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Expressed Emotion and Attitudes toward Body Image and Food

Toni Marie Maraldo
Butler University

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_____ Date

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Expressed Emotion and Attitudes toward Body Image and Food

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Abstract

In numerous studies over the years, body image and dysfunctional attitudes toward food have shown to be related to the genesis of eating disorders. Recent research has particularly focused on the influence that families have on both the development of eating disorders as well as their impact on their child's body image and eating attitudes. . In general, higher levels of expressed emotion are often found in families with children who have either anorexia nervosa or bulimia nervosa. However, there is a lack of research on sub-clinical populations. Therefore, the purpose of this study is to analyze the influence that expressed emotion has on body image and eating attitudes, which are often markers of sub-clinical eating dysfunction. Ninety-nine female undergraduate students from Butler University completed questionnaires assessing eating attitudes, restraint, body shape, fear of becoming fat, and expressed emotion. My hypothesis is that a high level of expressed emotion in families is positively correlated with dysfunctional attitudes toward food and distorted body image. Pearson correlations showed that indeed there are significant relationships between high expressed emotion and negative eating attitudes, increased restraint in eating patterns, poor body image, and fear of becoming fat in college-aged women. Results are discussed in light of relevant theory.

Expressed Emotion and Attitudes toward Body Image and Food

In the course of a lifetime, between 8 and 13 million Americans will suffer from some type of eating disorder (Hudson, Hiripi, Pope, & Kessler, 2007). Further, there has been a substantial increase in the yearly incidence of anorexia nervosa among women aged 15-24, from approximately 15 per 100,000 women in 1935 to approximately 50 per 100,000 women in 1989 (Lucas, Crowson, O'Fallon & Melton, 1999), and the incidence of bulimia tripled between 1988 and 1993 for women aged 10-39 (Hoek & Hoeken, 2003). In addition, research shows that 80% of American women are unhappy with their appearance, indicating that many individuals struggle with body dissatisfaction even without a clinical diagnosis of an eating disorder (National Eating Disorders Association, 2005). Body image concerns are especially high among college-age women. In fact, 91% of women admitted to trying to manage their weight through dieting practices when surveyed on their college campus (Kurth, Krahn, Nairn, & Drewnowski, 1995).

Many researchers consider body dissatisfaction one of the key factors in body image disturbance, suggesting it can result in numerous negative consequences, including disordered eating (Stice, 2002). In fact, disturbances in body image are central to the psychopathology of anorexia nervosa (Zanker, 2009). According to the DSM-IV-TR (American Psychiatric Association, 2000), diagnostic criteria for anorexia nervosa include: "an intense fear of gaining weight or becoming fat, even though underweight" and "disturbance in the way in which one's body weight or shape is experienced, undue influence of body weight or shape on self-evaluation, or denial of the seriousness of current low body weight" (p. 589). The second criterion in particular refers to the concept of poor or distorted body image, which is a common thread through all eating disorders. Furthermore, dysfunctional attitudes toward eating can also impact eating

disorders. Research has found that beliefs regarding food and overeating may influence not only the development but also the maintenance of eating disorders (Wilson et. al., 2009).

A good deal of research has examined the impact that families have on the development and maintenance of eating disorders. Research shows that poor social support is a potential risk factor for the development of an eating disorder (Limbert, 2010). Also, certain characteristics are often found in families in which an individual suffers from an eating disorder. According to a study conducted by le Grange, Lock, Loeb, and Nicholls (2010), certain parenting behaviors, such as overprotection or high concern, were more common in mothers of patients with anorexia nervosa than in mothers of control participants. In the same study, the individuals with anorexia nervosa had significantly more problems with their parents compared to the control group, including experiencing more arguments, criticism, high expectations, and critical comments from family members about eating or weight. Similar characteristics can also be found in the families of patients who suffer from bulimia nervosa. Those suffering from bulimia nervosa often perceive their families as less communicative, cohesive, and nurturing, and they perceive more conflict within their families than women without eating disorders (Laliberté, Boland, & Leichner, 1999).

