THE FACTORS MAKING FIRST- YEAR UNIVERSITY STUDENTS VULNERABLE TO PATHOLOGICAL EATING ATTITUDES

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ABSTRACT

THE FACTORS MAKING FIRST- YEAR UNIVERSITY STUDENTS VULNERABLE TO PATHOLOGICAL EATING ATTITUDES

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The purpose of the present study was to find out variables that make first year university students vulnerable to eating disorders. Pathological eating attitudes' association with height and weight, family meal patterns, perceived social support, family values and socio-demographic variables were assessed. 299 first year university students from the Department of Basic English at Middle East Technical University participated in the study. Five assessment devices- Demographic data form, the Eating Attitude Test (EAT– 40), Family Eating Attitude and Behavior Subscales, the Multidimensional Scale of Perceived Social Support, and the Traditional Family Values Questionnaire were administered. ANOVAs were conducted to assess differences on eating attitudes between participants in terms of gender, with whom they lived, perceived family type, socio economic status, body mass index and weight satisfaction. Stepwise multiple regressions were conducted to appraise to what extent perceived social support, family meal patterns, traditional family values and demographic variables predicted eating attitudes of first year students. The participants who perceived their family as traditional reported more pathological eating attitudes in dieting, preoccupation with food, social pressure on weight factor. Regression analyses for female participants revealed that dieting, parents occupation, body mass index (current / desired) perceived social support-family, relationships with family and kin, and perceived family income were associated with pathological eating attitudes. Regression analyses for males revealed that dieting, father occupation, desired body mass index and relationships with

family and kin were associated with pathological eating attitudes. These findings were discussed with reference to relevant literature. Future research topics were suggested and therapeutic implications of the study were discussed.

Keywords: Pathological Eating Attitudes, Traditional Family, Family Meal Patterns, Perceived Social Support.

ÖZ

İLK YIL ÜNİVERSİTE ÖĞRENCİLERİNİ PATALOJİK YEME TUTUMLARINA YATKIN YAPAN FAKTÖRLER

Mançe, Öykü
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Bu çalışmanın amacı, ilk yıl üniversite öğrencilerini yeme bozukluğuna yatkın yapan değişkenleri araştırmaktır. Bu amaçla, patalojik yeme tutumlarının boy ve kilo değişkenleri, aile yeme örüntüsü, algılanan sosyal destek, aile değerleri ve sosyo-demografik değişkenleri ile ilişkisi değerlendirmektir. Orta Doğu Teknik Üniversitesi Temel İngilizce Bölümünden 299 öğrenci bu çalışmaya katılmıştır. Yeme Tutum Testi, Aile Yeme Tutum ve Davranış Ölçeği alt ölçekleri, Çok Boyutlu Algılanan Sosyal Destek Ölçeği, Geleneksel Aile Değerleri Ölçeği, demografik bilgi formu kullanılmıştır. Kişinin cinsiyeti, kiminle yaşadığı, ailesini algılayış şekli, ailesinin sosyo-ekonomik durumu, beden kitle endeksi ve kilo memnuniyeti açısından yeme tutum farklılıklarını değerlendirmek amacıyla varyans analizleri uygulanmıştır.Adım adım regresyon analizi ile hazırlık öğrencilerinin yeme davranışlarının, algılanan sosyal destek, aile yeme örüntüsü, geleneksel aile değerleri ile demografik değişkenler tarafından ne kadar yordandığı araştırılmıştır. Kişilerden ailesini geleneksel olarak algılayanların diyet , yeme ile meşgul olma ve kiloya yönelik sosyal baskı davranışlarını daha fazla gösterdikleri bulunmuştur. Regresyon analizi sonucunda, kızlarda patalojik yeme tutumunu belirleyen değişkenler diyet yapma, anne / babanın meslek durumu, beden-kitle endeksi (sahip olunan ve olması istenen), aileden algılanan sosyal destek, aile ve akraba ilişkileri, ve algılanan aile geliri olarak bulunmuştur. Erkeklerde ise diyet yapma, babanın meslek durumu, olması istenen beden kitle endeksi, ve aile ve akraba ilişkileri değişken olarak patolojik

yeme tutumu ile ilişkili bulunmuştur. Bu sonuçlar literatür desteğiyle tartışılmış, ileride yapılabilecek araştırma konuları önerilmiş ve bu çalışmanın sonuçlarının terapi sürecine katkıları tartışılmıştır.
Anahtar Kelimeler: Patolojik Yeme Tutumları, Geleneksel Aile, Aile Yeme Örüntüsü, Algılanan Sosyal Destek.

To My Parents and Yarın …

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1. INTRODUCTION

"A. was 17 years old and had just entered university. She was from a family with high socio-economic status. She started to live in the dormitory. It was not easy for her to adapt to her new accommodation, meals, cleaning… Her family was not as supportive as she needed or expected. Rarely, she was in contact with them. Her father's coercive attitudes had been disturbing her for a long time. To be separate from her family and to have her own control over her life made her feel strong. She chose to refuse eating not only to control her life on her own but also sadden her parents. She could not complete her first year in the university because she developed an eating disorder."

"S. was 18 years old, and had just entered university. She came from small city. Her family had middle socio-economic status. She started to live in the dormitory. She was quite happy to live in a big city because of its colorful places like shopping centers. She started to diet in an uncontrolled way. Her desire was to wear feminine trendy clothes in small sizes. Her parents were quite interested in their daughter. They presented all funds for their daughter's desires despite their difficulty in their budget. She did not care about them. In the end, she continued to lose weight not until reaching her goal, her desired weight, but until having physical problem with her health."

These two cases were observed in the dormitory of Middle East Technical University in 2000. They seem to have few similar things in their lives. However they are both first year university students and they both exhibit pathological eating attitudes. Thus, beginning university may trigger pathological eating. The present study aims to answer the following question: "Which factors made first year university students vulnerable to pathological eating attitudes in their first year of the university?"

1. Eating Disorders

Eating disorders are among the most deteriorating psychiatric problems that affect young women (Klein & Walsh, 2003). Many risk factors contribute to the

development of eating disorders and make people vulnerable to eating problems. For instance, certain environments or cultural milieu trigger development of eating disorders (Striegel-Moore et al., 1986). One of the settings is college (Compass et al., 1986, cited in Vohs et al., 1999) and women at college are one of the groups which are at high risk of developing eating disorders (Herrin, 1999).

During university years, students may be eating out more often than ever before especially if they live far away from home. As a result of being away from home, they tend to consume more (Hertzler & Bruce, 2002). Especially, first year female university students usually have problems with unstructured eating settings in campus and often they are likely to gain weight (Bowen-Woodward & Levitz, 1989). It is not easy to find familiar foods or have regular meals in the campus life. Moreover, difficulties related to college adjustment were found to be associated with problematic eating behaviors in the first year female university students (VanLone & Kalodner, 2000; cited in VanLone, 2002).

First year female university students' vulnerability to eating disorders was common in Turkey, as well. Among first year university students, females showed pathological eating attitudes and their rate was higher than male students' (Zabunoğlu, 1999; Alpargun, 1995).

During the first year at college, almost 80% of women diet and 50 % of them binge (Striegel- Moore et al., 1990, cited in Vohs et al., 1999). A comparison of same students' eating disorder symptoms with related behavior both in the senior year of high school and in the first year of a college revealed that there were no differences on eating attitudes between the two groups (Vohs et al., 1999).

University students come across with some problems that might result in the development of psychological problems during their university lives. Personality disorders and eating disorders are more common concerns that make university students apply to counseling centers (Robbins et al., 1985). Eating concerns, which include food avoidance, body image issues, and binge eating was one of the shared factors in both clinical and non-clinical university population in addition to other problems such as academic concerns, relationship problems, adjustment problems, depression, romantic relationship, and sexual issues (Baker et al., 2006).

As a result, eating disorders are common psychological problems in the university setting, and especially first year students are at risk of developing eating problems.

1.1. DSM-IV Criteria of Eating Disorders

According to DSM-IV (APA, 1994), eating disorders are categorized in three groups:

Anorexia nervosa, bulimia nervosa and eating disorder not otherwise specified.

Criteria for Anorexia Nervosa:

a. Refusal to maintain body weight at or above a minimally normal weight for age and height (e.g. weight loss leading to maintenance of body weight less than 85% of that expected; or failure to make expected weight gain during period of growth, leading to body weight less than 85% of that expected)
b. Intense fear of gaining weight or becoming fat, even though underweight.
c. Disturbance in the way in which one's weight or shape is experienced, undue influence of body weight or shape on self-evaluation or denial of the seriousness of the current low body weight.
d. In postmenarcheal females, amenorrhea, that is the absence of at least three consecutive menstrual cycles. (A woman is considered to have amenorrhea if her periods occur only following hormone, e.g. estrogen administration.)

Two clinical subtypes of Anorexia nervosa:

Restricting type: During the current episode, the person has not regularly engaged in binge eating or purging behavior (i.e. self-induced vomiting or the misuse of laxatives, diuretics, or enemas).

Binge-eating/ purging type: During the current episode, the person has regularly engaged in binge eating or purging behavior (i.e. self-induced vomiting or the misuse of laxatives, diuretics, or enemas).

Prevalence rate of full syndrome of Anorexia Nervosa is approximately 0.5 % in America. Partial forms of syndrome are seen but these people can not be diagnosed with Anorexia nervosa because they do not meet Anorexia Nervosa criteria exactly (Klein & Walsh, 2003).

Criteria for Bulimia Nervosa, DSM-IV (APA, 1994)

a. Recurrent episodes of binge eating. An episode of binge eating is characterized by
    (1) eating in a discrete period of time (e.g. within any 2-hour period), an amount of food that is definitely larger than most people would eat during a similar time period and under similar circumstances.
    (2) a sense of lack of control over eating during the episode (e.g., a feeling that one cannot stop eating or control how much one is eating) .
b. Recurrent inappropriate compensatory behavior in order to prevent weight gain, such as self-induced vomiting; misuse of laxatives, diuretics, enemas, or other medications; fasting; or excessive exercise.
c. The binge eating and inappropriate compensatory behaviors both occur, on average, at least twice a week for three months.
d. Self- evaluation is unduly influenced by body shape and weight.
e. The disturbance does not occur exclusively during episodes of Anorexia Nervosa.

Two clinical subtypes of Bulimia nervosa:

Purging Type: During the current episode of bulimia nervosa, the person has regularly engaged in self-induced vomiting or the misuse of laxatives, diuretics, or enemas.

Nonpurging type: During the current episode of bulimia nervosa, the person had used other inappropriate compensatory behaviors, such as fasting or excessive exercise, but has not regularly engaged in self-induced vomiting or the misuse of laxatives, diuretics, or enemas.

Bulimia nervosa is more prevalent than anorexia nervosa, almost 1-3 % of women in America (Kendler et al., 1991; Garfinkel et al., 1995; cited in Klein & Walsh, 2003). Bulimia nervosa prevalence rate like anorexia nervosa is higher in Western cultures where thinness is overvalued and food is abundant with diverse varieties (Klein & Walsh, 2003).

Patients who have problems related to appetite, eating, and weight, but who do not meet criteria for Anorexia Nervosa or Bulimia Nervosa are categorized as Eating Disorder Not Otherwise Specified (Morrison, 1995, p. 394).

DSM-IV Criteria for Eating Disorder Not Otherwise Specified (APA, 1994):

1. For females, all of the criteria for anorexia nervosa are met except that the individual has regular menses.
2. All of the criteria for anorexia nervosa are met except that, despite significant weight loss, the individuals' current weight is in the normal range.
3. All of the criteria for bulimia nervosa are met except that the binge eating and inappropriate compensatory mechanisms occur at a frequency of less than twice a week or for a duration of less than 3 months.
4. The regular use of inappropriate compensatory behaviors by an individual of normal body weight after eating small amounts of food (e.g., self-induced vomiting after the consumption of two cookies).
5. Repeatedly chewing and spitting out, but not swallowing, large amounts of food.
6. Binge-eating disorder: recurrent episodes of binge eating in the absence of the regular use of inappropriate behaviors characteristic of bulimia nervosa.

1.2. Etiology of Eating Disorders

Literature review on eating disorders shows that there are many factors that make people vulnerable to eating disorders. In other words, eating disorders' etiology is composed of various factors.

Multi-factorial model of eating disorders identifies many factors' potency and groups them (Garner & Garfinkel, 1980, cited in Hetherington et al., 2000). According to this model, genetic and psychological characteristics of the individual (body-mass-index, perfectionism, anxiety, etc.) and the family (family psychopathology, communication, etc.) are the factors that predispose person to have an eating disorder. The decision to diet is activated by these dynamics. Afterward, any kind of stressors in the life would precipitate the development of the disorder. Physiological and psychological consequences of the process function as perpetuating factors. Briefly, individual decides to diet because of predisposing

factors. Then, efforts to diet and weight changes are maintained by life stressors as precipitators. Lastly, severe dietary restrictions are triggered with the effect of perpetuating factors, therefore different types of eating disorders come into view. This vicious cycle is called socio-cultural milieu (Hetherington et al., 2000).

1.2. General Risk Factors

Eating disorders are the result of a process composing of biological, familial, environmental, psychological, developmental, and socio-cultural factors (Mussell et al., 2000).

In the series case studies of Fairburn and colleagues (1997, 1998, 1999), 47 risk factors were defined: personal vulnerability factors (childhood psychopathology, childhood obesity, personality traits), familial and interpersonal factors (parental psychopathology, family interaction patterns, quality of parenting, family demographic characteristics, family eating patterns, social pressures about weight and shape, peer relationships, having a close friend), and adverse life events (childhood physical and sexual abuse) (cited in Striegel- Moore & Cachelin, 2001).

Socio-cultural factors are also proposed in the etiology of eating disorders. In this view, preoccupation with weight and shape are primarily among socio-cultural factors (Striegel-Moore et al., 1986). The industrial culture contributes to the development of eating disorders in the community because it emphasizes beauty and conveys the message that beauty is the basic feature of femininity and one of the primary factors of success (Dolan, 1991; McCarthy, 1990; Pate, Pumariega, Hester, & Garner, 1992; Prince, 1985 cited in Mussell et al., 2000). In addition, the society creates an ideal woman prototype which consists of beauty, successful career and good social relations. This ideal woman prototype puts girls at risk during their identity development. Physical acceptance criteria of the prototype may make them vulnerable to eating disorders. Peer pressure related to appearance and the reinforcing messages of the media on ideal body support this general approach. As a result, society prepares a basis for body dissatisfaction, weight concerns, drive for thinness and dieting (Mussell et al., 2000).

Some biological, socio-cultural and interpersonal factors as body dissatisfaction risk factors were taken into consideration in a longitudinal study of adolescent girls. Findings confirmed that elevated body mass index, social support deficiency, perceived pressure to be thin, and thin ideal internalization had potent on body dissatisfaction as significant predictors. In this study, social pressure to be thin was the most important predictor of body dissatisfaction (Stice and Whitenton, 2002).

Dysfunctional cognition, negative and positive affect (mood, esteem), body attitudes (body shape, body part satisfaction, attractiveness, social desirability) as psychosocial factors related with pathological eating attitudes were studied with a sample of undergraduate women. Sample group was categorized into three groups (symptomatic, asymptomatic or eating-disordered). The reason to categorize sample was to understand each factor's effect on pathological process. The results revealed that the participants in the eating disordered group had more pathological eating behavior (bulimia, weight fluctuation, and dietary restraint), more dysfunctional cognition (approval by others, dichotomous thinking, weight and approval…), and more dysfunctional body image (satisfaction with face, concern with body shape). Symptomatic group and then asymptomatic group followed the eating disordered group. However, there was no significant difference between disordered group and symptomatic group on some affective variables (sad, anxious, guilty, esteem…), some cognition (catastrophizing, vulnerability) and some body factors (body satisfaction, importance of being attractive and physically fit) (Cohen & Petrie, 2005).

1.3.1. Culture

Culture, as a term, means "the belief systems and value orientations that influence customs, norms practices and social institutions, including psychological processes (language, caretaking practices, media, educational systems) and organizations (media, educational systems" (American Psychological Association, 2003, p.380; cited in Warren, 2003). Like in all psychiatric disorders, it is hard to claim only one risk factor in eating disorders. Culture is also accepted as one of the

risk factors (Garfinkel & Garner, 1982) and has a potency to contribute to the development of eating problems for people living in it. In this section, ethnicity, Western and non-Western culture, and acculturation are assessed as cultural risk factors for eating disorders.

"Ethnicity" was one of the cultural risk factors. All risk factors for eating disorders were categorized with specific labels (fixed marker, variable risk factor, variable marker, causal risk factor) in terms of their qualities. According to this, ethnicity was labeled as "fixed marker", meaning that it cannot be changed or changed spontaneously (Jacobi et al., 2004, p.3). Until this time, studies on ethnicity claimed that Caucasian females were mainly affected ethnic group from eating disorders when compared to others (Striegel-Moore & Smolak, 1996; cited in Jacobi et al., 2004). However, it was found that Hispanics were also as affected as Caucasians and Native Americans were much more affected than Caucasians (Crago, Shisslak, & Estes, 1996; cited in Jacobi et al., 2004). Additionally, Blacks and Asians had less eating disorder symptoms than Caucasians (Le Grange, Telch, & Tibbs, 1998; Szabo & Hollands, 1997; cited in Jacobi et al., 2004). The interesting point is that, although weight concern and body dissatisfaction among Blacks were lower than other ethnic groups, they tended to show binge eating behavior more than others (Striegel-Moore et al., 2000; cited in Jacobi et al., 2004).

Prevalence of eating disorders has been increasing among Western young females. This occurrence is explained with the desire for slimness which is founded by culture. Western society emphasizes the usual body shape which is slim and shapely body for women, slender and muscular body for men (Conner at al., 2004). For instance, Croatia is a transient country that is still adapting to western values. It was found that girls from Croatia are more satisfied with their bodies as compared to girls from the United Kingdom and the United States (Bulian & Becirevic, 2005). However, it is wrong to underestimate changed weight values and increasing rate of obesity among children and young people across the world (Society of Actuaries, 1970; Garner et al., 1980; Gortmaker et al., 1987; cited in Lee, 1993).

Although the prevalence of eating disorders was more in Western countries, eating disorder rate was also increasing in non-western countries (Makino et al.,

2004). One reason would be that modern industrial society or Western culture enforced female beauty standards which make social pressure on people. Furthermore, Western media exposure with globalization would make nonwestern countries vulnerable to eating disorders (Huon et al., 2002; cited in Makino et al., 2004). Additionally, industrialization would be a risk factor for eating problems. Females, who are living in industrialized or developing societies, come across with plenty of diverse food. Thinness as a mean of attractiveness is encouraged through fashion industry. As a result, this environment would make females more vulnerable to eating disorders (Walsh & Devlin, 1998).

Three countries (USA, Italy and England) were compared to assess whether both Europe and North America share similar problems on body image disturbance because in general, these countries are all categorized as "Western Culture" (Triandis, 1994; cited in Mautner et al., 2000). The results showed that there was no difference between these countries in terms of body image disturbance relationship with the defined criteria (teasing history, age of pubertal onset, societal pressures to be thin) except appearance comparison. However, appearance comparison as a factor was not taken into consideration because of minimal difference. Lack of difference among countries may be the result of the characteristics of the sample group; all the participants were university students (Mautner et al., 2000).

