

Having the Right Tool for the Right Job: Results of an Incentive Versus Non-Incentive Weight Loss program

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Article:

INTRODUCTION

Health promotion or "Wellness" programs have been identified as a means of promoting positive behavior change in the general population, and have become an increasingly attractive value-added benefit in settings such as the worksite, medical and community centers, and universities. As such, one of the most consistently popular choices to effect positive behavior change strategies into a persons lifestyle are weight loss programs. There are several reasons why a weight loss program can provide positive benefits:

- Weight loss is of great personal interest to many people, thus it can be an attractive fringe benefit at an employment site,
- Weight loss programs may lessen health expenditures by reducing costs due to weight-related conditions, i.e.; diabetes and hypertension, and,
- Weight loss may improve overall satisfaction in personal life areas such as self-image and self-esteem.

Given these potential benefits, challenges still exist for health professionals obtaining consistent participation and retention by participants engaged in programs such as weight loss. One way to attract people to take part in a program is through the use of incentives. Traditionally, incentives have been offered either up front to encourage sign-up and participation, at various stages of the program to recognize positive behavior change, and/or upon completion of the program. Reports on the use of incentives for participation range from team competitions, money, gifts, and flexible time benefits, among others.

Stunkard, Cohen, and Felix (1989) conducted three studies evaluating the effectiveness of competition as a method of weight loss. Results found that team competition was the most effective. The first study found that team competition had far lower attrition (0%) than cooperation (1%) and individual competition (17%). This study also found that men lost more weight in team competition (3.2 lbs.) than in cooperation (1.5 lbs.) and individual (0 lbs.) competition. In the second study, team competition was effective in a wide variety of settings, with different kinds of people and with different methods of assignment to teams.

Weight loss competitions in the workplace have reported nearly double the attrition and half the weight loss found compared to similar competitions in a clinical setting. Brownell, Cohen, Stunkard, Felix, and Cooley (1984) attempted to improve worksite competitions by introducing health promotion competitions to enhance motivation and social support. The participants in this study were given information on self-monitoring, stimulus, controlled slow eating, reinforcement, social support, attitude change, nutrition, and exercise. To show weekly progress of the participants, a large scoreboard was placed in a prominent location in each workplace. The boards provided feedback and incentive to participants. The largest change found in this study was morale. At least 50% of the employees rated all five components of the program (weekly weigh-ins, team support, lobby scoreboard, prizes, and competition) as beneficial. The study reported that 62% of the participants rated this program as more successful than their previous attempts to lose weight and only one person of the 213 participants dropped out.

Research of incentive-based programs has also attempted to determine if the type of incentives used, such as money or gifts, can influence the recruitment and/or retention of participants. Colvin, Zopf, and Myers (1983) compared a financial incentive for weight loss to a non-incentive control condition to 23 participants over an eleven week period. In this study incentive participants averaged three times the weight lost compared to the control group. End of treatment attrition was also reduced for the incentive group.

Finally, there has been research comparing incentive-based versus non-incentive based weight loss programs. Follick, Fowler, and Brown (1984) examined the effects of an incentive procedure that was intended to decrease attrition. The participants in this study were randomly assigned to one of two treatment conditions: (a) weight loss program plus an incentive procedure (incentive group) and (b) weight loss alone (control group). The results of the investigation indicated that the addition of an incentive procedure to a behavioral weight loss intervention truly decreases attrition. Participants in the incentive group attended more sessions and completed more treatment (60%) compared to the non-incentive group (20%). The results indicated that the incentive program may improve the effectiveness of a behavioral weight loss program. It can certainly be hypothesized that an incentive-based program will lead to greater positive behavior change than non-incentive based programs. Therefore, the purpose of this study was to compare results of an incentive based versus non-incentive based intervention among participants of a weight loss program.

METHODS

Study participants were chosen from a pool of elementary and secondary school employees representing 13 local public schools in a Southeastern state that had signed up for a county-wide schoolsite weight loss program administered by a community Wellness Center. The program consisted of an 8-12 week program concentrating on weight loss of one to two pounds per week with no more than a total 20 pounds weight loss maximum. Two of the larger schools participating were approached at the initial weigh-in and were asked if employees would be willing to participate in a study. A total of 50 (100% female) volunteers from both schools, ranging in age from 22 - 51, agreed to participate in the study. Study participants were divided into incentive groups and non-incentive groups based on their availability to meet for weigh-ins over an eight week period. Twenty volunteers were identified as the incentive group and the remaining 30 made up the non-incentive group.