Along with families having an influence on clinically diagnosed patients with an eating disorder, research also suggests that families have an impact on their children's body image. In general, researchers believe that family and social influences tend to impact body image and dieting among adolescent girls in three main avenues: through the girls' perceptions of their family relations, girls modeling of their mothers' behaviors and

attitudes regarding food, and communication within the family (Byely, Archibald, Graber, & Brooks-Gunn, 2000). According to several studies examining family influences on eating patterns, girls who have eating problems tend to perceive their families as more conflictual and less unified and affectionate (Byely et al., 2000). Studies have also shown that mothers may have a direct impact on their daughters' eating behaviors, pressuring them to be thin. Pike and Rodin (1991) found that young girls with disturbed eating patterns often had mothers who were more critical about their weight and overall appearance than girls without disturbed eating patterns. Furthermore, there is evidence to suggest that perceptions of family relations can affect body image and dysfunctional eating attitudes over time. Byely et al. (2000) found that girls' perceptions of family interactions and mothers' perceptions of their daughters' weight at Time 1 significantly predicted girls' dieting behavior 1 year later more than the dieting and body image levels at Time 1 predicted the dieting behavior 1 year later. This study in particular shows the large influence that perceived family interactions have on dysfunctional eating patterns and attitudes toward food.

Another way that family influences are analyzed with any psychological disorder is through the study of expressed emotion (EE). EE is defined as "a type of negative communication involving excessive criticism and overinvolvement directed at a patient by family members" (Butcher, Mineka, & Hooley, 2010, pp. 485-486). Specific characteristics of EE include confusion of roles, high levels of criticism, unrealistic expectations, persistent disappointment, emotional overinvolvement, and hostility (Leff & Vaughn, 1985). A great deal of research has examined EE in the context of relapse in people with schizophrenia and EE has proven to be a remarkably important factor. A

meta-analysis conducted by Butzlaff and Hooley (1998) showed that 24 out of 27 studies (89%) examining EE and relapse in schizophrenia patients showed a significant positive relationship between the two variables: higher EE is associated with greater risk of relapse.

Expressed emotion has been examined in many other mental illnesses as well, including eating disorders. Families containing a child with anorexia nervosa are often described as having unresolved conflict between parents, often including the child in these conflicts, as well as being overprotective and inflexible (Hodes & le Grange, 1993). According to a study conducted by Kyriacou, Treasure, and Schmidt (2008), higher levels of overinvolvement and criticism were found in the families of anorexia nervosa patients compared to families of a control group. Further, Butzlaff and Hooley's meta-analysis (1998) found that, while there is much more research connecting EE and schizophrenia relapse, there is a greater effect size for EE and eating disorders than for EE and schizophrenia. This suggests that although EE may be a very strong predictor for poor outcome in schizophrenia, it is an even better predictor for eating disorders.

Although there have been several studies examining the relapse between EE and eating disorders, there is a lack of research concerning EE in sub-clinical eating disorder populations. If dysfunctional attitudes toward food and body image are placed on a spectrum, the extant research only focuses on the high extreme of the spectrum: tremendously dysfunctional attitudes toward food and extremely negative body image in the form of eating disorders. However, there is no research looking at other areas of the spectrum where less severe levels of body image and dysfunctional attitudes toward food can be found. Therefore, the purpose of the present research was to examine the

relationship between EE and body image and dysfunctional attitudes toward food in sub-clinical populations. My hypothesis was that a high level of expressed emotion in families is positively correlated with dysfunctional attitudes toward food and distorted body image.

Thesis Description

In numerous studies over the years, body image and dysfunctional attitudes toward food have shown to be related to the genesis of eating disorders. Recent research has particularly focused on the influence that families have on both the development of eating disorders as well as their impact on their child's body image and eating attitudes. There have been numerous studies that suggest eating disorders develop out of a certain type of family organization (Whitney & Eisler, 2005). In general, higher levels of EE are often found in families with children who have either anorexia nervosa or bulimia nervosa. However, there is a lack of research on sub-clinical populations. Because any mental illness is believed to be the extreme end of a continuum of behavior (see van Os, 1999), focusing solely on the extremity neglects the whole picture. Therefore, this thesis aimed to examine other parts of the spectrum to see if a similar relationship exists. The purpose of this study was to analyze the influence that expressed emotion has on body image and eating attitudes, which are often markers of sub-clinical eating dysfunction. Overall, this research will help in determining whether EE is a developmental factor versus a purely relapse factor of eating disorders.

