

Mirror, Mirror, Help Me Like My Body: Examining a Body Image Media Campaign

Sara B. Oswalt and Tammy J. Wyatt

University of Texas at San Antonio

Abstract

Body image is a concern for many individuals but especially for women. Few body image interventions focus beyond the individual and attempt to reach a larger population. A media campaign was developed using the Social Marketing Model and implemented on a university campus to help women recognize conversations and ideas that reinforce negative body image concepts. Details about the development and implementation of the media campaign are reviewed. Follow-up assessment revealed that almost 60% ($n = 194$) of women surveyed saw the materials. Many responded favorably to the campaign's impact. Buscards were viewed most frequently, indicating a potential promotion strategy for future health campaigns. Implications for future interventions and recommendations for practitioners are discussed.

© 2007 Californian Journal of Health Promotion. All rights reserved.

Keywords: Body Image, Media Campaign, College and University, Women

Introduction

Body dissatisfaction is a prevalent concern among American youth (Moore, 1993; Serdula, et al., 1993) and few media campaigns have been utilized to address this issue. A media campaign was designed to affect the self-reported body image of college women by stimulating recognition about ideas and comments that may contribute to and reinforce negative body image.

Many women regardless of age and place in life are affected by the desire to have a different body size and shape. Body image is defined in numerous ways; however, most definitions are multidimensional and include physiological, psychological and sociological components (Cash & Pruzinsky, 1990). Body dissatisfaction is defined as "a person's negative thoughts and feelings about his or her body" (Grogan, 1999). Many individuals engage in disordered eating behaviors as a result of body dissatisfaction. Studies estimate that two thirds of young women and one third of young men in the U.S. have severe body dissatisfaction (Moore, 1993; Serdula et al., 1993), with many more having milder forms of the condition. Recent National

College Health Assessment data indicate that while 69% of college females and 59% of college males are at a desirable weight according to BMI calculations, 60% and 30% of those females and males respectively intend to lose weight (American College Health Association [ACHA], 2006). Prevalence estimates suggest that 60% of college females report disordered eating behaviors and 20% acknowledge some form of an eating disorder (Mazzeo, 1999) with body dissatisfaction serving as a driving force in these behaviors.

There is no single cause of body dissatisfaction; a myriad of influences have been identified, such as societal factors, low self-esteem, and depression (Fisher, Schneider, Pegler, & Napolitano, 1991). Similarly, greater physical self-concept, less drive for thinness, and greater social self-esteem are associated with less body dissatisfaction (Cook-Cottone & Phelps, 2003). Media images, because of their unrealistic portrayal of a woman's body, are often cited as a major contributor to body dissatisfaction (Myers & Biocca, 1992; White, 1992) with exposure to thin ideal media images increasing body dissatisfaction, negative mood states, and eating

disorder symptoms while decreasing self-esteem (Hawkins, Richards, Granley, & Stein, 2004). For many women, body dissatisfaction is an everyday part of life; some researchers define this dissatisfaction as “normative discontent” (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999).

As there is no single cause of body dissatisfaction, intervention development is challenging. Some techniques target the media’s influence on body image (Posavac, Posavac & Weigel, 2001). Rabak-Wagener and colleagues (1998) found that informing college students about the reality (or non-reality) of media images influenced students to make diet and exercise decisions based on health concerns rather than appearance. Likewise, counseling programs have shown potential to effectively improve an individual’s body image (Rosen, Orosan, & Reiter, 1995; Strachan & Cash, 2002) and evaluations of related self-help books have shown some positive impact (Lavalley, 1998). Interventions have also been directed toward classrooms in hopes of reaching younger students (Hamilton & Oswalt, 1998; O’Dea & Maloney, 2000) as well as college students (Springer, Winzelberg, Perkins, & Taylor, 1999).

One limitation of the aforementioned interventions is the focus on the individual, which may not be cost-effective in terms of population impact. Media campaigns have been used to reach larger audiences regarding health issues (Anonymous, 2000; Elwood & Ataabadi, 1997; Hafstad & Aar, 1997); however, few relate to body image. Two notable ones are both produced by cosmetic companies: The Body Shop and Dove. The Body Shop had a campaign in the 1990s that focused on misperceptions produced by the media. More recently, Dove has launched the “Campaign for Real Beauty” which is an effort to challenge the current narrow societal definition of beauty. Part of the campaign targets adolescents to help them have a positive attitude about their body regardless of the size and shape (Dove, 2006).

In addition to a limited number, efforts to reach larger numbers of individuals have not been well

documented or evaluated. Gollings and Paxton’s (2006) recent pilot study results indicate the use of the internet as a promising intervention approach to body dissatisfaction and disordered eating behaviors; however, this intervention strategy needs further study. Because of the high rate of distorted self body image among college student women and their distorted perceptions of the ideal body (Stuhldreher & Ryan, 1999), this project sought to affect the self-reported body image of college women through a media campaign.

