Cognitive influences on Weight Status in Obesity and Overweight

Al-Sahel R[1]*, Al-Qaoud N[2]

[1]*Department of Educational Psychology, College of Education, Kuwait University, Kuwait*
[2]*Department of Nutrition, Ministry of Health, Kuwait*

*Corresponding author: Rashed Al-Sahel, Department of Educational Psychology, College of Education, Kuwait University, Kuwait, Tel: 0096599960200; E-mail: dralsahel@gmail.com

Abstract

Background: According to the theories underlying Cognitive Behavioral Therapy, thoughts about their bodies by overweight and obese people affect their ability to lose weight. Many overweight and obese people complain about their weight; however, for different reasons they either do not follow a diet program or follow one for some time but then quit.

Objectives: a.   To understand the reasons behind obesity and overweight.

b. To discover the thoughts and behaviors that lead overweight and obese people to not follow a diet program.

c. To examine the thoughts and behaviors that make overweight and obese people quit a diet program.

Methods: A cross-sectional survey was administered to a sample of 728 adults (220 male and 508 female) all of whom were overweight or obese. A structured questionnaire collected the reasons for their overweight or obesity and factors behind their failure to follow or adhere to a diet program.

Results: Of 728 participants, 71.9% believed that lack of time to exercise was the main reason for their overweight or obesity, more than 73% indicated weakness of will underlying their failure to follow a diet program, and more than 75% believed that following a diet program required patience over a long time, which was hard for them to accomplish. Moreover, results showed that many participants have negative feelings when following a diet program, such as boredom with the program (76.9%), blaming themselves (30.4%), sadness (37.8%), fatigue (56.9%), and nervousness (52.3%).

Conclusion: The results of this study emphasize that cognitive factors play an important role in overweight and obesity.

Introduction

According to the World Health Organization, 39% of women and 38% of men aged 18 and over were overweight, 15% of women and 11% of men aged 18 and over were obese, and mean body mass index (BMI) rose in both men and women from 1975 to 2014. Moreover -obesity has increased prevalence in the United States and worldwide and is often accompanied by multiple comorbidities leading to Type 2 diabetes and cardiovascular disease [1]. Many studies have shown that the rates of overweight and obesity have rapidly increased around the world over the last few decades [2]. The Centers for Disease Control reported that 34.2% of Americans over 20 are overweight, 33.8% are obese and 5.7% are extremely obese [3].

Obesity is known as a risk factor for many chronic diseases, including heart disease, diabetes, high blood pressure, stroke, and some forms of cancer [4,5,2]. In addition, obesity is a main or partial cause for many psychological disorders, namely depression and anxiety [5,6]. The worst issue here is that overweight and obese children are likely to stay obese into adulthood and more likely to develop non-communicable diseases like diabetes and cardiovascular diseases at a younger age.

Alqarni, M et al. (2016) [7], showed that the main factors causing obesity include family history, dietary pattern and habits, genetic factors, marital status, hypertension, and lack of physical activity. Moreover, people who visited fast food restaurants more than twice per week gained roughly nine to 11 pounds (four to five kilograms) more than people who visited them less than once per week [8]. These results along with other evidence, have shown that fast food is less healthy than other food [9,10]. Many other studies have shown correlations between fast food and weight gain [8].

The bad habit causing overweight and obesity, it has been shown, is eating while watching television. Many studies have associated higher television viewing hours with higher BMI [11]. In addition Proctor, et al. (2003) [12], found that children who watched television during childhood had the greatest increase in body fat over time.