Method

Participants

99 women from undergraduate Butler University classes and from Butler sororities were recruited for this study. Participants in psychology classes received extra credit with permission from his/her professor. All participants were at least 18 years of age in order to give informed consent. All 99 participants were single, with a mean age of 20.36. The majority of participants were white, with only 5 participants designating another race. Six participants noted having a past or current eating disorder diagnosis. None of the demographic variables were significantly related to any of the independent or dependent variables.

Materials

Demographic Questionnaire (Appendix A). Participants filled out a demographic questionnaire assessing, among other variables, their age, race, gender, and psychiatric history.

Eating Attitudes Test (EAT; Garner & Garfinkel, 1979; Appendix B). The EAT is a 40-item scale that measures behaviors and attitudes that are characteristic of anorexia nervosa. This is used to assess peoples' negative attitudes toward food and eating. For each question, participants rate how often the statement is true for them on a scale of 1 *Always* to 6 *Never*. Questions cover a variety of eating attitudes and behaviors (e.g., "Like eating with other people" or "Eat diet foods"). This test was selected due to its high internal reliability, with an alpha of .94 (Garner & Garfinkel, 1979).

Restraint Scale (RS; Herman, 1978; Appendix C). The RS is a 10-item scale that measures efforts to control eating. There are various question types in this scale. Some

questions ask participants to select a number range of their weight loss or gain (e.g., "What is your maximum weight gain within a week?"). Other questions assess how often the participants feel, think, or act in relation to specific eating situations on a scale of 0 *Never* to 3 *Always* (e.g., "Do you eat sensibly in front of others and splurge alone?"). This test was selected because it specifically targets the theme of controlling or restraining eating, which may be an indicator of dysfunctional attitudes toward food. Also, studies indicate that this scale has both criterion and concurrent validity (Herman, 1978).

Body Shape Questionnaire (BSQ; Cooper, Taylor, Cooper, & Fairburn, 1987; Appendix D). The BSQ is a 34-item scale that measures concerns about body shape. This scale was created because body image is a key feature in both anorexia and bulimia (Cooper et al., 1987). For each question, participants rate how often they have participated in certain behaviors over the past four weeks on a scale of 1 *Never* to 6 *Always*. Questions entail various dimensions of the same end result: "feeling fat" (e.g., "Have you felt so bad about your shape that you have cried?"). This test was selected because it particularly focuses on the concept of "feeling fat," which is a central aspect of body image. Also, this scale has strong concurrent validity when compared to other established eating disorder scales, such as the Eating Disorder Inventory and the EAT, as well as strong known-groups validity (Cooper et al.).

Goldfarb Fear of Fat Scale (GFFS; Goldfarb, Dykens, & Gerrard, 1985; Appendix E). The GFFS is a 10-item scale that measures participants' fear of gaining weight. This scale is beneficial because the fear of becoming fat is one of the fundamental emotions of eating disorders (Goldfarb et al., 1985). For each question,

participants rated how true a statement was for them on a scale of 1 *Very untrue* to 4 *Very true.* Questions suggest a variety of feelings that participants may be experiencing related to their body image or fear of gaining weight (e.g., "Becoming fat would be the worst thing that could happen to me"). This test was selected because it has very high internal reliability with an alpha of .85 and an excellent test-retest correlation of .88 (Goldfarb, et al.).

Level of Expressed Emotion Scale (LEE; Hale, Raaijmakers, Gerlsma, & Meeus, 2007; Appendix F). Originally developed by Cole and Kazarian (1988), the current version of the LEE is a 38-item self-report scale that measures a family's level of EE from the subject's perspective. It examines four main factors of family interaction: perceived lack of emotional support, perceived intrusiveness, perceived irritation, and perceived criticism (Hale et al., 2007). For each question, participants rate how true a statement is for them on a scale of 1 *untrue* to 4 *true* in regards to a characteristic or situation concerning his or her parents (e.g., "My parents…Try to reassure me when I'm not feeling well"). The LEE has demonstrated strong internal reliability with an alpha of .93 (Hale, et al.).

