The effects of different recruitment and incentive strategies for body acceptance programs on college women

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ABSTRACT
The objective of this study—getting individuals to participate in eating disorder prevention programs—is difficult yet crucial for dissemination efforts. Little research has investigated what incentive strategies can be particularly efficacious, and even less is published on their cost-effectiveness. The following study examined two types of email advertisements and six incentive strategies in an empirically supported body acceptance program disseminated at a large university. A total of 5,978 undergraduate women received email advertisements, of which 430 signed up to participate. An additional 588 who did not participate were assessed. Results suggest the most effective incentives were offering gift certificates for free manicure services and free personal fashion style training gift certificates from a student organization. Undergraduate women were least likely to attend due to lack of knowledge about the program, not having a friend to attend with them, or inconvenient times. Implications for future research are explored.

Universities are large, centralized communities that must continuously address and treat issues related to physical and mental health. Because of this need, universities are optimal settings for disseminating evidence-based programs aimed at facilitating the adoption of healthy behaviors. However, those who need these preventions the most are often the least likely to access them (Larimer & Cronce, 2007). Engaging students through cost effective and self-sustainable methods is a key barrier to the dissemination of prevention programs on college campuses. Thus, the question becomes: how do we get students to show up?

One of the largest barriers to program implementation is the inability to generate interest among potential participants (Becker, Ciao, & Smith, 2008; Larimer & Cronce, 2007), and it has been documented across domains of prevention and intervention research focusing on depression (Cuijpers, Van Straten, Warmerdam, & Van Rooy, 2010), eating disorders (Atkinson & Wade, 2013), alcohol use (Larimer & Cronce, 2007), and weight loss...
Factors related to the participants (lack of awareness about risk and effectiveness of the program, fear of social stigma, time availability), the program (resources available, capacity to reach participants), and the recruitment methods are theorized to contribute to this challenge (Atkinson & Wade, 2013; Cuijpers et al., 2010). Compounding this problem is the limited research on effective strategies.

A review of the literature on body acceptance programs indicates they largely rely on promotional materials such as posters or pamphlets, emails, and personal referrals to recruit participants (Bojorquez-Chapela, Unikel, Mendoza, & de Lachica, 2014; Butryn, Rohde, Marti, & Stice, 2014; Linville et al., 2015). However, very few studies have assessed the effectiveness of their recruiting strategies. In a study investigating the combination of emails, promotional materials (i.e., fliers and brochures), and referrals to a body acceptance intervention from physicians, personal referral was largely unsuccessful, while promotional materials sent directly to potential participants were the best recruitment strategy (Linville et al., 2015). One body acceptance program recruited women by using personal referral placed phone calls to 195 potential participants of which only 62 (32%) were reached and 50% consented to participate (Bojorquez-Chapela et al., 2014). Thus, referral based personal phone calls resulted in a 16% success rate. Other prevention programs targeting college students have reported referrals from knowledgeable staff and online advertising were effective at increasing participation and motivation when compared to printed promotional materials (Morgan, Jorm, & Mackinnon, 2013; Williams, Zenilman, Nanda, & Mark, 2008).

Dissemination and implementation research has shown that university women are largely uninterested in participating in body acceptance programs (Atkinson & Wade, 2013; Becker et al., 2008), which acts as a constant challenge for prevention science. In a study that investigated intrinsic interest in participating in a body acceptance program among university women, only 16 (13%) of 121 women who saw an advertisement expressed interest without an incentive (Atkinson & Wade, 2013). Thus, many eating disorder prevention programs targeting undergraduate women have resorted to offering financial compensation (McMillan, Stice, & Rohde, 2011; Stice, Rohde, Gau, & Shaw, 2009) as well as course credit (Matushek, Wendt, & Wiseman, 2004; Roehrig, Thompson, Brannick, & van den Berg, 2006) to increase enrollment. Monetary rewards have been shown to be effective in enticing participants to attend the first session of a program; thereafter, payment became less pertinent as self-motivation to participate increased (Heinrichs, 2006). Attrition rates in studies offering monetary incentives range from 19% (McMillan et al., 2011) to 33% (Stice et al., 2009), and from 5% (Matushek et al., 2004) to 6.5% (Roehrig et al., 2006) for course credit. Thus even with extrinsic rewards, programs can struggle to obtain participants, and the traditional strategy to offer multiple incentives for higher participation can
be expensive and inefficient (Atkinson & Wade, 2013; Heinrichs, 2006). In order to maximize dissemination efforts of prevention programs, research comparing the effectiveness of incentive strategies is needed.

