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THE PROCESS OF RESTRUCTURING AND THE TREATMENT OF OBESITY IN WOMEN

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Obesity is a prevalent health behavior that is difficult to treat because of its complexity, constraints on provider time, and negligible insurer reimbursement. In this comparative case study the authors describe two obese women's weight loss and lifestyle change efforts while enrolled in a nine-month, multidisciplinary weight loss program. The researchers conducted three semistructured interviews during six months. Eight major themes were identified: (1) support networks, (2) internalization/externalization, (3) routines, (4) relapse, (5) change in perspective, (6) reward/punishment, (7) emotional

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issues, and (8) life balance. These themes parallel Johnson's three-stage theory of cognitive restructuring. (See Johnson, 1990, "Restructuring: An Emerging Theory on the Process of Losing Weight." *Journal of Advanced Nursing, 15,* 1289–1296.) Researchers reveal that complex health problems are replete with social and psychological factors that may undermine treatment success. Understanding a client's experience while attempting behavior change is crucial for the development of interventions that address difficult and costly health behaviors.

Obesity is a complex health behavior that impacts a great number of people, is difficult to treat, and is costly to our society and health care system. Obesity is defined as a condition of excess adipose and may result in the impairment of health status (Blackburn & Kanders, 1987). In this article we describe and compare the process that two women experienced while attempting to effectuate lifestyle changes and lose weight while they were enrolled in a nine-month, multidisciplinary weight loss program.

SELECTED LITERATURE REVIEW

One-third of Americans are obese (Juczmarski, Flegal, Campbell, & Johnson, 1994; Wing, 1993) and researchers reveal that females of all races, but non-Whites in particular, have an especially high prevalence of obesity (Solomon & Manson, 1997) with peak prevalence (52%) occurring between the ages of 50 to 59 years old (Gorsky, Pamuk, Williamson, Shaffer, & Koplan, 1996). Chronic diseases associated with obesity include the following: hypertension, cardiovascular disease, dyslipidemia, diabetes, gallstones, respiratory dysfunction, joint and low back pain, and certain forms of cancer (Hubert, Feinleib, McNamara, & Castelli, 1983; Rimm et al., 1995). The economic impact of obesity has been estimated at $100 billion per year (Colditz et al., 1990; Wolf & Colditz, 1998). Thus obesity exerts a major impact on individual quality of life and is responsible for increasing health care expenditure (Blackburn & Kanders, 1987; Colditz et al., 1990; Gorsky et al., 1996; Heithoff, Cuffel, Kennedy, & Peters, 1997; Wolf & Colditz, 1998). In addition, many people who lose weight fail to maintain weight loss (Blackburn, Wilson, & Kanders, 1989; French & Jeffery, 1994).

It is well known that weight loss in obese individuals demonstrates positive health benefits such as improvements in blood pressure and insulin and lipid levels (Pollick, Abrams, Smith, Henderson, & Herbert, 1984; Resin et al., 1978). However, obesity is a chronic disease, which like most chronic disorders cannot be solved by quick fix remedies (Carek, Sherer,

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& Carson, 1997). This point is further supported by the failure of formerly popular drugs such as fenfluramine and phentermine (fen/phen) and dexfenfluramine (Redux) to effectuate long-term changes in weight loss and to do so without serious health risk (Carek et al., 1997; Wing, 1993). Obesity is considered a multifactorial condition involving genetic, cultural, socioeconomic, behavioral, and situational factors and is therefore a difficult health behavior to manage (Carek et al., 1997). To compound this factor, the treatment of obesity often frustrates practitioners because of its complexity, constraints on provider time, and negligible insurer reimbursement. Because the problem of obesity is multifactorial, it follows that its treatment deserves a multidisciplinary approach. Because of its complexity and behavioral aspects, health care provider understanding of the cognitive process clients experience is crucial to the success of any program.

Conceptual Framework

One popular method for examining the process of behavior modification is the stages of change model that describes five stages of readiness to change: precontemplation, contemplation, preparation, action, and maintenance (Prochaska, DiClemente, & Norcross, 1992). This model is appropriate and has been used for examining readiness to changes in eating patterns (Glanz et al., 1994; Greene, Rossi, Reed, Willey, & Prochaska, 1994; Sorenson, Stoddard, & Macario, 1998). However, for the purposes of our research, Johnson's (1990) theory of cognitive restructuring provided a more detailed framework for understanding the process experienced by women who attempt to make lifestyle change and lose weight.