Using the Social Marketing Model (SMM), a multi-component media campaign was implemented on a university campus. The social marketing process uses commercial marketing techniques to design, plan, implement and evaluate programs to influence the behavior and/or attitudes of the intended audience in order to improve their physical or mental well-being (Glanz & Rimer, 2005). Health promotion programs that follow the SMM include consideration of four concepts: product, place, price and promotion. Product is the health issue or behavior being promoted and its benefits; place concerns delivering information in the right place at the right time; price considers the balance of benefits and costs involved in adopting the behavior; and promotion involves the communication to deliver messages about the product advantages to the intended audience. To be most successful, the SMM incorporates feedback at every step in order to adjust and modify the plan. Likewise, summative evaluation processes are a critical component of SMM focused health promotion campaigns to determine what worked, what didn’t, and whether the program was cost-effective (Glanz & Rimer, 2005).

This body image health promotion media campaign followed such a model and was designed to stimulate recognition in women about ideas and comments that may contribute to and reinforce negative body image. This article details the planning, development, implementation, and evaluation of the health promotion intervention. Key research questions include:

- Was there a self-reported increase in thinking and talking about body image issues after exposure to a body image media campaign?
- Was there a self-reported positive or negative influence in body image or perceptions about other women's bodies after exposure to a body image media campaign?
- How did the magnet influence the impact of the media campaign?
- What are suggested methods to improve body image among college women?
- Were the pre-determined objectives for the media campaign met?

Methods

At a large southeastern university, a media campaign intended to increase awareness about body image concerns and the negativity of common statements and thought was developed.

Participants

The participants in the evaluation portion of this project were 324 women (see Table 1). Most of these women were white (95.4%, n = 309) and under the age of 21 (84.9%, n = 275). More freshmen (26.9%, n = 87) and sophomores (38.0%, n = 123) participated than juniors (24.7%, n = 80) and seniors (10.5%, n = 34). More participants lived off-campus (43.5%, n = 141) than in a residence hall (34.0%, n = 110) or in a sorority house (22.5%, n = 73). Demographics for undergraduates at this University are similar to the participant group. The participant group is more white (95.4% vs. 87.3%) and younger (84.9% under 21 years of age versus 52.7% of total undergraduate population). The age difference coincides with more freshmen and sophomores completing the survey (64.9% of respondents) compared to the actual undergraduate population (50.1%) (University of Georgia, 1999).

Table 1
Demographics of Women Surveyed & Total University Demographics

Demographics	Total Sample (n = 324)	Sample Seeing Campaign (n = 194)
Age		
18	22.2% (72)	25.8% (50)
19	36.4% (118)	41.8% (81)
20	26.2% (85)	22.2% (43)
21	11.1% (36)	7.7% (15)
older than 21	4.0% (13)	2.5% (5)
Ethnicity		
White	95.4% (309)	94.3% (183)
Black	2.5% (8)	3.6% (7)
Other	2.1% (7)	2.0% (4)
Classification		
Freshman	26.9% (87)	30.4% (59)
Sophomore	38.0% (123)	43.3% (84)
Junior	24.7% (80)	19.6% (38)
Senior	10.5% (34)	6.7% (13)
Residence		
Off-campus	43.5% (141)	40.7% (79)
Residence Hall	34.0% (110)	35.1% (68)
Sorority	22.5% (73)	24.2% (47)

Intervention

The health promotion department at the university health center developed a media campaign to help individuals recognize conversations and ideas that focus on body image and reinforce negative body image concepts. Although body image issues affect men, given the higher prevalence of body dissatisfaction among women (Demarest & Allen, 2000; Jackson, 1992; Pope, Phillips, & Olivardia, 2000), this project was directed toward female undergraduates.

Health promotion professionals developed the theme of “The Top 10 Ways to Sabotage Your Body Image.” These messages were similar to

the model of David Letterman’s Top 10, using edgy and sarcastic messages that addressed common negative body image behaviors and attitudes. These messages were given to peer educators, staff, and faculty for feedback and revision. The reviewers liked the campaign’s messages, but they also wanted suggestions to improve body image. Consequently, a positive companion piece was developed, “The Top 10 Ways to Enhance Your Body Image.” University students were also asked to review these messages and provide feedback about the wording and design. The final top ten messages are listed in Table 2. Actual media materials included graphics and appropriate design formatting.