There is limited information in the literature about effective strategies for recruitment and engagement of individuals to participate in body acceptance programs. In addition, the most popular methods may not be self-sustainable. For example, some universities have strict guidelines that limit or prohibit programs on campus to call students for marketing purposes. In addition, placing personal phone calls can require significant staff time making the strategy less cost-effective. One common and cost-effective method of recruitment is advertising and marketing through emails. However, little to no research has examined how the content of recruitment emails influence participation. Thus, the first purpose of this study was to explore if disclosing the nature of our body acceptance program (i.e., the Body Project) would affect participation. We hypothesized that advertising the program as a body acceptance program (vs. a personal growth program surrounding women’s issues) would reduce participation rates. Second, we sought to evaluate the cost and effectiveness of six incentive strategies in increasing the dissemination of an evidence-based prevention program within structured communities, such as universities. We met with key stakeholders within the university to create a traditional and non-traditional list of incentives and examined their effectiveness. Finally, we aimed to identify factors that may prevent university-aged females from participating in this face-to-face prevention program.

**Methods**

**Participants**

First-year, undergraduate women living on campus ($N = 5,978$) were eligible to participate in the Body Project program through their on-campus residential hall. A total of 430 women signed up to participate in the program across Fall and Spring semesters of one academic year.

During the implementation of the Body Project, an online study of health behaviors and social networks was simultaneously occurring. This study conducted online assessments of first-year undergraduate women at the end of each semester and included questions regarding participation in the Body Project program. The study was advertised through emails sent by community directors at each residence hall. Data from the women residing at the targeted residence halls were abstracted from the dataset. A total of 588 ($M_{\text{age}} = 18.69$ years, age range: $18–32$ years) women endorsed living on campus and not participating in the Body Project. These participants were
asked questions related to why they did not participate in the program. The online study had Institutional Review Board approval, and participants provided online consent prior to completing the online questionnaires.

Body Project Program

The Body Project is an empirically supported body acceptance program based on cognitive dissonance theory. Extensive research supports the program’s efficacy, effectiveness, and dissemination among college populations (Becker et al., 2008; Perez, Becker, & Ramirez, 2010). The program consists of two 2-hour workshops led by undergraduate peer leaders. The program was offered for 4 weeks at each residence hall. All Body Project workshops were run through the University’s student development and health and wellness programming at targeted residence halls.

Recruitment and procedures

Information regarding student development, health, and mental health programs occurring within the residential community is advertised through email sent by the community director of the respective residence hall. Given the existing structure, email was the only mechanism for advertising. Residents received one email per week advertising the program and offering an incentive to participate. Women interested in participating could register anonymously online through SignUpGenius (www.signupgenius.com). This online platform allowed weekly signup rates to be monitored.

Email advertising was randomized so that emails received Fall semester vaguely described the program, strategically not stating that this was a body acceptance or eating disorder prevention program. The email provided a colorful picture of the face of a woman, underneath the email was composed of four sections labelled “what we are about,” “past participants have said,” “incentives to participate,” and “link to sign up.” The “what we are about” section highlighted that this was a program for undergraduate women by undergraduate women, that it was fun, and focused on personal growth and women’s issues. Spring semester, residents received emails that disclosed the program was a body acceptance program. The emails distributed were structured like the fall semester emails, with the exception that under the “what we are about” section, the following quote was added: “Don’t change your body to get respect from society. Instead let’s change society to respect our bodies.” The email highlighted that this was a body acceptance program for undergraduate women by undergraduate women, that it was fun, and that it focused on personal growth and women’s
issues. Thus, the emails only differed in the disclosure of a body acceptance program.