"Objectification theory" proposes that female body is objectified sexually in Western culture. Women in this culture may objectify their own bodies on the basis of the perspectives and judgments of the society. This self objectification may lead to eating disorders, shame about the body or anxiety related with the body (Fredrickson, Roberts, Noll, Quinn, & Twenge, 1998; McKinley & Hyde, 1996; Noll & Fredrickson, 1998; Parsons & Betz, 2001; Tiggemann & Slater, 2001; cited in Calogero, 2004).

In literature, there are fewer studies on non-Western cultures than on the Western culture. However, many Asian countries went through the economic changes and people in these countries are also exposed to advertisements that propagandize the Western norms and behavior style. In Lee's study (1993), the aim was to see the profile of eating attitudes and behavior in China. Results showed that

the Chinese sample desired to be slim but dieting was not common and the eating disorder rate was significantly less than in Western culture. To explain these consequences, Lee proposed a model that involved three main factors (body mass index, culture desire for slimness, and family psychopathology). Due to this model, maximum risk for eating disorders, especially bulimia nervosa, is combination of three factors. According to this, for Chinese culture, only factor, cultural desire for slimness would be appropriate, it is cognitive fear of obesity. Since high body mass index and family psychopathology are not present in Chinese culture, dieting and risk for having eating disorders are less as compared to other cultures. Lee stated that although many female students wanted to be slimmer, they did not make an effort to lose weight.

There is research addressing the question if anorexia nervosa and bulimia nervosa are the result culturally bound phenomenon or not. Results revealed that anorexia nervosa was not a culturally bound syndrome. In different historical periods, there were anorexia nervosa patients who refused to eat but they did not have weight concern and did not idealize thinness. The latter two diagnostic criteria of anorexia nervosa are related to Western culture values. In contrast, bulimia nervosa was accepted as a culturally bound syndrome because its rate showed huge increase during the last half of twentieth century and this increase is associated with the effect of Western culture (Keel & Klump, 2003).

Another cultural risk factor is "acculturation" and results showed that more acculturated subjects had higher rates of eating disorder symptoms (Davis & Katzman, 1999; Gowen, et al., 1999; Hooper & Garner, 1986; cited in Jacobi et al., 2004). Asian and Caucasian adolescent girls were assessed to examine the relationship between acculturation, eating attitudes and eating disorder. Results revealed that eating disorder scores of the Asian sample were higher, and among eating attitudes, only in "Dieting" subscale there was a significant difference between two cultures. Moreover, eating attitude scores of the less acculturated group were higher. According to this, dieting scale difference which is calculated with current and desired weight difference would result from body mass index difference among cultures. Besides, culture clash would make less acculturated group more

vulnerable to pathology. Having a more traditional culture would increase the probability of culture clash (Jennings et al., 2005).

Two generation Greek migrants and non-migrants were assessed in terms of changing socio-cultural values related to eating disorders (Fichter, et al., 2005). According to this, independent from time and location, adolescent girls had lower level of general health and higher level of eating pathology. For the first generation participants**,** bulimic behavior scores were higher in Greek (participants in Greece) than in migrants. For the second generation participants, these scores decreased and location difference disappeared. Percentage of the girls with low body weight increased in both groups. This situation would be interpreted as a result of socio-cultural change (urbanization, economic rapidness …) among generations in Greek.

Japanese bulimics and normal sample were compared with German bulimics and non-clinical sample in terms of eating attitudes and behavior (Kusona-Schwarz & von Wietersheim, 2005). Results showed that among non-clinic sample, Japanese scores were significantly higher than Germans on most of the scales. The significant difference was valid for the clinical group with a smaller rate. Slimness was evident in all over the world independent from cultural differences. It would be unanticipated to high scores belonging to collectivist culture rather than individualistic societies. However, it is important to see that not only self oriented values make people vulnerable for eating problems, but also society originated values had an effect on self-realization.

A sample of Japanese people was examined in terms of weight, height and body-mass-index change between 1960 and 1995. It was found that between the ages six to 14; weight, height and body-mass-index had increased for both girls and boys. However, between the ages 15-24 females had increased height, decreased body-mass-index, and less increase in weight. Throughout the thirty-five years, young adult women and adolescents had thinner body with increased dieting trend (Kırıike et. al, 1998). Additionally, it was found that Japanese university students were more dissatisfied with their bodies and were more likely to identify themselves as overweight than American university students. Interestingly, actually body mass indexes of Japanese students were lower than the others. There was no nationality

difference in terms of eating disturbance level as well. While for American students, body fatness and body dissatisfaction predicted eating disturbances; for Japanese, social approval appeared as predictor in addition to body dissatisfaction (Mukai et al., 1998).

1.3.2. Body Dissatisfaction

Body dissatisfaction is among the risk factors for eating pathology. When gender effect on body satisfaction was assessed, it was found that there was no gender difference on body satisfaction level among the participants who desire to lose weight. Weight and appearance concern were similar for the whole group. However, the association of body satisfaction and self esteem was stronger for females and females applied more strategies to lose weight than males (Bulian & Becirevic, 2005). On the contrary, there was no difference in the association of self esteem and body dissatisfaction between girls and boys in the middle school (Wiseman et al., 2004). According to this, gender gap tends to either decrease or disappear because men also intend to lose weight and are concerned about their bodies (Kashubeck-West et al., 2005), starting with early ages (Wiseman et al., 2004). In contrast, it is found that secondary school girls were more dissatisfied with their bodies and applied more weight loss behaviors than boys. Nevertheless, for normative weight loss, binge eating, bulimic tendency, there was no gender difference (Vincent & McCabe, 2000).

Adolescent population was examined in terms body satisfaction intensity and its association with other variables (Kelly et al., 2005). It was found that underweight girls and African-American ones tended to be more satisfied with their bodies than others. Parental and peer originated messages on healthy eating and exercising to be fit changed body satisfaction in a positive way. Satisfied girls were less likely to bother weight than others. Weight control behaviors, dieting frequency and weight watching were less among the girls with high body satisfaction. As a result, to be satisfied with weight protects girls from eating disorders. Body dissatisfaction was found to be the primary significant factor related with the development of anorexia nervosa and bulimia nervosa among Korean university students, and secondary factor

for Korean high school population (Ryu et al., 2003). Thus, independent from culture, body satisfaction would be an important trigger for eating disorders.

In a longitudinal study, family, social, and psychopathological aspects were assessed as risk factors on eating disorders in an adolescent sample. After adjustment of previous eating pathology period, it was found that body dissatisfaction and not being loved or being ignored by the mother made adolescents vulnerable during the two years. On the contrary, body mass index and self- esteem had a protective role for body dissatisfaction throughout this time period (Fernández et al., 2004).

In the prospective study, (Presenell et al., 2003) the relation of body satisfaction with some factors was assessed in adolescent girls and boys. Results yield that while negative feeling increase was associated with body dissatisfaction for boys; initial body-mass-index increase was related with body dissatisfaction for girls. For the whole sample, peer pressure for thinness and negative mood predicted body dissatisfaction.

In another study**,** to understand cohort effect on body related thoughts and eating attitudes, middle aged and elderly women were assessed (Lewis & Cachelin, 2001). Although both groups showed similar attitudes about body dissatisfaction and body ideals, motivation for weight related behavior and restriction tendency were less in elderly group as compared to middle aged women. Eating concern was higher in the younger group, as well**.**

1.3.3. Family

To be grown up in the same culture does not make all people vulnerable to eating disorders. In order to understand the alteration process of body messages in culture, family was taken as a mediator factor (Haworth-Hoeppner, 2000). Dominated discourse on weight, coercive parental control, critical family environment and unloving parent-child relationship were the factors which were associated with eating disorders individually as well as in combinations.

In a study on bulimia nervosa conducted with undergraduate female students, it was found that all familial factors, i.e., general family dysfunction, family eating

attitudes and behaviors, and negative family communication were correlated with bulimic symptoms (Crowther et al., 2002). When bulimic university students were compared with binge eaters and normal eaters in terms of family environment, it was found that there were more conflicts in the families of bulimic students than students who were binge eaters and normal eaters (Zawacky, 1990). In other words, family variables play an important role in bulimia nervosa.

Descriptive studies on family and eating disorders concluded that dysfunctional family relationships and pathology of parents were related to development and maintenance of eating disorders. Patients with bulimia nervosa and bulimia-anorexia perceived their family environments as disengaged, more conflicting, less nurturing and cohesive than the individuals in control groups. Laboratory studies on family interaction demonstrated that families of anorexic and bulimic patients were enmeshed, hostile, and intrusive and ignore emotional needs of their children (Strober & Humphrey, 1987). In general, patient's perceptions of the family atmosphere include negative components and some family characteristics are common among patients with different subtypes of eating disorders.

The difference between the ways in which patients and their mothers perceive family communication, flexibility and cohesion was assessed. It was found that patients perceived family environment as less flexible, less cohesive and less adaptable than their mothers (Vidovic et al., 2005). In addition, patients' mothers perceived their communication with their daughters more impaired. However, they perceived their families more cohesive than their daughters. In another study, patients with eating disorders, their mothers and their fathers were compared in terms of family functioning perception. Mothers and daughters perceived problem solving, communication, affective responsiveness, and behavior control in the family differently. Mothers perceived the family less chaotic and healthier than their daughters. Another important outcome is that patients' depression level made a negative effect on the perceptions of the patient and the parent (Dancyger et al., 2005). In brief, mothers tend to perceive family environment more positive than their daughters.

The role of abuse in the development and maintenance of eating disorders was examined. Sexual and physical abuse within and outside the family and psychosocial factors were found to correlate with disordered eating. Low parental expectations, low parental caring, low perceived family communication and any kind of abuse made adolescents prone to eating disorders (Neumark-Sztainer, et al., 2000). To sum up, any kind of abuse has a negative effect on the development of an eating problem.

Research indicates that there is gender difference in family factors associated with eating disorders. Boys who had sexual abuse in the past and who have high monitoring parents had unhealthy eating attitude. Girls who were sexually abused also had unhealthy eating attitudes. As stated before, abuse is one of the factors that make both girls and boys vulnerable to eating disorders. Parental monitoring, family connectedness, maternal presence, and positive family communication are protective factors for girls, whereas, for boys, connectedness with friends and other adults, maternal presence and high parental expectation are protective factors (Fonseca et al., 2002). Besides, family values, positive role models, supportive extended family network, good relationships with parent /parents, and rules and responsibilities within the household also were accepted as protective factors connected with family (Strigel-Moore & Smolak, 2001, p.77).

As a result, family can be a risk factor as well as a protective factor for the development of eating disorders.

1.3.4. Turkish family (Traditional & Modern)

Beginning from the Republic to 1950s, extended traditional family type was common in Turkey. More people lived in villages than in cities. Since industrialization was not as fast as today, the development of nuclear family happened gradually.

A significant change in the Turkish family occurred between the years 1950-2000. Main characteristics of this period were industrialization, urbanization and migration from rural parts of the country to big cities. While nuclear family rate increased, traditional family relations remained one of the main characteristics of the

Turkish families. In other words, although Turkish population had different family types, authoritarian and traditional family perspective was widespread in general (Tezcan, 1992). Family loyalty is one of the characteristics of traditional Turkish family and Turkish university students chose the family loyalty among the three domains of life satisfaction (Hyman et al., 1958). In the same study, it was stated that Turkey was in the middle of modernized Western culture and traditional Middle Eastern culture.

Turkish society is composed of opposite tendencies (Illbas, 1991). Urban and western regions are less traditional as a result of higher educational level. While extended families are more common in North and East parts of the country, there is less family authority in the western and urban nuclear families. In addition, urban nuclear family income level is higher and they are more exposed to urban life (cited in Aytac, 1998). It was stated that middle-class urban Turkish women have similar patterns with Western women in terms of living conditions, political rights and dressing code. However, this rate is too small in broad-spectrum and all women in Turkish society come across various coercions in some forms. These coercions affect both modern women and traditional women with different problems (Bac, 1999).

Turkish society has modern and traditional characteristics. While some regions with certain sectors were supported by government policies, traditional local groups refused to accept reforms. Therefore, reforms have different impacts in different regions (Abadan-Unat 1986; Meric 1991; Ozbay 1990; Timur 1972; cited in Aytac, 1998).

In Turkey, modernization is perceived as acceptance of European living styles, attitudes, and norms (Mardin, 1991). Thus, there is a tendency to refuse traditional components since it means being non- European (cited in Bac, 1999). In brief, it is not easy to categorize Turkish family either as traditional or modern because it involves both modern and traditional characteristics.

The Turkish family can be discussed in the context of socioeconomic development on Turkey, so that family structure would be understood in terms of relationships and socioeconomic status.

The **"**Family change theory" categorizes the Turkish family in three types: the interdependence family, independent family, emotional interdependent family. The "interdependence family" which is composed of interdependent relations in the family includes both psychological and maternal pattern. This family type is common in rural, less developed places (traditional, low socio-economic status, rural area). The "independent family" emphasizes individualism which is a culture of separateness. This family type is widespread in Western, industrial, urban / suburban middle class society. The last family type is combination of the two family types and it is called "emotional interdependent family". Psychological relatedness in more developed / urban socioeconomic environments exemplifies this type of family. In other words, while emotional dependency is increasing in the family, maternal realms decrease (Kağıtçıbaşı & Ataca, 2005; Kağıtçıbaşı, 1996). This theory is important and deserves attention because it involves Turkish family with different socioeconomic status and relationships.

1.3.5. Dieting

Dieting is actually associated with health promoting behaviors which include reducing fat intake and increasing physical activity level. However, various eating strategies such as avoidance of certain foods, not eating for long periods of time, or overall restriction of the amount of food eaten are also called dieting (Mooney et al., 2004). The reason to diet, which is either to lose weight or to maintain weight, made a significant difference on weight loss behaviors that the participants apply (Timko et al., 2006).

Female adolescents who are concerned about their weight and who diet are vulnerable to develop eating disorders (Striegel- Moore & Cachelin, 2001). Female participants who diet are 18 times more likely to develop eating disorders (Patton et al., 1999).

In literature, dieting and restrained eating are used interchangeably. Nevertheless, these are related but different concepts. It was found that among dieters, most of them were also restrained eaters, whereas among restrained eaters, only 37% of them were dieting (Lowe et al., 1991).

Three different dieter types, i.e., bulimic, emotional, normal, were defined in a study. According to this, bulimic dieters usually displayed bulimic and emotional eating patterns. Similarly, emotional dieters showed emotional and restrained eating pattern. However, normal dieters applied only restrained eating. The study claimed that chronic dieters show diverse features with different variation. Moreover, eating disorder psychopathology and psychological well being were more common among emotional eaters than among normal dieters. Therefore, this study was important because it indicated that emotional eating pattern not only causes overeating but also affects emotional well being of people in general (Lindemann & Stark, 2001).

The effect of dietary restraint on binge eating periods was assessed (Engelber et al., 2005). According to this, dietary restraint lead to stronger binge attacks by elevating urge for craving. In line with this study, it was found that participants who had low and average dietary restraint scored higher in binging when they encountered psychological stress (Freeman & Gil, 2004). However, it is not possible to claim that it has a predisposing effect on the occasion of binge eating.

Amount of time people think about eating and food is named as "preoccupation with food" (Fairburn & Cooper, 1993; cited in Timmerman & Gregg, 2003). There was no association among caloric fat intake and perceived deprivation for binge eaters and dieters. However, preoccupation with food had a positive correlation with daily fat intake rather than daily consumed calories. Additionally, an important outcome was that dietary restraint was the best predictor not only for preoccupation with food but also for perceived deprivation.

Eating made a negative state effect on people applying strategies to control overweight and overeating (Solomon, 2001). While daily hassles, negative events, tension releasing coping, problem-solving coping, body-mass-index and weekly consumed calorie did not make a difference on state, weight control strategies made a negative effect. In addition, females who had parents with overweight preferred weight control strategies as well, although most of them had weight within normal limits.

Among eating motives, weight control motive was higher in homosexual and heterosexual women than men. Likewise mood and health motive for eating were

significantly higher among homosexual and heterosexual women. Furthermore, homosexual women and men tended to apply restrained and emotional eating more than heterosexuals (Conner, 2004).

Dieting shows different patterns (less to extreme) with diverse structures among cultures. For instance, in one of the Middle East countries, in Lebanon, on the one hand dieting and weight control were widespread among university students; on the other hand, attempts to lose weight were not as high as in Western population. In the study, the most vulnerable group to apply risky weight control behavior consisted of young females, who smoke, have high body mass index and were either engaged or married (Tamim et al., 2006).

1.3.6. Body Image Disturbance

For many years, body image disturbance has been regarded as an important factor by the professionals (clinicians, researchers) for both weight related behaviors and the maintenance and treatment of eating disorders (Thompson, 1996). Perceptual, developmental and socio-cultural theories were proposed for the explanation of body image disturbance.

Perceptual theories explained the concept in terms of the accuracy of one's perceived size (underestimate / overestimate). According to the perceptual approach, disturbance is the result of some cortical deficits in the brain, or one's difficulty to adapt any weight change (adaptive failure theory), or one's tendency to overestimate the body different from real body size (perceptual artifact theory).

There is research on "Perceptual artifact theory". It was found that participants who had smaller body sizes tended to overestimate their body size (Coovert, 1988; cited in Thompson, 1996). In line with this theory, Schulken et al. (1997) found that participants with the lowest body mass index were more likely to categorize their weight as "normal" than participants with higher body mass indices.

Developmental and socio-cultural approaches were accepted as subjective theories. Maturational time and puberty, teasing and negative verbal comments, sexualization and childhood sexual abuse are the proposed factors related to the

developmental period and they are emphasized in developmental theories (Thompson, 1996).

According to socio-cultural theories, socio- cultural ideals emphasize the importance of low size in terms of physical appearance. Recent trends support any way (dieting, exercise, diet foods, weight loss programs…) to reach ideal body figure (Thompson, 1996).

In general, feminist theories claimed that the self esteem of women who are exposed to ideal figures is associated with their physical appearance (Franks, 1986; Nagel & Jones, 1992; cited in Thompson, 1996). Likewise, feminists claimed that women are more vulnerable to culture of thinness than men (Nagel & Jones, 1992; Thompson, 1992; cited in Thompson, 1996). Generally, women have more body fat than men, and thinness is overvalued for women rather than for men (Brown, 1989; Gilbert & Thompson, in press; cited in Thompson, 1996). Thus, social pressure to be thin affects females more, and body dissatisfaction and eating disorders appear as a response to this pressure (Thompson, 1996).

Another proposed hypothesis related to vulnerability of women was that women control their life through the agency of their bodies. So, if they can control their bodies they have power over their lives (Gilbert & Thompson, in press; cited in Thompson, 1996).

Gender-role orientation was taken into consideration as an important socio-cultural factor on body image disturbance. According to this view, women with more masculine or androgynous characteristics had higher body satisfaction than gender-typed women (Jackson, Sullivan, & Rostker, 1988; van Strien, 1989; cited in Thompson, 1996). It was stated that more traditional women chose weight or body focused more external interventions whereas nontraditional women preferred internal personal sources as interventions (Glidden & Tracey, 1989; cited in Thompson, 1996).

