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**A THESIS PRESENTED IN
PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE
DEGREE OF
MASTER OF ARTS IN CLINICAL PSYCHOLOGY**

**EATING DISORDER RISK: THE ROLE OF ATTACHMENT TO
PARENTS AND ATTACHMENT TO GOD**

BY

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DECEMBER 2014

**DEPARTMENT OF PSYCHOLOGY
COLLEGE OF ARTS AND SCIENCES
CARDINAL STRITCH UNIVERSITY
MILWAUKEE, WI**

**REPORT ON THESIS AND ORAL
EXAMINATION**

Name of Student: Angela J. Campbell

Title of Thesis: Eating Disorder Risk: The Role of Attachment to Parents and Attachment to God

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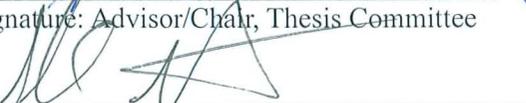
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Abstract

This study's purpose was to examine links between women in insecurely attached families and their endorsement of eating disorder behaviors, as compared to women in securely attached families. This study also examined whether a strong attachment to God or an individual's ethnicity served as protective factors from eating disordered behavior among individuals identified as belonging to insecurely attached families. One hundred ten women volunteered to take an online survey via the website Qualtrics. Attachment was assessed using the Experiences in Close Relationships—Revised (ECR-RS) scale (Fraley, Heffernan, & Vicary, 2011). Individuals' risk for developing an eating disorder was assessed using the Eating Attitudes Test-26 (EAT-26; Garner, Olmsted, Bohr, & Garfinkel, 1982). Ethnicity was assessed using a demographic survey, and participants' attachment to God was assessed by using the Attachment to God Inventory (Beck & Macdonald, 2004). It was hypothesized that female participants with an insecure parental attachment would endorse more eating disorder symptoms than females with secure parental attachment. Ethnicity and a strong attachment to God were expected to act as protective factors against eating disorder symptomology in individuals in insecurely attached families. Results showed there was no significant relationship between parental attachment and endorsement of eating disorder symptoms. However, results indicated that one's attachment to God, when analyzed in conjunction with parental attachment, is a better predictor of eating disorder symptoms than when analyzing parental attachment alone. Results also revealed that the only difference between minorities and non-minorities in terms of the study variables was their attachment to God, with minorities having a less avoidant insecure relationship with God as compared to non-minorities.

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Vita

The author was born in Milwaukee, Wisconsin, on February 14, 1989. After a brief stint in Southern California, she graduated with her Bachelor of Science degree in psychology from Carroll University in 2011. She is a member of Psi Chi, the National Honor Society in Psychology. This is by far the most thorough project she has ever worked on.

Table of Contents

Abstract	4
Acknowledgements/Vita	5
List of Tables.....	7
List of Appendices	8
Introduction	9
Eating Disorders and Attachment	9
Familial Protective Factors	11
Spirituality as a Protective Factor	15
Ethnicity as a Protective Factor	18
Present Study	21
Research Questions	21
Methods	22
Participants.....	22
Measures	23
Procedures	25
Results	25
Data Transformation	25
Experiences in Close Relationships—Revised	26
Attachment to God and EAT-26	26
Ethnicity	27
BMI and Attachment	27
Discussion	28
References.....	34

List of Tables

Table 1: *Demographics of Participants* 37

Table 2: *Intercorrelations of Research Variables*..... 38

Table 3: *Table of Means*39

List of Appendices

A. Demographics Questionnaire40

B. Experiences in Close Relationships—Revised (ECR-RS)41

C. Eating Attitudes Test-26 (EAT-26)42

D. Attachment to God Inventory (AGI)44

Introduction

Few studies have examined the role that family attachment style plays in a female's risk of later developing an eating disorder. These studies have examined the three different styles of attachment: secure attachment, anxious attachment, and avoidant attachment (Ty & Francis, 2013). Securely attached individuals can be described as having no fear of abandonment; they feel comfortable depending on people and having people depend on them. Anxiously attached individuals worry that others will leave them and believe people are hesitant to get close to them, while avoidant attached individuals find it hard to get close to others and often end relationships because they do not feel comfortable with the level of intimacy their partner desires (Feeny, Noller, & Hanrahan, 1994).