**Incentives**

A series of focus groups was conducted with university staff (directors of health and wellness programming, directors of Greek life, and community directors who oversee residential life programming) and undergraduate women (Panhellenic sorority presidents, officers of three women’s issue student organizations, and 25 women from diverse student organizations) to identify incentives. The university staff suggested incentives such as t-shirts, which were financially unsustainable, a free meal (i.e., pizza), or a free dessert (i.e., ice cream). Undergraduate women suggested pairing with other student organizations, offering cash for participation, or a free service, such as a manicure-pedicure treatment. Based on these results, six incentives were implemented and evaluated: (a) fashion style training—one student organization based on making “fashion fit your body and reflect your personality,” offered free personal styling and in return, this organization received free marketing and a constant supply of new members; (b) $100 lottery—individuals would have their named entered into a lottery, with three opportunities to win $100; (c) ice cream party—the largest group of “friends” (defined loosely as residential hall floor, sorority, or group of friends) to attend a session would receive a free ice cream party; (d) free pizza—provided during the workshop; (e) referral—a snowball sampling strategy was employed where the participant earned $10 for each friend they brought to the workshop. A snowball sampling strategy is a commonly used chain referral sampling technique where participants refer peers to participate and was originally designed to recruit hard-to-reach populations (Paquette, Bryant, & De Wit, 2012; Sadler, Lee, Lim, & Fullerton, 2010; Sedgwick, 2013) as well as a method for reducing attrition between follow up sessions (Sedgwick, 2013). It is commonly used in AIDS research (Paquette et al., 2012); (f) manicure/pedicure gift certificate—local nail salons surrounding the university were asked to donate gift certificates in return for free advertising. In addition, we negotiated with one salon that for every two gift certificates purchased, they would provide a third gift certificate for free (i.e., buy two, get one free).

Residents received one email each week for a total of four emails. No incentive was provided for participation the first week. This served as a baseline of participation rates. After the first week, each subsequent email provided a different incentive to participate. The order of appearance of each financial incentive was randomized.
**Online questionnaire**

The online questionnaire asked women if they participated in the Body Project with a yes or no category response. Those who selected “no” received a second question inquiring why they did not participate and were given the following options: lack of knowledge, lack of interest, inconvenient times, inconvenient locations, stigma associated with this type of program, friends could not attend, I had no one to go with, or other. Women could select multiple reasons.

**Results**

The statistical analyses for the current study were predominantly descriptive in nature. To compare the two email advertisements based on participation numbers and number of targeted women, a 2×2 table was created, and a chi square analysis was used. There were 4,297 female residents who received emails advertising a body acceptance program, of which 200 (5.82%) participated in the program. There were a total of 1,681 female residents who received emails advertising the program as a personal growth program, of which 263 (24%) participated in the program. This differential participation rate was statistically significant, $\chi^2 (1) = 167.78, p < .01$.

A frequency analysis was conducted to examine which incentive strategy yielded the best participation. A cost analysis was conducted where the total amount of money spent on each incentive was divided by the total number of participants that signed up online while that incentive was offered. **Table 1** presents participation rates by incentive strategy and the cost per person for each incentive. During baseline, 4% of participants signed up when no incentives were offered. The two most popular incentives were gift certificates for free manicure or pedicure and free personal fashion style training gift certificates, which accounted for 70% of the total participation. Moreover, personal fashion style training was the most cost-effective of these popular incentives.

| Incentive                  | Percentage of participants | Cost per person* |
|----------------------------|---------------------------|------------------|
| Manicure/pedicure gift certificate | 37                        | $1.88            |
| Fashion style training       | 33                        | Free             |
| Referral                    | 11                        | $8.47            |
| $100 lottery                | 8                         | $8.82            |
| No incentive offered        | 4                         | $0               |
| Free pizza                  | 3                         | $28.47           |
| Free ice cream              | 4                         | $3.71            |