The self-ideal discrepancy theory declares that "individuals have a tendency to compare their perceived appearance with an imagined ideal or with an ideal other" (Thompson, 1996, p38; cited in Thompson, 1996). Especially, great discrepancy may make women have body image dissatisfaction and disturbance (Thompson, 1996).

Another socio-cultural hypothesis is the social comparison theory. According to this theory, people have an innate tendency to make social comparisons to have an idea about themselves (Festinger, 1954; cited in Thompson, 1996). Making physical comparison with others and body dissatisfaction are significantly associated (Striegel-Moore, McAvay, & Rodin, 1986; Thompson, 1996). In a laboratory study self-reported bulimic participants are showed photographs of different sized models. Results shows that participants who were showed thinner models reported lower weight satisfaction and lower self-esteem than participants who were showed photographs of models with higher sizes (Irving, 1990; cited in Thompson, 1996). Socio-cultural theories suggest that societal norms and cultural traditions have an effect on the body image perception of people and can make people vulnerable to eating disorders.

1.3.7. Social Support

Social support is another risk factor for eating disorders. When people encounter stressful life events perceived social support may inhibit the negative psychological effects of these events (Cohen & Wills, 1985).

Anorexia nervosa and bulimia nervosa patients were assessed in terms of social support (Tiller et al., 1997). The patients had fewer social support figures than normal population. Anorexics tended to have fewer partners than bulimics whereas bulimics had a more problems related to the size and adequacy of their social networks than anorexics.

Anorexic women had less social support as compared to non-eating disordered group whereas their support satisfaction was equal to non- eating disordered women. While support size of bulimic women was similar to the normal group, they were less satisfied from the support they received (Tiller et al., 1997; cited in Schmidt, 2003).

Among college students, increase in sociotrophy and decrease in perceived social support from close relationships predicted increase of eating symptoms (over a 6 week interval). Moreover, increase of interpersonal hassles (over a 10 week period), has a role in eating disturbances. In other words, interpersonal relations;

perceived social support as well as hassles make people vulnerable to eating disorders (Jackson et al., 2005).

Bulimic females perceived less support than female university students who binge and from the female students in the control group (Zawacky, 1990). In another study, distraction coping style and decreased social support showed association with increased binge eating episodes (Freeman & Gil, 2004). In line with these studies, Hirsch (1998) claimed that more interpersonally connected, more socially supported and more psychologically differentiated college women tended to show healthier eating attitudes than others.

1.3.8. Body Mass Index

Body mass index, which is obtained by dividing the weight to height squared, is a common measure of body size (Wilson et al., 2005). Partial binge eating diagnosis (Vollrath et al., 1991) and to be symptomatic (Killen et al., 1994) were predicted by higher body mass and higher body fat (cited in Jacobi et al., 2004). Body-mass-index was found correlated with frequency, severity and amount of binge eating (Picot & Lilenfeld, 2003).

Exercise, body image and disordered eating were assessed in terms of subjective (body weight and portion perception) and objective criteria (body-mass-index and waist to hip ratio) (Wilson et al., 2005). The result of the study confirmed that body weight perception predicted disordered eating. In addition, there was no correlation between subjective criteria and objective criteria. In other words, participants perceived their bodies different from their body-mass index. Additionally, body- mass-index and waist to hip ratio were associated with body image and disordered eating.

A study made an important assessment on the disturbed body mass perception of patients with anorexia nervosa and bulimia nervosa. It was found that anorexics and bulimics tend to overestimate their and others' body mass. Their attractiveness criterion was significantly lower body mass than the criterion of the control group. Another result was that for the whole sample, there was a negative correlation

between body mass index and overestimation rate. In other words, while one's own body mass decreases, their overrated body mass index increases (Tovee et al., 2000).

When male and female university students were assessed in terms of weight satisfaction and body perception, it was found that underweight females had a tendency to perceive themselves as normal. In contrast, some overweight males defined themselves as normal. In addition, normal weight women were more dissatisfied with their bodies than men. Females tended to perceive themselves as heavier than they are and females are more likely to try to lose weight than males (Kiefer et al., 2000).

For middle school girls and boys, there was a positive correlation between body dissatisfaction and body- mass index without gender difference whereas the drive for thinness had a positive correlation with body mass index only for boys (Wiseman et al., 2004). In line with this study, it was found that elevated body mass index had effect on body dissatisfaction as significant predictor (Stice & Whitenton, 2002).

Both females and males in the university population having higher body mass index had higher scores on eating attitude (Kjelsas & Augestad, 2004). However, current and ideal body mass index made a significant difference between males and females. Ideal body mass index was significantly less in heterosexual female students than in homosexual female students, homosexual and heterosexual male students (Conner at al., 2004).

Women who diet to lose weight had higher body mass indices than women who diet to maintain weight and women who did not diet (Timko et al., 2006). Similarly, being overweight is a vulnerability factor to eating disorders. Among teenager girls with eating disorders, a strong association between the onset of the eating disorder and upward weight curves was observed (Swenne, 2001).

Urban adolescents were eight times more likely to be overweight than adolescents from rural areas. Two factors may have lead to this outcome: Firstly urban families have a higher income potential and secondly urban mothers have a higher education level (Jackson et al., 2003). In developing countries, this is also valid for adults with higher income from urban areas. At the same time, socio-

economic status was accepted as one of the risk factors for eating disorders. Women with high socio-economic status have a tendency to diet, and have lower weight mean than women with lower socio-economic status (Rogers, Resnick, Mitchell, & Blum, 1997; cited in Soh et al., 2006). On the contrary, lower socio-economic groups had a tendency to be overweight (Health and Nutrition Examination Survey, 1999; cited in Jackson, et al., 2003). Therefore, it is not easy to claim that wealth is a risk factor for eating disorders, because media and globalization diminished the distinction of socio- economic status (Soh et al., 2006).

1.3.9. Food Habits & Family Meal Patterns

In all cultures, food is a way of composing social relationships. Each step of production as well as consumption of food involves social interaction.

Food habits are hard to identify and analyze. Food habit refers to how many meals are eaten, where these meals are eaten and who is present in these meals (Germov & Williams, 1999). The influence of family relationships and food habits on the performance and aspiration of students was assessed. Results revealed that family commensality, which refers to food quality and attractiveness, appetite of students, meals in which the whole family is present, and the family member who cooked the meals, was correlated with the academic performance, personal and money problems, family love perception and family role performance of students. Furthermore, there was a correlation between family commensality and the foods students like, adequate dietary intake and health perception (Allen et al., 1970; cited in Germov & Williams, 1999).

Socio-economic status has an effect on the food habits of people. There are still differences in the dieting and food preference of people from different socio-economic status. In general, people with high socioeconomic status are more likely to consume fruits, some vegetables, fruit juices and cheese whereas people with lower socioeconomic status are more likely to consume butter, potatoes, and bread. However, the difference is less obvious than it was in the past (Germov & Williams, 1999).

Families eat together not only to consume food but also to be in touch and to exchange information about the events in the lives of family members (Vallentine, 1999). In all cultures, food is a way of building and maintaining social relationships. For the purpose of eating, family members come together because food consumption is a social event for the whole family. Solitary eating is not encouraged by any culture. Eating is a precious social instrument as people interact with each other while eating (Germov & Williams, 1999). In traditional cultures family meals are more common than in modern cultures because in traditional cultures there are no regular activities which may interfere with the daily routine of family meals (Germov & Williams, 1999).

Family meals are family rituals in which family members spend time together and have the opportunity to care for each other. Families have been reinforcing this daily ritual by associating it with community or religious happenings (Germov & Williams, 1999). The relationship the family meal customs of university students and their eating attitudes was investigated. Results yielded that food as a function of mood, pleasure related to family meals, family mealtime rules and nutritional value of the consumed food predicted eating attitudes of university students (Hogan, 1988).

The association of bulimic behaviors with family meals was assessed in the context of other family variables among female university students. Results revealed that eating dinner together was more common than eating other meals together. The frequency of family dinners was negatively correlated with bulimic symptoms. Additionally, independence, low level of achievement orientation, frequent family meals and perception of family cohesion were associated with fewer bulimic symptoms (Ackard & Neumark-Sztainer, 2001).

There were differences in the childhood memories about mealtimes between bulimic and not bulimic people. Bulimic participants reported more emphasis on weight and dieting, higher level of stress and more conflicts than not bulimic people. Bulimic people also stated that food was used to punish and manipulate in their families (Miller et al., 1993). Moreover, when childhood meal time memories of university students were evaluated, mother's preoccupation with weight and

appearance was found to have a significant effect on dieting, bulimia and food preoccupation among university students (Worobey, 2002).

The association between family meal pattern and pathological eating attitudes was assessed in an adolescent sample (Neumark-Sztainer et al., 2004). Participants who gave high priority to family meals, who reported a positive atmosphere and a more structured environment in family meals, and who had more frequent family meals were less likely to engage in pathological eating. In addition, family meal priority was proposed as the most coherent factor for eating disorders.

The association of socio-demographic variables with family meal patterns and dietary habit was assessed. According to this, family meal frequency was positively associated with gender (boys), school (middle school), race (Asian American), mothers' status (unemployed) and socioeconomic status (high) among variables. Family meal frequency was positively correlated with healthy food intake and negatively correlated with soft drink intake (Neumark-Sztainer et al., 2003). This study may imply that frequent family meals may have a preventive role in the development of eating disorders because it encourages a regular dietary habit and healthy food intake.

In a repeated design study, the association of binge eating attitude and potential socio-demographic risk factors was assessed in a Swedish non-clinical adolescent sample. Results yielded that living alone, having been bullied and moving away from home at young age were significantly associated with binge eating (Engström & Norring, 2001).

Negative family communication, external control of food intake and rules related to family meals predicted bulimic symptoms among undergraduate female students (Crowther et al., 2002). In line with this study, it was found that family meal narratives of bulimic people involved more negative appraisals than the narratives of binge eaters and normal eaters (Zawacky, 1990).

As a result, these studies are important to reveal the important effects of family meals on eating patterns.

1.4. Gender

Gender is a risk factor for eating disorders and it is regarded as a fixed marker because it cannot be changed (Striegel- Moore & Cachelin, 2001). The common hypothesis is that females are more vulnerable to eating disorders than males. Many studies are in line with this assumption. American Psychiatric Association reported that 90 – 95 % of the patients diagnosed with eating disorders are women (American Psychiatric Association, 2000). This outcome is similar in Turkey as well. In a Turkish adolescent sample, eating disorders were seen frequently and girls were more vulnerable to eating disorders than boys (Demir et al., 1998).

One of the reasons for this difference is that men are usually more satisfied with their appearance than women (Conner at al., 2004). Therefore, they may be less concerned with their appearance than women. However**,** recent studies indicate that heterosexual and homosexual men are also diagnosed with eating disorders. When homosexual and heterosexual women and men were compared, results revealed that homosexual men had higher levels of body dissatisfaction and body restraint than heterosexual men and homosexual women scored lower on all the eating related variables than heterosexual women. Additionally, independent of gender, negative femininity which includes low esteem, unassertiveness, and passivity predicted high scores in eating attitudes (Lakkis et al., 1999).

In Western culture, social pressure to have ideal weight and proposed body size has been influencing women more than men. However, as fit muscular ideal male models became popular, men started to perceive social pressure. As a result of this pressure they yearned for strong muscular bodies that are similar to the bodies of film stars or other models. In order to have a fit body, men either exercise excessively or use steroids. The social conditions and the strategies men apply may make them vulnerable to eating disorders (Gaskill & Sanders, 2000, p.8).

When a sample of students from four universities was assessed, the results revealed that females had higher scores in total eating behavior, drive for thinness, bulimic behaviors, and body dissatisfaction than males. However, the number males who scored high in pathological eating attitudes increased when it is compared to

past studies. This may support the hypothesis that the gender gap in eating disorders is diminishing (Kjelsas & Augestad, 2004).

Life quality variables of people with and without eating disorders were assessed. Both males and females with eating disorders had a similar level of satisfaction with their life quality. Similar conditions triggered their eating disorder. Another finding is that men without eating disorders had less problems and more satisfaction in life quality variables than men with eating disorders. In other words, living conditions and satisfaction with quality of life are important for psychological health (Woodside et al., 2001).

As a result, although females may be more vulnerable to eating disorders than males, there are more homosexual and heterosexual males who are diagnosed with eating disorders than in the past and this new condition deserves further attention and investigation.

1.4. Studies on Eating Disorders in Turkey

In Turkey, there were some studies that described the Turkish profile on eating attitudes and behaviors. Most of these studies were conducted either with high school students or university students. Therefore, it is hard to generalize these findings to the whole population. Nevertheless, it is important to assess the vulnerability factors to eating disorders in this age group. This knowledge can serve to the development of preventive policies in future.

Eating problems were more common among girls, especially in the age range of 14-15 and among families with high socioeconomic status (Şener et al., 1990; cited in Çam, 1994). 17-18 year old girls asserted more social pressure than 15-16 year old girls. Their need to be liked and accepted by others in daily life may have increased with their age. Another finding was that the daughters of parents with higher education level were more likely to diet than the daughters of parents with lower education level. Additionally, daughters of fathers with higher education level stated more anxiety on being weighty than daughters of fathers with lower education level. According to this, high socio-economic status may make adolescents vulnerable to eating problems.

Adolescents who were between 15 and 18 years old were assessed in terms of body image satisfaction, perceived family psychological well-being and eating attitudes (Hacıevliyagil, 1991). Results revealed that there was a significant difference between females and males in body image satisfaction; females were less satisfied with their body image than males. However, this difference was not valid for eating behaviors. In addition, there was a significant (but weak) association among body image satisfaction, perceived family psychological well-being and eating attitudes. According to this, if perceived familial variables including communication, management, emotional context and satisfaction are high enough; adolescent would have healthier eating attitudes. As expected it was found that adolescents whose parents criticized their appearance displayed more pathological eating behaviors and were more dissatisfied with their bodies. In addition, doing sports made a positive effect on body satisfaction of adolescents.

As a result of socio-economic differences, adolescents have different dieting and meal patterns as well as different eating attitudes. Two high schools with different socio-economic structures were assessed on eating attitudes. It was found that 25 % of the students had a tendency to eat alone and 6 % of the students applied an unbalanced diet to keep their weight. Students from the high school with low socio economic status were encouraged to gain weight whereas students from the high school with high socioeconomic structure were encouraged to lose weight. In addition, students of the school with low socio economic structure were more likely to overtake meals or combine two meals than students of the school with high socio economic structure. Similarly, students of the school with low socio economic structure were less likely to have three main meals regularly (Çetinarslan, 2002).

Private and public high school students (between 13 and 21 years old) were assessed in terms of eating attitudes and behaviors. It was found that public school students (girls, boys) were more vulnerable to eating disorders than private school students. However, private school students were more preoccupied with their weight and tended to diet more than public school students. Students from public school stated more social pressure on eating attitudes more than private school students. There was a significant gender difference; while more boys reported social pressure

related to eating, more girls were dieting and had preoccupation with weight. 9.9 % of the girls and 5.5 % of the boys had eating disorders and the mean age of students with eating disorder was 15.5 (Anıl, 1992).

The association between personality characteristics and eating disorders of first year university students was assessed (Alpargun, 1995). According to this, 6% of the females and 2% of the males showed pathological eating attitudes and considered as disordered eating group (above 27 point). While females in the disordered group displayed low self esteem, low self concept, high depression, anxiety, obsession and introvertness, males displayed dissociation from reality, deep fantasy world, anxiety and social withdrawal as personality characteristics. Among demographic variables associated with eating disorders, it revealed that disordered group tended to come from families with middle socio-economic status. However, while the fathers of the males in the disordered eating group had higher income than others, fathers of the females in disordered group had lowest monthly income.

Obesity was assessed in terms of self-esteem, appearance-esteem and loneliness (Kartal, 1996). Results revealed that while obese females had lower appearance-esteem scores than obese males, underweight males had lower appearance esteem scores than underweight females. Self-esteem and appearance esteem scores of obese participants were significantly lower than participants in other weight categories and obese participants had significantly higher loneliness scores than participants in other weight categories. Body mass index and gender significantly predicted appearance-esteem; body mass index and appearance-esteem significantly predicted self-esteem; and appearance-esteem and self-esteem significantly predicted loneliness.

In university sample, it was found that 7.9 % of the female university students displayed pathological eating behaviors. Results revealed that traditionalism of mother and parents, critical attitudes towards dieting, and following mass media publications were the predisposing factors of pathological eating. Additionally, general dissatisfaction and negative perfectionism were vulnerability factors for eating disorders (Altuğ, 1999).

First year university population was investigated in terms of Lee's model (1993) on the development of eating disorders. The model was composed of three main factors, which are high body mass index, cultural desire for slimness, and personal and / or family psychopathology. Psychopathology was assessed with the Multi-dimensional Perfectionism Scale. Cultural desire for slimness was assessed with questions about perceived pressure on weight from significant others. For both females and males, the weight related pressure of same sex friends predicted the dieting factor of the eating attitude scale. Males perceived pressure to gain weight whereas females perceived pressure to lose weight. Weight dissatisfaction significantly predicted pathological eating attitudes of females and other-oriented perfectionism significantly predicted pathological eating attitudes of males. In addition, weight related pressure of the mother and family income were positively correlated with pathological eating attitudes for females. Females were more vulnerable than males to eating problems (Zabunoğlu, 1999).

Professional ballet dancers are vulnerable to eating disorders. In a study, professional dancers were compared with non-professional dancers and non-dancers. As expected it was found that professional dancers had more pathological eating attitudes than non-professional dancers and non-dancers. Professional dancers perceived more pressure from significant others (especially from ballet dance teachers) to lose weight than non-professional dancers and non-dancers. Besides, planning to lose weight and weight dissatisfaction were more common among professional dancers and non-dancers. Actual and ideal weight difference and pressure of the teacher to lose weight predicted pathological eating attitudes of professional dancers. Family relationships significantly predicted pathological eating attitudes in both non-professional dancers and non-dancers but not in professional dancers (Anafarta, 2000).

Gürmeriç (2003) claimed that criticism of friends and following media publications on weight loss predicted eating attitudes and these variables were positively correlated with pathological eating attitude scores. In addition, there was a positive correlation between maternal warmth and eating scores. There was a positive association between eat-40 scores of participants and their highest and

lowest weight. Furthermore, family interference prior to the university years did not predict eating behaviors. There was a positive association between individualism and eating scores. It is interesting, that there is a positive correlation between maternal warmth and pathological eating behaviors, because maternal warmth is actually a potential variable that can prevent the development of eating disorders.