Table 2
Messages for Media Campaign

Top 10 Ways to Sabotage Your Body Image	Top 10 Ways to Enhance Your Body Image
10. Compare your body to other women, especially waif-like computer enhanced super models.	Appreciate your body – it works hard for you.
9. Think that smoking cigarettes will control your weight and make you more attractive.	Dance, play, hike – move your body in ways that bring you joy.
8. Try fad diets and mess up your metabolism.	Respect the beauty and sex appeal of all sizes – who says “thin is better” anyway?
7. Obsess about what you have just eaten and talk about it – a definite way to bore everyone around you.	Take charge of your attitude! You have more important things to do than obsess about food.
6. When you really want chocolate, eat a rice cake or – ANYTHING but what you really want.	Savor those special foods. Occasional treats are perfectly OK!
5. If you eat, you exercise, if you eat, you exercise, if you eat, you exercise.....	Exercise, YES! But you can overdo a good thing.
4. Always order salad and water on a date because “real women” don’t eat.	Enjoy your evening out! A healthy appetite is a good thing!
3. If your friends are dieting, you should too, because you don’t want them looking thinner than you.	Take action! Eat well, Be active ⇔ have energy.
2. Do anything to lose weight because you think can’t be happy until you are thin.	Liking yourself brings happiness – size doesn’t matter.
1. Don’t buy new clothes because you are waiting until you get to your “perfect” weight.	Look good and feel good NOW. You are beautiful!

These final messages were integrated into a multi-component approach, which included buscards (11 x 17 advertisement sheets placed on campus buses), posters, and magnets. Ten different buscards were developed to address all of the issues from the “Sabotage” poster. Each buscard included one statement from the “Sabotage” poster with a corresponding rebuttal that corrected the misinformation in the statement. The buscards were rotated every two weeks for an entire semester (four months). Because the university covers 615 acres and finding a parking spot is difficult, the bus system is used frequently with 8 million rides annually and an average daily ridership of 41,551 University members (Campus Transit 2001-2002 Fact Sheet, 2001). Previous focus groups conducted by the university health center indicated that buscards were a common place for students to get information. (L. Rachun, personal communication, January 12, 1999).

Posters included messages that were either the Top 10 Ways to “Enhance” or “Sabotage” Body Image. Posters were displayed in multiple, high traffic campus locations, including the student recreation facility, student center, university health center, and frequently used classroom buildings. Both posters were also given to all on-campus residence halls (n = 15) and sororities (n = 18). During the campaign, both posters were displayed continually and periodic checks were made to ensure posters were in place. If not displayed, posters were replaced.

Magnets conveying the “Enhance” messages were also created. These magnets were distributed to women in 17 of 18 sorority houses, to female residence halls (n = 6), through various educational programs (e.g., women’s health programs, peer nutrition educators) and at the University Health Center. Over 2400 magnets were distributed.

Evaluation Design & Data Collection

Because assessing effectiveness is a critical component of the SMM, two months after implementation, an evaluation survey was conducted to measure the impact of the campaign. The survey cover sheet served as a

consent form and provided visual examples of the posters and magnet. Because there were 10 different buscards, visual examples of the buscards were not used. This evaluation had approval to use human subjects from the Institutional Review Board.

In order to survey a wide-range of women from the intended audience, multiple selection methods were used to solicit participants. The survey was administered to two sorority houses and three intact undergraduate classrooms with the survey administrator collecting the surveys immediately after completion. Additionally, a sample of 100 female on-campus residence hall students was randomly selected by the University Housing Office; these students were mailed the survey with a return envelope provided. A total of 384 surveys were collected, for a total response rate of 65%. Because the campaign targeted women, male responses were not included in the evaluation. In addition, surveys with missing demographic data (age, gender, ethnicity, classification) were also discarded. As a result, 324 surveys are used for the initial analyses.

Instrumentation

The survey contained 30 items. All items were developed for this study. Five students and staff at the university were asked to read the survey and note any comprehension difficulties or inconsistencies. No changes were made to the survey based on their comments.

Five demographic questions queried age, sex, ethnicity, classification, and location of residence. One item asked if the participant had seen any body image campaign materials, with a dichotomous response of yes/no. If participants indicated “no,” written comments on the survey thanked them and instructed them to return the survey. Individuals responding “yes” were asked to continue. Four questions asked about contact with the campaign, specifically, (1) what form of the materials the participant had seen, (2) where the participant saw the materials, (3) if the participant had received a magnet and (4) if they had received a magnet, if the participant displayed the magnet. Forms of the materials

and possible locations were provided so the participant circled answers for those items. The other two questions had a yes or no response.

Three items were used to measure current body image practices. Participants answered the items using a five-point Likert-type scale where 1 indicated "strongly disagree" and 5 indicated "strongly agree." The items read: "I regularly discuss body image issues with my friends," "I regularly think about how women perceive their bodies," and "I often think about my perception of my body." These three items had a reliability coefficient of .72.