Design and Procedure

Participants completed the surveys in a group research setting. The participants signed up for a time slot to complete the study and returned to the lab during their designated time. Participants filled out an informed consent before participating in the study. In order to minimize carryover effects, we counterbalanced the measures. Half of the participants completed the body image/dysfunctional attitudes toward food scales first followed by the EE scale while the other half of the participants did just the opposite. No

order effects emerged, so all data are reported. All participants completed the demographic questionnaire last. Participants were then free to leave. This study took the participants approximately 20-30 minutes to complete.

Results

Pearson correlations produced many significant results supporting my hypothesis. High total EE was significantly correlated with negative eating attitudes as measured by the EAT, $r(97)=.216$, $p<.05$, increased restraint in eating behaviors as measured by the RS, $r(97)=.223$, $p<.05$, poor body image as measured by the BSQ, $r(97)=.332$, $p<.01$, and fear of becoming fat as measured by the GFFS, $r(97)=.329$, $p<.01$.

Because of the significant relationships between overall expressed emotion and the other variables, the subscales of the LEE were further examined. The "perceived lack of emotional support (pLES)" factor was significantly correlated with poor body image as measured by the BSQ, $r(97)=.227$, $p<.05$. The "perceived irritability (pIR)" factor was significantly correlated with negative eating attitudes as measured by the EAT, $r(97)=.293$, $p<.01$, increased restraint as measured by the RS, $r(97)=.262$, $p<.01$, poor body image as measured by the BSQ, $r(97)=.361$, $p<.001$, and fear of becoming fat as measured by the GFFS, $r(97)=.389$, $p<.001$. The "perceived intrusiveness (pIN)" factor was significantly correlated with poor body image as measured by the BSQ, $r(97)=.228$, $p<.05$, and fear of becoming fat as measured by the GFFS, $r(97)=.304$, $p<.01$. Finally, the "perceived criticism (pC)" factor was significantly correlated with poor body image as measured by the BSQ, $r(97)=.290$, $p<.01$, and fear of becoming fat as measured by the GFFS, $r(97)=.256$, $p<.05$. Of the four sub-scales of EE, perceived irritability was the strongest predictor because it was significantly related to all four variables.

Supplemental analyses further suggested that, while the presence of a current or past eating disorder diagnosis was significantly related to dysfunctional eating attitudes as measured by the EAT($p<.01$) and behaviors as measured by the RS ($p=.01$), EE was more strongly related to those dysfunctional attitudes and behaviors (hierarchial regressions yielded non-significant R-square changes, all $p>.15$).

Discussion

The results of the study suggest that perceived EE is related to poor body image and negative attitudes toward food. Higher levels of EE were correlated with negative attitudes toward food and eating, increased restrained eating, poor body image, and an increased fear of becoming fat. The strongest correlations were found with poor body image and fear of fat, which can be indicators of sub-clinical eating dysfunction. There were also strong relations among all four specific aspects of EE. Perceived irritability was significantly correlated with all four body image and eating scales, suggesting this could be the key factor among the EE and disordered eating attitudes and body image link. Perceived irritability refers to a parent's ability to handle stress and manage his/her emotions, especially in relation to the child. Examples of this factor include "can cope well with stress," "make matters worse when things aren't going well," etc. This factor examines how parents' reactions to situations affect their children and may be vital in the development of the disordered attitudes and behaviors. Further studies need to be conducted that focus on this factor in particular.

The overall goal of this thesis was to determine whether there was a relationship between EE and attitudes toward body image and food. My hypothesis was that high EE was related to dysfunctional attitudes toward food and distorted body image, and this

hypothesis was indeed supported by the data as discussed above. Although we collected some data on past and current psychological diagnoses, this study is not longitudinal in nature. We have no indications to whether these participants will develop eating disorders in the future, so we cannot determine from this present study whether EE plays a developmental role in the genesis of an eating disorder. However, we do have evidence that EE is related to sub-clinical markers of eating disorders, such as distorted body image and dysfunctional attitudes toward food. To determine whether EE is truly a developmental factor of eating disorders, a longitudinal study would need to be conducted to determine whether these participants become diagnosed with an eating disorder. However, the present study suggests that there is possibly an interesting and important link between family dynamic and communication and signs of a potential eating disorder.

