographics of the small group of participants who did not see the campaign (5%) was compared to the other 95% of the participants, it was not appropriate to use this group as comparative control group. The students who did not see the campaign were older, had been at the university longer, and were more likely to live off

campus than the participants who reported seeing the social marketing campaign images. However, previous studies that built up to this campus-wide study gave the researchers an opportunity to utilize control and experimental groups.[30–32] Although the study design is constrained to some extent by the nature of working in the field with college students, the design used in this study is often used in program evaluation. Further, because this research was conducted in the field, another limitation is that study relies on data that are self-reported. Researchers need to rely on participants' assessment of their own attitudes. The use of the SDS and its nonsignificant results give some indication that the participants were providing answers that were based on their own experience rather than providing answers that were socially desirable. Finally, it is important to state that measures to assess bystander behavior are newly developed and thus do not have the track record of validity that other measures in the field might.

In the future the social marketing campaign needs to be administered and evaluated on a college campus that has greater racial and ethnic diversity to examine the transferability of this type of campaign. As stated earlier, at the campus where this research took place, 92% of the undergraduates identify as white. In 3 of the 8 images bystanders are black or Hispanic. All of the perpetrators whose faces are not featured are white. Further, the pretest and posttest need to be administered to a larger group of students. New strategies need to be devised to retain a larger percentage of the sample between the pretest and posttest times. In future research 2 campuses in the same geographical area with diverse student bodies and similar characteristics should be used to evaluate the efficacy of the social marketing campaign. One campus would be administered the campaign and the second campus would serve as a control group with members of both groups being invited to participate in pre- and posttests.

Conclusions

Although social marketing campaigns are less expensive per capita than an in-person prevention programs, there are often false assumptions that the target audience members will notice and process the messages relayed in the campaign.[55] Specific pre- and posttest questions to participants that can gauge their attitudes on problems that are addressed in the social marketing campaign can help developers and administrators understand the interpretation and internalization of the social marketing campaign. During the 6-phase campaign development[22] detailed above, detailed feedback was obtained from samples of target audience members[30] that was incorporated into the multimedia bystander social marketing campaign.

The findings indicate that the carefully constructed campaign images and the multimethod dissemination engaged members of the target audience. Students exposed to the campaign exhibited changes in attitudes towards the problems of sexual and relationship violence and stalking and took actual steps to reduce these problems in their community. As college students explore their identities and their role as community members, it is a time of opportunity for college educators and administrators to design and administer evidence-based prevention messages highlighting behavioral norms to be explored and adopted.

Practitioners may read a research study such as this one and feel that it would not be a realistic endeavor to attempt to implement an evidence-based social marketing campaign on their campuses. Part of this hesitation may be that practitioners think that they do not have the appropriate skills to conduct the kind of complex statistical evaluation required to show that their campaign is evidence based. However, practitioners on college campuses are in a unique position in that they can develop partnerships with researchers on their campus to devise strategies to engage students for evaluation purposes making the efforts less daunting and more likely to come to fruition. But more helpful resources continue to be made available to help with making the dream of having a meaningful, campus-wide anti–sexual and relationship violence campaign a reality. For example, the American College Health Association's toolkit[12] noted at the outset of this article is available at no cost to guide practitioners (and researchers) in their endeavors to implement bystander-focused programming and research. Another no-cost resource is the US Department of Education's Higher Education Center for Alcohol, Drugs and Violence Prevention's posting of its recently held Bystander Intervention Training Institute.[56]

The theory of change model presented in the Center's materials emphasizes the importance of an ecological approach that involves active participation of constituencies representing a variety of populations from all over the campus. The Center's Web site on the Bystander Intervention Training Institute contains a wealth of information for practitioners and researchers interested in conducting well-planned programming and evaluation that fits their campus needs. That approach is similar to the one used to develop the social marketing campaign presented and evaluated in this article. That is, our social marketing campaign is grounded in a multidisciplinary team of researchers, direct service providers, target audience members, and prevention specialists who have different experiences with incidence, and make different contributions to preventing sexual and relationship violence and stalking. Forging these partnerships can provide important knowledge bases for practitioners and university researchers. The success of these partnerships benefits all constituencies involved, but most importantly it ultimately benefits the lives of students while they are a part of our communities and after they leave.