Eleven total items assessed the campaign's impact. Three items asked about changes in behavior, specifically, (1) increased discussion about body image, (2) increased thought about body image and (3) increased thought about the participant's own body image. These items used a five-point Likert-type scale where 1 indicated "strongly disagree" and 5 indicated "strongly agree." These items had a reliability coefficient of .76. Two items specifically addressed magnets: if the magnet increased dialogue about body image issues and if the magnet reinforced the overall campaign's message. These items also used a five-point Likert-type scale where 1 indicated "strongly disagree" and 5 indicated "strongly agree." While only two items, the internal consistency of these items was examined and the reliability coefficient was .70.

Four items asked directly about the perceived impact of the campaign. Two items specifically asked if the campaign's messages had a positive influence on the participant's perception of her body and of other women's bodies. These two items had a reliability coefficient equal to .78. Some researchers have identified a negative impact on body image by educational interventions that intend to improve body image (O'Dea, 2000; O'Dea, 2002). To ensure that this campaign was not having a detrimental effect on the population, two items specifically asked if the campaign's messages had a negative influence on the participant's perception of her body and of other women's bodies. These two items had a reliability coefficient = .75. All four

items used a five-point Likert-type scale with 1 as "strongly disagree" and 5 as "strongly agree."

Two open-ended items about the campaign's impact allowed the participant to elaborate on how the campaign impacted her. These items were "What is one message you will remember from the campaign?" and "Please briefly describe any conversations you had that were generated by the campaign."

A final six items queried about body image interventions. The first five items asked the participant if a particular educational strategy would have a positive impact on her body image. The response options were yes and no. The five strategies listed were: workshop on body image, compliment from a friend, compliment from a relative, seeing less media images, and a media campaign. The final question asked the women to indicate which of these five strategies would have the most positive impact on how she perceived her body. An "other" option with a blank to write in a response was also provided.

Results

Awareness of Media Campaign

Almost 60% (n = 194) of the women surveyed saw the media campaign. Significant demographic differences existed between individuals who saw the materials and those who did not. Younger women (18 and 19 year olds) were more likely to see the materials than those 20 years and older ($\chi^2 = 15.73$, $p < .001$), with 68.9% of 18 and 19 year olds seeing the materials compared to only 47.0% of the older women. Likewise, individuals who lived in on-campus residence halls were significantly more likely to see the materials than those who lived off-campus or in a sorority house [71.8% compared to 48.2% and 64.4%, respectively ($\chi^2 = 14.48$; $p = .001$)]. Finally, underclassmen (freshmen and sophomore) were more likely to have seen the campaign than upperclassmen (juniors and seniors), 68.1% compared to 44.7% ($\chi^2 = 15.28$, $p < .001$). This finding is most likely connected to the age difference already reported. There were no racial/ethnic differences in exposure to the media campaign,

and this is largely attributed to a small minority population in the sample and on the campus.

Since the remaining survey items specifically related to the media campaign, individuals who did not see the campaign were instructed to return the survey after completing the demographic section. As a result, the following responses are based on the 194 women who saw the campaign. Since the materials were displayed in many locations, determining where the individuals saw the materials was important. The most common single response was on the bus (26.3%, $n = 51$). For individuals seeing the materials in two locations, the most common responses were bus and residence hall (6.2%, $n = 12$) and bus and sorority (4.6%, $n = 9$).

Attitudes and Beliefs about Body Image

The survey inquired about the women's current attitudes and beliefs about body image issues. Only women who had seen the campaign ($n = 194$) were asked to respond to these questions. Over 52.2% ($n = 86$) of the women responded agree or strongly agree to the statement "I regularly think about how women perceive their body," and 58.9% ($n = 99$) responded agree or strongly agree to the statement "I regularly discuss body image issues with my friends." Concerning their own body image, 68.3% ($n = 112$) responded agree or strongly agree to the statement "I often think about my perception of my body."

Impact of Media Campaign

Eleven questions assessed the impact of the media campaign. Many women strongly agreed or agreed that the media campaign increased how often they thought about body image (39.9%, $n = 65$), with the most common single response being neutral (35.6%, $n = 58$). Slightly over 13% strongly agreed or agreed that the campaign increased their discussions about body image (13.5%, $n = 22$). Regarding the campaign's impact on their own body image, 31.7% ($n = 51$) agreed or strongly agreed that the campaign increased thought about their body image. Again, the most common single response was neutral (41.6%, $n = 67$).

Many women responded that the campaign had a positive effect on their own body image and how they viewed other women's bodies. Fifty-nine women (36.2%) strongly agreed or agreed that the campaign positively affected their body image, with neutral being the most common single response (46.0%, $n = 75$). Less women believed the campaign positively influenced their perception of other women's bodies; 28.3% ($n = 46$) agreed or strongly agreed with the statement. Again the most common single response was neutral (52.8%, $n = 86$).

