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Barriers to Engagement in a Workplace Weight Management Program: A Qualitative Study

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Abstract

Purpose: To investigate (1) why some participants in a workplace weight management program were more engaged in the program, (2) specific barriers and facilitators for engagement and weight loss, and (3) suggest how workplaces may better engage employees in these programs to improve their effectiveness.

Design: Qualitative study (8 focus groups).

Setting: A large academic university and medical system.

Participants: Twenty-six (5%) of the 550 employees who participated in a weight management program as part of the Steps to Health study.

Measures: A trained moderator guided the audio-recorded focus groups.

Analysis: Transcripts were analyzed using the directed content analysis approach.

Results: Participants faced numerous barriers to engagement in workplace weight management programs, both within and outside the workplace. Participants viewed the coaches positively and reported that the coaches had a strong influence on their engagement in the program. Participants suggested increased frequency and variety of contact by coaches, on-site group exercise classes, and tailored educational materials.

Conclusion: Workplace weight management programs may be improved by being more flexible around participants' schedules and changing needs, by increasing access to affordable, convenient exercise facilities, and by implementing institutional changes that encourage healthy eating and physical activity during the workday. Employers should measure program engagement and solicit participant feedback to ensure that the programs are appropriate and delivered in an optimal manner.

Keywords

employee assistance programs, weight control, workplace, qualitative research, barriers, obesity, healthy eating, physical activity

Introduction

In United States, 73% of adult males and 66% of adult females have a body mass index (BMI) of 25 kg/m^2 or greater.[1] One approach to reach large groups of adults to decrease overweight and obesity is through intervention and prevention programs in the worksite.

In 2015, 61% of large firms (200 or more employees) and 39% of small firms offered programs to help employees lose weight.[2] However, systematic reviews of studies addressing obesity and overweight in the worksite show only modest improvements in weight status; thus more information is necessary to determine which aspects of these interventions work or do not work and why.[3-5] This is especially important as the US Office of Disease Prevention and Health Promotion has included increasing the "proportion of worksites that offer nutrition or weight management classes or counseling" as an objective of the Healthy People 2020 initiative to improve the health of all Americans.[6] In addition, in 2011, the Centers for Disease Control (CDC)'s National Institute for Occupational

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Safety and Health (NIOSH) expanded their focus from traditional occupational safety and health protection programs to programs that advance worker health and well-being with the Total Worker Health (TWH) Program. In part, the NIOSH TWH Program funds research that evaluates worksite interventions aimed at improving employee health through decreased rates of obesity.[7]

As a typical example of such workplace programs, Step Ahead was a weight gain prevention randomized controlled trial in a hospital setting in which the intervention included environmental strategies to promote physical activity and healthy eating, interpersonal support through periodic workplace contests, a social marketing campaign, workshops, newsletters, recipe books, and other print materials. The intervention had no impact on BMI; however, those with greater participation had greater BMI reduction.[8] It is not clear why some participants engaged more with the program. Other previous studies from outside the worksite have reported on barriers to weight loss and weight maintenance, including lack of motivation, cost of healthy food and participating in physical activity, lack of social support from family and friends, lack of time, physical and mental health problems, and family responsibilities.[9-12] These barriers may also interfere with one's ability to engage in a work site weight management program, even for a person motivated to change his or her weight-related behaviors.

The Steps to Health (STH) study was a randomized controlled trial to evaluate the effectiveness of 2 preexisting weight management programs in a population of obese employees.[13] The 2 programs were approximately 12 months long and focused on weight loss and weight management through physical activity and healthy eating. Participants in the weight management program received 1 in-person meeting with a coach in the first month then received monthly educational materials and 2 telephone coaching calls at months 6 and 12. Participants in the weight management plus program received a more intensive behavioral intervention with monthly coaching (in-person in months 1, 4, 8, and 12 and by phone in the other months), 2 meetings with an exercise physiologist, quarterly biometric feedback, health education materials (information pamphlets, portion plate, measuring cups, and healthy recipes), and information about and linking with other workplace wellness resources. The coach was their main contact with the program and provided not only the coaching sessions but also the health education materials and links to other resources. There were no clinical or statistical significant differences in weight loss between the 2 weight management programs; however, there were a wide range of weight change outcomes, and greater participation in the intervention arm was associated with greater weight loss.[14]

Purpose

Based on the previous research and the results from the STH study, a qualitative study was therefore developed to investigate why some employees were more engaged in the program and which specific barriers and facilitators all participants faced for program engagement and weight loss. We aimed to investigate and better understand these barriers and suggest how worksites may be able to better engage employees in these programs to improve their effectiveness.