In the nursing literature, Johnson defines restructuring as a social–psychological process that facilitates an individual's efforts to lose weight. Restructuring represents the continuous alteration of a client's life that occurs during and after weight loss. Johnson, through her study of obese women, generated a theory of restructuring, which contains three stages. Stage one: *Gaining a sense of control* involves a patient's need to be in charge of food. External restructuring of one's environment and internal restructuring of the self begins in this stage and a patient may experience setbacks before control of food is accomplished. During this stage, a client reorganizes the self and environment by seeking guidance, disciplining oneself, and creating a supportive environment.

Stage two is entitled *changing perspective*. This stage requires a change in attitude, awareness, and internal restructuring of self. The individual is self-reflective and may chose to modify her social and material environment to facilitate her lifestyle change effort. Johnson believes that a client

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must demonstrate a change in perspective to develop a new approach to food. Otherwise the weight loss effort is merely a plan to reach a desired weight instead of the development of a new approach to food.

Stage three, *integrating a new identity and/or way of life*, requires a synthesis of behavior patterns and values developed in the first two stages with established beliefs and habits. Individuals may experience not only stepwise progression through these three stages but also simultaneous and backward movement as well.

The purpose of our research was to describe the process experienced by two obese women who were participants in a multidisciplinary weight loss program. These women were selected from a larger group of participants to illustrate for the reader how differently two individuals may experience the process of weight loss. To study this phenomenon, we generated several focus questions to guide our research. The research questions were generated in part from the conceptual framework and the work of Johnson. The researchers were interested to understand what strategies the women studied used and what kind of social support networks they developed to assist them during the weight loss process. Also, inherent in Johnson's theory is change over time. Therefore, the researchers planned to follow the women in this study for five and a half months to see if change in perspective or behavior was evident as time progressed. The following research questions were generated: What strategies do patients utilize to accomplish their weight loss goals? What types of social support networks are developed by participants to assist them with exercising and eating well? Also, based on their previous work with women and weight loss efforts, the researchers had an interest in studying the motivational factors that impact success with weight loss. The researchers believed that this area of Johnson's theory was not as well developed. To address this issue, the researchers developed two other research questions that included: What factors increase or decrease patient motivation to exercise and eat healthily and comply with established exercise and healthy eating plans? Do patients utilize a system of rewards and punishment to recognize progress with weight loss?

METHODS

Participants and Setting

Eighteen female patients were recruited from the Mass General Hospital (MGH)/Charlestown Healthcare Center, which is affiliated with the MGH in Boston, Massachusetts, for participation in a nine-month weight loss program. The women were between 29 and 67 years old and weighed between 156 and 278 pounds at the start of the intervention. All partici-

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pants had a body mass index (weight in kilograms divided by height in meters squared) of at least 27 kg/m^2 or greater with or without a concomitant comorbidity such as high blood pressure or diabetes. A body mass index of 27 kg/m^2 or greater is an accepted definition for obesity (National Center for Health Statistics, 1997). In addition, all participants had experienced previous failed attempts at weight loss through conventional or usual means, which had resulted in weight cycling or morbid obesity. Participants were excluded if they demonstrated severe psychiatric illness or eating disorders such as anorexia nervosa or bulimia, or were pregnant or lactating.

At the beginning of the nine-month program (phase I), six women from the original 18 were selected for inclusion in the interview portion. These six women were chosen using a purposeful sampling technique to select individuals representative of the original 18 in terms of age range, weight, and number of years obese. Three months into the study (phase II), two women were selected from the six women interviewees to be followed more closely for the remaining six months of the study. These particular women were chosen because they represented different levels of success with effectuating behavioral change with respect to eating and exercise and provided an interesting comparison. The women included a 31-year-old, single, Caucasian businesswoman. She has been overweight for most of her adult life. The second woman was a 50-year-old, single, human service worker who described herself as Southern European. She indicated that she had been overweight since she was a child.

Intervention

The Get Fit Group (GFG) is a nine-month multidisciplinary weight loss program and an innovative blend of Eastern and Western medical tenets. The program includes nutritional counseling, exercise education, group mental health counseling, stress reduction, tai chi, and acupuncture treatments. The GFG represents a multidisciplinary approach to the treatment of obesity in women because it combines the talents of a varied group of practitioners: primary care physician, physical therapist, social worker, nutritionist, physiologist, and an acupuncturist.