When asked if the campaign had a negative effect on their body image, most women strongly disagreed or disagreed with the statement (53.4%, $n = 86$); the most common single response was neutral (43.5%, $n = 70$). Only four women agreed and one woman strongly agreed (total 3.1%) with the statement. When asked if the campaign had a negative effect on how the women perceived other women's body image, many women strongly disagreed or disagreed (48.4%, $n = 78$). Again, the most common single response was neutral (47.8%, $n = 77$). Five participants agreed and one woman strongly agreed (total 3.7%) with the statement.

Analysis of variance (ANOVA) methods were used to examine differences between demographic categories. There was one difference regarding age. Older women (20 years and above) were more likely to report that the media campaign positively influenced their perception of other women's bodies [$F(1,161) = 4.24, p < .05$]. Similarly, juniors and seniors were more likely to report a positive influence in the perception of other women's bodies [$F(1,161) = 3.97, p < .05$]. Two items had significant differences regarding residency: the campaign increased thinking about one's own body image [$F(2, 158) = 4.08, p < .05$] and the campaign positively influenced their perception of other women's bodies [$F(2,160) = 3.26, p < .05$]. Post-hoc analyses using Tukey HSD revealed only significant differences between the groups for only one of these items: the campaign increased thinking about one's own body image, with those living off-campus reporting more impact from campaign compared to those living

in residence halls (mean difference = -0.45, $p = .05$) and sororities (mean difference = -0.57, $p < .05$). There were no differences for these items regarding ethnicity.

Two open-ended questions attempted to ascertain the specific impact of the media campaign. The first question asked the participant to identify one message that she will remember from the campaign. Many ($n = 82$) individuals listed a message with over half (51.2%, $n = 42$) identifying the overall campaign theme as the message they received. Examples of thematic responses include "Appreciate your body," "Love your body," "Don't sabotage," and "Be happy as you are." Seven responses discussed how women are a variety of shapes and five responses cited a specific message from the campaign.

The participants were also asked to describe any conversations generated by the campaign. Thirteen individuals responded with brief descriptions; the most common conversation topics were the body image magnet ($n = 3$), specific items from the campaign that resonated with the participant ($n = 3$), general campaign messages ($n = 2$) and eating disorders ($n = 2$).

Impact of Magnet

Examining the perceived impact of the magnets (apart from the other components) was undertaken. Since the magnet component of the campaign increased the project's budget by almost \$1500 (an estimated 68% of the project's total budget) an assessment of impact was viewed as essential. Seventeen sorority houses received the magnet; one sorority house did not receive the magnet. Sisters of the sorority house that did not receive a magnet could have received a magnet through other means. Because of this, the sorority houses were not compared as whole units, and individual responses were analyzed.

Forty-eight (25.5%) individuals reported that they received a magnet, and most (95.8%, $n = 46$) reported that they displayed the magnet.

Individuals who received a magnet were asked about their perception of the magnet's influence. Slightly over 15% ($n = 7$) agreed or strongly agreed that the magnet increased dialog with 43.5% ($n = 20$) responded neutrally. Almost half (47.8%, $n = 22$) agreed or strongly agreed that the magnet reinforced the campaign's messages. Using ANOVA, women who received magnets were compared to those who did not regarding their perception of the campaign's impact. There were two items which had significant differences between those who received a magnet and those who did not: the campaign negatively influenced self body image [$F(1,158) = 14.97, p < .001$] and the campaign negatively influenced perception of other women [$F(1,158) = 4.56, p < .05$]. For both items, individuals who received a magnet were significantly more likely to disagree that the campaign had a negative impact.

Body Image Interventions

The evaluation concluded by asking what would have a positive impact on body image (the respondent could check all that were applicable). The most common responses were compliment from a friend (98.1%, $n = 157$) and compliment from a relative (92.4%, $n = 146$). The other possible options included seeing less media images (66.4%, $n = 99$), a media campaign like this one (64.7%; $n = 90$), and a workshop on body image (53.2%; $n = 75$). Participants were also asked what would have the most positive impact on their body image, and 72.4% ($n = 105$) selected a compliment from a friend.

Pre-determined Objectives

Proper evaluation practices dictate the use of pre-established objectives for programs and interventions. Reporting the results related to objectives is an important component of practice dissemination. For this media campaign, six clearly defined and measurable objectives were established. Many of the predetermined objectives for the media campaign were met, with some exceeding the expected outcome. Table 3 details these objectives and the corresponding results.

Table 3
Pre-Determined Objectives of the Media Campaign and Result

Statement	Objective (%)	Percentage Results (n)
1. Women seeing a “Sabotage” or “Enhance” poster, magnet or buscard.	30	59.4% (194)
2. Sorority women given an “Enhance” magnet.	75	92% (2100) ^a
3. Women strongly agreeing or agreeing that “Because of these materials, I discussed body image issues more often with my friends.”	25	13.5% (22)
4. Women strongly agreeing or agreeing that “Because of these materials, I thought more often about how women perceive their bodies.”	40	39.9% (65)
5. Women strongly agreeing or agreeing that “The messages in this campaign positively influenced the way I think about my body.”	25	36.2% (59) ^b
6. Women strongly agreeing or agreeing that “The messages in this campaign positively influenced the way I think about other women’s bodies.”	30	28.3% (46) ^c

Notes: ^aThis was determined through the distribution process, with over 2100 magnets distributed to the sorority chapters on campus; ^bThe most common response was neutral (46.0%, n = 75); ^cThe most common response was neutral (52.8%, n = 86).

