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REVIEWING THE RELATIONSHIP BETWEEN SELF-EFFICACY OF LIFE STYLE RELATED TO WEIGHT AND PERCEIVED SOCIAL SUPPORT WITH SUCCESS IN WEIGHT LOSS IN TEENS

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ABSTRACT

This study aimed to investigate the relationship between self-efficacy of lifestyle related to weight and perceived social support with success in weight loss in teens. The population of this study consist of all teens with a body mass index more than 30 thatreferred for treatment of obesity to Khatibi Nutrition and Diet Counseling Center in Kerman in October and Novemberof2014. Among these population a total of 130 individuals selected using available sampling method. Patients treated with diet and exercise obtained fromweight loss software that is determined based on the amount of overweight which is prescribed by an expert. After two months, for the second time during the months inDecember and Januarytheir weight recorded again and after the second month the factors for lifestyle self-efficacy related to weight and the Zimet et al. (1988) multi-faceted factors related to social supportfilled by them. The data analyzed using statistical indexes such as frequency,percent, average and standard deviation and statistical methods such asPearson's correlation coefficient,determination coefficient and stepwise regression. The results showed that there is a significant positive correlation between social support and weight loss and there is asignificant positive correlation between self-efficacy of lifestyle related to weight and weight loss. The results of stepwise regression showed that the two variables of perceived social support and self-efficacy can predict 54 % of the variance of success in weight loss

Key words: self-efficacy oflifestyle related to weight, Perceived social support, Success in weight loss.

INTRODUCTION

Obesity is one of the biggest problems in industrialized and developing countries andit is defined as conditions in which increased body fat and debilitating disorders threaten individuals' health. Obesity determined according to body mass index. World health organization defines obesity as BMI>30 and because of its growing declared it as aprevalence phenomenon. (Guerrier et al. [5], 2006).The Iran's ministry of health and medical education declared obesity as agrowing phenomenon as well. (Delawari, Alikhani and Aladdini 2005).

Despite the multitude of data regardingphysical variables of obesity not much is known aboutits psychological variables. Research in the field of obesity indicate that mood and anxiety disorders in obese people are more to happen (Amann [6] et al.2009; Becker [7],Margraft [8], 2001). In addition to depression and anxiety, psychological effects of obesity can include low self-respect(Johnson and Kanor. 2003) low body image and poor self-esteem (Harris [10], 1999) can be pointed out. Obesity increases an individual's susceptibility to social consequences. Social consequences of obesity include hint and annoying labels,unattractive ness and unpleasant physical condition that lead to discrimination to them which resulting in the isolation of these individuals. Obese people experiencing difficulties in recruiting and earning money (Alon, 2006).

In addition to the physical Psychological and social consequences of obesity,there are also financial consequences and high medical costs for the community for example in the United States% 9 of medical expenses used to treat obesity. Undoubtedly, the existence of many factors can impact results of the success in weight loss. Success in the treatment can be partly due to psychological factors, such as compliance with treatment recommendations (Wadden et al. 2009) or personality characters (Faith et al. 2000) self-efficacy(lened et al. [12], 2006) body image (Kanpolatet al 2005) and perceived social support (AL fang [13] and Rossner [14], 2005) ×.

Obesity follows impulsivity and poor self-respect (De Zavaan [15], 1993) and body dissatisfaction (Jackson [16], 2000) that isassociated weight loss and weight changes in management. Based on a study that carried out in Iran has been it has been found that poor self-respect is among the most important these obstacles responsible forchanges for individual lifestyle for weight loss in obese children (Amiri et al. 1388).

Self-efficacy is one ofkey variables in cognitive- social theory (Bandura, 2001). Banduradefines self-efficacy in beliefs in one's self to mobilize abilities and motivation, resources and, control over occurrences. One of the fundamental aspects of one's self efficacythat through control one can affect the consequences of their own lives.Affect the and, especially in the face of stressorshaving a sense of control over the situation is an important factor in the compatibility in different situations. Bandura believes thatincrease in sense of self efficacy converts a threatening situation to secure situation. High Self Efficacy in the field of physical activity follows high physical activity and high self-efficacy abouthealthy foods follows less consumption of fat and sugary foods (Clarke and King. 2000).

Self-Efficacy beliefs relates to healthy behaviors and short-term weight loss, but the long-term relationships is unclear. Self-efficacy through motivated to change health habits, the amount of effort spent, health compliance with and ability to recover after relapse affect health behavior(Matsuo et al., 2010).

Perceived social support in the research regarding predicting weight loss has attracted studies supports on their own. Respectively.(Forit and Godric. 1994).If weight loss experts give attention to individual weight loss variables, they can providediet and exercise plans more effectively to reduce the withdrawal of treatment and increase the effectiveness of diet in obesity (Matsuo et al. 2010).

Each of these factors that impact of changes in body weight, such as Self-efficacy and social support will be studied separately. Therefore, this research seeks to answer the question that how effective are the above factors separately and together predict success in weight loss.