ACKNOWLEDGMENT

Preparation of this article was supported by the Centers for Disease Control and Prevention by grant number 5 R01 CE001388-02 (principal investigator: V. L. Banyard). The

content is solely the responsibility of the author and does not necessarily represent the official views of the Centers for Disease Control and Prevention.

NOTE

For comments and further information, address correspondence to Sharyn J. Potter, Department of Sociology, University of New Hampshire, 20 College Road, Durham, NH 03824, USA (e-mail: sharyn.potter@unh.edu).

REFERENCES

1. Fisher BS, Cullen FT, Turner MG. *The Sexual Victimization of College Women*. Washington, DC: National Institute of Justice and Bureau of Justice; 2000. NIJ 182369.

2. Krebs CP, Lindquist CH, Warner TD, Fisher BS, Martin SL. College women's experiences with physically forced, alcohol- or other drug-enabled, and drug-facilitated sexual assault before and since entering college. *J Am Coll Health*. 2009;57:639–649.

3. McMahon PP. Sexual violence on the college campus: a template for compliance with federal policy. *J Am Coll Health*. 2008;57:361–366.

4. Karjane HM, Fisher BS, Cullen FT. *Sexual Assault on Campus: What Colleges and Universities Are Doing About It*. Washington, DC: National Institute of Justice; 2005. NCJ 205521:1–21.

5. Smith PH, White JW, Holland LJ. A longitudinal perspective on dating violence among adolescent and college-age women. *Am J Public Health*. 2003;93:1104–1109.

6. Lawyer S, Resnick H, Bakanic V, Burkett T, Kilpatrick D. Forcible, drug-facilitated, and incapacitated rape and sexual assault among undergraduate women. *J Am Coll Health*. 2010;58:453–460.

7. Frazier P, Anders S, Perera S, et al. Traumatic events among undergraduate students: prevalence and associated symptoms. *J Couns Psychol*. 2009;56:450–460.

8. Watson SB, Haynes SN. Brief screening for traumatic life events in female undergraduate health service patients. *Int J Clin Health Psychol.* 2007;7:261–282.

9. Littleton H, Radecki Breitkopf C. Coping with the experience of rape. *Psychol Women Q.* 2006;30:106–116.

10. Fabiano PM, Perkins HW, Berkowitz A, Linkenbach J, Stark C. Engaging men as social justice allies in ending violence against women: evidence for a social norms approach. *J Am Coll Health*. 2003;52:105–112.

11. Schwartz MD, DeKeseredy WS. Aggregation bias and woman abuse: variations by male peer support, region, language, and school type. *J Interpers Violenc*e. 2000;15:555–565.

12. American College Health Association. Shifting the paradigm: primary prevention of sexual violence. Available at: http://www.acha.org/sexualviolence/docs/ACHA_PSV_toolkit.pdf. Accessed February 2, 2010.

13. Centers for Disease Control and Prevention. Sexual violence prevention: beginning the dialogue. Available at: http://www.cdc.gov/ncipc/dvp/SVPrevention.pdf. Accessed February 2, 2010.

14. Katz, J. Mentors in violence prevention: history and overview. Available at: http://www.jacksonkatz.com/aboutmvp.html. Accessed November 30, 2007.

15. Foubert JD, Newberry JT. Effects of two versions of an empathy-based rape prevention program on fraternity men's survivor empathy, attitudes, and behavioral intent to commit rape or sexual assault. *J Coll Stud Dev*. 2006;47:133–148.

16. Banyard VL, Moynihan MM, Plante EG. Sexual violence prevention through bystander education: an experimental evaluation. *J Community Psychol*. 2007;35:463–481.