Methods

Sample

Between 2011 and 2012, 550 employees participated in the STH study. As described in detail elsewhere, obese employees working a minimum of 20 hours per week who attended an onsite health screening and planned to stay at the worksite for 12 months, were eligible to participate in the main STH. Of the 876 employees approached, 125 did not meet inclusion criteria, 117 declined participation, and 84 others were excluded prior to randomization with a final number of 550 (63%) employees randomized.[13] At the time of consent for the main STH study, participants were invited to be added to a study repository for possible future follow-up studies. One-hundred fifty-nine participants from the repository were randomly selected for participation in one of the series of focus groups conducted to understand the factors influencing program participation. Recruitment e-mails were sent out to anyone with a valid email address ($n = 152$) and those without email address ($n = 7$) were sent a paper recruitment letter to the last known address inviting them to take part and informing them that they would be followed up by phone. Each participant received at least 1 follow-up phone call. We aimed to recruit enough participants for 6 to 8 focus groups.

We asked participants to provide feedback on what they perceived to be motivators, barriers, facilitators, support for healthy eating and physical activity, program participation, as well as recommendations to improve the program. This study was approved by the Duke University Health System institutional review board.

Design and Measures

The investigators developed a semistructured focus group discussion guide to explore 5 domains related to physical activity and healthy eating—(1) facilitators, (2) barriers, (3) motivations, (4) support, and (5) specific program feedback. The guide included open-ended questions and probes to stimulate discussion. The focus groups were conducted between November, 2015, and January, 2016. They were held in a private conference room at times convenient for the participants, including lunchtime and evenings. Prior to the start of each focus group, participants signed consent forms, and the moderator reminded participants that their participation was voluntary. Participants were not required to answer any questions and could leave at any time. Focus groups lasted approximately 1 hour each, led by a trained moderator and audio recorded. Another team member took extensive notes to ensure accuracy of transcripts. Following the focus group, participants completed a brief questionnaire

reporting their age, gender, race, years of employment at this work site, and their job title. Participants received a USD$25 gift card for their participation. The focus group data were not linked at the individual level to STH data.

Analysis

The audio recordings were transcribed by a professional transcription company. Two team members (T.D. and S.M.C.) reviewed each transcript for accuracy and corrected transcription errors based on field notes. Transcripts were uploaded into NVivo version 10 software to assist with coding and analysis. Using a directed content analysis approach, 2 team members analyzed the transcripts[15] by generating an initial list of nodes based on the 5 domains in the discussion guide. The same team members read and coded the first 2 transcripts separately then discussed together to reach consensus. The last 6 transcripts were coded simultaneously by the 2 coders, comparing codes regularly to ensure coding consistency. New constructs were added as they emerged. Emerging themes and already defined domains were discussed within the research team to synthesize the major points and recurring messages from participants.

Results

Participant Characteristics

Of the 344 participants in the STH repository, 159 were randomly selected and invited to participate in focus groups. Of the 159 participants, 20 refused participation, 52 did not reply, 51 agreed to participate, and of the 51 participants who agreed to participate, 15 did not schedule a time, 36 were scheduled to participate, and 26 participated in a focus group. There were a total of 8 focus groups, ranging in size from 2 to 5 participants. Participants had a mean age of 51.3 years (standard deviation = 9.7), 96% (n = 25) were female, and 50% (n = 13) were black. This is similar to the participants in the main STH study, where the mean age was 45 years, 83% (n = 457) were female, and 53% (n = 293) were black. Participants came from various occupational groups within the university and health system and on average had 13.8 years of institutional tenure with a range from 4 to 37 years.

