



## Prevalence of Eating Problems and its Relationship with Family Nutrition Pattern in Preschool Children of Bandar Abbas

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**ABSTRACT:** The present research was carried out in order to study the rate of outbreak of eating disorders and their relationship with the model of family feeding in preschool children in Bandar-Abbas City. A descriptive correlation method was employed in this research. The statistical society was the total number of preschool children in Bandar-Abbas County, including 4370 children, in 2011 to 2012 academic year; 222 of which were studied by the method of random cluster sampling. Tools of data collection were the questionnaires of family feeding model and eating disorders which were distributed among the research samples after surveying the validity and reliability of them. Results revealed that the selection-based eating disorder is more prevalent among preschool children and the model of family feeding and its components are significantly associated with children's eating disorders.

**Key words:** Eating Disorders, Model of Feeding, Preschool Children

### INTRODUCTION

Etiological studies of children's eating disorders like other behavioral, psychological and emotional disorders are equally important. Also, identifying the rate of outbreak is of utmost importance. Although various individual and environmental reasons such as family factors contribute to the emergence of such problems, it is necessary to find, in the first stage of identifying the outbreak rate and in subsequent steps, the contributory factors to them. Thus, given the importance of this subject on one hand and the worth of research findings on the other hand (Chatoor, 1989, 2001; Crist, 2001; Graber, 1994), the abnormal eating attitudes and behaviors in people without any apparent clinical disorder should be evaluated and studied. Many studies have placed a particular emphasis on the effect of various factors such as sex, race, socio-cultural factors, social class, anxiety and depression on these disorders. Feeding is now considered as of important dimensions of public health since it provides the required physical conditions in the light of the growth of an organism and human's dynamic and functionality in his/her social life. Today, fatness has become an important and challenging subject and the outbreak of obesity is increasingly rising among children and teenagers.

Change of diet and eating habits and the reduction of mobility are said to be the main reasons of the rise in obesity rate (Hyodson, 2008). For people, eating has deep individual and cultural implications revealing that this behavior is strongly influenced by cognitive environmental, biological and emotional variables (Babaei, 2006). Environmental factors, which have effect on eating behavior, include daytime, tension and the taste and appearance of food. Also, eating is a social

opportunity and if it is an important behavior in a group, group pressure may be a sign of stronger eating than individual physiology. In children's life, eating is regarded as an important behavior and they prefer foods eaten by their liked individuals (Rio, translated by Seyed Mohammadi, 2006). One issue in the way of studying the eating disorders is the existing unusual insights into eating. Eating is a mental involvement including unusual viewpoints and insights into the current and ideal weight, mental image of body, feeding behaviors and their metabolism and using particular ways of food exclusion from body. Bowlby (1980) believes that disorders happening in the primary stages of life may have influence on information processing in subsequent stages. This consequently would make individuals vulnerable to the threat of being left alone and other threats that may biologically hurt people's lives. By reinforcing the cognitive substructures involving in the etiology of eating disorders, the concept of this disorder has been significantly developed. Eating disorders in children would bring about many psychological disorders and many causes have been identified for them. One of them is the parents' model of feeding.

Since many women having school-age children work outside of home, children may have one or two course meals at nursing homes, day care centers or schools. In such complexes, healthy meals should be available for children in a healthy and secured place to be assured of children's growth and health (Abbasali Zadfahangi, 2010). In a research into girl students in Kerman City, Seyyedi et al. (2004) reported the eating disorders as being 8.6 percent, 3.8 and 2.1 percents of which relate respectively to loss of appetite and increased

appetite when being nervous and 1.7 percent refers to the third type of eating disorders. Regarding the importance of preschool problems and the role of determining factors on one hand and based on the previous research results on the other hand, this research reviews the epidemic rate of eating disorders and their relationship with the model of family feeding.

## MATERIALS AND METHODS

A descriptive-correlation method was employed and the statistical society was the total number of preschool children in Bandar-Abbas County, including 4370 children, 222 of which were children from four preschool centers in region one and from three centers in region two. They were chosen by the method of random cluster sampling. Sample size, meanwhile, was determined based on Krejcie and Morgan's table. To collect the required data, two questionnaires of family feeding model and eating disorders were used. The researcher was obliged to develop a suitable tool for evaluating the family feeding model and eating disorders, given that there were limited measuring tools. To identify the eating related problems in children according to DSM-IV-TR, forty eight questions were designed which were then decreased to forty five following a factor analysis. There was a three value scale (0=never, 1=sometime, 2=often) for this questionnaire. Additionally, forty eight questions were designed for the scale of family feeding model which were then decreased to forty five after a factor analysis. Following the determination of nominal validity, the questionnaire validity was determined based on comments offered by 15 clinical psychologists. The process of factor analysis was then carried out on completed questionnaires. Extracting factors relating to eating disorders and the

model of family feeding, the final analysis was carried out relying on the research hypotheses. It should be noted that the reliability coefficients and the related factors have been presented in tables 1 and 2.