Discussion

Through summative evaluation it was determined that most of the objectives for the media campaign were met. Almost 60% of the women surveyed saw the media campaign, and over 2400 magnets were distributed. Most participants who saw the campaign thought more about body image issues; however, the increase in discussions about body image did not meet the pre-determined objective. Possible reasons include the participants’ already high rates of thinking (52.2%), talking (58.9%) about body image issues, and thinking about their own body image perception (68.3%). While the campaign may not have increased thought or conversation, it may have affected the nature (positive versus negative) of the thoughts and conversations. Although not conclusive, the open ended responses provide support for this idea. Sample statements identifying the positive tone of the conversations include: “We talked about society’s views of what women should be.” [We]...“talked about how much time and energy we focus on body image.” [We would]...“point out things we did that were on the sabotage list.”

Over 25% of the participants had seen the campaign on the bus system which reinforces buscards as a high visibility medium to reach students on this campus. The literature contains no research on magnets as an individual component in a media campaign in any arena and limited documentation of magnet use in health promotion. This lack of research was supported by personal communication with speech communication researchers who are familiar with magnet use (J. Lillie, personal communication, April 9, 1999; R. Parrott, personal communication, March 26, 1999). The campaign developers believed that the constant presence of magnets would increase the impact of the message. This idea was not supported through the statistical results; however, respondents who received a magnet believed the magnet reinforced the messages. Depending on project budgets, magnets may constitute a high percentage of the budget. With limited resources, health promotion specialists need to consider the cost, perceived benefit and research supporting magnet use as they consider this approach in the future.

While many health promotion efforts involve workshops, only 53% of the women believed that a workshop would have a positive impact. These results are aligned with other research that suggests effective strategies increase awareness of peer influences (Dohnt & Tiggemann, 2006; Dohnt & Tiggemann, 2005; Lieberman, Gauvin, Bukowski & White, 2001), family influences (Byely, Archibald, Graber, & Brooks-Gunn, 2000; Sinton & Birch, 2006), and realistic media images (Hawkins, et al., 2004). Discovering that most women believed a “compliment from a friend” would have the most positive impact on their body image was a critical finding. Future strategies to address body image need to incorporate how comments by friends have intended and unintended consequences.

While some interventions have had success focusing on the individual (Lavalley, 1998; Rabak-Wagener et al., 1998; Rosen et al., 1995; Strachan & Cash, 2002), the impact of external factors cannot be overlooked. Slightly over 66% of the participants believed that seeing less media images would have a positive impact on their body, and over 90% indicated that a compliment from a friend or relative would also have a positive influence on their body image. Increasing awareness about the comments of others should be considered for future interventions. Comments directly to an individual (“You look great” after a weight loss) and comments made about others (“Why is she wearing that outfit? Does she think she can fit into it?”) reinforce that ones’ identity and self worth are intrinsically tied to size and appearance. Further research, perhaps intensive interviews with both women and men, to explore the impact of language and conversation on body image is recommended.

Limitations

Most research on body image involves white adolescents, and research on other ethnicities is limited (Guinn & Semper, 1997) although this is changing (Demarset & Allen, 2000). This evaluation also lacked a diverse sample and these findings should not be generalized to other ethnicities. Southern culture and the definitive gender roles in the South (King, 1975) may also impact the results. This survey was intentionally

brief for easy implementation at sorority chapter meetings and in classes; however, in-depth questions would have provided more feedback about the participants’ perceptions.

Another limitation was the use of a convenient sample for the evaluation. While this method was useful in gathering a wide-range of responses from the intended audience, it may not accurately reflect the level of observation of the campaign by the total undergraduate female population. As social marketing often targets a population’s subgroup, this evaluation strategy is not totally flawed, but one needs to consider that the results are not likely generalizable to a campus-wide body image media campaign.

The lack of pre-intervention data is also a limitation and the addition of a pretest would demonstrate changes in attitude more definitively than participants’ perception. During the development of the health promotion media campaign, statistical information about negative body image rates at this specific institution was unknown. Anecdotal information from conversations with peer nutrition educators, staff at the student recreation center and nutritionists on campus revealed an increasing problem. A survey examining many health issues was scheduled for two years in the future. Given the length of time until quantitative assessment data would be available, the designers and implementers of the media campaign decided not to wait, and proceeded with the media campaign intervention and evaluation.