Focus Groups

The focus group discussion guide was organized into these general sections—facilitators, barriers, motivations, support, and specific program feedback. Overall, the barriers were the main topic of discussion. After reviewing the transcripts, we found that discussion within some of these topics could be split into within the worksite or outside the worksite. As such, we present the information by first explaining the initial motivations to join the program, second, by exploring the barriers and facilitators within the worksite and outside the worksite that influenced program participation, third, the importance of the coach, then motivators during the program, and finally, participants' recommendations for improving program engagement.

Individual-level motivators of deciding to join the STH weight management program. All participants were able to identify their initial motivation for joining the STH weight management program. The most common motivator was to improve their health in general. Related was the annual, voluntary, and worksite Health Checks for all employees that include measurement of height and weight, total cholesterol, blood pressure, blood glucose, and a self-reported health risk assessment that includes brief measures of diet and physical activity. Based on this information, employees have the opportunity to speak with a registered nurse in the moment. Many identified these Health Checks and the information related to cholesterol and blood pressure as impetuses for joining STH as they wanted to improve their health and avoid medications. No one reported that their doctor recommended weight loss or identified their doctor as an important factor in their decision to join the program. Several participants were caring for an ailing parent or spouse during the time of the program and indicated that those experiences also pushed them to want to improve their own health and live longer. A couple of participants had already lost weight but had plateaued and needed more guidance on how to continue to lose weight. Some participants were motivated to lose weight (or continue to lose weight) so that they could engage more with their children and live to see their children grow up; "*. . . just wanting to be fit enough to just enjoy playing with them and being able to run around with them you know while they are young. And also to be able to live long enough to actually see significant things in their life have sort of weighed heavily on me . . .*" Participants also said they were tired of being overweight and uncomfortable with themselves. One participant's main motivator was the desire to fit into smaller clothes and to look good.

Barriers and facilitators influencing program engagement within the worksite. Participants identified the workplace as an important setting that could facilitate participation in the program and weight loss; however, conversely, a negative work environment was a barrier to participation and to healthy eating and physical activity. Most participants in these groups had sedentary jobs and found it difficult to be active during the workday. As one participant noted "*It is a health-care institution but yet our work does not lead us to that break that we need to stretch*" and another who commented that "*. . . there is an extremely high density of people that are so stressed out they cannot even think about going anywhere."* This lack of physical activity was compounded by the fact that work celebrations and holidays often revolved around unhealthy treats making it difficult for participants to stick to their meal plans.

For the more intensive program, weight management plus, participants were supposed to meet in-person quarterly with the coach; however, in order to do that, many would have to leave work, drive and pay to park or walk to the office, and then wait to be seen. The scheduling was difficult since the coaches'

office was only open during typical work hours and they would have to leave during the workday to attend. Similarly, the supporting phone calls were usually scheduled during typical work hours making it difficult to schedule calls and find privacy to talk while at work.

Managerial and coworker support. The program offered suggestions on how to increase activity during the workday, including setting reminders to get up and walk, taking the stairs and walking on breaks, and during lunchtime; however, not all participants were able to implement these suggestions. One participant stated that she was specifically told that she was not allowed to walk around the office as a break as it was disruptive. In contrast, other participants mentioned flexible supervisors who allowed them to use breaks for walking and to use work time to meet with their coach or complete coaching calls.

In addition to supportive managers, some participants received support from coworkers who acknowledged and encouraged their weight loss and walked with them on breaks or after work. As 1 participant shared, she and her coworker had to psyche her up to walk: "*I am going to walk to the tower. I am going to walk to the tower but it was like literally the whole time my coworker was like 'You are going to do it.' I said 'I am going to do it. Do not let me get on the bus.'*"

Worksite access to gyms. Participants felt they lacked easy access to gyms and fitness classes at their workplace. Although the worksite provided reduced pricing at a variety of local gyms, including the campus gyms, some participants were uncomfortable exercising with college students, and the prices still were not affordable for all participants. Participants went to the gym or to fitness classes when these fit conveniently into their days and were easily accessible and affordable; however, few were able to find such time and funds to engage consistently in these activities.