The association of eating disorders with early maladaptive schemas was assessed among university students and high school students. Results confirmed that four maladaptive schemas which were mistrust / abuse, vulnerability to harm and illness, unrelenting standards, and insufficient self-control made a difference between patients with eating disorders and control group. Patients with eating disorders and participants who took cut off score showed more maladaptive patterns in terms of the four schemas than control group as well. Among clinically diagnosed eating disordered patients (anorexia nervosa-bulimic type, anorexia nervosa-restrained type, bulimia nervosa), patients with anorexia nervosa had more maladaptive schemas than other patients at four schemas which were emotional deprivation, mistrust /abuse, dependency, insufficient self control. As expected, female participants showed more pathological eating attitudes than male participants. In addition, gender difference appeared in the association of eating disorders with early maladaptive schemas. According to this, emotional deprivation, mistrust/ abuse, and insufficient self control made a difference between females and males with pathological eating attitudes. Pathological eating attitude were more common among younger participants (20 and below) than older participants (21 and above) (Batur, 2004).

In another study, it was found that weight satisfaction, gender, emotion focused coping, age and body mass index significantly predicted eating attitudes. All the predictors except weight satisfaction had a positive correlation with eat-40. Additionally, the results revealed that both females and males were sensitive to the opinions of opposite sex friends on weight. Another finding was that if males had a weight problem they preferred to get help from a fitness expert rather than a medical doctor or a dietitian whereas if females had weight problems they either got help from a dietitian or a fitness expert (Pembecioğlu, 2005).

1.6. Aim of the Study

In Turkey, there are only few studies that examine the association of family factors and eating disorders. The present study aims to explore the association of eating attitudes with family factors which include values, support, and meal patterns and to what extent these variables contribute to pathological eating attitudes. Therefore, the study assesses the association of eating attitudes with height and weight; family meal patterns; perceived social support; traditional family values and socio-demographic variables.

The study hypotheses are as follows:

1. There will be a significant difference on eating attitudes between participants who live with their families and participants who moved away from their families as they started university.
2. Participants who perceive their families as traditional will show more pathological eating attitudes than participants who perceive their families as modern.
3. Participants with normal body mass index and satisfied with their weight will display less pathological eating attitudes.
4. There will be a significant difference between body mass index and body identification of participants.
5. Traditional family values will be associated with eating attitudes of participants.
6. Participants who perceive less social support will have more pathological eating attitudes.
7. Family meal patterns (frequency of meal patterns, priority of meals, atmosphere at family meals and structure / rules at family meals) will be associated with eating attitudes of participants.

CHAPTER II

2. METHOD

2.1. Participants

Participants of the study were 299 students from the Department of Basic English at Middle East Technical University (METU). Students filled out the questionnaires during class hours. There were 129 female and 170 male participants. Participants ranged in age between 17 and 34. The mean age was 19.

34 % of the participants were living with their families in Ankara; 66 % of them were living far from their families. Perceived family income was classified into three groups: low (lower and lower middle), middle, and upper (upper, middle, upper) Perceived family type was grouped under two types: traditional (score 1 and score 2 were coded as 1) and modern (score 3 and score 4 were coded as 2). Detailed information on demographic variables of the participants can be found in Table 1.

2.2. Materials

Demographic data form (See Appendix A), Height and Weight Items (See Appendix B), the Eating Attitude Test – 40 (See Appendix C), the subscales of Family Eating Attitude and Behavior Scale (See Appendix D) and added items (See Appendix E), Multidimensional Scale of Perceived Social Support (MSPSS) (See Appendix F), and Traditional Family Values Questionnaire (See Appendix G) were used as materials.

2.2.1. Demographic Data Form

Questions about age, gender, marital status, parents (alive / death, education, parental job, parents' marital status), number of family members, family

accommodation, own accommodation (longest, regional, last five years, current), people live with, perceived family income group, perceived family type (traditional-modern) were included in Demographic Data Form (in Appendix A).

2.2.2. Height and Weight Items' Form

Body-mass-index , desired body-mass-index , weight satisfaction, desired weight change (gain eight / lose weight), weight condition (last six months), planned weight loss (for next six months), dieting (yes /no), current body identification and desired body identification information were considered in Height and Weight Items' Form (in Appendix B). Body mass index and desired body mass index of participants were calculated according to their reported actual and desired weight and height ratios. Body mass index and desired body mass index were obtained by dividing the weight to height squared. Weight satisfaction was grouped as satisfied, neither satisfied nor unsatisfied, and unsatisfied. Dieting was coded as point 1 (yes) and point 2 (no). Current body identification and desired body identification were grouped as underweight, normal and overweight.

Table 1. Demographic Characteristics of the Sample

	N	%
Gender		
Female	129	43
Male	170	57
Place lived		
Dorm	164	55
Home	135	45
Mother Education		
Illiterate	11	4
Primary School	54	18
Secondary School	23	8
High school	94	32
Pre-bachelor	22	7
University	84	28
Master / Doctorate	10	3

Table 1. (continued)

Father Education		
Illiterate	3	1
Primary School	32	11
Secondary School	11	4
High school	74	25
Pre-bachelor	24	8
University	130	44
Master / Doctorate	24	8
Mother Occupation		
Housewife/ unemployed	131	44
Worker	3	1
Employee / qualified worker	126	42
High status in public/ private (businessman, manager ….)	33	11
Father Occupation		
Unemployed	3	1
Worker	24	8
Employee / qualified worker	165	55
High status in public/private, (businessman, manager …)	97	33
Perceived Family Income		
Low	40	14
Middle	185	62
High	73	24
Perceived Family Type		
Traditional	59	20
Modern	239	80

2.2.3. Eating Attitude Test- 40 (EAT-40)

The Eating Attitudes Test 40 (EAT-40) was developed by Garner and Garfinkel (1979). The scale was developed to evaluate behavior and attitudes that were existing symptoms in Anorexia Nervosa. As well, the scale was used to examine anorexia nervosa cases among non-clinical population (Garner & Garfinkel, 1980).

EAT-40 consists of 40 items with six point scale (see Appendix C). The scale ranges from "always" to "never" with point 6 standing for 'never' and point 1 standing for 'always'. Items are scored as follows: questions 1, 18, 19, 23, 27, 39 are reversed and all extreme responses ("always") are scored 3 points and other responses are weighted as 2 points and 1 points respectively. The cut off score for the scale is 30+. Scores between 30 and 32 are accepted as sub clinical group scores. In other words, people who differ from general population in terms of eating attitudes but not have the diagnostic symptoms of eating disorders. Score 33 and above mean that the person has pathologic eating symptoms (Garner & Garfinkel, 1979).

EAT – 40 was adapted to Turkish by Savasır and Erol (1989). The reported one month interval test re-test reliability coefficient of EAT - 40 was .65. Internal consistency calculated by Cronbach Alpha was .70. The factor analysis of EAT - 40 revealed four interpretable factors including anxiety for being fat, dieting behavior, social stress, and obsession for thinness. No cut of score was established for the Turkish population.

2.2.4. Family Eating Attitude and Behavior Scale (FEABS)

In this study, it is important to describe participants' family meal patterns to understand its relation with their eating attitudes. Therefore, subscales related to family meal patterns were adapted from Family Eating Attitude and Behavior Scale (FEABS). Items related to frequency of family meals, priority of family meals, atmosphere at family meals and structure /rules at family meals were translated into Turkish (in Appendix D). In this study, internal consistency of these items was assessed. Four point scale (strongly agree to strongly disagree) are used. Each item answer are coded on a 4 point scale (1, very low; 4, very high). Coding is reversed for some items.

In Neumark-Sztainer et al. (2004) study, test-retest reliabilities was found between r = .54 and r = .70. Five items related to "Priority of family meals" are applied. "1) In my family, it is important that the family eat at least one meal a day together. 2) I am often just too busy to eat dinner with my family. 3) In my family, different schedules make it hard to eat meals together on a regular basis. 4) In my

family, it is often difficult to find a time when family members can sit down to a meal together. 5) In my family, we are expected to be home for dinner." The internal consistency of the priority scale was acceptable (Cronbach alpha = .82) in the study of Neumark-Sztainer et al. (2004).

Four items are used for "Atmosphere at family meals": "1) I enjoy eating meals with my family. 2) In my family, eating brings people together in an enjoyable way. 3) In my family, mealtime is a time for talking with other family members. 4) In my family, dinner time is about more than just getting food; we all talk with each other." The internal consistency of the atmosphere scale was acceptable (Cronbach alpha = .73, Neumark-Sztainer et al., 2004).

Five items were used for "Structure /rules at family meals": 1) In my family, there are rules at mealtimes that we are expected to follow. 2) In my family, it is okay for a child to make something else to eat if she/he doesn't like the food being served. 3) In my family, a child should eat all the foods served even if she/he doesn't like them. 4) Manners are important at our dinner table. 5) In my family, we don't have to eat all meals at the kitchen / dining room table. The internal consistency of structure / rules at family meals scale was lower than others (Cronbach alpha = .60, Neumark-Sztainer et al., 2004).

In addition to the subscale items some statements related to family meal pattern that are more idiosyncratic to Turkish culture were applied (in Appendix E), As well, internal consistency of these items was assessed.

2.2.5. Multidimensional Scale of Perceived Social Support (MSPPS)

The Multidimensional Scale of Perceived Social Support (MSPSS) was developed by Zimet, Dahlem, Zimet, & Farley, (1988). The scale consisting of 12 items evaluates perceived social support from three support groups; family, friends and significant others. MSPSS is rated on a 7-point scale (1=disagree very strongly; 7= agree very strongly).

MSPSS was adapted to Turkish by Eker and Arkar (1995) and the psychometric properties of the scale confirmed that the defined three factors are also valid for Turkish population (in Appendix F). The Cronbach alpha values were found

to be between .83 and .91 in 3 Turkish samples, where the means were (M = 53.56, Sd =16.99) for psychiatry, (M = 65.98, Sd=15.63) for surgery, and (M = 66.42, Sd = 11.60) for normal (Eker, Arkar, & Yaldız, 2001). Higher scores on the scale indicate perception of positive social support.

2.2.6. Traditional Family Values Questionnaire

The Traditional Family Values Questionnaire was developed by Georgas (1989, 1991). In the original form, it was composed of 64 items. To appear normative part of values, "should" word is used in all items. Traditional Family Values Questionnaire is rated on a 7- point scale (1= disagree very strongly; 7 = agree very strongly). 7 - point is toward to traditional value.

In this study, to assess the family values of participants, a short version of Traditional Family Values Questionnaire contained 18 items and 2 dimensions, "Hierarchical Roles of Father and Mother" and "Relationship with Family and Kin". Internal consistency of Hierarchical Roles of Father and Mother was .87 and the other was .80. It's adaptation to Turkish has not been concluded yet (in Appendix G).

2.3. Procedure

The questionnaires were applied to students from the Department of Basic English by instructors of the department during class hours. Questionnaires were organized in random order. To fill out questionnaires took participants about 20 minutes.

2.4. Analysis

Prior to main analyses, internal consistencies of the subscales of the Eating Attitude Test-40, the Family Eating Attitude and Behavior Subscales (frequency of family meals, priority of family meals, atmosphere at family meals and structure /rules at family meals), the Multidimensional Scale of Perceived Social Support and the Traditional Family Values Questionnaire were assessed. Details about the alpha coefficients and item-total correlations of the Turkish versions of the scales can be found in the results section.

The main analyses included ANOVAs and regression. ANOVAs were run to evaluate whether there were significant differences in dieting factor, preoccupation with food factor, social pressure on weight factor, and total eating attitude scale scores of participants with gender, with whom they lived, perceived family type, current body mass index and weight satisfaction.

In addition, the chi square analysis was applied to assess whether there are a significant differences between participants' current and desired body mass index with their current and desired body identification.

Finally, stepwise multiple regression was conducted for the three factors and the total eating attitude scale scores. Predictor variables were some demographic variables (mother education, mother occupation, father education, father occupation, perceived family income, whom living with, perceived family type) and some subscales of the scales (dieting, current/ desired body mass index, perceived social support-friends, perceived social support- family, frequency of family meals, priority of family meals, atmosphere at family meals, hierarchical roles of father and mother, relationship with family and kin and total traditional values) which had a significant correlation with any of the factor.

CHAPTER III

3. RESULTS

3.1. Psychometric Properties of the Scales

Internal consistency coefficients and item total correlations of the Eating Attitude Scale, the Family Eating Attitude and Behavior Subscales (frequency of family meals, priority of family meals, atmosphere at family meals and structure /rules at family meals), the Multidimensional Scale of Perceived Social Support, the Traditional Family Values Questionnaire were calculated separately.

3.1.1. Psychometric Properties of the Eating Attitude Test (EAT-40)

The Eating Attitude Test (EAT- 40) responses were analyzed using principal-components extraction to estimate the number of factors, to detect low communalities, low reliabilities, and presence of items that were loaded under two or more factors. The initial analysis, with an eigenvalue criterion of 1.00, yielded 11 factors explaining 69 % of the variance. An examination of scree plot revealed that a three-factor solution served the present purposes best. The obtained factors accounted for 37.7 % of the total variation. The criterion employed for determining the item structure of the EAT-scale was a factor loading of .35. 12 items did not load according to the criterion so they were excluded from subsequent analysis. Further, item 8, item 32 and item 39 were found to reduce reliability; therefore, these items were excluded from further analysis. The remaining 28 items were included under the factor on which they had the highest loading. The first factor was labeled as "Dieting" and included 15 items. The second factor was called 'Preoccupation with Food' consisted of 5 items. The third factor was named 'Social Pressure on Weight" and consisted of 8 items. The reliability coefficients as estimated by Cronbach's alpha were .93 for Dieting, .79 for Preoccupation with Food, .71 for Social Pressure

on Weight. The reliability coefficient alpha for the total scale was .92. A list of three factors, their factor loadings and the content of the items that were grouped under those dimensions are presented in Table 2.

Table 2. The Factor Loadings and the Items of Eating Attitudes Test

Item No		Factor Loadings		
	Factor 1. Dieting	Factor 1	Factor 2	Factor 3
	Variance explained = 18.4 % Cronbach's alpha = .93			
25.	I am preoccupied with the thought of having fat on the body.	.80	.32	.00
30.	I eat diet foods.	.75	.11	.15
37.	I engage in dieting behavior.	.73	.28	.04
16.	I exercise strenuously to burn off calories.	.73	.12	.03
04.	I am terrified about being overweight.	.73	.08	-.13
15.	I am preoccupied with a desire to be thinner.	.72	.32	-.03
29.	I avoid foods with sugar in them.	.69	-.15	.28
22.	I think about burning up calories when I exercise.	.68	.13	.14
14.	I feel extremely guilty after eating.	.67	.42	.20
09.	I am aware of the caloric content of foods that I eat.	.65	.06	.19
10.	I particularly avoid foods with high carbohydrate content.	.63	-.22	.09
38.	I like my stomach to be empty.	.48	.03	.03
36.	I feel uncomfortable after eating sweets.	.44	.22	.13
11.	I feel bloated after meals.	.42	.19	.22
17.	I weigh myself several times a day.	.37	.24	.18

Item No		Factor Loadings		
	Factor 2. Preoccupation with Food	Factor 1	Factor 2	Factor 3
	Variance explained = 10.8 % Cronbach's alpha = .79			
06.	I find myself preoccupied with food.	.10	.75	.08
34.	I give too much time and thought to food.	.42	.73	.20
07.	I have gone on eating binges where I feel that I am not being able to stop.	.29	.72	.01
31.	I feel that food controls my life.	.38	.65	.24
21.	I eat the same food day after day.	.26	.40	.34

Table 2. (continued)

Item No		Factor Loadings		
	Factor 3. Social Pressure on Weight	Factor 1	Factor 2	Factor 3
	Variance explained = 8.5 % Cronbach's alpha = .71			
12.	I feel that others would prefer if I ate more.	.08	-.12	.66
24.	Other people think that I am too thin.	-.29	-.16	.61
33.	I feel that others pressure me to eat.	.17	.10	.59
13.	I vomit after I have eaten.	.08	.30	.59
28.	I take laxatives.	.26	.16	.54
03.	I become anxious prior to eating.	.25	.15	.52
26.	I take longer than others to eat my meals.	.02	-.01	.43
40.	I have the impulse to vomit after meals.	.29	.28	.42

Item No		Factor Loadings		
	Items excluded	Factor 1	Factor 2	Factor 3
02.	I prepare foods for others but do not eat what I cook.	.26	-.04	-.15
08.	I cut my foods into small pieces.	.21	-.39	.14
32.	I display self-control around food.	-.17	-.66	.24
35.	I suffer from constipation.	.07	.30	.29
20.	I wake up early in the morning.	-.01	-.21	-.06
23.	I have regular menstrual periods.	-.13	-.21	-.38
01.	I like eating with other people.	.23	-.02	-.17
27.	I enjoy eating at restaurants.	.14	.30	.03
39.	I enjoy trying rich new foods.	-.11	.43	.12
18.	I like my clothes to fit tightly.	.11	.03	.21
05.	I avoid eating when I am hungry.	.17	.17	.09
19.	I enjoy eating meat.	-.00	.25	.05

Pearson correlation coefficients between sub-scales of EAT-40 are presented in Table 3. As can be seen from Table 3, all of the inter-correlations were significant.

Table 3. Pearson Correlation Coefficients among Subscales of EAT - 40

Subscales	Dieting	Preoccupied with food	Social Pressure on weight
Dieting	1.00	.62**	.57**
Preoccupied with food		1.00	.40**
Social Pressure on weight			1.00

**. Correlation is significant at the 0.01 level (2-tailed).

3.1.2. Psychometric Properties of the Family Eating Attitude and Behavior Subscales

Internal consistency coefficients of "Priority of family meals", "Atmosphere at family meals", "Structure /rules at family meals" of Family Eating Attitude and Behavior Subscales were calculated. Alpha coefficient for "Priority of family meals" was found to be .81. Item-total correlations range between .50 and .68. Alpha coefficient for "Atmosphere at family meals" was found to be .83. Item-total correlations range between .54 and .73. Alpha coefficient for "Structure /rules at family meals" was found to be .63. Item-total correlations range between .36 and .52.

3.1.3. Psychometric Properties of the Multidimensional Scale of Perceived Social Support

Internal consistency coefficients of the Multidimensional Scale of Perceived Social Support were calculated for both whole items and three support group subscales. Alpha coefficient for the scale was .83. Item-total correlations range between .35 and .65. Alpha coefficient for significant others subscale was found to be .78. Item-total correlations range between .32 and .80. Alpha coefficient for family subscale was .78. Item-total correlations range between .52 and .66. Alpha

coefficient for friends subscale was .89. Item-total correlations range between .69 and .81.

3.1.4. Psychometric Properties of the Traditional Family Values Questionnaire

The Traditional Family Values Questionnaire responses were analyzed using principal components analysis with varimax rotation. The initial analysis, with an eigenvalue criterion of 1.00, yielded 4 factors, explaining 53% of the variance. Two factors were agreed upon with an examination of the scree plot. These factors accounted for 38% of the total variation. The inclusion criterion of an item under a factor was a loading of .35. Two items did not load according to the criterion; therefore these were excluded from the analysis. The first factor was labeled as "Hierarchical Roles of Father and Mother" and included 7 items. The second factor was called "Relationship with Family and Kin" and included the 9 items. The reliability coefficients as estimated by Cronbach's alpha were .83 for Hierarchical Roles of Father and Mother, .69 for Relationship with Family and Kin. The reliability coefficient alpha for the total scale was .81. A list of two factors, their factor loadings and the content of the items that were grouped under those dimensions are presented in Table 4.