*Note. N = 430. *The total amount of money spent on each incentive was divided by the total number of participants that signed up online while that incentive was offered.
A frequency analysis was conducted to examine the reasons provided for not participating in the program. Nineteen individuals did not report a reason for not participating in the Body Project and, therefore, were deleted from the analyses. Table 2 displays the percentage of endorsement per item given the total sample of the 569 women who completed the question. Though more than half (56%) did not know about the program, nearly a third (28%) reported their friends could not attend, which prevented their participation.

### Table 2. Reasons for not participating in the program.

| Reason                        | Percentage of endorsement |
|-------------------------------|---------------------------|
| Friends could not go          | 28                        |
| No one to go with             | 8                         |
| Did not know about the program| 56                        |
| Stigma                        | 3                         |
| Inconvenient time             | 20                        |
| Inconvenient location         | 3                         |
| Lack of interest              | 14                        |

*Note. Participants could endorse multiple options.*

Discussion

The objective of this study was to evaluate two types of email recruitment techniques and six incentive strategies for engaging women in a body acceptance program. A number of notable incentive strategies were successful at increasing participation among undergraduate women. In particular, partnerships with local vendors and student organizations can lead to unique, cost effective and sustainable incentives that promote prevention programs as well as supporting businesses and organizations. Potentially due to the stigma of mental health programs, advertisements specific to the mental health directive of the prevention program were not as successful as the utilization of a vague goal (i.e., personal growth). This finding may have important implications for improving recruitment strategies currently employed by health-related programs.

In the business world, there is a widespread belief that consumers increasingly desire their prizes (or incentives) as soon as they’ve won them; this is potentially due to the popularity of the immediate gratification provided in online gaming (“Speeding the reward,” 1998). It is possible that the two best incentives (accounting for 70% of the participants) were so successful because they fit into this immediate gratification model; participants received the gift certificates for manicures/pedicures or free fashion advice immediately following the session. Conversely, this model may explain why some incentives were less effective; the referral, lottery, and free ice cream party were received up to a month after the session was completed.
Though the free pizza incentive fits the instant gratification model, it was the least effective incentive provided in this comparison. This may be due to the negative stereotypes that apply to those who eat excessively (Herman, Rother, & Polivy, 2003) and to those who eat “bad” (i.e., fattening) foods (Vartanian, Herman, & Polivy, 2007). A significant concern for most people is to be seen positively by others; therefore, in a group setting, where social comparison is already high, offering an unhealthy food option may be too anxiety provoking and lead to increased body image insecurities, especially in those already high in eating pathology.

Interestingly, potential participants were less likely to attend when their friends could not attend. This finding suggests peer networks may be an important factor for dissemination efforts. Moreover, research has found that women feel more comfortable, have greater ease in expressing themselves, are more likely to reveal sensitive information, and report greater overall satisfaction with programming and greater group cohesion when attending prevention programs with friends (Harper, Dolcini, Benhorin, Watson, & Boyer, 2014). Future research should investigate successful strategies to integrate social networks not only for increased participation but also for greater satisfaction among participants.

There are several important limitations worthy of discussion. First, 56% of students reported they did not know about the body project despite receiving multiple emails; this may have been due to emails being overlooked in the mass of institutional emails that are sent daily or the email content not attracting students. Regardless, it highlights the limitations of this common recruitment technique. Second, we assessed online signup to a program and not actual attendance. Although we had a large sample size of women that did not participate in the program but were assessed through the online questionnaire, this still only represented 17% of the women living on campus and, thus, may not accurately represent the entire population of undergraduate women living on campus. Third, participant perceptions of the incentives were not assessed which can assist in understanding why some incentives work better than others. Future research is needed in this area. Despite these limitations, this report serves to inform the effectiveness of recruitment and incentive strategies that may improve the dissemination of evidence-based prevention programs on college campuses.

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