Although our main hypothesis was supported, one of the most interesting findings was that EE was more strongly related to the dysfunctional attitudes and behaviors than having a past or present eating disorder diagnosis. Although this was unexpected and a peculiar finding, there are many possible explanations for it. One possibility is that many participants have not been diagnosed with an eating disorder even though they perhaps should be. Many people refuse to seek psychological help even when the problem is serious, which could account for the dysfunctional attitudes and behaviors but lack of an official diagnosis. Another possibility is that the participants who were formerly diagnosed with an eating disorder no longer experience the distorted body image or dysfunctional behaviors. We did not ask participants to specify whether the diagnosis was current or past, simply whether they have ever been diagnosed. A final possibility is

that the measures used to assess the dysfunctional attitudes and behaviors are not related to actually having an eating disorder diagnosis. Although this is a possibility, it is not likely since these scales have been validated and are typically used to assess eating disorders. Regardless of the reasons for this finding, it is still an interesting and provocative one, further suggesting that there is a link between EE and dysfunctional eating attitudes and behaviors, which often can lead to full-blown eating disorders.

Despite the many exciting findings of this study, there are some weaknesses. The participants were rather homogeneous ethnically and socioeconomically and did not represent the diversity of college-aged women. The majority of participants were white and all came from Butler University, which is a private liberal arts university. The participants in this study may not represent college-aged women of different races and socioeconomic levels, and EE may operate differently in diverse environments. Therefore, generalizing these results to other populations needs to be done with caution. Also, all data were collected using self-reports, and no correction was made for such factors as social desirability bias or demand characteristics.

As noted earlier, future longitudinal studies should be conducted to determine whether EE has a truly developmental nature in the origins of eating disorders. This phenomenon should also be examined in other populations, such as diverse races, education, and family incomes. Regardless of the limitations of this study, a significant link between EE and distorted body image and dysfunctional eating attitudes and behaviors emerged. Although we cannot imply a causal link, this study is a catalyst for future studies to determine the true influence of EE on the development of eating disorders.

The purpose of this study was to analyze the influence that expressed emotion has on body image and eating attitudes, which are often markers of sub-clinical eating dysfunction. My hypothesis was that a high level of expressed emotion in families is positively correlated with dysfunctional attitudes toward food and distorted body image. Results showed that indeed there are significant relationships between high expressed emotion and negative eating attitudes, increased restraint in eating patterns, poor body image, and fear of becoming fat in college-aged women. Future studies should be conducted that follow college-aged women longitudinally to determine whether these sub-clinical markers develop into eating disorders, which would provide stronger evidence of the EE influence.

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ID # _____

Appendix A: Demographic Questionnaire

Gender: Male _____ Female _____

Age: _____

Marital Status: Single _____ Married ____ Divorced ____ Separated ____
Widowed ____

Race/Ethnic Background: White _____ African American or Black _____

Asian _____ Hispanic or Latino _____

American Indian _____Other _____
(please specify)

Religion: _____

Are you a full time student? Yes _____ No ____

If no, what is your occupation? _____

Year in college: First year ____ Sophomore ____ Junior ____ Senior ____ Other ___

Major: _____

Have you ever been diagnosed with a psychological disorder? Yes ____ No ____

If yes, please list diagnoses: _____

Are you currently taking any medication for the treatment of any psychological disorder?

Yes _____ No _____

ID # _____

Appendix B: Eating Attitudes Test

Please indicate on the line at left the answer which applies best to each of the numbered statements. All of the results will be *strictly* confidential. Most of the questions directly relate to food or eating, although other types of questions have been included. Please answer each question carefully. Thank you.