Table 4. The Factor Loadings and the Items of Traditional Family Values Questionnaire

		Factor Loadings	
	Factor 1: Hierarchical Roles of Father and Mother Variance explained = 20.3 % Cronbach's alpha = .83	Factor 1	Factor 2
06.	Evde parayı baba idare etmelidir.	.82	.01
18.	Ekmek parasını baba kazanmalıdır.	.78	-.00
01.	Baba ailenin reisi olmalıdır.	.75	.21
15.	Anne, babanın kararlarımı kabul etmelidir.	.71	.23
03.	Annenin yeri evdir.	.68	-.02
11.	Çocuklar anne bablarına itaat etmelidir.	.57	.43
04.	Anne, baba ile çocuklar arasında aracı olmalıdır.	.47	.21

Table 4.(continued)

		Factor Loadings	
	Factor 2: Relationship with Family and Kin Variance explained = 18.0 % Cronbach's alpha = .69	Factor 1	Factor 2
12.	Aile itibarımıza saygı duymalı ve onu korumalıyız.	.23	.72
14.	Çocuklar büyükanne ve büyükbabalarına saygı göstermelidir	.11	.71
10.	Aile problemleri aile içinde çözülmelidir	-.13	.67
05.	Anne-baba çocuklarına uygun şekilde davranmayı öğretmelidir	.10	.61
08.	Anne-babaları yaşlandığında çocuklar onlara bakmakla yükümlüdür	.23	.56
02.	Kişi akrabalarıyla iyi ilişkiler içinde olmalıdır.	.18	.50
13.	Anne-baba çocuklarına maddi açıdan yardımcı olmalıdır.	.03	.38
09.	Çocuklar ev işlerine yardım etmelidir.	.06	.38
17.	Anne-baba çocukların önünde tartışmamalıdır.	.10	.36

		Factor Loadings	
	Items excluded	Factor 1	Factor 2
16.	Çocuklar aileye yardım etmek için çalışmalıdır	.29	.25
07.	Anne-baba evli çocuklarının özel yaşamlarına Karışmamalıdır	-.14	.15

Pearson correlation coefficients between sub-scales of the Traditional Family Values Questionnaire are presented in Table 5. As can be seen from Table 5, the inter-correlation was significant.

Table 5. Pearson Correlation Coefficients among Subscales of Traditional Family Values Questionnaire

Subscales	Hierarchical Roles of Father and Mother	Relationship with Family and Kin
Hierarchical Roles of Mother and Father	1.00	.37**
Relationship with Family and Kin		1.00

**. Correlation is significant at the 0.01 level (2-tailed)

3.2. Gender, Perceived Family Type and Living with vs. away from family Differences for Eating Attitudes Test and its Subscales

To examine possible differences in gender (male / female), perceived family type (traditional / modern) and living with vs. away from family in the three EAT-40 factors (dieting, preoccupied with food, social pressure on weight), 2 (Gender) X 2 (traditional / modern) X 2 (with family / away from family), between subjects ANOVA was conducted.

3.2.1. Differences for Dieting factor

For dieting factor, results showed that perceived family type had a significant main effect on dieting attitude, F (1, 281) = 9.38, p <. 05 (in Appendix H). In other words, participants who perceived their families as traditional (M= 5.92, Sd= 9.81) had a greater score on dieting factor as compared to participants who perceived their families as modern (M= 3.50, Sd= 6.76). According to this, participants who perceived their families as traditional were more likely to show pathological dieting attitudes (in Table 6).

Table 6. Means of Dieting Scores of Participants with Different Perceived Family Type

Perceived Family Type	M	Sd
Traditional	5.92	9.81
Modern	3.50	6.76

3.2.2. Differences for Preoccupation with Food factor

Perceived family type had a significant main effect on preoccupied with food factor, F (1, 283) = 5.68, p<.05 (in Appendix H). According to this, participants who perceived their families as traditional (M= 2.07, Sd= 3.36) had a greater score from preoccupation with food factor as compared to participants who perceived their families as modern (M= 1.45, Sd= 2.56). In other words, participants who perceived their families as traditional were more likely to be preoccupied with food (in Table 7).

Table 7. Means Preoccupation with Food Scores of Participants with Different Perceived Family Type

Perceived Family Type	M	Sd
Traditional	2.07	3.36
Modern	1.45	2.56

3.2.3. Differences for Social Pressure on Weight factor

For social pressure on weight factor, perceived family type had a significant main effect on social pressure on weight factor, F (1, 282) = 6.09, p< .01 (in Appendix H). In other words, participants who perceived their families as traditional (M = 3.32, Sd= 3.97) were more likely to face with social pressure on weight than participants who perceived their families as modern (M = 2.47, Sd= 3.25).

A significant gender by perceived family type interaction on social pressure on weight factor was found, F (1, 282) = 12.54, p<.01. A post hoc analysis, using Tukey HSD test, demonstrated that female students who perceived their families as traditional (M = 3.45, Sd= 4.52) had significantly higher scores than females who perceived their families as modern (M = 2.11, Sd= 2.24). According to this, female students who perceived their families as traditional were more likely to face with social pressure on their weight.

Furthermore, for social pressure on weight factor, a significant interaction of whom living with by perceived family type appeared, F (1, 282) = 8.33, p<.01. The result of post hoc analysis (Tukey HSD) revealed that participants who perceived their families as traditional and who lived with their families (M = 4.88, Sd= 5.03)

had significantly higher scores than participants who perceived their families as modern and who lived with their families (M = 1.96, Sd= 2.36). In addition, the means of the scores of participants who perceived their families as modern and who lived away from their families (M = 2.75, Sd= 3.62) were significantly higher than participants who perceived their families as modern and who lived with their families (M = 1.96, Sd= 2.36).

Results for gender, perceived family type and whom living with interaction were found significant, F (1, 282) = 4.57, p<.05. According to this, a post hoc analysis (Tukey HSD) illustrated that females who perceived their families as traditional and who lived with their families (M = 7.00, Sd= 6.02) had significantly higher scores than females who perceived their families as traditional and who lived away from their families (M = 1.43, Sd= 1.16) (in Figure 1) and males who perceived their families as traditional and who lived with their families (M = 2.75, Sd= 2.76) in social pressure factor of eating attitudes. In addition, there was a significant difference between males who perceived their families as modern and who lived away from their families (M = 3.19, Sd= 4.32) were more likely to have social pressure on weight than males who perceived their families as modern and who lived with their families (M= 1.72, Sd= 2.12), (in Figure 2).

Figure 1. Interaction of gender, perceived family type and whom living with for social pressure on weight factor for females

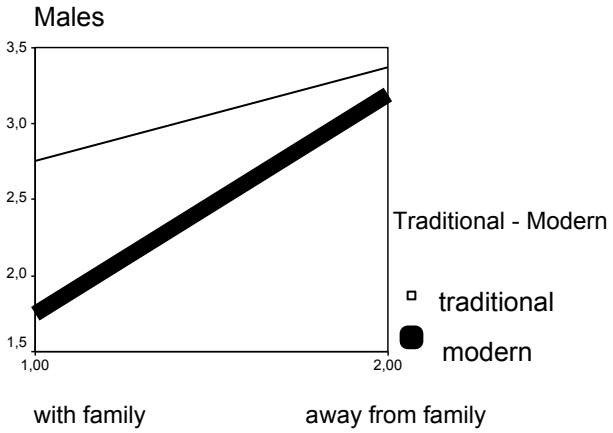

Figure 2. Interaction of gender, perceived family type and whom living with for social pressure on weight factor for males

3.2.4. Differences for Total Eating Attitude Scale

Perceived family type main effect was found significant for total eating attitude scale F (1, 270) = 10.60, p<.01. Participants who perceived their families as traditional (M = 11.58, Sd= 15.71) had significantly more scores than participants who perceived their families as modern (M = 7.50, Sd= 10.71). In other words, participants who perceived their families as traditional were more likely to show pathological eating attitudes.

Furthermore, an interaction for whom living with by perceived family type appeared significant for EAT-40 total score F (1, 270) = 4.79, p<.05. According to post hoc analysis (Tukey HSD), participants who perceived their families as traditional and who lived with family (M = 18.09, Sd= 22.77) had significantly higher scores than participants who perceived their families as modern and who lived with their families (M =6.05, Sd=5.84). In addition, the mean scores of participants who lived with their families and who perceived their families as traditional (M =18.09, Sd= 2.77) were significantly higher than the mean scores of participants who lived away from their families and who perceived their families as traditional (M =9.74, Sd=12.89), (in Appendix H).

3.3. Perceived Family Income Differences for Eating Attitudes Test and its Subscales

In order to find if there is a significant differences on dieting factor scores, preoccupied with food factor scores, social pressure on weight factor scores and total eating scores between participants with different perceived family income, one-way ANOVA was run.

3.3.1. Differences for Dieting Factor

Perceived family income in three levels did not have a significant effect on dieting factor, F (2, 288) = 2.32, p>.05.

3.3.2. Differences for Preoccupation with Food Factor

Results did not yield any significant effect on preoccupation with food factor, F (2, 291) = 1.01, p>.05.

3.3.3. Differences for Social Pressure on Weight Factor

For social pressure on weight factor, perceived family income made a significant difference among three groups, F (2, 289) = 3.54, p<.05.

According to post hoc analysis (Tukey HSD), low income group (M= 3.95, Sd= 4.62) was significantly different from middle income group (M = 2.39, Sd= 3.13). In other words, participants belonging to low income group faces with more social pressure on weight than participants in middle income group. High income group (M= 2.52, Sd= 3.17) took place under low income group.

3.3.4. Differences for Total Eating Attitude Scale

Results did not yield any significant effect on total eating attitude scale, F (2, 278) = 2.92, p>.05.

3.4. Gender, Weight Satisfaction, Current Body Mass Index Differences

It is hypothesized that participants with normal body mass index and satisfied with their weight will show less pathological eating attitudes. To examine possible differences in gender, weight satisfaction, and current body mass index in the three EAT-40 factors (dieting, preoccupied with food, social pressure on weight), 2

(gender) X 3 (satisfied, neither satisfied nor unsatisfied, unsatisfied) X 3 (underweight, normal, overweight) between subjects ANOVA was conducted.

3.4.1. Differences for Dieting factor

Weight Satisfaction had a significant main effect on dieting factor, F (2, 271) = 8.78, p<.01. According to post hoc analysis (Tukey HSD), unsatisfied group (M= 7.14, Sd= 8.23) was significantly different from satisfied group (M = 2.03, Sd = 5.61). Neither satisfied nor unsatisfied group (M= 4.49, Sd= 8.52) was coming after unsatisfied group (in Table 8).

Table 8. Means Dieting Scores of Participants with Different Weight Satisfactions

Weight Satisfaction	M	Sd
Unsatisfied	7.14	8.23
Neither satisfied nor unsatisfied	4.49	8.52
Satisfied	2.03	5.61

3.4.2. Differences for Preoccupation with Food

Results did not yield any significant main effect or interaction effect on preoccupation with food factor, F (2, 274) = .08, p>.05.

3.4.3. Differences for Social Pressure on Weight factor

Current body mass index had a significant main effect on social pressure on weight factor, F (2, 272) = 5.13, p<.01. According to post hoc analysis (Tukey HSD), underweight group (M = 3.62, Sd =2.86) was significantly different from overweight group (M = 1.44, Sd= 2.64) in social pressure scores. Normal group (M = 2.69, Sd= 3.55) took place under the underweight group.

Interaction effect of gender, weight satisfaction and current body mass index had a significant effect on social pressure on weight factor, F (2, 272) = 3.94, p<.05. According to a post hoc analysis (Tukey HSD), underweight females who were unsatisfied with their weight (M = 11.00) had significantly higher social pressure

scores related to eating attitudes as compared to underweight males who were unsatisfied with their weight (M = 2.00, Sd= 2.00), (in Figure 3).

In terms of mean of social pressure score, males with normal body mass who were unsatisfied with their weight (M = 4.96, Sd= 4.77) were significantly different from females with normal body mass who were unsatisfied with their weight (M = 2.00, Sd= 3.41). Furthermore, males with normal body mass who were unsatisfied with their weight (M = 4.96 Sd= 4.77) had higher mean score as compared to females with normal body mass who were satisfied with their weight (M = 2.21, Sd= 2.45), (in Figure 4).

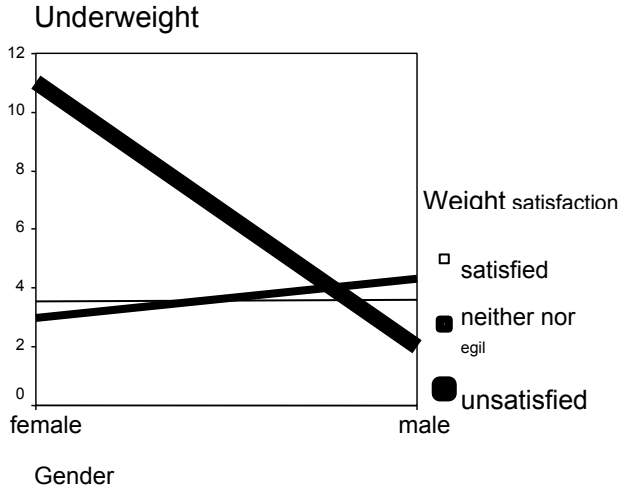

Figure 3. Interaction of gender, weight satisfaction and current body mass index for underweight participants

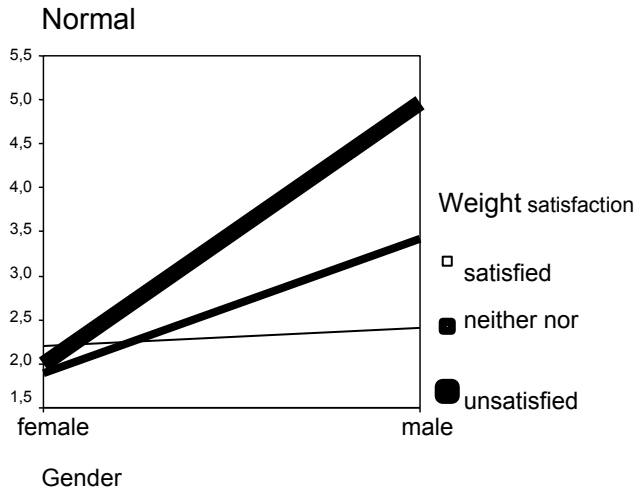

Figure 4. Interaction of gender, weight satisfaction and current body mass index for normal weight participants

3.4.4.Differences for Total Eating Attitude Scale

Weight Satisfaction had a significant main effect on total eating attitude score, F (2, 261) = 6.70, p< .01. According to post hoc analysis (Tukey HSD), unsatisfied group (M= 12.74, Sd= 13.07) was significantly different from satisfied group (M = 5.53, Sd= 9.00). Neither satisfied nor unsatisfied group (M= 8.96, Sd = 13.66) was coming after unsatisfied group (in Table 9).

Table 9. Means Total Eating Attitude Scale Scores of Participants with Different Weight Satisfactions

Weight Satisfaction	M	Sd
Unsatisfied	12.74	13.07
Neither satisfied nor unsatisfied	8.96	13.66
Satisfied	5.33	9.00

Comparing Groups in terms of Current Body Mass Index, Desired Body Mass Index, and Body Identifications

It is hypothesized that there will be a significant difference between body mass index and body identification of participants.

3.5. Current Body Mass Index and Current Body Identification Differences

The chi-square analysis was used to assess whether there was a significant difference between participants' current body mass index and current body identification. There were two variables which were current body mass index with three levels (underweight, normal, overweight) and current body identification with three levels (underweight, normal, overweight). Current body mass index and current body identification were found to be significantly related for both female and male participants. For females, its relation with Pearson was $\chi 2$ (4, n= 128) = 61.0, p =.000, for males, it was $\chi 2$ (4, n= 167) = 54.0, p =.000 (in Table 10).

Among female participants identifying themselves as overweight, while only 8.6 % of them had actual overweight body mass, 91.4 % of participants had normal body mass index. Among male participants identifying themselves as overweight, while 66.7% of them had actual overweight body mass, 33.3 % of participants had normal body mass index.

Among female participants identifying themselves as underweight, whereas 86.7 % of them had actual underweight body mass, 13.3 % of them had normal body mass index. Among male participants identifying themselves as underweight, whereas only 11.8 % of them had actual underweight body mass, 86.3 % of them had normal body mass index.

Table 10. Percentage of Data on Current Body Mass Index and Current Body Identification

	Current Body Mass Index		
Current Body Identification	Underweight	Normal	Overweight
FEMALES			
Overweight	-	91.4 %	8.6 %
Normal	12.8 %	85.9 %	1.3 %
Underweight	86.7 %	13.3 %	-
MALES			
Overweight	-	33.3 %	66.7 %
Normal	5.6 %	80.9 %	13.5 %
Underweight	11.8 %	86.3 %	2 %

* p= .000

3.6. Desired Body Mass Index and Desired Body Identification

The chi-square analysis was used to assess whether there was a significant difference between participants' desired body mass index and desired body identification. Two variables were desired body mass index with three levels (underweight, normal, overweight) and desired body identification (underweight, normal, overweight). Desired body mass index and desired body identification were found to be significantly related with Pearson, for females: $\chi 2$ (2, n= 129) = 8.75, p =.01, for males: $\chi 2$ (4, n= 165) = 25.11, p =.000, (in Table 11).

Among female participants desiring to have normal body, while 45.9 % of them gave underweight body mass index as desired normal body, 54.1 % of them gave normal body mass index. Among males desiring to have overweight body, while 50 % of them gave normal index as overweight body identification, other 50 % of them gave overweight body mass index for overweight body.

Among female participants desiring to have underweight body, while 72.1% of them also gave underweight body mass indices, 27.9 % of them gave normal body mass index as desired body index. Among male participants desired to have underweight body, while only 18.2 % of them gave underweight body mass index, 81.8 % of them gave normal body mass index as desired underweight identification.

Table 11. Percentage of Data on Desired Body Mass Index and Desired Body Identification

	Desired Body Mass Index		
Desired Body Identification	Underweight	Normal	Overweight
FEMALES			
Overweight	-	-	-
Normal	45.9 %	54.1 %	-
Underweight	72.1 %	27.9 %	-
MALES			
Overweight	-	50 %	50 %
Normal	3.3 %	94.7 %	2 %
Underweight	18.2%	81.8 %	-

* p= .000

3.7. Current Body Mass Index and Desired Body Mass Index

The chi-square analysis was used to assess whether there was a significant difference between subjects' current body mass index and desired body mass index. Two variables were current body mass index with three levels (underweight, normal, overweight) and desired body mass index (underweight, normal, overweight). Current body mass index and desired body mass index were found to be significantly related with Pearson, for females: $\chi 2$ (2, n= 129) = 18.61, p =.000, for males: $\chi 2$ (4, n= 164) = 48.99, p =.000 (in Table 12).

Among females, 79.7 % of normal participants, 17.8 % of underweight participants and 3.1 % of overweight participants desired to have overweight body mass index. 70.4 % normal participants and 29.6 % of underweight participants desired to have underweight body mass index.

Among males, 28.6 % of normal participants, 57.1% of underweight participants and only 14.3 % of overweight participants desired to have underweight body mass index.