Research suggests that daughters with anxious and avoidant parental attachment are more likely to develop eating disorders (need a reference here). However, not all daughters in insecurely attached families develop eating disorders. This study seeks to examine the protective factors that help prevent individuals in either anxiously-attached or avoidant-attached families from developing eating disorder symptoms. Specifically, an individual's attachment to God, their ethnicity, or their attachment style to a parent (e.g., a secure maternal attachment) have all been shown to be protective factors against eating concerns and a negative body image.

Eating Disorders and Attachment

The overall lifetime prevalence rate for females developing an eating disorder by the age of 20 is 13.1% (Stice, Marti, & Rhode, 2013). For anorexia and bulimia, the individual rates are 0.8% and 2.6%, respectively (Stice, Marti, & Rhode, 2013). The

DSM-5 (APA, 2013) recognizes five different types of eating disorders: Anorexia Nervosa, Bulimia Nervosa, Binge Eating Disorder, Other Specified Feeding or Eating Disorder (OSFED; formerly known as Eating Disorder Not Otherwise Specified [EDNOS]), and Avoidant/Restrictive Food Intake Disorder (ARFID). For the purposes of this study, only anorexia (AN), bulimia (BN), and binge eating disorder (BED) will be examined. Persons may be diagnosed with AN if they are significantly low in body weight, have a deep fear of becoming fat or gaining weight, and suffer from a misperception of their actual weight or size (e.g., an individual who is severely below a healthy body weight still sees herself as overweight when she looks in the mirror). There are two subtypes of AN: the restricting type of anorexia and the binge eating/purging type of anorexia. A person with the restricting type will cut back on the amount of calories they eat and exercise to get rid of any unwanted calories. A person with the binge/purge type has episodes of binge eating followed by compensatory behavior such as excessive exercise, food restriction, self-induced vomiting, and/or laxative abuse. Bulimia is characterized by consuming large amounts of food in short periods of time and a feeling of being unable to stop eating. These binge episodes are then followed by self-induced vomiting, misuse of diuretics or laxatives, excessive exercise, and/or fasting. The binge/purge cycle has to occur at least once a week for 3 months. Like AN, people with BN are influenced by their body's weight and shape. However, unlike AN, many individuals with BN are of normal body weight and even overweight. BED is similar to BN in that there are periods of eating large amounts of food in short periods of time. This often takes place in private, due to shame and embarrassment. Furthermore, many individuals with BED often binge when they are not hungry. These binges are not

followed by any compensatory behaviors such as vomiting or excessive exercise (APA, 2013).

A qualitative study done by Dallos and Denford (2008) on attachment examined how attachment styles in families with an anorexic member can later shape the way individuals view themselves and their relationships with other people. The study used a working model that incorporated a “specific set of expectations about our relationship with food and more generally how this becomes intertwined with our relationship with the people who provide this for us.” (Dallos & Denford, 2008, p. 306). This study selected four different families and interviewed four members of each of those families: the person diagnosed with anorexia nervosa, a sibling, and both of the parents. Findings indicated that across all four families, communication styles were ambiguous (meaning the families did not have one straight style of communication, but rather oscillated between a few different styles) and family members were not able to trust one another. The article goes on to suggest that the therapists treating the eating disordered individual and/or the family need to be aware that the family with an anorexic member may feel criticized or incompetent. Furthermore, the therapist should acknowledge how threatened the family may feel at the thought of changing their style of communication with one another.

A critique of this article is that it only focuses on families in which the member with the eating disorder has anorexia nervosa, versus any of the other eating disorders. Data from families with members diagnosed with bulimia nervosa, binge eating disorder, and/or OSFED should also be collected and analyzed. This study also uses a small

sample size, and it relied solely on a qualitative design and methodology, so the results may not have external validity.