1	2	3	4	5	6
Always	Very Often	Often	Sometimes	Rarely	Never

___ 1. Like eating with other people.

___ 2. Prepare foods for others but do not eat what I cook.

___ 3. Become anxious prior to eating.

___ 4. Am terrified about being overweight.

___ 5. Avoid eating when I am hungry.

___ 6. Find myself preoccupied with food.

___ 7. Have gone on eating binges where I feel that I may not be able to stop.

___ 8. Cut my food into small pieces.

___ 9. Aware of the calorie content of foods that I eat.

___ 10. Particularly avoid foods with a high carbohydrate content (e.g. bread, potatoes, rice, etc.)

___ 11. Feel bloated after meals.

___ 12. Feel that others would prefer if I ate more.

___ 13. Vomit after I have eaten.

___ 14. Feel extremely guilty after eating.

___ 15. Am preoccupied with a desire to be thinner.

___ 16. Exercise strenuously to burn off calories.

___ 17. Weigh myself several times a day.

___ 18. Like my clothes to fit tightly.

___ 19. Enjoy eating meat.

___ 20. Wake up early in the morning.

___ 21. Eat the same foods day after day.

___ 22. Think about burning my calories when I exercise.

___ 23. Have regular menstrual periods.

___ 24. Other people think that I am too thin.

___ 25. Am preoccupied with the thought of having too much fat on my body.

___ 26. Take longer than others to eat my meals.

___ 27. Enjoy eating at restaurants.

___ 28. Take laxatives.

___ 29. Avoid foods with sugar in them.

___ 30. Eat diet foods.

___ 31. Feel that food controls my life.

___ 32. Display self-control around food.

___ 33. Feel that others pressure me to eat.

___ 34. Give too much time and thought to food.

___ 35. Suffer from constipation.

___ 36. Feel uncomfortable after eating sweets.

___ 37. Engage in dieting behavior.

___ 38. Like my stomach to be empty.

___ 39. Enjoy trying new rich foods.

___ 40. Have the impulse to vomit after meals.

ID # _____

Appendix C: Restraint Scale

Please answer the following items by circling the alternatives below the question.

1. How often are you dieting?

   a. Never b. Rarely c. Sometimes d. Often e. Always

2. What is the maximum amount of weight (in pounds) that you have ever lost in one month?

   a. 0-4 b. 5-9 c. 10-14 d. 15-19 e. 20+

3. What is your maximum weight gain within a week?

   a. 0-1 b. 1.1-2 c. 2.1-3 d. 3.1-5 e. 5.1+

4. In a typical week, how much does your weight fluctuate?

   a. 0-1 b. 1.1-2 c. 2.1-3 d. 3.1-5 e. 5.1+

5. Would a weight fluctuation of 5 pounds affect the way you live your life?

   a. Not at all b. Slightly c. Moderately d. Very Much

6. Do you eat sensibly in front of others and splurge alone?

   a. Never b. Rarely c. Often d. Always

7. Do you give too much time and thought to food?

   a. Never b. Rarely c. Often d. Always

8. Do you have feelings of guilt after overeating?

   a. Never b. Rarely c. Often d. Always

9. How conscious are you of what you are eating?

   a. Not at all b. Slightly c. Moderately d. Extremely

10. How many pounds over your desired weight were you at your maximum weight?

    a. 0-1 b. 1-5 c. 6-10 d. 11-20 e. 21+

ID # _____

Appendix D: Body Shape Questionnaire

We would like to know how you have been feeling about your appearance over the *past four weeks*. Please read each question and indicate on the line at left the answer which applies best.

Over the past four weeks:

1	2	3	4	5	6
Never	Rarely	Sometimes	Often	Very Often	Always

___ 1. Has feeling bored made you brood about your shape?

___ 2. Have you been so worried about your shape that you have been feeling you ought to diet?

___ 3. Have you thought that your thighs, hips, or bottom are too large for the rest of you?

___ 4. Have you been afraid that you might become fat (or fatter)?

___ 5. Have you worried about your flesh being not firm enough?

___ 6. Has feeling full (e.g., after eating a large meal) made you feel fat?

___ 7. Have you felt so bad about your shape that you have cried?

___ 8. Have you avoided running because your flesh might wobble?

___ 9. Has being with thin women made you feel self-conscious about your shape?

___ 10. Have you worried about your thighs spreading out when sitting down?

___ 11. Has eating even a small amount of food made you feel fat?

___ 12. Have you noticed the shape of other women and felt that your own shape compared unfavorably?

___ 13. Has thinking about your shape interfered with your ability to concentrate (e.g., while watching television, reading, listening to conversations)?