Barriers and facilitators outside the worksite influencing program engagement. Generally, participants felt that they could not keep consistent with the program due to competing personal and work obligations. They were eager to engage with their coaches but were embarrassed when they had not lost weight or were not eating well and/or exercising as planned. They acknowledged that their motivation varied greatly during the program, often translating into worse dietary and activity choices.

Lack of time in participants' personal life related to home/family obligations was one of the greatest barriers to healthy eating and physical activity. Participants struggled to find time to focus on their own health while caring for family members, chauffeuring children to their activities, and maintaining their households. Upon the recommendation of her STH coach, 1 participant began working out at 4:00 AM every day before her young children woke up and before she had to be at work for a 12-hour hospital shift.

Social/cultural context. Participants described family members as "food pushers" who pushed them to eat unhealthy foods or shamed them for eating healthier even though they were attempting to be kind by saying that they looked great or that they did not need to lose weight. One participant used the word "sabotage" to describe how her family negatively influenced her desire to lose weight. Family traditions around food, including what was served and how it was served, made it difficult to adjust to new ways of cooking and new types of foods. "*We eat when we are happy. We eat when we are sad. We eat when we are frustrated. You know, so there is that history, that historic side of what food means to your family that needs to be dealt with.*"

Family support and responsibilities. Participants expressed that they had to cook multiple meals because their families would not eat the same food, which added to the stress of not having time to cook. "*Yeah, I think the hardest part again was just the meals, the food, the planning for how you are going to eat and what you are going to eat and when I am going to eat and how much of it . . . "* However, some participants found the suggestion to meal plan realistic and helpful in their busy schedules. For 1 participant, meal planning became the biggest facilitator for healthy eating once she was able to fully incorporate it into her family life. This was reinforced by a worksite weekly farmer's market where she preordered affordable boxes of fresh fruits and vegetables and picked them up at work.

Participants' children supported their efforts to be more active by exercising with them and encouraging them to continue exercising. Although some spouses encouraged their behavior change, most often it was their children who took part in exercising with them. However, in anticipation and fear of family scrutinizing their actions, participants did not always share that they were trying to lose weight with their family or friends. "*You do not want to just announce 'Hey, I am going to this to do this!' because some people will say 'Are you supposed to be eating that?' Or, 'Aren't you supposed to be walking around the block again?*'"

Coaches' role and interactions with participants. Participants spoke highly of their coach's ability to encourage and support them even when they got off track. They appreciated that the coaches did not chastise or belittle them for their weight or struggles to lose weight, in contrast to other individuals in their lives. The coaches' reminders that their health mattered as much as their families' lives were helpful in prioritizing their health. Of the participants who spoke about finding solutions to overcome barriers, a little more than half were recommendations from their coach. Many appreciated simply having someone to talk with about their struggles and successes. When asked what aspects of the program did they find especially helpful, 1 participant replied that it was "*Having someone whose prime responsibility to me was to help me set goals and to try and keep me accountable to those goals*."

They expressed a desire not to disappoint the coach—"It helped me to be accountable not just for myself but to my coach

because I wanted to look good for her too, and I wanted her to be proud of me." This sense of accountability to their coaches led some to stay motivated throughout the program or to refocus closer to their meetings with their coaches. One participant stated that "I got better every time I was going to have a meeting and then because they were so far apart I would kind of slack off a bit. It is like flossing before the dentist."

Motivators to continued participation. In addition to the coaches, the success of losing weight and reducing cholesterol and blood pressure motivated participants to continue. A general sense of feeling better, more clearheaded, and less stressed encouraged some. The way clothes fit and losing inches around their waist motivated others. These successes were motivators to continued behavior change.