Table 12. Percentage of Data on Current Body Mass Index and Desired Body Mass Index

	Current Body Mass Index		
Desired Body Mass Index	Underweight	Normal	Overweight
FEMALES			
Overweight	17.8	79.7 %	3.1 %
Normal	3.4 %	89.7 %	6.9 %
Underweight	29.6 %	70.4%	-
MALES			
Overweight	-	-	-
Normal	4.6 %	79.7 %	15.7 %
Underweight	57.1%	28.6 %	14.3 %

* p= .000

3.8. Predictors of the Three Factor of the EAT-40 and Total EAT-40

The predictors of eating attitudes and behaviors for male and female subjects were examined separately. For each gender group, the regression analyses were run.

Prior to the regression analysis, a correlation matrix was constructed for the 22 predictor variables. Those variables that had no significant correlation with any of the Eating Attitude Scale factors were excluded. However, exceptions were made in cases that none of them were correlated significantly. The remaining 18 variables were mother education, mother occupation, father education, father occupation, perceived family income, whom living with, perceived family type, current body mass index, desired body mass index, dieting, perceived social support –friends, perceived social support- family, frequency of family meals, priority of family meals, atmosphere at family meals, hierarchical roles of mother and father, relationships with family and kin, and total traditional values (in Table 13).

Stepwise regression analyses for the three EAT-40 factors (dieting, preoccupation with food, social pressure on weight and total eating attitude score) were conducted with the 18 variables.

Table 13. Correlations of Diet, Socpress, Preoccup and Total Eat-40 with Candidate Variables for Female and Male Participants

MALES	diet	socprs	Preoccupy	eat-40
Me	-.06	- .18*	.10	-.08
Mo	-.03	-.13	.09	-.05
Fe	-.10	-.20**	.05	-.11
Fo	-.13	-.29**	.01	-.18*
Pft	-.05	-.08	.09	-.03
D	-.17*	-.02	-.16*	-.16*
Ffm	.00	.05	-.06	.00
Whlv	.02	.16*	-.05	.05
Bmi	.11	-.12	.09	.06
Dbmi	-.02	-.21**	-.10	-.09
Pfi	-.12	-.16	.00	-.13
Pss- f	-.12	-.08	.00	-.09
Pss- fri	-.05	-.10	.09	-.03
Priot	.08	.15	.02	.10
Atmos	-.05	.02	-.01	-.02
Hier	.06	.13	.04	.09
Rel	-.07	-.07	-.13	-.09
Trad	.01	.06	-.03	.03

FEMALES	diet	socprs	Preoccupy	eat-40
Me	.06	- .06	.17	.08
Mo	.14	.00	.24**	.17
Fe	.01	-.13	.02	-.02
Fo	.20*	-.01	.02	.14
Pft	-.07	-.20*	-.14	-.13
D	-.38**	.02	-.14	-.31**
Ffm	-.12	-.23**	-.19*	-.19*
Whlv	.10	-.17	.10	.05
Bmi	.24*	-.20*	.23*	.17
Dbmi	-.08	-.17	-.11	-.14
Pfi	.11	.05	.03	.09
Pss- f	-.11	-.21*	-.15	-.18*
Pss- fri	.05	-.21*	.09	-.02
Priot	-.01	-.18*	-.15	-.08
Atmos	-.06	-.11	-.18*	-.11
Hıer	-.07	-.01	-.02	-.07
Rel	.12	.08	-.20*	.03
Trad	.01	.03	-.10	-.04

Table 13. (continued)

* p<.05, **p <.01

Me: Mother education, Mo: Mother occupation, Fe: Father education, Pft: Perceived Family Type, D: Dieting, Ffm: Frequency of Family Meals, Whlv: Whom living with, Bmi: Body Mass Index, Dbmi: Desired Body Mass Index, Pfi: Perceived Family Income, Pss-f: Perceived social support- family, Pss-fri: Perceived social support- friends, Priot: Priority of family meals, Atmos: Atmosphere at family meals, Hıer: Hierarchical roles of father and mother, Rel: Relationship with family and kin, Trad: Total traditional values.

3.8.1. Analysis for Female Participants

3.8.1.1 Predictors for dieting factor for female participants

For dieting factor, the stepwise multiple regression analysis was conducted. Dieting and father occupation significantly predicted dieting attitudes, $R^2 = .19$, F (2, 111) = 12.81, p = .01 (see table 16). While dieting was correlated negatively (being on diet scored as 1 point, not to diet as 2 point), father occupation showed positive correlation with the factor. The sample multiple correlation coefficient was .44, indicating that approximately, 19 % of the variance in the dieting attitudes was explained by the dieting, and father occupation (see Table 14).

3.8.1.2 Predictors for Preoccupation with Food factor for female participants

Mother occupation, current body mass index, desired body mass index, relationships with family and kin and frequency of family meals predicted preoccupation with food attitudes, $R^2 = .23$, F (5, 112) = 6.40, p = .000. While mother occupation and current body mass index were correlated positively with the factor, desired body mass index, relationships with family and kin and frequency of family meals showed a negative correlation. According to this, the sample multiple correlation coefficient was .48, indicating that approximately, 23 % of the variance in the preoccupation with weight attitudes was explained by perceived family type, mother education, current body mass index, frequency of family meals and relationships with family and kin (see Table 14).

3.8.1.3 Predictors for Social Pressure on Weight factor for female participants

Perceived social support – family and current body mass index were found to be significant predictors of social pressure on weight related attitudes, F (2, 111) = 5.62, p = .01. Both predictors were correlated negatively with the factor. The sample multiple correlation was .31, indicating that approximately % 9 of the variance in social pressure on weight related attitudes was explained by two above variables (see Table 14).

3.8.1.4 Predictors for Total Eating Attitude Scale for female participants

Dieting, perceived social support- family, and perceived family income predicted all eating attitudes, F (3, 107) = 7.52, p =.000. While dieting and perceived social support- family showed negative correlation, perceived family income was correlated positively with the factor. The sample multiple correlation was .42, claming that approximately % 18 of the variance in eating attitudes (see Table 14).

3.8.2 Analysis for Male Participants

3.8.2.1 Predictors for Dieting factor for male participants

For dieting factor, the stepwise multiple regression analysis was conducted. Dieting significantly predicted dieting attitudes, $R^2 = .04$, F (1, 156) = 5.71, p = .05 and was correlated negatively with the factor. The sample multiple correlation coefficient was .19, indicating that approximately, 4 % of the variance in the dieting attitudes was explained by dieting, perceived family type and father occupation (see Table 14).

3.8.2.2 Predictors for Preoccupation with Food factor for male participants

Dieting predicted preoccupation with weight attitudes and showed a negative correlation, $R^2 = .03$, F (1, 157) = 4.67, p = .05. According to this, the sample multiple correlation coefficient was .17, indicating that approximately, 3 % of the variance in preoccupation with food attitudes was explained by dieting (see Table 14).

3.8.2.3 Predictors for Social Pressure on Weight factor for male participants

Father occupation, desired body mass index and relationships with family and kin were found to be significant predictors of social pressure on weight related attitudes, F (3, 156) = 9.72, p =.00. According to this, all the predictors showed a negative correlation with the factor. The sample multiple correlation was .40, indicating that approximately % 16 of the variance in social pressure on weight related attitudes was explained by father occupation, desired body mass index and relationships with family and kin (see Table 14).

3.8.2.4 Predictors for Total Eating Attitude Scale for male participants

Dieting, father occupation, and relationships with family and kin were found to be significant predictors of total eating attitude scale, F (3,150) = 5.58, p =.01. According to this, all the predictors were correlated negative with the factor. The sample multiple correlation was .32, indicating that approximately % 10 of the variance in the EAT-40 total score was explained by dieting, father occupation and relationships with family and kin (see Table 14).

Table 14. Summary Results of Multiple Regression

Gender	DEPENDENT VARIABLES	SIGNIFICANT PREDICTORS	Beta	t	R ²change	R
Female	DIET	D	-.39	-4.47	.15	.44*
		FO	.20	2.31	.04	
				Total R ²	. 19	
	PREOCCUP	MO	.15	1.72	.05	.48**
		CBMI	.39	4.01	.05	
		DBMI	-.25	-2.52	.05	
		RFK	-.20	-2.27	.04	
		FFM	-.19	-2.20	.04	
				Total R ²	.23	
	SOCPRESS	PSS-F	-.21	-2.33	.06	.31**
		CBMI	-.20	-2.12	.04	
				Total R ²	.10	
	EAT-40	D	-.32	-3.60	.10	.42**
		PSS-F	-.24	-2.61	.04	
		SES	.19	2.09	.04	
				Total R ²	.18	
Male	DIET	D	-.19	-2.39	.04	.19**
	PREOCCUP	D	-.17	-2.16	.03	.17**
	SOCPRESS	FO	-.32	-4.26	.08	.40*
		DBMI	-.21	-2.82	.05	
		RFK	-.17	-2.22	.03	
				Total R ²	.16	
	EAT-40	D	-.19	-2.38	.03	.32*
		FO	-.24	-2.94	.04	
		RFK	-.17	-2.16	.03	
				Total R ²	.10	

*p<.01
**p<.05

Dieting= D (1: yes / 2: no) , Father Occupation= FO, Mother Occupation = MO, Current Body Mass Index= CBMI, Frequency of Family Meals=FFM, Perceived Social Support-Family= PSS-F, Perceived family income= SES, Desired Body Mass Index= DBMI, Relationships with Family and Kin= RFK.

3.9. Descriptive Statistics

The chi-square analysis was used to assess whether there was a significant difference between females and males in terms of eating and dieting practices.

According to analyses, it was found that males and females were significantly different from each other in terms descriptions for losing weight [$\chi 2$ (1, n= 152) = 43.17, p =.000]. 91.2 % of the female participants wanted to lose weight, whereas 60.7 % of the male participants wanted to gain weight. Furthermore, there was a significant difference between males and females in weight change in last 6 months [$\chi 2$ (1, n= 296) = 7.05, p =.01]. Of the whole sample, there was a change in weight of 70.3% of participants. The majority of female participants (65.1%) planned to lose weight, but only 29.2% of male participants intended to do so, [$\chi 2$ (1, n= 297) = 38.14, p =.000]. In addition, there was a significant difference in terms of being on diet, [$\chi 2$ (1, n= 299) = 8.97, p =.01]. The related data are presented in Table 15.

Furthermore, questions related to family meal patterns were asked to participants (in Appendix E). Some questions made a difference among participants in terms of eating attitude factors. According to this, participants whose family makes special meals for bayrams [($\underline{M}$ = 2.91, Sd = 3.71); ($\underline{M}$ = 1.80, Sd = 2.06)] illustrated higher scores in social pressure on weight factor $\underline{t}$ (288) = 2.40, $\underline{p}$ < .05 and in total eating attitude scale $\underline{t}$ (276) = 2.15, p < .05 as compared to others.

Participants whose parents intervene their meals ($\underline{M}$ = 2.00, Sd =3.05) illustrated higher scores in preoccupied with food factor than others ($\underline{M}$ =1.25, Sd=2.44), $\underline{t}$ (288) = 2.33, p< .05. In addition, dieting factor scores were higher in the group claiming that meals have a role on making family members be together in bayrams and celebrities [($\underline{M}$ = 4.43, Sd = 7.89); ($\underline{M}$ = 2.32, Sd = 5.40)]; $\underline{t}$ (287) = 1.98, p=.05.

Table 15. Percentages on Weight Satisfaction, Current and Desired Weight Change

	Females		Males		Total		$\chi 2$
	%	N	%	N	%	N	
How satisfied with your weigh?							
Satisfied	42.6	55	50.6	86	47.2	141	
Neither nor	26.4	34	27.6	47	27.1	81	
Unsatisfied	31.0	40	21.8	37	25.8	77	3.46
If not satisfied with your weight,							
I want to lose weight	91.2	62	39.3	33	62.5	95	
I want to gain weight	8.8	6	60.7	51	37.5	57	43.17*
Has your weight changed in last 6 months?							
Yes	78.3	101	64.1	107	70.3	208	
No	21.7	28	35.9	60	29.7	88	7.05**
If your weight has changed,							
I gained weight	63.7	65	61.7	66	62.7	131	
I lose weight	36.3	37	38.3	41	37.3	78	.93
Was your weight change intentional?							
Yes	29.5	28	37.9	33	33.5	61	
No	70.5	67	62.1	54	66.5	121	1.46
Do you plan to lose weight?							
Yes	65.1	84	29.2	49	44.8	133	
No	34.9	45	70.8	119	55.2	164	38.14*
Are you on diet now?							
Yes	14.7	19	4.7	8	9.0	27	
No	85.3	110	95.3	162	91.0	272	8.97**

*p<.01
**p<.05

CHAPTER IV

4. DISCUSSION

In this chapter, first the findings of the study will be discussed. Then limitations of the study will be stated. This will be followed by suggestions for future research and therapeutic implications of the present study.

4.1. Participant Characteristics

The present study included 129 female (43%) and 170 male (57%); totally 299 participants. In the present study, 3% of the male participants and 2.3% of the female participants scored higher than the cut off score (30 and above 30) of the Eating Attitudes Test. Thus, they showed pathological eating attitudes. The percentage of the male participants with pathological eating attitudes was almost equal to the percentage of the female participants with pathological eating attitudes. This finding confirmed hypotheses that gender gap for eating disorders is decreasing (Kashubeck-West et al., 2005) and males are vulnerable to eating disorders, too (Kjelsas & Augestad, 2004; Gaskill & Sanders, 2000, p.8). However, this is not in line with study of Alpargun (1995) that found 2 % of the males and 6% of the females were in the pathological group. In general, studies in Turkey assessed either high school students or female university students. Through the recent years, increased rate of males with pathological eating scores would be overlooked. Furthermore, in the present study, the reason for higher rate of males in the eating attitude test can be sourced from higher number of males participated in the study than number of females.

While 55 % of the students were living in dorms, 45% of them were living at home. 34 % of participants were living with their family in Ankara and 66 % of participants were living away from their families (living with friends, relatives or

living alone).While 20 % of the participants perceived their families as traditional, 80 % of the participants perceived their families as modern. In terms of perceived family income, 62 % of the students categorized their family in the middle income group, 14 % of the students categorized them in the low income group and 24 % of the students categorized them in the high income group. Participants who perceived their family income in the middle group were almost half of the sample in the present study.

4.2. Psychometric Qualities of Assessment Devices

In the present study, scales were applied to assess first year university students. These scales included the Eating Attitude Test (EAT– 40), the Multidimensional Scale of Perceived Social Support, the Traditional Family Values Questionnaire and the subscales of Family Eating Attitude and Behavior Scale. All these scales were adapted to Turkish, and all except the Traditional Family Values Questionnaire and subscales of the Family Eating Attitude and Behavior Scale. Turkish adaptation of the Traditional Family Values Questionnaire has not been completed yet, but factors that are obtained at the end of the factor analysis were in line with Tuncer's study (2005) and it had acceptable internal reliability coefficients. In addition, the Family Eating Attitude and Behavior Subscales were used in the study. These subscales had high internal reliability coefficients.

4.3. Differences Associated with Gender, Whom Living With, and Perceived Family Type

The present study hypothesized that there would be significant differences in the total eating attitude scale and its subscales in terms of gender, with whom participants lived (living with family / away from) and perceived family type (traditional / modern). It was expected that participants who perceive their families as traditional will show more pathological eating attitudes than participants who perceive their families as modern. Another hypothesis is that there will be a significant difference on eating attitudes between participants who live with their families and participants who moved away from their families as they started

university. In line with the expectation, participants who perceived their families as traditional showed more pathological eating attitudes (total eating score, dieting, preoccupation with food, and social pressure on weight factors) than the participants who perceived their family as modern. This finding was in line with the previous research indicating that traditionalism of mother and the parents made a predisposing effect on pathological eating attitudes and behaviors (Altuğ, 1999). This may be caused from that modernization is perceived as acceptance of European living styles, attitudes, and norms in Turkey (Mardin, 1991) and there is a tendency to refuse traditional components because it means being non- European (cited in Bac, 1999). First year university students who perceived their family as traditional may adapt to modern life through their appearance and they may be more vulnerable to have ideal slim body which an ideal style of Western countries or modern life. In other words, traditional family structure may make first year university students vulnerable to pathological eating attitudes. Although traditional family type is not a definite concept for all participants, it would be an important risk factor in Turkish culture.

In terms of social pressure on weight, interaction of perceived family types with whom living with made a significant difference between and within the participants. Participants who lived with their families and who perceived their families as traditional had significantly higher scores than participants from modern families. In other words, participants who lived with their families and who perceived their families as traditional may face with social pressure on weight more. However, participants who perceived their families as modern and who lived away from their families took significantly higher scores in social pressure on weight factor than participants who perceived their families as modern and who lived with their families. Living with family may put participants from traditional families at risk for pathological eating attitudes, whereas it may have a protective role for participants from modern families.

Gender difference emerged in pathological eating attitudes related with social pressure as well. Females who perceived their families as traditional and who lived with their families had significantly higher pathological eating attitude scores than males. This finding supports the previous evidence that traditional women are more

likely to choose as weight or body focused external interventions than nontraditional women (Glidden & Tracey, 1989; cited in Thompson, 1996), and body focused interventions may make female participants vulnerable to pathological eating attitudes. In addition, female participants who perceived their families as traditional and who lived with their families may prefer to control their life through the agency of their bodies more than female participants who perceived their families as modern. On the other hand, males who perceived their families as modern and who lived away from their families took higher scores from social pressure on weight factor than males who lived with their families and who perceived their families as modern. According to this, coming from modern family may have a protective role for weight related social pressure for male university students. Nevertheless, males from modern family would desire to have fit muscular ideal body more when they live with their peers.

In general, traditional female participants who lived with their families were significantly different from male participants in terms of weight related social pressure. However, modern males who lived away from their families had more pathological eating attitude scores than females. Males from modern families may be open to friends' pressure more and concerned with their dieting more when they are far from families. There is evidence that perceived pressure from same-sex friend was significantly correlated with dieting attitudes of the first year male university students (Zabunoğlu, 1999). Female participants who perceived their families as traditional may be vulnerable to pathological eating attitudes when they continue to live with their families through the university years. Since traditional family environment may be enmeshed and coercive or may include excessive parental control and the environment may make daughters vulnerable to pathological eating attitudes. This family environment shows similar characteristics with the family setting of patients with anorexia nervosa and bulimia nervosa (Strober & Humphrey, 1987; Haworth-Hoeppner, 2000).

4.4. Perceived Family Income Differences for Eating Attitudes Test and its Subscales

Results on perceived family income association with pathological eating attitudes were not in line with literature. In the present study, it was found that participants from low income group were significantly different from participants from middle income group in the social pressure on weight factor. This finding contradicts with previous researches that participants from high socio-economic status were at the highest risk for eating disorders (Çam, 1994), and participants from family with middle socio-economic status was more vulnerable to eating disorders (Alpargun, 1995).