For different reasons, obese people either do not follow or quit a diet program [13]. Al-Qaoud, et al. (2007) [14], found that the major reasons, obese people stop attempting to lose weight or inability to resist sweets and traditional foods and dissatisfaction with the outcome of the program. In addition Ozmen, et al. (2007) [15], found that body dissatisfaction is related to different psychological problems, such as low self-esteem and depression. The prevalence of overweight and obesity has increased dramatically in Saudi Arabia, as it has worldwide. Based on previous findings, the rate of obesity is higher in Saudi Arabia, among different age groups and occupations, with the main causal factors, including family history, dietary pattern and habits, genetic factors, marital status, hypertension, and lack of physical activity [7]. According to the World Health Organization and International Diabetes Federation, in the Gulf Area, 24% of Saudi, 23% of Kuwaiti, 22% of Bahraini, 20% of Qatari, 19% of Emirati, and 15% of the Omani people suffer obesity and diabetes [16]. This presents a crisis impacting health care in the Arab nations of the Middle East and in North and West Africa; six countries in this region

are in the top ten worldwide in terms of the prevalence of diabetes and obesity. Comprising 22 countries with a total population of 350 million people, nearly 20% of the population in Kuwait, Lebanon, Qatar, the Kingdom of Saudi Arabia, and the United Arab Emirates are diabetic [16].

Cognitive Behavioral Therapy (CBT) and Weight Loss

Cognitive behavioral therapy is based on the idea that thoughts, not external factors like people, situations, or events, cause feelings and behaviors. This theory has the benefit that people can change how they think to feel or act better, even if the situation does not change. Beck, et al. (2007) [17], indicated that how people think about food, eating, and dieting affects their behavior and feelings around weight loss. The main role of CBT is to change sabotaging thoughts to helpful ones that enable successful maintenance of a diet program. According to CBT, no matter what ideas patients have about their bodies or how much fat they have, their beliefs about their obesity and weight loss are the main factors underlying their ability to lose weight.

A study in 334 adult Kuwaitis by Serour, et al. (2007) [2], found that most overweight or obese people (63.5%) did not adhere to any type of diet program and 64.4% did not exercise regularly. While 48.2% indicated will as their main obstacle to implementing a diet program, 30.2% refused to apply a dietetic program because they disliked eating different food from the rest of their families and 39% reported not having time for diet programs. These results indicate that people's beliefs underlie their decisions to not follow a diet program.

Al-Qaoud, et al. (2007) [14], conducted a survey of 526 overweight Kuwaitis attending a medical center's clinic, finding that 47.1% wanted to reduce their weight to avoid health problems, while 26.8% wanted to improve their appearance. As main reasons for many of their failures to continue implementing diet programs, 31% indicated inability to resist sweets and traditional foods, while 24.8% indicated dissatisfaction with the diet program.

Many people see overweight and obesity as a body problem, which is not true; what people eat is less important than what they think and do. According to Castillo, et al. (2007) [18], many people stick with negative ideas, such as "you will always be fat" or "it is too hard to lose weight," that easy to seep into their core consciousness and take root. Beck, et al. (2007) [17], showed that dieters' main problem is that they do not know how to think like a thin person, as certain ways of thinking make it difficult to follow a diet and maintain weight loss.

On the other hand, environmental factors, lifestyle preferences, and the cultural environment play pivotal roles in the rising worldwide prevalence of obesity [19-22]. Moreover, the biology interacts with social, cultural, and built-environmental factors in infinite permutations and combinations, work together to cause obesity [23].

However, handling overweight and obesity is made less difficult if obese people pay more attention to their thoughts and lifestyles [17]. Unhealthy habits usually are ingrained and hard to change, especially for people with an "obese cognitive profile [24]. By changing sabotaging thoughts about body weight, it is possible to change the feelings that motivate diet and thereby to change habits of eating and activity, ultimately changing the body. Patterns of eating and physical activity are learned behaviors and can be modified; changing these patterns over the long term requires changing the environment. The succession of these steps depends on the extent to which obese people have changed their sabotaging thoughts [17]. Therefore, no matter what ideas people have about their bodies and how much fat they have, beliefs about obesity -how many people believe they can lose weight -matter of their ability to change. This study attempted to find out how these cognitive factors influence the weight status of overweight and obese people [25].