17. Banyard VL, Plante EG, Moynihan MM. Bystander education: bringing a broader community perspective to sexual violence prevention. *J Community Psychol*. 2004;32:61–79.

18. Wandersman A, Florin P. Community interventions and effective prevention. *Am Psychol*. 2003;58:441–448.

19. Randolph W, Viswanath K. Lessons learned from public health mass media campaigns: marketing health in a crowded media world. *Annu Rev Public Health.* 2004;25:419–437.

20. Reingle J, Thombs DL, Weiler RM, Dodd VJ, O'Mara R, Pokorny SB. An exploratory study of bar and nightclub expectancies. *J Am Coll Health*. 2009;57:629–638.

21. Maggs JL, Schulenberg JE. Trajectories of alcohol use during the transition to adulthood. *Alcohol Res Health*. 2004;28:195–201.

22. Shive S, Neyman Morris M. Evaluation of the energize your life! Social marketing campaign pilot study to increase fruit intake among community college students. *J Am Coll Health*. 2006;55:33–39.

23. Turner J, Perkins HW, Bauerle J. Declining negative consequences related to alcohol misuse among students exposed to a social norms marketing intervention on a college campus. *J Am Coll Health*. 2008;57:85–94.

24. Palmer RS, Kilmer JR, Larimer ME. If you feed them, will they come? The use of social marketing to increase interest in attending a college alcohol program. *J Am Coll Health*. 2006;5:47–52.

25. Ludwig TD, Buchholz C, Clarke SW. Using social marketing to increase the use of helmets among bicyclists. *J Am Coll Health*. 2005;54:51–58.

26. Konradi A, DeBruin PL. Using a social marketing approach to advertise sexual assault nurse examination (SANE) services to college students. *J Am Coll Health*. 2003;52:33–39.

27. Colorado Coalition Against Sexual Violence. Stimulate conversation. Available at: http://www.whynotask.org. Published 2002. Accessed June 15, 2004.

28. Chrismer E. Bold rape-awareness posters spark interest worldwide. *Dateline UC Davis*. Available at: http://www.news.ucdavis.edu/search/news_detail.lasso?id=5723. Published April 21, 2001. Accessed July 30, 2004.

29. Potter SJ, Perry B. Incorporating evaluation into media campaign design. Harrisburg, PA: National Online Resource Center on Violence Against Women (VAWnet); 2008. Available at: http://www.vawnet.org/Assoc_Files_VAWnet/AR_EvalMediaCampaign.pdf. Accessed June 8, 2010.

30. Potter SJ, Stapleton JG, Moynihan MM. Designing, implementing, and evaluating a media campaign illustrating the bystander role. *J Prev Interv Community.* 2008;36:39–55.

31. Potter SJ, Moynihan MM, Stapleton JG, Banyard VL. Empowering bystanders to prevent campus violence against women: a preliminary evaluation of a poster campaign. *Violence Against Wome*n. 2009;15:106–121.

32. Potter SJ, Moynihan MM, Stapleton JG. Using social self-identification in social marketing materials aimed at reducing violence against women on campus. *J Interpers Violence*. 2011;26:971–990.

33. Grimley D, Prochaska JO, Velicer WF, Blais LM, DiClemente CC. The transtheoretical model of change. In: Brinthaupt TM, Lipka RP, eds. *Changing the Self: Philosophies, Techniques, and Experiences*. Albany: State University of New York; 1994:201–227.

34. Prochaska JO, DiClemente CC. *The Transtheoretical Approach: Crossing Traditional Boundaries of Change*. Homewood, IL: Dorsey; 1984.

35. Schumann A, Meyer C, Rumpf H, Hannöver W, Hapke U, Ulrich J. Stage of change transitions and processes of change, decisional balance, and self-efficacy in smokers: a transtheoretical model validation using longitudinal data. *Psychol Addict Behav*. 2005;19:3–9.