Finding of the present study would be caused from that lower income groups have a tendency to be overweight more than others (Health and Nutrition Examination Survey, 1999; cited in Jackson, et al., 2003). In the present study, the rate of the participants who had overweight body mass index and who were in the low income group (15.4 %) was more than the rates of participants from middle income group (12 %) and high income group (9.6 %). Therefore, low income group may be open to social pressure on weight more. In addition, regular eating was preferred less by low socio-economic status (Çetinarslan, 2002) and in parallel with the irregular diet, pathological eating attitudes may appear more in this group. Additionally, participants coming from family with low family income may not have adequate autonomy and power in family environment. Body control would be a way of self-determination and self-sufficiency for them.

University students with low family income may choose fast food more because of financial problems they have since fast food is low-priced and common in university campus. Fast food which is more preferable by the students with low family income, it makes the students come across with more weight and eating problems.

High income group was following low income group. This is not in line with the literature because participants with high family income have eating problems more than participants with other family income groups. These results were also not

in line with Alpargun's study indicating that participants with pathological eating attitudes mostly come from family with middle socio-economic status (1995).

In the present study, it is important to see extension of social pressure in pathological eating attitudes among different social groups. In contrast to literature, low family income group was found significantly different from middle and high family income groups in terms of pathological eating attitudes.

4.5. Differences associated with Gender, Current Body Mass Index, and Weight Satisfaction

The present study hypothesized that there would be significant differences in the total eating attitude scale and its subscales in terms of gender, current body mass index (underweight, normal, overweight) and weight satisfaction (unsatisfied, neither satisfied nor unsatisfied, satisfied). It is expected that participants who had normal body mass index and who are satisfied with their weights will show less pathological eating attitudes.

In line with the hypothesis, unsatisfied participants claimed dieting behaviors, and showed pathological eating attitudes more. This finding is also in line with the previous research claiming that body dissatisfaction is an important trigger factor for eating disorders (Ryu et al., 2003). Current body mass index had a significant main effect on social pressure factor; underweight participants were significantly different from overweight participants in terms of social pressure scores. However this finding was not in line with the previous research indicating that underweight participants tended to be satisfied with their bodies more than overweight participants (Kelly et al., 2005). On the other hand, this was in parallel with the study asserting that Japanese university students were more dissatisfied with their bodies although Japanese' body mass indices were lower than others (Mukai et al., 1998).

Furthermore, interaction effect of gender, weight satisfaction and current body mass index obtained only for social pressure factor. Underweight and unsatisfied females were more tend to feel social pressure on weight than underweight and unsatisfied males. In contrast, unsatisfied males with normal body mass took more social pressure scores than unsatisfied and normal body mass

females. Weight dissatisfaction may make male participants with normal body mass more vulnerable to weight related social pressure than females.

4.6. Comparing Groups in terms of Current Body Mass Index, Desired Body Mass Index, and Body Identifications

The present study hypothesized that there will be a significant difference between body mass index and body identification of participants. In line with the hypothesis, it was found that female participants with normal body mass index have a tendency to identify their body as overweight than female participants with overweight body mass index. Furthermore, male participants with normal body mass index identified themselves as underweight rather than male participants with underweight body mass index. These findings may be sourced from unrealistic perception of female and male participants with normal body mass index. Therefore, normal weight participants would be open to any kind of eating problems more than others.

In addition, desired body mass and desired body identification showed a significant difference. Male participants desiring to identify their bodies as overweight gave body mass index not only as overweight body mass index but also as normal In addition, female participants desiring to identify their bodies as normal gave body mass index not only as normal body mass index but also underweight body mass index. These results may be caused from changed weight sizes in the world. For instance, fashion industry proposes quite small and large sizes in wearing. Thus, perception of young people may be diffused. This kind of diffusion was found for underweight body mass index as well, because 81.8 % of the male participants identified their desired body mass index as underweight by giving normal body mass index in the present study. This is in line with the previous research indicating that participants with the lowest body mass index were more likely to categorize their weight as “normal” than participants with higher body mass index (Schulken et al., 1997).

Another important finding is that female participants with normal body mass index (70.4 %) desired to have underweight body mass index. In other words, first

year female university students with normal body mass index desired to have slimmer body. This is in line with socio-cultural theories claiming that socio- cultural ideals emphasize the importance of low size in terms of physical appearance and recent trends support any way (dieting, exercise, diet foods, weight loss programs…) to reach ideal body figure (Thompson, 1996).

4.7. Predictors of the Three Factor of the EAT-40 and Total EAT-40

Variables which were correlated with EAT-40 and its subscales differentiated between female and male participants. This difference can be caused from the fact that factors which make first year university students vulnerable to pathological eating attitudes change from females to males.

4.7.1. Predictors for Dieting Factor

Variables associated with dieting factor for female participants were dieting, and father occupation. Among these predictors, father occupation was correlated positively with dieting factor. Education level is one of the criteria that define individual's occupation and there is evidence that the daughters of parents with higher education level were more likely to diet than the daughters of parents with lower education level. Additionally, daughters of fathers with higher education level stated more anxiety on being weighty than daughters of fathers with lower education level (Şener et al., 1990; cited in Çam, 1994). Therefore, father occupation may make females vulnerable to pathological eating attitudes as well. In addition, it was found that being on diet predicted pathological eating attitudes of the first year female students. Dieting without dietitian control may make females vulnerable to eating problems.

For male participants, variable associated with the dieting factor was only dieting. This variable is common predictor for both females and males and there is evidence that eating disorders are more common among dieters than non-dieters (Striegel- Moore & Cachelin, 2001).

4.7.2. Predictors for Preoccupation with Food Factor

Variables associated with preoccupation with food factor for female participants were mother occupation, current body mass index, desired body mass index, relationships with family and kin and frequency of family meals. While mother occupation and current body mass index were correlated positively with preoccupation with food factor; desired body mass index, frequency of family meals, relationships with family and kin were correlated negatively with the factor. It is expected to find that there is a negative correlation between desired body mass index and preoccupied with food factor. Since desire to be slim makes people restraint their eating and there is association between dietary restraint and preoccupation with food (Fairburn & Cooper, 1993; cited in Timmerman & Gregg, 2003). In other words, amount of time people think about food increase when they restraint their eating to be slimmer.

Frequency of family meals, and relationships with family and kin were found to be negatively correlated with preoccupation with food factor in the present study. This is in line with the finding that participants with more frequent family meals showed less pathological eating attitudes (Neumark-Sztainer et al., 2004). Values on family and kin relationship may have a protective role for adaptation problems that first year university students come across and this may prevent possible pathological eating attitudes that they may have. In brief, frequency of family meals, and values related to family and kin may protect females to be preoccupied with food.

For males, variable associated with preoccupation with food was only dieting. In other words, to be on diet would make first year male university students be preoccupied with food more than other variables.

4.7.3. Predictors for Social Pressure on Weight

Variables associated with social pressure on weight factor for female participants were perceived social support – family and current body mass index. These predictors were correlated negatively with the factor. According to this, female participants who perceived less social support from their families and have low body mass index were more likely to face with social pressure on their weight. There is

evidence that patients with anorexia nervosa had less social support than non-eating disordered group (Tiller et al., 1997; cited in Schmidt, 2003). Young people may face with social pressure on their appearance more than older people in the society. They may be sure of themselves if they come from supportive family environments. Therefore, they may be less vulnerable to social pressure related to their bodies. In brief, females with low body mass index can be open to weight related social pressure more and family social support may have a protective role for females by decreasing their vulnerability to weight related social pressure.

For males, variables associated with social pressure on weight factor were father occupation, desired body mass index, and relations with family and kin. According to this, participants who have father with occupation with low status, who desire to have lower body mass index, who have less values related to family and kin claimed more social pressure on weight. Occupation is mainly defined by education. According to this, father with low status occupation as a finding contradicts with the previous research indicating a significant relationship between daughters of fathers with higher education level and feeling anxiety on being weighty (Şener et al., 1990; cited in Çam, 1994). This difference can be caused from gender difference since the previous research considered only females. In addition, it was also found that desiring to have low body mass index predicted social pressure factor. This is expected because desiring to be slim is an important risk factor for both males and females. Additionally, values given to relationship with family and kin can have protective role for social pressure related to weight for first year male university students.

In sum, it was found that family variables (perceived social support – family, values related to family and kin) would have a protective role for social pressure related pathological eating attitudes for first-year university students. These variables were in line with the previous research that proposed family related variables as protective factors for eating disorders which were family values, supportive extended family network, good relationship with parent / parents, and rules and responsibilities within the household (Strigel-Moore & Smolak, 2001, p.77).

4.7.4. Predictors for total eating attitude test

Variables associated with the total eating attitude test for female participants were dieting, perceived social support-family, and perceived family income. Among these predictors, only perceived family income was correlated positively with the factor. Females who were coming from higher income were more likely to show pathological eating behaviors. This finding is in line with the previous research indicating that women with high socio-economic status have a tendency to diet, and have lower weight mean than women with lower socio-economic status (Rogers, Resnick, Mitchell, & Blum, 1997; cited in Soh et al., 2006, Zabunoğlu, 1999). According to consequences, females with high family income who were dieting and perceived less social support from family were likely to show pathological eating attitudes more than others.

For males, variables associated with the total eating attitude test were dieting, father occupation, and relationships with family and kin. All variables were negatively correlated with the factor. Dieting appeared as a common vulnerability factor for both females and males. If father occupation is accepted as an indicator of family income, it would be interpreted as low family income makes males vulnerable to pathological eating attitudes in contrast to females. Male first year university students with low family income may have weight problems. Since there is evidence that lower income groups have a tendency to be overweight more than others (Health and Nutrition Examination Survey, 1999; cited in Jackson, et al., 2003). In addition, they may not have regular dieting because of economical difficulties and this may make them have weight problems.

In whole sample, only family support was found as predictor among perceived social support groups. This can be interpreted as importance of family on pathological eating attitudes of first year university students. Family environment in terms of support can be a protective factor for eating disorders. However, family meal patterns were not associated with pathological eating attitudes except frequency of family meals. This can be caused from family meal pattern difference in Turkish family. Questions on family meal patterns may not be suitable for Turkey.

4.8. Descriptive Statistics

In the present study, it emerged that desire to lose weight differentiated between males and females. While 91.2 % of the female participants wanted to lose weight, 60.7 % of the male participants wanted to gain weight. In line with this outcome, planning to lose weight was more common among female participants (65.1%) as compared to male participants (29.2%). These rates are in line with the findings of Zabunoğlu (1999). In other words, females are more likely to desire to lose weight as compared to males. Desiring to lose weight may have a negative effect on eating patterns of female students if they choose restrained eating rather than dieting which is controlled by dietitian.

In the present study, although intention to lose weight was apparent among participants, being on diet was not common. While only 9 % of the participants were dieting, 91 % of them were not dieting. This outcome is not in line with previous research stating that 80 % of the female first-year students were dieting (Striegel-Moore et al., 1990). This difference may be caused from a difference among cultures. This result shows similarity between Turkish culture and Chinese culture because although many Chinese female students wanted to be slimmer, they did not make an effort to lose weight, but Chinese female students had lower body mass index than Turkish students (Lee, 1993). Dieting in non-Western countries may not be common as much as in Western countries.

Another result was that there was a change in weight of 70.3 % of the whole sample. The change is in the direction of gaining weight. This finding would be caused from adaptation process of the first year university students. It is not easy to adjust new environment because this process includes physical adaptation (accommodation, transportation, food and drink, communication), and psychological adaptation (emotional change related to: new social setting, away from family/ or previous social milieu). There is also evidence that first year female university students usually have problems with unstructured eating settings in the campus and they are likely to gain weight (Bowen-Woodward and Levitz, 1989). Additionally, difficulties related to college adjustment were associated with problematic eating

behaviors in the first year female university students (VanLone & Kalodner, 2000; cited in VanLone, 2002).

4.9. Limitations of the present study

The main limitation of the study is that, it is not longitudinal in nature. The present study assessed first year university students' conditions in their six months in the university. First year university students have not been long enough in the university (in their six month in the university), thus to generalize findings to all university students is not appropriate. It would be valuable to explore change of their pathological eating attitudes with a longitudinal analysis.

Target population of the present study was university students who were frequently applied group in the literature on eating disorders and university students are similar and have universal characteristics independent from the countries they lived in. However, it is hard to see Turkish profile with the sample. Therefore, it would be valuable to explore eating attitudes of young people who do not continue to university. Different parts of Turkey (both urban and rural areas) should be assessed as well.

In the study, participants stated their perceived family type as either traditional or modern. However participants' criteria on making a decision would make a difference among them because there are no specific definitions for these terms. In future researches, it would be better to give operational definitions of traditional and modern family. In addition, traditional family characteristics may be assessed with different questions. Traditionalism of mother and father can be questioned separately.

4. 10. Therapeutic Implications

University entrance and being first year student in the university as a whole is an important life event for all students independent from gender, family structure or living place (dorm / home). While adapting to university life, some of the students may have difficulties and this may result in psychological problems. Eating disorders

are one of the most common concerns that make university students apply to counseling centers (Robbins et al., 1982).

Analyses revealed differences among first year university students in terms of pathological eating attitudes. According to this, whom living with (with / away from family), perceived family type (traditional / modern) are family related variables that make difference among participants in this study. In addition, perceived social support from family and relation with family and kin are associated with pathological eating attitudes. In university counseling centers, it would be helpful for professionals to assess family structure of students with details while evaluating eating problems of them. In the therapy setting, the therapist can focus on importance of parents in the lives of students. Family influence on the development of pathological eating attitudes may be explored since perceived social support from family and relationships with family and kin are also found to be associated with pathological eating attitudes of the students in the present study.

In regard to pathological eating attitudes, male university students were found to be vulnerable as well as female university students. Therefore, it is important to consider potential of eating disorders for male university students as well in addition to other psychological disorders in university counseling centers.

In the light of the findings of this study, preventative and early intervention programs can be developed for first year university students. These interventions may focus on normal body mass index, weight satisfaction and dieting in university setting.

4. 11. Suggestions for Future Research

Future research would benefit from longitudinal studies which would provide more information on the nature of the development and resolution of the eating problems that first year university students have. To assess the effectiveness of potential interventions, study designs with pre-, post-test and follow up would be useful.

In the future, different age groups and non-university youth can be taken as target populations. Since university sample has universal characteristics, and shows

similar attitudes with university students in the world and it is hard to have an idea on eating attitudes of Turkish culture with this sample.

In the present study, the Eating Attitude Test was used as assessment tool. In future researches, interview can be applied to evaluate pathological eating attitudes of participants as well. More detailed information would be obtained with the interview especially from the participants who take cut off score from the EAT-40 scale. Case studies also may give opportunity to understand causes of pathological eating attitudes better.

Gender difference can be assessed with more details. Especially, current and desired body identification and difference of the identifications can be analyzed for females and males in addition to body mass indices.

In regard to pathological eating attitudes, family would be assessed with more family related variables. Family is a structure with traditions, values, habits, etc. and may have an effect on the maintenance of eating disorders more than predicted. Future studies may find out influence and importance of Turkish family on the development of pathological eating attitudes as well.

4. 12. Conclusion

The present study attempted to make clear association of pathological eating attitudes with height and weight; family meal patterns; perceived social support; traditional family values and socio-demographic variables among first year university students. In the light of the findings, factors which make first year university students vulnerable to pathological eating attitudes were appeared. The finding of the present study may help professionals working with first year university students in regard to pathological eating attitudes.

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APPENDICES

APPENDIX A

Bu ankette edinilen bilgiler Orta Doğu Teknik Üniversitesi'nin Klinik Psikoloji bölümü bünyesinde hazırladığım yüksek lisans tezim için kullanılacaktır.

Lütfen soruların başındaki yönergeleri dikkatle okuyun ve her soruyu size en uygun olan cevabı vererek yanıtlayın. Bu araştırma içindeki soruların doğru ya da yanlış yanıtları yoktur. Cevaplarınız kesinlikle gizli tutulacak ve yalnızca araştırma amacına yönelik kullanılacaktır.

Vereceğiniz yanıtlar bu araştırma için çok büyük değer ve önem taşımaktadır. Bu nedenle değerlendirmelerinizi sizi yansıtacak şekilde dürüstçe ve titizlikle yapınız.

Katılımız için teşekkür ederim.

Öykü MANÇE
ODTÜ Psikoloji Bölümü
Y.Lisans Öğrencisi

Tez Danışmanı:
Doç. Dr. Faruk Gençöz
ODTÜ Psikoloji Bölümü

---

1. Cinsiyetiniz: Kadın ( ) Erkek ( )

2. Yaşınız:

3. Medeni Durumunuz:
Bekar ( ) Evli ( ) Boşanmış ( ) Diğer ( )

4. Anneniz: Hayatta ( ) Hayatta değil ( )
5. Babanız: Hayatta ( ) Hayatta değil ( )

6. Annenizin Eğitim Durumu:
Okuryazar değil ( ) Ön lisans mezunu / 2 senelik üniversite mezunu ( )
İlkokul Mezunu ( ) Üniversite mezunu ( )
Ortaokul veya dengi okul mezunu ( ) Lisansüstü yapmış (Master, doktora) ( )
Lise veya dengi okul mezunu ( )

7. Annenizin mesleği nedir? ***(Eğer anneniz emekli ise, şu an çalışmıyor ise veya hayatta değil ise, çalıştığı zamanki mesleğini yazınız.)***

…….

8. Babanızın Eğitim Durumu:

Okuryazar değil ( ) Ön lisans mezunu / 2 senelik üniversite mezunu ( )
İlkokul Mezunu ( ) Üniversite mezunu ( )
Ortaokul veya dengi okul mezunu ( ) Lisansüstü yapmış (Master, doktora) ( )
Lise veya dengi okul mezunu ( )

9. Babanızın mesleği nedir? ***(Eğer babanız emekli ise, şu an çalışmıyor ise veya hayatta değil ise, çalıştığı zamanki mesleğini yazınız.)***

……..

10. Anneniz ve babanız:

Evli ( ) Boşanmış ( ) Ayrı yaşıyor ( ) Birinin işi nedeniyle ayrı yaşıyor ( )

11. Yaşamınızın en büyük bölümünün geçtiği yer?

Köy ( ) İlçe merkezi ( )
İl merkezi ( ) Büyükşehir [İstanbul, Ankara gibi…] ( )
Diğer [yurtdışı gibi] ( )

12. Yaşamınızın en büyük bölümünün geçtiği bölge?

Ege ( ) Marmara ( )
İç Anadolu ( ) Karadeniz ( )
Doğu Anadolu ( ) Akdeniz ( )
Güneydoğu Anadolu ( ) Yurt Dışı ( )

13. Şu an Ankara'da nerede yaşıyorsunuz?

Evde ( )
Yurtta ( )
Diğer [özel misafirhane, orduevi, vb…..] ( )

14. Şu anda kimlerle yaşıyorsunuz?