The GFG program consisted of two parts: three months of weekly group therapy, education regarding normal eating and exercise habits, tai chi, and acupuncture treatments; and then six months of follow-up. The follow-up consisted of a week of group therapy, nutrition, and exercise education, which was alternated with a week of tai chi and special health topics that focused on reinforcement, reeducation, motivation, and compliance. For the entire nine months, participants met weekly for two hours.

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It has been suggested that a quick fix solution to weight loss is unsuccessful and that a more gradual and long-term approach is more effective to lose and maintain weight loss (Foreyt & Goodrick, 1991; Juczmarski et al., 1994; Pollick et al., 1984; Wing, 1993). The GFG program goals are to effect long-term behavioral change and to limit or prevent the development of diseases associated with obesity. We utilized several strategies to do this. One strategy, used to increase participant buy-in, was to incorporate participant feedback and program recommendations into the design of the GFG. Thus we attempted to tailor the program to meet individual needs. Second, a social support network was provided through the creation of a telephone buddy system. It has been reported that individuals tend to have greater success with weigh loss when they are part of a support network (Watley et al., 1994). Another strategy involved following Satter's (1987) philosophy for "normal eating." Satter's (1987) philosophy for eating and weight control espouses the tenet that clients must relinquish external control (that is, rigid diet programs) of eating and exercise. She believes that patients should trust internal regulators of hunger, appetite, and satiety, and exercise in a manner that feels comfortable and positive and from this accept the body weight that results (Satter, 1996). A component of internally regulated eating and exercise involves cognitive restructuring. Participants are not placed on a restrictive diet, which engenders feelings of deprivation that can trigger relapse (Foreyt & Goodrick, 1991), but are instructed in "normal healthy eating."

Data Collection

This investigation was completed using a qualitative, comparative case study methodology to compare and contrast the experiences of the two women. The methodological value of comparing the cases of just two women versus the entire population of participants was to focus attention on the contrast inherent within these two individual's experiences. These two women were selected because they seemed to illustrate the limits of the variable: one participant demonstrating success with her weight loss and behavior change efforts while enrolled in the GFG while the other woman explicating the opposite. Their experiences illustrate for the reader the uniqueness and complexity of the process they underwent while trying to lose weight. A case analysis allows one to search for understanding and view the richness and complexity within case examples (Stake, 1988). Prior to data collection, the women were informed of the research purpose and signed informed consent forms approved by both the MGH and Northeastern University Institutional Review Boards. Data were collected by a graduate student (CN) through semistructured interviews that were audiotaped and later transcribed. CN and her faculty

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mentor (LMH), who was also the primary investigator, developed interview questions based upon LMH's experience working with the women and drew from the work of Johnson. CN was initially trained by LMH in proper qualitative interviewing techniques. CN was provided with one-on-one training and with a source (Weiss, 1994) for how to properly conduct qualitative interviews. After each round of interviews, LMH and CN read the interview transcripts, listened to the tapes, and discussed areas within each interview that were problematic or successful. CN would then modify her interviewing strategies accordingly.

Data collection began at the conclusion of phase I of the GFG and occurred at three points during phase II, January through June of 1998. A baseline interview was conducted during late February. Following the first round of interviews, CN and LMH participated in a debriefing session to analyze the data and develop a second group of questions, administered in late April. At the conclusion of the analysis of the second interview transcripts, a similar debriefing session was held to develop a third set of interview questions, administered mid-June. In addition, a journal was kept by CN to record subjective reflections on the research process. This layered data collection approach of interviews, debriefing sessions, and journal entries served to increase internal validity and reduce bias (Maxwell, 1996).

Data Analysis

Data from interview transcripts were analyzed using the system advocated by Miles and Huberman (1994). In this system, data is analyzed immediately after collection to look for patterns and themes within the participant responses. This in turn influences subsequent data collection as interview questions may be progressively focused, which results in a successively deeper data analysis.

Following each round of interviews, copies of the transcripts were distributed to both CN and LMH who independently read and analyzed the transcripts. A predetermined coding category was not imposed on the data. During the data analysis, preliminary categories were developed inductively by the researchers who later met and shared their observations (Maxwell, 1996). CN kept a reflective journal, which served as a vehicle for recording her thoughts with respect to (1) emergent themes that surfaced during the interviews with the women, and (2) questions about the research methodology that resulted during discussions with her research mentor.