Participants' recommendations to enhance program engagement. In every focus group, participants had suggestions for what would have further helped them to engage in the program elements. They suggested that the coaches conduct calls and meetings outside of just the typical work hours and hold meetings in a more convenient location. They suggested that the in-person meetings with their coach be held as "walking meetings" so that they use the time with the coach for exercise. They also suggested increasing the frequency of the contacts with coaches. One common suggestion was to have free on-site group exercise classes offered at a variety of times in a convenient location. They suggested having free on-site group meetings to discuss nutrition, physical activity, and to actually work out together as a group with other participants who wanted to lose weight. In addition, they suggested chat groups to discuss their common issues and support one another. They suggested pairing up coworkers so they could have support from someone other than just the coach and potentially work out together. Participants wished that the written materials were tailored based on their previous knowledge base about food and activity as they felt they were too simple for those who have dieted before, and others felt they were not thorough enough. "*It is just the pamphlets, they are basic vague pamphlets . . . they are probably great pamphlets, but it does not go into depth, especially for somebody that has never dieted before.*"

Discussion

From the focus groups, it became apparent that the participants' engagement in the program and their weight changes were influenced by much more than enrollment in the program per se. Overall, they viewed the worksite as an important setting for their ability to engage in the STH program and implement the coaches' suggestions. Their comments point to a number of important factors that new and existing worksite programs should consider.

The focus groups emphasized that programs should be flexible to meet the diverse needs of program participants. Needs may be different for different participants but also for a given participant over time, and programs should be able to respond to such varying needs effectively and efficiently. In addition to in-person meetings, meetings could be conducted online via Skype and could include an instant messaging feature for more frequent and flexible check-ins during and outside traditional work hours. They noted that the infrequent contact often got them off track so more frequent contact may lead to better behavior change and maintenance. To increase the reach, programs could implement the participants' suggestions to pair up participants and have online chat groups.

Coaches played an integral role in the participants' progress by creating accountability; however, engagement was not consistent. In addition to the recommendations above, programs could be designed so that coaches have more flexibility to provide tailored written materials based on the participants' experiences and progress since the participants found the materials variably helpful.

When participants first entered the program, the coaches could, even more than they already did, help identify potential barriers and develop strategies to overcome these barriers so that when they arise the participants are well equipped to handle them. The culture around food was strong and a difficult societal norm to break away from while still participating in daily social activities. Another qualitative study with African American women found that those who were able to maintain weight loss viewed positive support and opposing cultural norms around food as necessary for their continued success.[16] Coaches could help prepare participants for this challenge and provide strategies for maintaining their healthy eating while still participating in social events.

Notably, there was no indication by the participants that their doctor played a role in recommending weight loss and none identified their doctor as being a factor in their decision to join the program. This finding suggests action to improve the role of the doctors in promoting the participants' change of behavior to improve their health, consistent with other recommendations.[17,18] Further, this suggests that having worksite Health Checks, like those offered at this worksite that motivated participants to join the weight management programs, could be beneficial to encourage employees to join weight management programs in the worksite.

On the institutional level, changes could be made to create a healthier environment that is supportive of healthy eating and more physical activity during the workday. Worksites could implement policies that encourage healthy eating by offering healthy options in the cafeteria and encouraging workplace parties to only serve healthy food options. A review of other worksite interventions found modest improvements in dietary intake in the general worksite population through environmental changes, such as increasing the availability and variety of healthy food, labeling food as healthy or unhealthy, and reducing the cost of healthy food.[19] These types of changes to policy and healthy food availability should be evaluated for improvements in health not only for those who are overweight and obese but also for all employees.

Consistent with the CDC and Prevention's Community Guide's recommendation to provide on-site facilities for

exercise, worksites could offer free group exercise classes onsite.[20] Participants noted the lack of convenient exercise facilities at work as a barrier to engaging in physical activity. Having a free exercise class in a safe setting with coworkers who are also overweight and/or obese could address the barriers of the expense of gyms and the discomfort of working out in front of others who are not overweight. This would be made easier if the class is offered at convenient times for the participants or at a time that is supported by their manager for them to leave work, such as an extended lunch break. Further, worksites can encourage managers to support employees using their breaks for walks so that all employees feel that they can actually take a break and use it to be physically active during the workday. The implementation and effectiveness of these changes should be evaluated within a variety of worksite settings.