___ 14. Has being naked, such as when taking a bath, made you feel fat?

___ 15. Have you avoided wearing clothes which make you particularly aware of your body shape?

___ 16. Have you imagined cutting off fleshy areas of your body?

___ 17. Has eating sweets, cakes, or other high-calorie food made you feel fat?

___ 18. Have you not gone out to social occasions (e.g., parties) because you have felt bad about your shape?

___ 19. Have you felt excessively large and rounded?

___ 20. Have you felt ashamed of your body?

___ 21. Has worry about your shape made you diet?

___ 22. Have you felt happiest about your shape when your stomach has been empty (e.g., in the morning)?

___ 23. Have you thought that you are in the shape you are because you lack self-control?

___ 24. Have you worried about other people seeing rolls of fat around your waist or stomach?

___ 25. Have you felt that it is not fair that other women are thinner than you?

___ 26. Have you vomited in order to feel thinner?

___ 27. When in company have you worried about taking up too much room?

___ 28. Have you worried about your flesh being dimply?

___ 29. Has seeing your reflection (e.g., in a mirror) made you feel bad about your shape?

___ 30. Have you pinched areas of your body to see how much fat there is?

___ 31. Have you avoided situation where people could see your body (e.g., swimming pools)?

___ 32. Have you taken laxatives in order to feel thinner?

___ 33. Have you been particularly self-conscious about your shape when in the company of others?

___ 34. Has worry about your shape made you feel you ought to exercise?

ID # _____

Appendix E: Goldfarb Fear of Fat Scale

Please read each of the following statements and select the number which best represents your feelings and beliefs.

1	2	3	4
Very Untrue	Somewhat Untrue	Somewhat True	Very True

___ 1. My biggest fear is of becoming fat.

___ 2. I am afraid to gain even a little weight.

___ 3. I believe there is a real risk that I will become overweight someday.

___ 4. I don't understand how overweight people can live with themselves.

___ 5. Becoming fat would be the worst thing that could happen to me.

___ 6. If I stopped concentrating on controlling my weight, chances are I would become very fat.

___ 7. There is nothing that I can do to make the thought of gaining weight less painful and frightening.

___ 8. I feel like all my energy goes into controlling my weight.

___ 9. If I eat even a little, I may lose control and not stop eating.

___ 10 Staying hungry is the only way I can guard against losing control and becoming fat.

ID # _____

Appendix F: Level of Expressed Emotion

Please read each of the following statements regarding your relationship with your parents and select which number best represents your feelings.

1	2	3	4
Untrue	Somewhat Untrue	Somewhat True	True

My parents…

____ 1. Try to reassure me when I'm not feeling well

____ 2. Are sympathetic toward me when I'm ill or upset

____ 3. Are considerate when I'm ill

____ 4. Can see my point of view

____ 5. Often accuse me of making things up when I'm not feeling well

____ 6. Are understanding if I make a mistake

____ 7. Make me feel relaxed when they are around

____ 8. Understand my limitations

____ 9. Try to make me feel better when I'm ill

____ 10. Hear me out

____ 11. Are tolerant with me, even when I'm not meeting their expectations

____ 12. Make me feel valuable as a person

____ 13. Accuse me of exaggerating when I say I'm unwell

____ 14. Calm me down when I'm upset

____ 15. Will not help me when I'm upset

____ 16. Are willing to gain more information when I'm not feeling well

____ 17. Will take it easy with me, even if things aren't going right

My parents...

____ 18. Don't know how to handle my feelings when I'm unwell

____ 19. Expect the same level of effort from me, even if I don't feel well

____ 20. Fly off the handle when I don't do something well

____ 21. Get irritated when things don't go right

____ 22. Make matters worse when things aren't going well

____ 23. Get upset when I don't check in with them

____ 24. Can cope well with stress

____ 25. Can't think straight when things go wrong

____ 26. Are able to be in control in stressful situations

____ 27. Are always nosing into my business

____ 28. Have to know everything about me

____ 29. Are always interfering

____ 30. Butt into my private matters

____ 31. Often check up on me to see what I'm doing

____ 32. Insist on knowing where I'm going

____ 33. Don't pry into my life

____ 34. Are critical of me

____ 35. Get annoyed when I want something from them

____ 36. Show me that they love me

____ 37. Try to change me

____ 38. Usually agree with me