Coding categories began as descriptive and then progressed to pattern codes (Miles & Huberman, 1994). Preliminary descriptive coding categories were discussed by the student and her mentor and checked

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Table 1. Final data categorization

1. Support networks
2. Internalization versus externalization
3. Routines
4. Relapse
5. Change in perspective
6. Rewards versus punishment
7. Emotional factors
8. Life balance

for bias and accuracy. Data were inspected for areas requiring additional clarification of information. Coding categories were continually refined until they were interpreted consistently by both researchers. Early and ongoing data analysis influenced subsequent data collection allowing the researchers to progressively refine interview questions (Glaser, 1978).

The ordering of the final coding categories (see Table 1) reflects how the data naturally emerged during the analysis and served as intellectual bins for the data. Existing theory may be used to either provide a framework or to illuminate relationships between data. We examined our data inductively and then examined it in relation to Johnson's established theory to test for similarities and discrepancies (Maxwell, 1996).

RESULTS AND DISCUSSION

The results will be presented as they relate to the eight inductively generated themes. Several of the themes have been combined for the purpose of brevity and to illustrate an integration of the concepts by the women. Excerpts from interview transcripts will be furnished that illustrate the results in each section. Also, a discussion of the results and how they are supported by Johnson's theory and the work of others will follow.

Support Networks

Our results indicate that both women expressed a need for joining an organized program to support them in their initial weight loss effort. Both women indicated that external reinforcement from GFG members was useful for motivation during the beginning phases of a weight loss program:

> My team (GFG) has definitely helped me. They are so supportive, and it's wonderful just knowing you're not the only one out there.... You're like,

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> "Oh, my God, I feel those things, or I've done that, and okay, so I'm not an idiot, or I'm not completely by myself" and 'cause at certain points you always feel that if somebody looks at you and you're overweight that you have some sort of deficit or there's something wrong with you ... and it's interesting that these are very intelligent women and they're experiencing the same issues that you are ... and it makes you feel a little less stupid.

However, although one woman viewed the support provided by the GFG as important, the other indicated that she was not gaining new knowledge or support from this group. This particular woman stated that she preferred support from a more rigid program such as Weight Watchers:

> I don't know that it's [GFG] provided an emotional benefit.... I realize, again, which I've realized before, that I'm not alone in this place. That other people have problems with food and food control ... and exercise, and all that is going to relate to people's health ... but I've realized that for many years.

Over time, both women created elaborate and diverse networks to support their weight loss efforts. They drew from friends, family, health care providers, coworkers, athletic trainers, and the GFG. As the women felt more in control of their eating and exercise habits, they expressed a movement away from the support of overweight peers and a preference for thinner, healthier ones:

> It's interesting because when we first started the group [GFG], the motivators were the people within the group who were overweight women, but who were very knowledgeable about what works for them, what doesn't work for them, and that was a great resource. And now I'm using, and although I'm still using the group, I'm finding that it's the people like my trainer at my gym and my two roommates, one who teaches spinning and then one who's just a very active person, to give you alternatives for exercising. But as far as a group, per se, like I said, initially I think our group [GFG] helped. Having a voice. So you don't feel like you're the only one that's ever done, you know, eaten a bag of M&Ms ... and then felt guilty ... and it's good to hear that you're not alone.

The importance of creating support networks and a supportive environment was critical for our women. Initially, both women sought support by joining an organized group that served as a catalyst for initiating behavior change. Both women expressed the need for social support to decrease their isolation and battle with weight loss, although each expressed the need for social support to a different degree. Social support was crucial during all stages of the weight loss process and it was important that

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efforts to change were not stymied by family or friends. Family, friends, and coworkers can provide a wide range of social and emotional support that directly impacts health behaviors and outcomes (Berkman & Syme, 1979).

The theme of social support is present in all three stages of Johnson's theory. Her work supports individual need for guidance that was also present in our women's responses. According to Johnson, seeking a support network is the first step in the reorganization of one's environment. In addition, reflection on past behavior assists women with viewing differently their present situation with respect to eating. Johnson also found that support from family and friends is essential for the integration of the dieter's new identity into her existing life.