Familial Protective Factors

To further examine the role that attachment style plays in the development of eating disorders, self-protective strategies within attachment styles have been examined. A study done by Ringer and Crittenden (2007) hypothesized that parents' histories and hidden problems in the marital relationship might be implicated in the daughter's development of an eating disorder. This study also looked at the attachment style of the families of the individuals with the eating disorder as well as protective strategies used by daughters within each attachment style. The Adult Attachment Interview (AAI) was used to assess attachment, identifying avoidant, anxious-ambivalent, and secure forms of attachment. The study found that most of the women exhibited anxious-ambivalent attachment, meaning that they have a "preoccupation with close relationships and negative feelings about them" (Ringer & Crittenden, 2007, p. 120). The study also identified a set of self-protective strategies within the models of attachment. For example, avoidantly-attached individuals use strategies to protect against perceived or actual threat of danger. They "involve *inhibition* of negative affect to prevent attachment figures' anger and are associated with actual threat or danger" (Ringer & Crittenden, 2007, p. 120). Protective strategies used by individuals with anxious-ambivalent attachment involve *exhibition* and an exaggeration of feelings in order to coerce attachment figures to respond to the individuals. The study found that none of the individuals with eating disorders experienced secure attachment with their families.

Critiques of this article include a lack of a normative control group and a clinical non-eating disordered comparison group. Both of these groups are needed to fully understand the results of this study.

Other researchers have explored the role that family environment and attachment styles play in the development of eating disorders. Family environment involves the modes of interaction within a family, family roles, and styles of coping with different conflicts. A study done by Latzer, Hochdorf, Bachar, and Canetti (2002) used the Adult Attachment Scale to assess how the participants feel in close relationships, while the Family Environment Scale was administered to examine how the individuals perceived the social and environmental characteristics of their families. The two scales were administered to 25 women diagnosed with AN and 33 women diagnosed with BN, and their scores were compared with those of 23 women who did not have an eating disorder. The participants completed the questionnaires during an intake session at an eating disorder clinic. No significant difference in scores was found between the AN and BN groups. However, between the patients and the controls, the patients reported much less family cohesion and family expressiveness, as well as lower overall quality of family relationships. The AN and BN scores also showed that the majority of these families' attachment styles were avoidant, while most of the control group exhibited a secure attachment style. AN patients also scored higher on measures of anxious attachment when compared with controls.

A critique of this study is that it is completely based on self-report measures. Using the reports of parents or other family members would provide important supplemental data. In addition, previous studies utilizing patient data and data from a

non-clinical population showed significant differences between the two populations. The non-clinical samples showed more cohesion, support, and less conflict within the family (Latzer, Hochdorf, Bachar, & Canetti, 2002). These results show a difference in perception when it comes to caregiving between the parent and the child.

Strober (1987) focused on studies that have been done on the family environments of individuals with anorexia nervosa and those with bulimia nervosa. Using self-report measures, both the AN and BN groups perceived relations with their parents as less involved and less supportive, more isolative, conflictual, and detached, and having less structure as compared to the control group (Strober, 1987). The article goes on to discuss familial transmission and whether or not eating disorders can be inherited. While there is strong evidence that anorexia nervosa runs in families, it is still inconclusive whether the same can be said for bulimia.

Studies performed on sisters of patients with anorexia nervosa show the prevalence rate of them developing the disorder to be between 3-10%, much higher than the general population (Strober, 1987). The article states that “Crisp et al. (1980) reported a family history of probable anorexia nervosa (definitional criteria unspecified) to have been present in 29% of 102 cases” (Strober, 1987, p. 656). Certain personality traits that could contribute to the development of “inheriting” an eating disorder include high neuroticism, obsessive worrying, and introversion. However, Strober also surmises that nongenetic factors, such as the home environment and deviant patterns of self-esteem, may also contribute to the development of an eating disorder (Strober, 1987).

While this article provides detailed information regarding eating disorders and its relationships to familial factors, it does not discuss family attachment style. It is also

merely a review of other articles and data that other researchers have collected; no study or experiment was actually performed.