Next, weigh-in dates were established for participants in the incentive group. It was established that at the same time each Thursday morning for eight weeks, the incentive group would be weighed-in by a member of the research group. Additionally, each week the incentive group would receive in their work mailboxes written support material (pamphlets, fact sheets, and recipes) addressing weight loss, and would be notified at each weigh-in of their progress of weight loss or weight control. During the same time period, the non-incentive group participated in a weigh-in at the beginning of the study and eight weeks later at the end of the study. The non-incentive group was notified that they were participating in a study, however no other details of the study were discussed with these members. During the eight weeks the non-incentive group did not receive any information on weight loss and no other incentive to lose or control weight.

RESULTS

Attrition was a difficult variable to control with the incentive group. Sixteen of the 20 members of the incentive group either had 100% attendance or only missed one weigh-in. Those 16 members were used for the final results. The non-incentive group had 22 participants remain out of 30. Attrition was not a variable of concern since there were only two weigh-ins for the non-incentive group (beginning of the study and end of the study).

The average weight loss for the incentive group was a loss of 0.5 pound, while the average weight loss for the non-incentive group was a loss of 1.27 pounds. The median for the incentive group was +1.0 pound while the median for the non-incentive group was 0. The ranges for the two groups were -9 pounds to +4 pounds for the incentive group and —20 pounds to +5 pounds for the non-incentive group. When comparing the total percent of people that lost weight (at least one pound), the incentive group had more

people that lost weight (44%) than the non-incentive group (41%). The amount of weight that was most frequently lost by both groups was one pound.

DISCUSSION

The overall weight loss during this study was less than would be expected, particularly among the incentive group members. Although more people in the incentive group lost weight overall, the non-incentive group experienced a greater total of weight lost. Given that the incentive group received support material and feedback each week, one would anticipate a reinforcement effect as the program continued. In trying to explain the results one must look at whether or not the incentive effects (weekly weigh-in, support material) were powerful enough, or even desired by the study participants. In this study, incentive group participants were not given an opportunity to select the support material incentive, nor were they given the choice of either the weekly weigh-in or the support materials. It can be hypothesized that the support material was not what participants would have chosen, given the opportunity. The placement itself of the support material, in the employee mailboxes, may have been an inappropriate choice. The incentive group participants, all teachers, may already be overwhelmed with items in their mailboxes, and the support material is relegated to the bottom of the priority pile. There may also be the belief that the only good thing that comes in the mailbox at work is a paycheck. Perhaps the home may have been a better place to send the material - not only would the study participant have received it, but it also may have been read by a member of the participants family, which may provide the study participant with some support.

CONCLUSIONS

According to Chapman (1996), weight loss is one of the most difficult long-term health behaviors or health states to change. In fact, according to the National Institutes of Health (1992) long-term results from most treatments for overweight and obesity have been poor. How then to solve the dilemma of continuing one of the most popular health programs while not experiencing successful outcomes? Choosing the right incentive is crucial. The results of this study possibly show that the incentives chosen, informational literature and weekly weigh-ins, while not uncommon choices, may not have been powerful enough or appropriate to the study participants. On average, this group of participants lost less weight than would be expected from similar weight loss programs. While this cannot be adequately explained, a reevaluation of incentives for future programs may provide more successful outcomes. In his highly successful manual titled "Using Wellness Incentives" (1996)", Larry Chapman recommends considering the following guidelines for assuring the effective use of incentives:

- Clearly identify the behavioral goals of the program,
- The more highly valued the potential reward the stronger the incentive effect,
- The shorter the time between the desired behavior and the incentive reward, the stronger the incentive effect,
- The higher the possibility of receiving the reward, the stronger the incentive effect; the simpler the incentive rules, the stronger the incentive rules,
- Past group experience with incentives will shape future incentive performance,
- Incentive programs are constantly changing; they must be revisited on a regular basis to be effective.
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Weight loss programs will continue to be popular across the country in light of health education efforts, secular trends, and popular culture. Choosing the right incentive for these types of programs needs to be a key consideration for program planners to retain participants and ensure positive health outcomes.

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