RESEARCH METHODOLOGY

According to the objective this study is an applied studythat by using the cognitive psychology indexes attempts to determine the psychological factors strength in the weight loss success and in terms of data collection its a correlation type. The population of this research includes all teens that have participated in the treatment of obesity program with body mass index more than 30 inKhatibi nutrition and diet counseling center of Kerman In October and November2014. Among patients admitted to the medical center 130 individuals with available sampling methods selected. Therequirements to participate in the program was as follows:

1-Has a body mass index between 30 and 40 (obesity grade one and two.

2-Age between 11-19 years.

4 obesityisn't due to other causes.

5- Has no history in participating in otherweight and obesity treatment programs.

Participants were selected from Octoberof 2014until November for two months. They have filled questionnairesat the start of weight loss therapy and questionnaires include body satisfaction assessment and perceived social support and thus recorded. After two months again their weight recorded for the second time during the months of December and January. At the end of the second month they filled a questionnaire regarding the treatment compliance.

RESEARCH TOOLS

In this study, a variety of tools used to search the variables of interest.

To determine obesity meter and balance used for measuring height and size and for psychological variables -the perceived social support scale and multifaceted questionnaire of body-self used.

1 **weight and height**: Individual'sweight at the first meeting with measured with a scale that had a minimum of0. 1 and 150 kg at the max without footwear and clothesandtheir height too is measured while they stand upright with accuracy of 0. 1 Cm hot.The BMI is calculated by dividing weight (Kg) over square root of height (square meter).

2. **self-efficacy of lifestyle related to weight questionnair**e: this questionnaire is designed by Clark (1991) that contains 20 items about eating efficacy behavior. That expresses it subject's level confidence and confidence itself. In control and prevention from behavior eat on basis one five pointLikert spectrum (from lack of confidence, 0 up to full confidence 4). The spectrum of scores is vary from 0 up to maximum 80. This 20 items questionnaire contains of five mini scalesthat every scale contains four items. Therefore, it provides one general score and five scores related to situations that resisting food and obesity becomes hard. This possibilitiesinclude occurrence of negative behavior excitation will and resistance goods to individuals with problem increase weight and obesity. Hard and tough fluctuation.These in scale of the display are included. From: the lives of the negative (such as eating at time of sadness, anxiety, loss and fails and access to products and food) orthe time that food is easy to access such as travel, sightseeing orwhen sweet and fat foot is accessible eat for example (community push) or eating to reduce pain (such as eating at time of pain and fatigue) or eating during activities ac (such as eatingat time of study or watchingTV). (Clarke, Abrams, Nia Mora and Itone and Rossi,

1991; Clark and King. 2000).The correlation between the scores of lifestyle based on weight loss self-efficacy questionnaire with general self-efficacy scores showed that it is about %62 that is statistically significant correlation (p <0. 0001). The reliability analysis shows that overall coefficient of questionnaire and its five mini scalesare in the range of 0. 57 to 0.91 which is close to the correlation coefficient obtained by the main questionnaire in the range of 0.60 to 0.88 reported by Clark, Abrams,Nia Mora, Eaton and Rossi (1991) andbetween0. 70 to 0.90 obtained by Dayton,Martin and Brantley's (2004

3 –**Multi faceted scale of social support (Zimet et al., 1988**): this scale including 12 articles for measurement of the amount ofperceived supporting from three source of family, friends and othersthat is filled according to a 5 point scale from "full opposition "to "fully agree ". The main Cronbach'sAlphareport to be about 0.89 (Zimet et al., 1988).The alpha scale for Rostami et al. research was 0. 76, 0.89 and 0.88 (2009).

To investigate and describe the data, descriptive statistics such as frequency, percent, mean and standard deviation and inferential statistical methods such as Pearson correlation coefficient and stepwise regression were used and theSPSS-20 software was utilized for analysis.

FINDINGS

Table 1 shows the average standard deviation and range of participants in this study based onthe body mass index.

According to the data of the table 2 it can be said average body mass index of participants in the start of treatment was 34. 51.

Based on the data of this table 3 it can be said average body mass index of participants after two months of therapy is 30. 72.

As the findings in table 3 indicate, the average weight loss is5. 4 kg and most participants responded to questions of main variables of the questionnaires. On the other hand, examining the internal consistency of the variables shows that all variables have internal consistency. It is worth mentioning that the internal consistency is one of indexes for measuring reliability of the parameters of research tools.

According to the results presented in Table 4, in response to the first hypothesis is that the relationship between perceived social support and success of weight loss, at first of Pearson correlation significant test calculated (r=0. 19 = and p =0. 001). Between the variable perceived social support and weight loss a significant positive relationship exist. The square of the correlation value (R^2) showed

that perceived social support variable predicts 4% of success in weight changes.

In response to the second research hypothesis that the relationship between self-efficacy and success of weight loss, first Pearson correlation significant test determined (r = 0. 03and p <0. 0001). Between the self-efficacy and weight loss variable a significant positive relationship exist and the square of correlation value (R^2=0. 09). The efficacy variables value of 9 percent in weight-loss shows success in predicting the changes.

Then, to determine the strength of predictive power of success in weight loss by psychological variables to stepwise multiple regression model was used.