In the present research, descriptive statistics, including standard deviation, Pearson correlation coefficient and stepwise multiple regression analysis were employed in order to analyze the data. The data analysis has also been done by SPSS.

## RESULTS

This research is initially aimed at studying the extent of eating disorders among preschool children. To fulfill this, a descriptive method was used. The results have been displayed in tables 3 to 5.

As shown in table 3, selection based eating has the highest (weight) mean, 0.81. The lowest mean belongs to the loss of appetite when being nervous, 0.53. Finally, it should be noted that all variables relating to eating disorders have low mean (regarding the average value of 1) showing the normality of these children.

The Variable of limited eating and fear of eating with the frequency of 39 children and the percentage of 17.6 has the highest frequency. The lowest frequency belongs to the variable of decrease in appetite with the number of 25 children and the percentage of 11.3. The second goal of this research is studying how eating disorders in preschool children are associated with the model of family feeding. In this case, the Pearson correlation coefficient method was used and the results have been given in table 5.

**Table 1.** Reliability Coefficients of Eating Disorders Questionnaire

Factors	Alpha Coefficient
Decreased Appetite and Loss of Appetite When Being Nervous	0.72
Increased Appetite and Increase in Appetite When Being Nervous	0.65
Selection-Based Eating	0.69
Limited Eating and Eating Fear	0.71
Total Score of Eating Disorders	0.71

**Table 2.** Reliability Coefficients of the Model of Family Eating

Factors	Alpha Coefficient
Family's Negative Eating Habits	0.73
Children's Negative Eating Habits	0.66
Family's Positive Eating Habits	0.73

**Table 3.** Statistical Indices of Eating Disorder Variable

Variable	Mean	Wight Mean	Standard Deviation	Minimum	Maximum
Decrease in Appetite	5	0.53	3.33	0	18
Increase in Appetite	6	0.62	2.83	1	15
Selection-Based Eating	6	0.81	2.71	0	13
Limited Eating and Eating Fear	10	0.61	4.84	0	21
Eating Disorders	28	0.63	9.52	8	56

**Table 4.** Frequency Distribution of Eating Disorders

Variable	Grouping	Frequency	Frequency Percentage
Decrease in Appetite	No Disorder	197	88.7
	With Disorder	25	11.3
Increase in Appetite	No Disorder	191	86
	With Disorder	31	14
Selection-Based Eating	No Disorder	191	86
	With Disorder	31	14
Limited Eating and Fear of Eating	No Disorder	183	82.4
	With Disorder	39	17.6
Eating Disorder	No Disorder	187	84.2
	With Disorder	35	15.8

**Table 5.** Pearson's Correlation Test to Specify the Relationship between Eating Disorders and the Model of Family Feeding

Variable		Model of Feeding		
		Family's Negative Eating Habits	Children's Negative Eating Habits	Family's Positive Eating Habits
Eating Disorders	Decrease in Appetite	0.10	0.10	0.02
	Increase in Appetite	0.07	0.05	-0.07
	Selection-Based Eating	0.13	-0.17*	-0.17*
	Limited Eating and Eating Fear	0.17*	-0.35**	-0.24**
	Eating Disorders	-0.19**	-0.21**	0.18*

P\*: 0.01 P\*\*: 0.05

## DISCUSSION

Considering the information presented in tables 4 and 5, it can be concluded that the negative feeding habits variable is positively and significantly associated with the variable of limited eating and eating fear. Also, there is a negative and significant correlation between children's feeding habits with the variables of selection-based eating, limited eating – eating fear – and eating disorders. Such correlation also exists between parents' positive feeding habits with the variables of selection-based eating, limited eating – eating fear – and eating disorders. Findings are in agreement with the research results obtained by Rio's (2007), Abtahi et al. (2005) and Bahrami Nezhad et al. (2006).

On the whole, there are various effective reasons resulting in the emergence of eating problems and disorders. Children usually prefer to have what their best loved individuals eat. In fact, they model themselves on their family. Since the model of family feeding is what critically concerns families, the method of developing a correct feeding model should be taught at lower ages. These trainings should be carried out through the extensive informing practices so that people are encouraged to optimally change their life style. This plays an effective role in children's physical and psychic health.

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