Objectives

a. To understand the reasons behind obesity and overweight.

b. To discover the thoughts and behaviors that lead overweight and obese people to not follow a diet program.

c. To examine the thoughts and behaviors that make overweight and obese people quit a diet program.

Methods

This study is part of a project fully funded by the Kuwait Foundation for the Advancement of Science in coordination with Kuwait University and with the cooperation of the Ministry of Health in Kuwait (under project number 6371). This project comprises two phases. In the first phase, a sample of 728 overweight or obese individuals was selected. The second phase was a pilot study in which 42 women were selected randomly from the Central Medical Nutrition Clinical of the Kuwaiti Ministry of Health and divided into two groups: 19 in the experimental group and 23 in the control group.

The researchers prepared a structured questionnaire concerning diet programs to collect information and data regarding the reasons, obese individuals do not adhere to diet programs. The questionnaire measured the relationships between overweight or obesity and people's thoughts and behaviors. It was divided into two main sections, the first section concerning the dietary habits and eating conditions, such as eating standing or sitting, eating alone or with a group. The second section concerning respondents thoughts behind their eating behaviors.

Validity and Stability of the questionnaire

For this research, the researchers have built a questionnaire. It consisted of (45) items in the initial form. It was presented to the six of faculty members at the Kuwait University. According to them, four items were weak, or they did not agree upon them, so these items were excluded. After verifying the validity of the questionnaire, the researchers applied it to a group of (40) individuals who were overweight and obese as a survey sample to measure the stability of the questionnaire. According to the Cronbach Alpha coefficient, it was found the total score of the questionnaire (89). The overall score results of the Cronbach Alpha, indicated that the questionnaire is in a satisfactory state of stability.

The survey was then administered to the cross-sectional sample of 728 adults (220 male and 508 female), all of who were overweight or obese. The participants were found through different institutions in Kuwait, such as health clubs, sport clubs, Kuwaiti Central Medical, nutrition clinics, and employees of various institutions.

Questions of the study

a. Is there a relationship between daily behavioral eating habits and weight gain among overweight or obese people?

b. Do people's ideas and beliefs about food and diet substantially relate to weight gain or obesity?

c. Do people's ideas and beliefs about food and diet, materially affect their failure to follow a certain diet program?

d. Do people's ideas and beliefs about food and diet significantly affect their decision not to continue a diet program?

Results and discussions

First Question: Is there a relationship between daily behavioral eating habits and weight gain among overweight or obese people? Of respondents, 64.9% prefer fast food. This result explains why respondents suffer from overweight and obesity. Fast food is not healthy, and people who eat more fast food than other food are more likely to have increased weight [8].

Respondents eat fast food for different reasons, with 73.6% eating while watching television. Prior research has shown that people who watch more television while eating gain more weight [8]. Of respondents, 55.6% eat their food while in a hurry. This result shows that one main problem in the sample is lack of attention to food during eating. Finally, 64.5% of respondents reported eating outside the home, where food is less healthy than the food at home. These results suggest that people's behavioral eating habits contribute to their weight.

Second Question: Do people's ideas and beliefs about food and diet substantially relate to weight gain or obesity? The answer is to this question show that 26% of participants believe that genetics cause overweight and obesity, and 37.2% believe that dieting methods lead to insecure results. Lack of time for exercise, 71.9% of the participants believe, led to their increased weight, and 41.1% of participants believe that social events are the reason for their extra weight. Of participants, the 48.5% eat more when they are sad or anxious, 30.2% eat more to gain the satisfaction of people close to them, and 59.5% believe that eating brings them a sense of enjoyment. These results clearly show that people's ideas and thoughts that they are carrying about food and diet stands substantially behind weight gain and obesity. This result has come in agreement with what Castillo, et al. (2007) [18] and Beck, et al. (2007) [17] indicated earlier. On the other words, people's thoughts make them believe that whatever they do to reduce their weight, their weight will not be reduced, so this belief affects their decision about following a diet program and eating behaviors negatively, so they do not follow a diet program.