As table 5 shows, the two variables of psychological variables involved in the study perceived self-efficacy and social support could predict 54 % of weight loss successfully. In the second step body image variables could explain 26% of the change in the criterion variable.

Table 1.Mean and standard deviation of the sample in terms of body mass index

Index	Average	Standard dev.	Min	Max
BMI	41. 45	30. 56	2. 25	34. 51

Table 2.Mean and standard deviation of the sample in terms of body mass index after two months

Index	Average	Standard dev.	Min	Max
BMI	30. 72	2. 12	25. 15	38. 33

Table 3 shows the frequency, average,standard deviation and the internal consistency of the variables.

Table 3.Frequency, average, standard deviation and internal consistency of variables

Index	frequency	average	Standard dev.	internal consistency
social support	130	46. 73	7. 84	. 78
self efficacy	130	49. 92	16. 83	0. 94
weight loss	127	5. 4	2. 58	

Table 4: The correlation coefficient between the variables and weight loss

Index	R	significance level	R^2
Percived social support	0. 19	0. 001	0. 036
lifstyle selfefficacy related to weight	0. 30	0. 001	0. 09

Table 5: Stepwise multiple regression to predict success between weight losses

	.	Regression coef		Variance analysis		Model review		
Model		B	Beta	F	Significance level	R	R^2	ΔR^2
1	Fixed value Self-efficacy	-1. 21 0. 42	0. 72	138. 67	0. 001	0. 72	0. 49	0. 52
2	Fixed value Self-efficacy	0. 26 0. 37	0. 62	76. 46	0. 001	0. 74	0. 54	0. 026
	social support	-0. 07	-0. 18					

CONCLUSIONS AND DISCUSSION

This study aimed to investigate the relationship between self-efficacy,social support and body image with weight-loss success in adolescents. After reviewing the results of the first hypothesis,we

foundsignificant positive relationship between perceived social support and weight loss. Thereforein order to determine this variable in the success in predictingthe weight loss the square root of correlation was calculated. It was found that social support variables alone could predict 4% ofindividuals'success in weight loss. The result is consistent with the research findings byMarco and Rozenstock 1990; Powers,Costner and Guerin, 2008; AL fang and Rossner, 2005. Results is also consistent with other studies on the relationship between the patient and the social support by Masood and Farhadi study (2006) on AIDs patients. Social support has a significant influence of on treatment and the disease control.

Social supporting is apsychological social factor that facilitatehealth behavior. Observationsindicates that bothgeneral social support and support related to diabetes correlates to self-preserving behaviors in diabetic patients. Social support can help individual gain confidence and increase their self-esteem, and prepare them to deal with physical and psychological problems. In terms of poor social support, people show social isolation and shows sensitivity to failure and make them loose their courage and fail in the face ofsituations. Most studies have shown that a wide network of social connections and subsequent social support is an important factor to provide a positive and rewarding experience for the people. As a result, increased sense worth will follow that leads to greater consistency with the treatment compliancy. People with social support sense strong feelings of belonging and self-esteem. . It seems higher social support encourage people to follow the healthy life style. For example, people with a high social support may be work andexercise and eat good food and avoid drinking and smoking. And that positive behavioral styles have a positive effect on the body immune indexes. It seems a supporting relationship by family help them to rely on family on difficult times thus helps them deal with it better and provide extra energy in person.

The second hypothesisresults showed that there is asignificant positive relationship between self-efficacy and weight loss. In order to determine the successrate of predicting the relationship between this variable and weight loss the squared root of correlation value was calculated. It was found that the self-efficacy variable alone impact predictingsuccess variance for weight loss in this study by 9 percent. The findings of this study are consistent with the results by De Willis, Becker and Rosenstock 1986;

Tekserya. Going and Sardinia,Lehmann, 2005; Dennis and Goldberg. 1996; Forit et al., 1995; lened, et al., 2004, 2006; Vamestker et al. 2005; Wiltink,Depple.,Szczepanski, Theid [22], Beutel, 2007 Tour and Koli 1997. To explain these findings, we can say that self-efficacy is one of the most important factors in, business success and compromise orientation and placed inpositive psychology. Self-efficacy impactsbehavior selection, effort and perseverance and following goalsand determines how to deal with obstacles and challenges to. According to Bandura's theory self-efficacy has a great impact onpsychological compatibility,mental difficulties, and physical health and strategies to change behavior, guidelines and consultation. It also can be said that people with higher self-efficacy follow higher goal of the challenge and show better obligation and preference toward them. People with low self-efficacy areeasilydiscouraged by the obstacles or failure. The self-reflectiveindividual first reconsidertheir own behavior. Among the most important limitations to this study, it can be noted that in this study we analyzed variables in linear way that, makes difficulties in explanatory variables transposition in determining success in weight loss due to existence of the mediating role of some variables. The use of available sampling method is also putting limitations on the study. It is recommended to use random sampling in future researchers also according to Bio psychosocial model in the study of factors affecting health, and due to the fact that this study only examines the psychological factors affecting weight loss it is recommended to investigate social factors that impact weight loss to be studied.

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