Internalization versus Externalization/Routines/Relapse

We discovered that it was extremely important for the women to create a routine or structure for both their eating and exercise habits. Because this was difficult, establishing a routine understandably resulted in occasional relapse. Once a woman truly integrated an eating or exercise routine into her life, this exemplified a movement away from an externally imposed discipline structure, such as requiring motivation or direction from a GFG leader, to internalization of the behavior change. One of our women in particular appeared to internalize her exercise routine:

> If I do vary from my routine ... if I don't get to exercise ... I get kind of irritable.... If I'm out of my routine, I feel destabilized.... I think that's the reason why I miss exercise so much 'cause that was a scheduled part of my day. So if I don't have that ... I feel like I have that void. I'm like ... I've got to get this in ... this block of time has to be in my day at some point. It was tough establishing a routine ... it was the toughest part. But once it was there, it makes it easier for me. And like I said, If I don't have it, I miss it. Whether I do it in the morning or in the afternoon or evening ... it's flexible, but I have those blocks of increments, those blocks that I need to fill.

The second woman seemed to understand that routine was important but expressed difficulty with maintaining one. She preferred an externally imposed system of guidance, such as a programmatic diet as prescribed by Weight Watchers, to motivate her to eat healthy:

> I feel like I'm more motivated when I'm in a more rigid program than GFG. I've done much better losing weight when I was in Weight Watchers for example.... I've been fairly dedicated to coming to this program, but do not feel so motivated for weight loss. Although I enjoy the content, it's not helping me to lose any weight.

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Both of our participants reported occasional difficulty with discipline and maintaining a routine for either exercise or eating. Relapse is common at this stage of restructuring as described by Johnson. Regression and relapse from a plan of action is also supported by Prochaska et al. (1992) and is part of the process of behavior change.

One of our participants in particular continued to have difficulty maintaining a routine for either her exercise or eating habits:

> I think structure is much better for me. I know what I need to eat, and I know what I'm going to eat. It's much better for me. I have the means to be compliant if I was on a slower schedule when I could think about things. But my time is really busy and limited. Sometimes I rush and before I can think, I've eaten already.

This individual understood that external structure and guidance were important for her. However, she was unable to take the time to reflect upon her actions. It appeared that this, in turn, limited her ability for internalizing her behavior and accomplishing a permanent lifestyle change as advocated by Johnson.

Change in Perspective

Both of the women recognized that the battle with obesity would be a lifetime struggle for them. One woman stated that she would always need to be conscious of food and this represented a change in thinking for her. She knew for her to be successful, efforts to eat well required a long-term commitment:

> Food I still have to be very conscious of. I think I'll always have to be very conscious of the food I eat. Just 'cause it's very easy to eat unconsciously. Just because our, I think, our society has the ready-to-eat meals ... so every effort has to be made for nutritional food.

This particular woman also indicated that once she understood the connection between feeling guilty and binge eating, she could then choose a different emotional response and that this represented a change in perspective for her:

> With [the] GFG I definitely feel like I'm a lot more conscious of what I am eating. I don't binge eat like I used to eat. It's strange because I think it's just the association with the removal of guilt for eating something. Before, I'd feel guilty about eating some jellybeans, so, of course, I'd finish. I'd proceed to finish the whole bag 'cause I felt so bad. So, like, if I eat one, I'd have to eat a hundred, and I think that's ridiculous now.

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This woman was demonstrating increasing control over her emotions and associated eating behaviors. Johnson, who indicates that awareness of eating alternatives leads to the ability to make choices, supports this conclusion.

Conversely, our second participant acknowledged that she had been overweight all her life, but she also stated that it did not bother her anymore. She had resigned herself to a lifetime of obesity but indicated being healthy was more important. This participant was particularly focused on maintaining good health in parameters such as blood pressure and cholesterol, for example:

> Everybody likes to look better and feel better. When you feel better, then you look better. I think for people that have been overweight their whole life, like me, and the people in the GFG, being overweight is not something that bothers us anymore. Although to a degree it does. But being healthy and feeling good is more important ... than looking good and maybe because that's why we tolerate our size.

Both of our participants acknowledged that obesity was a chronic disease for them and this required a change in perspective. However, the first woman indicated that her thinking about food would have to change permanently. Johnson found with her women that acceptance of being overweight as a chronic disease required a life-long commitment. In contrast, the second woman had resigned herself to being fit but fat and had given up making any substantial lifestyle changes.

Emotional Issues

Our results support Johnson in that an important step for participants is development of awareness for the reasons why they overeat. One of our women indicated that the group therapy portion was key for increasing her awareness as it exposed the emotions behind her eating:

> We covered a lot of big issues in our group therapy and it was strange 'cause some of them were almost too touchy. And once they really hit the mark, you're like, "Oh my God." Then you feel exposed and you just want to run and hide, and eat. And we could hide behind the fat ... that was the gut reaction and then you had to step back and be like, okay. The reason why you're doing this is to get beyond this step. And that helped me.