Conclusion

Results indicate that health promotion media campaigns may be a cost-effective health promotion strategy for addressing body image and body dissatisfaction among female undergraduate students. Future efforts on this campus to address body image will incorporate the results which may include a refined and revised media campaign.

Recommendations for future practice and practice-research studies include examining the indirect and direct consequences from peer conversations. Likewise, developing inclusive or directing specific messages to males would be

an important consideration for future projects as this issue is becoming increasingly important for men (Carlat, Camargo, & Herzog, 1997; Olivardia, Pope, Mangweth, & Hudson, 1995; Woodside, et al., 2001.).

Overall, this intervention application and assessment provides research to practice links for health promotion practitioners interested in

developing a SMM campaign. With regard to a health promotion media campaign, the results indicate that magnets may not be a cost-effective strategy. However, on campuses with a university transit system, buscards may provide the greatest amount of exposure to students, and communities with similar transportation modes should consider utilizing buscards when implementing a health media campaign.

References

- American College Health Association. (2006). American College Health Association - national college health assessment (ACHA-NCHA) web summary, Spring 2005 Data. Retrieved October 19, 2006, from http://www.acha.org/projects_programs/WEIGHTS05.cfm
- Anonymous. (2000). Practice notes: Strategies in health education. *Health Education and Behavior*, 27, 149-155.
- Byely, L., Archibald, A., Graber, J. & Brooks-Gunn, J. (2000). A prospective study of familial and social influences on girls' body image and dieting. *International Journal of Eating Disorders*, 28, 155-164.
- Campus Transit. (2001). Campus Transit 2001-2002 fact sheet. Retrieved August 2, 2002, from <http://www.transit.uxx.edu/facts.html>
- Carlat, D., Camargo, C., & Herzog, D. (1997). Eating disorders in males: A report on 135 patients. *The American Journal of Psychiatry*, 154, 1127-1133.
- Cash, T., & Pruzinsky, T. (Eds.)(1990). *Body images: Development, deviance and change*. New York: Guilford Press.
- Cook-Cottone, C. & Phelps, L. (2003). Body dissatisfaction in college women: Identification of risk and protective factors to guide college counseling practices. *Journal of College Counseling*, 6, 80-89.
- Demarset, J., & Allen, R. (2000). Body image: Gender, ethnic and age differences. *Journal of Social Psychology*, 140, 465-472.
- Dohnt, H., & Tiggermann, M. (2005). Peer influences on body dissatisfaction and dieting awareness in young girls. *British Journal of Developmental Psychology*, 23, 103-116.
- Dohnt, H., & Tiggermann, M. (2006). Body image concerns in young girls: The role of peers and media prior to adolescence. *Journal of Youth and Adolescence*, 35, 141-151.
- Dove. (2006). Why the campaign for real beauty? Retrieved August 24, 2006, from <http://www.campaignforrealbeauty.com/supports.asp?section=campaign&id=94>
- Elwood, W. N., & Atabadi, A. N. (1997). Influence of interpersonal and mass-mediated interventions on injection drug and crack users: Diffusion of innovations and HIV Risk behaviors. *Substance Use and Misuse*, 32, 635-651.
- Fisher, M., Schneider, M., Pegler, C., & Napolitano, B. (1991). Eating attitudes, health risk behaviors, self-esteem and anxiety among adolescent females in suburban high school. *Journal of Adolescent Health*, 12, 377-384.
- Gollings, E., & Paxton, S. (2006). Comparison of internet and face-to-face delivery of a group body image and disordered eating intervention for women: A pilot study. *Eating Disorders*, 14, 1-15.
- Grogan, S. (1999). *Body image: Understanding body dissatisfaction in men, women, and children*. London, UK: Routledge.
- Guinn, B., & Semper, T. (1997). Body image perception in female Mexican-American adolescents. *Journal of School Health*, 67, 112-115.
- Hafstad, A., & Aar, L. E. (1997). Activating interpersonal influence through provocative appeals: Evaluation of a mass media based antismoking campaign targeting adolescents. *Health Communication*, 9, 253-272.