The socio-ecological model for change explores how behavior change is influenced on the intrapersonal, interpersonal, institutional, community, and public policy levels, including the beliefs, norms, and information at each of these levels.[21] Within the focus groups, participants discussed not just their own personal motivations but also how their relationships with others, the worksite, and overall cultural norms within their life influenced their ability to engage in the program and lose weight. Worksite programs have the ability to influence the information and resources available, as well as the ability to influence the norms within the worksite around healthy habits.

Limitations

Only 26 participants of the original 550 who participated in the STH main study took part in this focus group study. Although slightly older, the 26 participants were similar in race and gender to those in the main study. Although there may have been additional opinions and insights among those who chose not to participate, we believe that we reached saturation of information. There may be insights that we did not capture from employees who chose not to participate in the main STH study; however, our aim was to understand which factors influenced those participants who did enroll in the main program and not why some employees chose not to participate in the main STH study at all. Additionally, many of the barriers to taking part in the main study could also have been barriers to taking part in this focus group study. In both the main STH study and in the focus group study, most participants were female so our results may not reflect the experiences of males in this setting well. The study took place in the context of a large academic university and medical system with multiple worksites and ample resources. Approaches and findings may be different in smaller companies or in different industries. The STH main study occurred between January 2011 and June 2014 and this follow-up study took place between November 2015 and January 2016, thus this time lapse may have reduced or biased the information that the participants remember.

Strengths

This study adds depth to the main STH study to provide more context around the results and the aspects that participants themselves saw as beneficial or detrimental to their engagement in the weight management programs. This study provides specific program elements that leadership in organizations may want to address to improve effectiveness of these types of programs. Although the majority of participants were female, they had various work backgrounds and life characteristics that provided different perspectives on the programs. Participants also had the opportunity to share experiences with each other.

Implications for Future Work

As employers aim to improve productivity, decrease absenteeism and health-care costs, and as there is more of a push for employers to have worksite weight management programs, it is important to recognize that simply having a program in place does not guarantee that workers will be engaged or that it will be effective at these goals. Program engagement is a crucial aspect of improving the effectiveness of programs and employers should evaluate program engagement as a measure of their effectiveness. In addition, employers should seek ongoing feedback directly from participants to ensure that the program is appropriate and being delivered in an optimal manner.

When trying to understand which aspects work in a weight management program, it is also important to measure success in ways other than just weight loss. Participants may see improvements in their health in other ways, such as improved blood pressure, better mood, or increased muscle mass, which could impact the ultimate goals of the employer; however, such potential positive outcomes must be tracked. Finally, it is important to recognize the issue of weight regain where a person gains back some or all of the weight lost. Thus, employers will need to consider the implementation of long-term weight maintenance programs that complement weight loss programs.

Conclusion

In order to improve worksite weight management programs further, it is necessary to recognize that there are a large number of potentially modifiable factors on the personal, interpersonal, and environmental level that influence whether participants are able to engage in the program. Worksites can remove or reduce barriers that employees face and create a more supportive environment for healthy eating and increased physical activity. Within weight management programs specifically, coaches can help identify potential barriers, develop strategies for overcoming these barriers, and create accountability for the participants' actions in a supportive environment through group exercise classes, tailored materials, and frequent and flexible contact.

SO WHAT?

What is already known on this topic?

Workplace weight management programs have only had modest impact on weight status; however, it is not clear why these programs do not have a greater impact. Increased engagement has been found to be associated with greater weight loss in some studies. Increasing program engagement may be an important key to make workplace weight management programs more effective.

What does this article add?

This study identifies actions that workplace weight management programs can take to reduce barriers' participants face and which may lead to increased program engagement. Participants desired more flexible communication with their coach, on-site exercise classes within the program, and more tailored information.

What are the implications for health promotion practice or research?

Workplace weight management programs should assess program engagement and solicit feedback to identify and reduce barriers to program engagement. Our findings identify key barriers' participants face within the workplace and suggest how to increase program engagement.

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