36. Guillot J, Kilpatrick M, Hebert E, Hollander D. Applying the transtheoretical model to exercise adherence in clinical settings. *Am J Health Stud*. 2004;19:1–10.

37. Chang JC, Dado D, Ashton S, et al. Understanding behavior change for women experiencing intimate partner violence: mapping the ups and downs using the stages of change. *Patient Educ Couns*. 2006;62:330–339.

38. Scott KL, Wolfe DA. Readiness to change as a predictor of outcome in batterer treatment. *J Consult Clin Psychol*. 2003;71:879–889.

39. Banyard VL, Eckstein RP, Moynihan MM. Sexual violence prevention: the role of stages of change. *J Interpers Violenc*e. 2010;25:111–135.

40. Mudde A, Hoefnagels CJ, Van Wijnen LGC, Kremers SPJ. Bystanding an abused child: testing the applicability of the stages of change construct. *Health Educ Res.* 2007;22:128–138.

41. Potter SJ, Stapleton JG. Bringing in the target audience in bystander social marketing materials for communities: suggestions for practitioners. *Violence Against Women*. 2011;17:797–812.

42. University of North Carolina Greensboro. UNCG Safezone/Violence Legal Terms. Available at: http://www.uncg.edu/shs/wellness/safezone/topics/violence.php#legal. Accessed December 15, 2010.

43. Koziol-McLain J, Campbell JC. Universal screening and mandatory reporting: an update on two important issues for victims/survivors of intimate partner violence. *J Emerg Nurs*. 2001;27:602–606.

44. University of Washington. Sexual Assault and Relationship Violence Information Service (SARIS). Available at: http://www.washington.edu/students/saris/info/sexual_assault.html. Accessed December 15, 2010.

45. Moynihan MM, Banyard VL. Educating bystanders helps prevent sexual violence and reduce backlash. *Sexual Assault Rep.* 2009;12:49–52.

46. Stöber J. The Social Desirability Scale-17 (SDS-17): convergent validity, discriminant validity, and relationship with age. *Eur J Psychol Assess*. 2001;17:222–232.

47. Dejong B, Winsten JA. *The Media and the Message: Lessons Learned From Past Public Service Campaigns*. Washington, DC: The National Campaign to Prevent Teen Pregnancy; 1998.

48. Trussell J, Koenig J, Vaughan B, Stewart F. Evaluation of a media campaign to increase knowledge about emergency contraception. *Contraception*. 2001;63:81–87.

49. Wilbur J. *Getting Your Feet Wet with Social Marketing: Simple Steps to Success Using Social Marketing*. Salt Lake City: Utah Department of Agriculture and Food; 2006.

50. Arnett JJ. Emerging adulthood: a theory of development from the late teens through the twenties. *Am Psychol.* 2000;55:469–480.

51. Arnett JJ. Learning to stand alone: the contemporary American transition to adulthood in cultural and historical context. *Hum Dev.* 1998;41:295–315.

52. Buhi ER, Clayton H, Surrency HH. Stalking victimization among college women and subsequent help-seeking behaviors. *J Am Coll Health*. 2009;57:419–426.

53. Banyard B, Moynihan MM, Walsh W, Cohn E, Ward S. Friends of survivors: the community impact of unwanted sexual experiences. *J Interpers Violence*. 2010;25:242–256.

54. Walsh W, Banyard B, Moynihan MM, Ward S, Cohn E. Disclosure and service use on a college campus after an unwanted sexual experience. *J Trauma Dissociation.* 2010;11:134–151.

55. Lewis MA, Neighbors C. Social norms approaches using descriptive drinking norms education: a review of the research on personalized normative feedback. *J Am Coll Health*. 2006;54:213–218.

56. The US Department of Education's Higher Education Center for Alcohol, Drug Abuse and Violence Prevention. Bystander Intervention Training Institute materials. Available at: http://www.higheredcenter.org/services/training/institute/bystander-intervention/materials. Accessed March 30, 2011.

Received: 5 August 2010
Revised: 18 May 2011
Accepted: 19 June 2011