Third Question: Do people's ideas and beliefs about food and diet, materially affect their failure to follow a certain diet program? Of the participants, 73.3% believe that the weakness of their will is the main reason they do not follow a diet program, 62.9% believe that dieting is a heavy and difficult duty of any person to bear, 49.9% believe that they are failures in applying a diet program, 74% believe that diet restricts their freedom to eat food they desire, 46.1% believe that most diet programs are commercial, 27.8% believe it is too difficult to change their weight no matter how much they work, and 40.4% believe that applying diet programs makes them look different from others. Clearly, participants' answers reflect their thoughts about diet programs. According to Castillo, et al. (2007) [18], many people stick with negative labels or sabotaging thoughts, such as "you will always be fat" or "it is too hard to lose weight." Because it is hard to act contrary to the thought, overweight and obese people fail with any kind of diet. Sabotaging or negative thoughts, such as "it is impossible to reduce my weight," "I know myself and I cannot control my eating," or "I am a failure in a diet," make people feel that it is difficult to change, leading them to do nothing to reduce their weight. Figure 1 explains how these sabotaging thoughts affect eating and dieting behaviors. Obese and overweight people recognize not their sabotaging thoughts, but only their feelings and their behaviors. Therefore, they respond to these thoughts as facts, and behave accordingly.
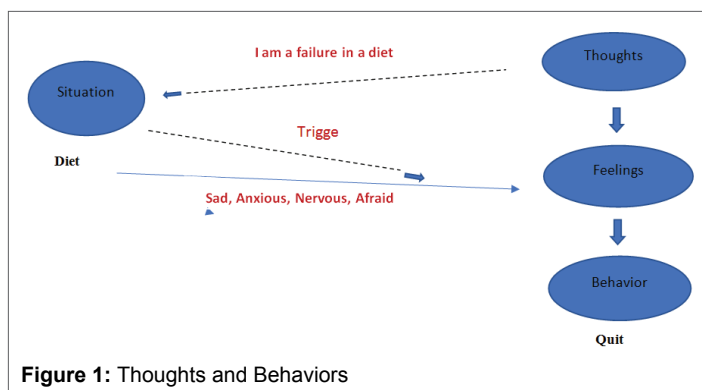
Fourth Question: Do people's ideas and beliefs about food and diet affect their decision not to continue a diet program? Many overweight and obese people begin diet programs with enthusiasm and strength, but quit after a while. Why? The results of this study indicate that their beliefs are central to their decision to quit. Of participants, 75.1% indicated that dieting programs need great patience, which is difficult for them to bear; 76.9% indicated feeling boredom during dieting that makes them stop after a while; 51.5% indicated being too busy to continue with their dieting program; 41.1% indicated that it is difficult to continue with any diet program because it makes them permanently preoccupied with their weight and 56.9% indicated that diet programs require specific times for meals, which makes it difficult to continue.

Clearly, participants' responses to these questions are related to their sabotaging thoughts, which lead them to discontinue dieting programs. For instance, 75.1% and 76.9% of participants respectively, have stuck with some sabotaging thoughts like impatience and feeling boredom that made them not continue their diet programs. Sabotaging thoughts obviously make it harder for people to reach and maintain a healthy weight. In addition, sabotaging thoughts play an important role in making obese and overweight people not follow or quit a diet program, as many other studies have also shown [2,14,17,18].

Conclusion

Obesity and overweight are complex problems. The main factors causing obesity include family history, dietary pattern and habits, genetic factors, marital status, hypertension, lack of physical activity, and sabotaging thoughts. However, the results of this study emphasize that people's thoughts and eating habits play an important role in their overweight and obesity. It may be advisable for future studies to investigate people's thoughts and habits in relation to their eating habits and diet programs, as well as to their demographic characteristics such as sex, age, social status etc. on the overweight and obesity.

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Figure 1: Thoughts and Behaviors

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