- Hamilton, D., & Oswalt, S. (1998). Distract me from my dreaded self: strategies to enhance my self-esteem. *Journal of School Health*, 68, 301-303.
- Wawkins, N., Richards, P. S., Granley, H. M., & Stein, D. (2004). The impact of exposure to the thin-ideal media image on women. *Eating Disorders*, 12, 35-50.
- Jackson, L. A. (1992). *Physical appearance and gender: Sociobiological and sociocultural perspectives*. Albany, NY: State University of New York Press.
- King, F. (1975). *Southern ladies and gentlemen*. New York: Stein and Day Publishers.
- Lavallee, D. M. (1998). The comparative efficacy of two self-help programs for a negative body image. *Dissertation Abstracts International*, 58 (9-B), 5126.
- Lieberman, M., Gauvin, L., Bukowski, W., & White, D. (2001). Interpersonal influence and disordered eating behaviors in adolescent girls: The role of peer modeling, social reinforcement, and body-related teasing. *Eating Behaviors*, 2, 215-236.
- Mazzeo, S. E. (1999). Modification of an existing measure of body image preoccupation and its relationship to disordered eating in female college students. *Journal of Counseling Psychology*, 46, 42-50.
- Moore, D. C. (1993). Body image and eating behavior in adolescents. *Journal of the American College of Nutrition*, 12, 505-510.
- Myers, P. N., & Biocca, F. A. (1992). The Elastic body image: The effect of television advertising and programming on body image distortions in young women. *Journal of Communication*, 42, 108-133.
- O'Dea, J., & Maloney, D. (2000). Preventing eating & body image problems in children & adolescents using the health promoting schools framework. *Journal of School Health*, 70, 18-21.
- O'Dea, J. (2000). School-based interventions to prevent eating problems: First do no harm. *Eating Disorders*, 8, 123-130.
- O'Dea, J. (2002). Can body image education programs be harmful to adolescent females? *Eating Disorders*, 10, 1-13.
- Olivardia, R., Pope, H. G., Mangweth, B., & Hudson, J. (1995). Eating disorders in college men. *The American Journal of Psychiatry*, 152, 1279-1288.
- Pope, H. G., Phillips, K. A., & Olivardia, R. (2000). *The Adonis complex: The secret crisis of male body obsession*. New York: The Free Press.
- Posavac, H. D., Posavac, S. S., & Weigel, R. G. (2001). Reducing the impact of media images on women at risk for body image disturbance: Three targeted interventions. *Journal of Social and Clinical Psychology*, 20, 324-340.
- Rabak-Wagener, J., Eickhoff-Shemek, J., Kelly-Vance, L. (1998). The effect of media analysis on attitudes and behaviors regarding body image among college students. *Journal of American College Health*, 47, 29-35.
- Rimmer, B. K., & Glanz, K. (2005). *Theory at a glance: A guide for health promotion practice* (2nd ed.) Washington, D.C.: National Institutes for Cancer, Department of Health and Human Services.
- Rosen, J. C., Orosan, P., & Reiter, J. (1995). Cognitive behavioral therapy for negative body image in obese women. *Behavior Therapy*, 26, 25-42.
- Serdula, M. K., Collins, M. E., Williamson, D. F., Anda, R. F., Pamuk, E., & Byers, T. E. (1993). Weight control practices of US adolescents and adults. *Annals of Internal Medicine*, 119, 667-671.
- Sinton, M., & Birch, L. (2006). Individual and sociocultural influences on pre-adolescent girls' appearance schemas and body dissatisfaction. *Journal of Youth and Adolescence*, 35, 165-175.
- Springer, E. A., Winzelberg, A. J., Perkins, R., & Taylor, C. B. (1999). Effects of a body image curriculum for college students on improved body image. *International Journal of Eating Disorders*, 26, 13-20.
- Strachan, M. D., & Cash, T. (2002). Self-help for a negative body image: A comparison of components of a cognitive-behavioral program. *Behavior Therapy*, 33, 235-251.
- Stuhldreher, W., & Ryan, W. (1999). Factors associated with distortion in body image perception in college women. *American Journal of Health Studies*, 15, 8-13.

- Thompson, J. K., Heinberg, L. J., Altabe, M., & Tantleff-Dunn, S. (1999). *Exacting beauty: Theory, assessment and treatment of body image disturbance*. Washington D.C.: American Psychological Association.
- University of Georgia. (1999). *University of Georgia 1999 fact book*. Retrieved September 10, 2007, from <http://www.uga.edu/irp/fb99/04enr/04enr30.htm>
- White, J. H. (1992). Women and eating disorders; part I: Significance and sociocultural risk factors. *Health Care for Women International*, 13, 363-373.
- Woodside, B., Garfinkel, P., Lin, E., Goering, P., Kaplan, A., Goldbloom, D., & Kennedy, S. (2001). Comparison of men with full of partial eating disorders, men without eating disorders, and women with eating disorders in the community. *The American Journal of Psychiatry*, 158, 570-574.

Acknowledgements

The author would like to thank the Health Promotion Department at the University Health Center, University of Georgia for their efforts in the implementation of the body image media campaign.

Author Information

Sara B. Oswalt, MPH, PhD*
University of Texas at San Antonio
Department of Health and Kinesiology
One UTSA Circle
San Antonio, TX 78249
Ph.: 210-458-6227
Fax.: 210-458-5873
E-Mail: sara.oswalt@utsa.edu

Tammy J. Wyatt, PhD
University of Texas at San Antonio
Department of Health and Kinesiology
One UTSA Circle
San Antonio, TX 78249

* corresponding author