Ailemle yaşıyorum ( )
Evde yalnız yaşıyorum ( )
Yurtta yalnız yaşıyorum ( )
Yurtta arkadaş/arkadaşlarla yaşıyorum ( )
Evde arkadaşım / arkadaşlarımla beraber yaşıyoruz ( )
Akrabalarımla yaşıyorum ( )

15. Sizce aileniz hangi gelir dilimine girer ?

Alt ( )
Alt-orta ( )
Orta ( )
Üstü orta ( )
Üst ( )

16. Siz ailenizi nasıl tanımlarsınız ?

Geleneksel			Modern
1	2	3	4

APPENDIX B

17. Boyunuz: ……..

18. Kilonuz:……..

19. Boyunuzun kaç olmasını isterdiniz? .....

20. Kilonuzun kaç olmasını isterdiniz? ……

21. Kilonuzdan ne kadar memnunsunuz?

Çok Memnunum ( ) Memnunum ( )

Ne memnun ne değilim ( ) Memnun değilim ( ) Hiç memnun değilim ( )

22. Kilonuzdan memnun değilseniz:

Kilo almak istiyorum ( )
Kilo vermek istiyorum ( )

23. Son 6 ay içerisinde kilonuzda bir değişiklik oldu mu?

Evet ( ) Hayır ( )

24. Cevabınız evetse:

Bu değişiklik hangi yönde oldu? Kilo aldım ( ) Kilo verdim ( )

Bu değişiklik isteyerek mi oldu? Evet ( ) Hayır ( )

25. Önümüzdeki 6 ay içerisinde kilo vermeyi planlıyor musunuz ?
Evet ( ) Hayır ( )

26. Şu an diyet yapıyor musunuz?
Evet ( ) Hayır ( )

27. Şu anki bedeninizi nasıl tanımlarsınız?
Çok kilolu ( ) Normal ( )
Kilolu ( ) Zayıf ( ) Çok zayıf ( )

28. Bedeninizin nasıl olmasını isterdiniz?
Çok kilolu ( ) Normal ( )
Kilolu ( ) Zayıf ( ) Çok zayıf ( )

APPENDIX C

Bu ölçek sizin yeme alışkanlıklarınızla ilgilidir. Maddelerin çoğu yeme alışkanlıklarınızla ilgili olmakla birlikte, farklı konularda maddeler de yer almaktadır. Bunların arasında doğru yada yanlış söz konusu değildir. Lütfen kendinizi olduğunuz gibi görmeye çalışarak, sizin için en doğru olan, altı seçenekten birini seçerek işaretleyin.

1= Daima 2= Çok sık 3= Sık sık 4= Bazen 5= Nadiren 6= Asla

1.Başkaları ile birlikte yemek yemekten hoşlanırım.	1	2	3	4	5	6
2. Başkaları için yemek pişiririm, fakat pişirdiğim yemeği yemem.	1	2	3	4	5	6
3. Yemekten önce sıkıntılı olurum.	1	2	3	4	5	6
4. Şişmanlamaktan ödüm kopar.	1	2	3	4	5	6
5. Acıktığımda yemek yememeğe çalışırım.	1	2	3	4	5	6
6. Aklım fikrim yemektedir.	1	2	3	4	5	6
7. Yemek yemeği durduramadığım zamanlar olur.	1	2	3	4	5	6
8. Yiyeceğimi küçük küçük parçalara bölerim	1	2	3	4	5	6
9. Yediğim yemeğin kalorisini bilirim	1	2	3	4	5	6
10.Ekmek,patates, pirinç gibi yüksek kalorili yiyeceklerden kaçınırım.	1	2	3	4	5	6
11.Yemeklerden sonra şişkinlik hissederim.	1	2	3	4	5	6
12. Ailem fazla yememi bekler.	1	2	3	4	5	6
13. Yemek yedikten sonra kusarım	1	2	3	4	5	6
14. Yemek yedikten sonra aşırı suçluluk duyarım	1	2	3	4	5	6
15. Tek düşüncem daha zayıf olmaktır.	1	2	3	4	5	6
16. Aldığım kalorileri yakmak için yorulana kadar egzersiz yaparım.	1	2	3	4	5	6
17. Günde birkaç kere tartılırım.	1	2	3	4	5	6

18. Vücudumu saran dar elbiselerden hoşlanırım.	1	2	3	4	5	6
19. Et yemekten hoşlanırım.	1	2	3	4	5	6
20. Sabahları erken uyanırım.	1	2	3	4	5	6
21. Günlerce aynı yemeği yerim.	1	2	3	4	5	6
22. Egzersiz yaptığımda harcadığım kalorileri hesaplarım.	1	2	3	4	5	6
23. Adetlerim düzenlidir **(*yalnızca kadın katılımcılar cevaplayacak*)**	1	2	3	4	5	6
24. Başkaları çok zayıf olduğumu düşünür.	1	2	3	4	5	6
25. Şişmanlayacağım (vücudumun yağ toplayacağı) düşüncesi zihnimi meşgul eder.	1	2	3	4	5	6
26. Yemeklerimi yemek başkalarınınkinden daha uzun sürer	1	2	3	4	5	6
27. Lokantada yemek yemeği severim.	1	2	3	4	5	6
28. Müshil kullanırım.	1	2	3	4	5	6
29. Şekerli yiyeceklerden kaçınırım.	1	2	3	4	5	6
30. Diyet (perhiz) yemekleri yerim.	1	2	3	4	5	6
31. Yaşamımı yiyeceğin kontrol ettiğini düşünürüm.	1	2	3	4	5	6
32. Yiyecek konusunda kendimi denetleyebilirim.	1	2	3	4	5	6
33. Yemek konusunda başkalarının bana baskı yaptığını hissederim.	1	2	3	4	5	6
34. Yiyecek ile ilgili düşünceler çok zamanımı alır.	1	2	3	4	5	6
35. Kabızlıktan yakınırım.	1	2	3	4	5	6
36. Tatlı yedikten sonra rahatsız olurum.	1	2	3	4	5	6
37. Perhiz yaparım.	1	2	3	4	5	6
38. Midemin boş olmasından hoşlanırım.	1	2	3	4	5	6
39. Şekerli, yağlı yiyecekleri denemekten hoşlanırım.	1	2	3	4	5	6

40. Yemekten sonra içimden kusmak gelir.	1	2	3	4	5	6

APPENDIX D

Aşağıdaki soruları yanıtlarken, **eğer şu an ailenizle yaşamıyorsanız**, ailenizle yaşadığınız dönemi düşünerek yanıtlayınız.

1. Son 7 gün içinde kaç kez ailenin tüm fertleri ile ya da bir kısmı ile birlikte (bir öğün) yemek yediniz?

a) Hiç
b) 1-2 kez
c) 3-4 kez
d) 5-6 kez
e) 7 kez
f) 7den fazla

2. Ailemde en azından bir öğünü birlikte yemek önemlidir.

Kesinlikle katılıyorum			Kesinlikle katılmıyorum
4	**3**	**2**	**1**

3. Sıklıkla, ailemle birlikte akşam yemeği yiyemeyecek kadar yoğun olurum.

Kesinlikle katılıyorum			Kesinlikle katılmıyorum
4	**3**	**2**	**1**

4. Ailemde, bireylerin günlük program yoğunlukları, düzenli olarak birlikte yemek yememizi zorlaştırır.

Kesinlikle katılıyorum			Kesinlikle katılmıyorum
4	**3**	**2**	**1**

5. Ailemde, bireylerin birlikte oturup, yemek yiyecek ortak zamanı bulması zordur.

Kesinlikle katılıyorum			Kesinlikle katılmıyorum
4	**3**	**2**	**1**

6. Ailemde, bireylerin akşam yemeğinde bir arada sofrada olması beklenir.

Kesinlikle katılıyorum			Kesinlikle katılmıyorum
4	**3**	**2**	**1**

7. Ailemle birlikte yemek yemekten keyif alırım.

Kesinlikle katılıyorum			Kesinlikle katılmıyorum
4	**3**	**2**	**1**

8. Ailemde yemek yemek, bireyleri keyifli bir şekilde bir araya getirme yoludur.

Kesinlikle katılıyorum			Kesinlikle katılmıyorum
4	**3**	**2**	**1**

9. Ailemde yemek zamanları (öğünler), aile bireylerinin birbirleriyle sohbet ettiği vakitlerdir.

Kesinlikle katılıyorum			Kesinlikle katılmıyorum
4	**3**	**2**	**1**

10. Ailemde akşam yemekleri yemek yemenin ötesinde birbirimizle sohbet ettiğimiz zamanlardır.

Kesinlikle katılıyorum			Kesinlikle katılmıyorum
4	**3**	**2**	**1**

11. Ailemde, yemek zamanlarında uymamız beklenen kurallar vardır.

Kesinlikle katılıyorum			Kesinlikle katılmıyorum
4	**3**	**2**	**1**

12. Ailemde, eğer bir çocuk sunulan yemeği beğenmezse, başka bir şey yemesi uygun bulunur.

Kesinlikle katılıyorum			Kesinlikle katılmıyorum
4	**3**	**2**	**1**

13. Ailemde, bir çocuk yemekte sunulan yemeği beğenmese dahi tümünü yemelidir.

Kesinlikle katılıyorum			Kesinlikle katılmıyorum
4	**3**	**2**	**1**

14. Yemek soframızda, tavırlar önemlidir.

Kesinlikle katılıyorum			Kesinlikle katılmıyorum
4	**3**	**2**	**1**

15. Ailemde, sofradaki tüm yemeklerden yememiz gerekmez.

Kesinlikle katılıyorum			Kesinlikle katılmıyorum
4	**3**	**2**	**1**

APPENDIX E

16. Evinizde yemeğin hep beraber yendiği belli bir mekan bulunur mu?
Evet ( ) Hayır ( )

17. Hep beraber yenildiğinde ailenize has yemekler yapılır mı?
Evet ( ) Hayır ( )

18. Bayram ve kutlamalarda ailenizin beraber olmasında yemek yemek rol oynar mı?
Evet ( ) Hayır ( )

19. Bayramlara has bir yemek yapılır mı?
Evet ( ) Hayır ( )

20. Hep beraber sofraya oturduğunuzda dua okunur/konuşma yapılır mı?

Evet ( ) Hayır ( )

21. Sofranın kurulması ve kaldırılmasında yardımcı olur musunuz?
Evet ( ) Hayır ( )

22. Evden uzak kaldığınızda aile sofrasını özler misiniz?
Evet ( ) Hayır ( )

23. Memleketinizden erzak, tarhana, kavurma, salça, yağ vb. gıda gelir mi?
Evet ( ) Hayır ( )

24. Anne ya da babanız yemekte yediklerinize karışır mı?
Evet ( ) Hayır ( )

25. Ailenizin mutfak kültürünü nasıl tanımlarsınız?
Geleneksel Türk Mutfağı ( )
Tencere Yemeği ( )
Hızlı- pratik ( )
Modern-batılı ( )

APPENDIX F

Aşağıda 12 cümle ve her birinde de cevaplarınızı işaretlemeniz için 1 den 7ye kadar rakamlar verilmiştir.Her cümlede söyleneni sizin için ne kadar çok doğru olduğunu veya olmadığını belirtmek için o cümle altındaki rakamlardan yalnız bir tanesini daire içine alarak işaretleyiniz. Bu şekilde 12 cümlenin her birinde bir işaret koyarak cevaplarınızı veriniz.

1. İhtiyacım olduğunda yanımda olan özel bir insan var.
(özel bir insan, aile ve arkadaşlarınız dışında; flört, sözlü, akraba, nişanlı, komşu, doktor…)

Kesinlikle hayır	1	2	3	4	5	6	7	Kesinlikle evet

2. Sevinç ve kederimi paylaşabileceğim özel bir insan var.
(özel bir insan, aile ve arkadaşlarınız dışında; flört, sözlü, akraba, nişanlı, komşu, doktor…)

Kesinlikle hayır	1	2	3	4	5	6	7	Kesinlikle evet

3. Ailem bana gerçekten yardımcı olmaya çalışır.

Kesinlikle hayır	1	2	3	4	5	6	7	Kesinlikle evet

4. İhtiyacım olan duygusal yardımı ve desteği ailemden alırım.

Kesinlikle hayır	1	2	3	4	5	6	7	Kesinlikle evet

5. Beni gerçekten rahatlatan bir insan var.

Kesinlikle hayır	1	2	3	4	5	6	7	Kesinlikle evet

6. Arkadaşlarım bana gerçekten yardımcı olmaya çalışırlar**.**

Kesinlikle hayır	1	2	3	4	5	6	7	Kesinlikle evet

7. İşler kötü gittiğinde arkadaşlarıma güvenebilirim.

Kesinlikle hayır	1	2	3	4	5	6	7	Kesinlikle evet

8. Sorunlarımı ailemle konuşabilirim.

Kesinlikle hayır	1	2	3	4	5	6	7	Kesinlikle evet

9. Sevinç ve kederlerimi paylaşabileceğim arkadaşlarım var**.**

Kesinlikle hayır	1	2	3	4	5	6	7	Kesinlikle evet

10. Yaşamımda duygularıma önem veren özel bir insanım.

Kesinlikle hayır	1	2	3	4	5	6	7	Kesinlikle evet

11. Kararlarımı vermede ailem bana yardımcı olmaya isteklidir.

Kesinlikle hayır	1	2	3	4	5	6	7	Kesinlikle evet

12. Sorunlarımı arkadaşlarımla konuşabilirim.

Kesinlikle hayır	1	2	3	4	5	6	7	Kesinlikle evet

APPENDIX G

Aşağıdaki ifadeler bazı geleneksel aile değerlerini belirtmektedir. Bizler, bu değerlere ne ölçüde katılıp katılmadığınızla ilgileniyoruz. Aşağıdaki cevaplara karşılık gelen numarayı, ifadenin yanındaki boşluğa yazınız.

Kesinlikle katılıyorum	**Katılıyorum**	**Biraz katılıyorum**	**Ne katılıyorum ne katılmıyorum**	**Pek katılmıyorum**	**Katılmıyorum**	**Kesinlikle katılmıyorum**
7	**6**	**5**	**4**	**3**	**2**	**1**

___ 1. Baba ailenin reisi olmalıdır.

___ 2. Kişi akrabalarıyla iyi ilişkiler içinde olmalıdır.

___ 3. Annenin yeri evidir.

___ 4. Anne, baba ile çocuklar arasında aracı olmalıdır.

___ 5. Anne-baba çocuklarına uygun şekilde davranmayı öğretmelidir.

___ 6. Evde parayı baba idare etmelidir.

___ 7. Anne-baba evli çocuklarının özel yaşamlarına karışmamalıdır.

___ 8. Anne-babaları yaşlandığında çocuklar onlara bakmakla yükümlüdür.

___ 9. Çocuklar ev işlerine yardım etmelidir.

___ 10. Aile problemleri aile içinde çözülmelidir.

___ 11. Çocuklar anne-babalarına itaat etmelidir.

___ 12. Aile itibarımıza saygı duymalı ve onu korumalıyız.

___ 13. Anne-baba çocuklarına maddi açıdan yardımcı olmalıdır.

___ 14. Çocuklar büyükanne ve büyükbabalarına saygı göstermelidir.

___ 15. Anne babanın kararlarını kabul etmelidir.

___ 16. Çocuklar aileye yardım etmek için çalışmalıdır.

___ 17. Anne-baba çocukların önünde tartışmamalıdır.

___ 18. Ekmek parasını baba kazanmalıdır

APPENDIX H

Gender, Perceived Family Type, Living with / away from family Differences for Eating Attitude Test and Its Subscales

Analysis of Variance for Dieting Factor

Source	df	SS	MS	F
Gender	1	88, 99	88,998	1.64
Whom Living with	1	28,62	28.62	.53
Perceived Family Type	1	508,17	508.17	9.38*
Gender x Perceived Family Type	1	54,70	54.70	1.01
Gender x Whom Living with	1	16,11	16.11	.30
Whom Living with x Perceived Family T.	1	148,92	148.918	2.75
Gender x Perceived Family Type x Whom Living	1	62,51	62.505	1.15
Error	281	15219,62	54.16	

* p <.05

Analysis of Variance for Preoccupation with Food factor

Source	df	SS	MS	F
Gender	1	.65	.65	.09
Whom Living with	1	4.70	4.70	.64
Perceived Family Type	1	41.95	41.95	5.68*
Gender x Perceived Family Type	1	9.94	9.94	1.35
Gender x Whom Living with	1	15.47	15.47	2.10
Whom Living with x Perceived Family T.	1	14.01	14.01	1.90
Gender x Perceived Family Type x Whom Living	1	2.51	2.51	.34
Error	283	2089.83	7.39	

* p <.05

Analysis of Variance for Social Pressure on Weight factor

Source	df	SS	MS	F
Gender	1	5.90	5.90	.54
Whom Living with	1	29.97	29.97	2.74
Perceived Family Type	1	66.63	66.63	6.09*
Gender x Perceived Family Type	1	137.24	137.24	12.54*
Gender x Whom Living with	1	20.91	20.91	1.91
Whom Living with x Perceived Family T.	1	91.11	91.11	8.33*
Gender x Perceived Family Type x Whom Living	1	49.96	49.96	4.57*
Error	282	3086.14	10.94	

* p <.05

Analysis of Variance for Total Eating Attitude scale

Source	df	SS	MS	F
Gender	1	105.35	105.35	.77
Whom Living with	1	194.58	194.58	1.42
Perceived Family Type	1	1453.04	1453.04	10.60*
Gender x Perceived Family Type	1	1.53	1.53	.01
Gender x Whom Living with	1	101.73	101.73	.74
Whom Living with x Perceived Family T.	1	657.15	657.15	4.79*
Gender x Perceived Family Type x Whom Living	1	20.36	20.36	.15
Error	270	37016.86	137.99	

* p <.05

APPENDIX I

Gender, Weight Satisfaction, Current Body Mass Index Differences

Analysis of Variance for Dieting factor

Source	df	SS	MS	F
Gender	1	87.32	87.32	1.71
Weight Satisfaction	2	897.24	448.62	8.78*
Current Body mass index	2	60.82	30.41	.60
Gender x Weight Satisfaction	2	212.48	106.24	2.08
Gender x Current Body Mass Index	2	112.12	56.06	1.10
Weight Satisfaction x Current B.M.I.	4	439.09	109.77	2.15
Gender x Weight Satisfaction x Current Body M. I.	2	32.92	16.46	.32
Error	271	13855.07	51.13	

* p <.01

Analysis of Variance for Social Pressure on Weight Factor

Source	df	SS	MS	F
Gender	1	.73	.73	.07
Weight Satisfaction	2	48.95	24.48	2.22
Current Body Mass Index	2	113.30	56.65	5.13**
Gender x Weight Satisfaction	2	39.60	19.80	1.79
Gender x Current Body Mass Index	2	65.79	32.90	2.98
Weight Satisfaction x Current Body Mass	4	16.51	4.13	.37
Gender x Weight Satisfaction x Current Body M.I.	2	86.95	43.47	3.94*
Error	272	3002.64	11.04	

* p <.05, ** p<.01

Analysis of Variance for Total Eating Attitude Scale

Source	df	SS	MS	F
Gender	1	31.25	31.25	.23
Weight Satisfaction	2	1794.28	897.14	6.70**
Current Body Mass Index	2	284.51	142.26	
1.06				
Gender x Weight Satisfaction	2	535.80	267.90	2.00
Gender x Current Body Mass Index	2	345.25	227.91	1.29
Weight Satisfaction x Current Body M.I.	4	911.63	140.46	1.70
Gender x Weight Satisfaction				
xCurrent Body M.I.	2	280.92	133.92	1.05
Error	261	34952.18		

* p <.05, ** p<.01