In contrast, our second woman did not seem to possess awareness, at this time, for the role overeating played in her life. Although she understood that she ate more "mindlessly" while home alone, no connection was made between her emotional issues and overeating.

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> I think it, to deal with the issues [emotional issues] is important. I don't think it affects motivation and compliance very much. I think that's another issue, that's a whole other place that you go to try to deal with your eating problems.

Our women indicated that there were emotional reasons for eating, although one did not see a connection between emotional eating and her motivation and compliance to healthy eating. We believe that individual awareness of the impact that emotions play with respect to eating behavior is critical to choose a different response. One of our participants realized that emotional issues caused her to overeat. Once she exposed that behavior in herself, she was able to take a step back and choose a different action.

Life Balance/Reward versus Punishment

Meeting one's own needs is essential for a woman to achieve her weight loss, eating, and exercise goals. We discovered that one woman considered herself to be successful with her goals. She was clearly able to find a balance between work and her own life needs. Furthermore, she was successful in establishing a routine for both eating and exercise and therefore internalizing these changes. In addition, she appropriately rewarded desired behavior with items that were nonfood related, such as a manicure, for example.

> I've decided to take charge of my life and they [health, eating, and exercise] are at the top of my list because if I don't take care of those, I've suddenly realized that the rest of it doesn't fall into place.

> This is going to remain unfinished [work] and I'll do it tomorrow because I'm going to they gym right now. Because they have classes and this aqua class. And I don't feel guilty about that 'cause I'm like, okay, I've given 10 hours. They [job] don't need the eleventh hour. I need it, the eleventh hour.

> Usually, if I accomplished a great task I would have a great dinner or wine. And this time it's more rewarding myself by going to get a facial or getting my nails done or more pampering as opposed to food-driven ... something more passive.

In contrast, the second woman, who did not consider herself to be as successful with her weight loss efforts, took little time for herself. Her life was unbalanced and heavily slated toward her job as a labor and delivery nurse. However, she indicated that she could reward herself with nonfood items:

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I do so much paperwork in my work, in my job. And I'd rather take the time to exercise than to keep a journal. And even though it's not a lot of time, even if it's 10–15 minutes a day, I'd rather exercise than write. Even though I know it could be useful.

Some days I work 12 hour days so I really can't get to the gym.

So, I'm trying to take good care of my health and watch a good television show or read a good magazine that I want to do instead of using food or spending money on rewards.

The ability to create a life balance and meet one's own needs reflects a change in perspective. This point is supported by Johnson, who indicates that traditionally women are the caregivers in families and have a tendency to put the needs of others before their own. Although the women in our study were single, they both exhibited a tendency to put the needs of others—in this case their job responsibilities—in front of their own needs. One of our women did exhibit a change in perspective, as illustrated by the quotes above. She stated that she left work at her job undone and thereby set a limit to how much time she would devote to work so that she could go to the gym and consequently take care of her need to exercise. Conversely, our second woman did not reflect a similar change in perspective. As illustrated by the quote above she indicated that she works too many hours a day to allow her to go to the gym. For Johnson, a change in perspective involves an internal restructuring of the self where the weight reduction plan represents a new lifestyle approach. We discovered that connected to a change in perspective is the creation of a routine for eating and exercise that is internalized. Also, it is crucial to establish a reward system that is nonfood related.

The researchers emphasize how important it is for health care workers to understand that a dynamic process—that includes relapse—exists for patients during a weight loss effort and that it is crucial to understand that process from the patient's perspective. Johnson provides a series of steps that an individual may progress through during a weight loss effort. However, Johnson's theory does not describe the impact that motivation and compliance and individual selection of rewards and punishment have on individual success, failure, or relapse. These issues emerged from our data, and we believe they represented a significant addition to Johnson's theory and adds to her work in this respect.

Although the researchers presented the experiences of only two women, the reader is provided with a focused illustration of their struggle with weight loss and behavioral change. In addition, the researchers also illustrated how the context, or program—in this case the GFG—can make a significant impact on certain individuals.

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Obesity is a costly health problem and the process of weight loss is complex. The development of programs that address the whole person provides opportunities for collaboration among health care providers. Descriptions of how individuals cope with complex health behaviors such as obesity may be used by health care providers in other clinical situations. More research is necessary to document the weight loss process experienced by obese women. A deeper understanding of the process may serve as a catalyst for the refinement of suitable intervention strategies.

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