Humphrey (1989) compared interactions among 74 families with a teenage daughter suffering from either anorexia or bulimia using a coding system. Each family discussed their daughters' emotional separation from them for ten minutes while being videotaped. Using Benjamin's structural analysis of social behavior (SASB; Benjamin, 1974) the tapes were then coded. The SASB model is made up of three foci or surfaces, and each surface has its own center of attention. The top surface focuses on the "other"; the middle surface focuses on the "self"; and the bottom surface is referred to as "intrapsychic," meaning focused on the mind. "Each surface or focus of the model comprises the same two primary, orthogonal dimensions of affiliation (horizontal axis) and interdependence (vertical axis). Affiliation extends from attack on the left side to attachment on the right, and interdependence ranges from freedom at the top to control/submission at the bottom. Individual points and clusters on one surface of the model have corresponding or complementary points on the other two surfaces," (Humphrey, 1989, p. 206). It was discovered that the eating disordered families differed from the control families, and that the anorexic families differed from the bulimic families. Specifically, families with a daughter who had anorexia nervosa sent conflicting messages of both affection and neglect to their daughter, reflecting the family members' inability to properly express their own feelings. In addition, the daughters showed ambivalence about disclosing their feelings versus submitting to their parents. However, families with a daughter suffering from bulimia appeared much more hostile and

entangled with one another. Because of this, the daughters had a more difficult time emotionally separating themselves from the family and becoming more assertive.

The purpose of the current study is to further examine the role of daughters' attachment styles to their parents and the development of eating disorders. It is hypothesized that daughters in families that exhibit an anxious-ambivalent or avoidant attachment style will have a higher risk of developing an eating disorder than daughters from securely attached families.

Spirituality as a Protective Factor

While an insecure attachment to one's family is related to an increased risk in a female developing an eating disorder, it is not a direct indicator. Many individuals with insecure attachments to their families have healthy relationships with their bodies and with food. One proposed protective factor that an insecurely attached female has against developing eating disordered behavior is a strong relationship with God (Homan & Boyatzis, 2010). Homan and Boyatzis explained in their article that "many protective factors are not specific to a single form of psychopathology but are common to a number of disorders" (pp. 240-241). In Homan and Boyatzis's study, 231 female college students were asked to complete five scales: the Perceived Sociocultural Pressure Scale, the Thin-Ideal Internalization Scale, the Body Dissatisfaction Scale, a Dieting Scale, and the Relationship with God Scale. Results showed that women who used prayer and meditation to deal with negative body image beliefs were better able to cope with negative feelings about their body and pressure to be thin than women who did not use these skills. A randomized, controlled study was then performed within an intensive inpatient eating disorder program. The patients in the program were randomly assigned to

either a weekly emotional support group, a cognitive therapy group, or a spirituality group, “in which [the women] received spirituality readings and self-help exercises” (Hoyman & Boyatzis, 2010, p. 241). These assigned groups supplemented their existing intensive inpatient program. All three groups showed significant posttreatment improvements, but “women in the spirituality group experienced the most reductions in disordered eating symptoms, negative emotionality, relationship distress, and social role conflict. They also experienced increases in their sense of being loved by God and having a purpose or meaning in life” (Homan & Boyatzis, 2010, p. 241-242).

One of the four factors that has a significant impact on eating behavior is body image. It “has emerged as one of the strongest predictors of eating pathology and has been shown to predict increased self-reported dieting, bingeing...[and] compensatory behavior” (Homan & Boyatzis, 2010, p. 240). Body satisfaction is also associated with a strong relationship with God (Hoyman & Boyatzis, 2010). Women’s feelings about their appearance improved when they were exposed to positive body affirmations that incorporated God (e.g., “Because I am a child of God, I am perfect and whole and my body is perfect and whole”; Homan & Boyatzis, 2010, p. 242). Results of the study found that women who had a secure relationship with God had a significantly less internalization of the cultural idealization of being thin and lower body dissatisfaction.

Homan and Boyatzis’s study further found that women who believe that God is accepting of them are less likely to internalize society’s ideal of the thin body type. However, women who are uncertain about God’s approval are more vulnerable to the cultural ideal and other risk factors, such as body dissatisfaction and dieting. Women who view God as “punitive and judgmental” hold themselves to unrealistic standards and

beliefs and have been found to identify with statements such as “I must be perfect in every way” (Homan & Boyatzis, 2010, p. 242). Similar to women who do not identify as having any relationship with God, those who view God as judgmental rely on external affirmation through dieting or they strive for physical perfection.

Homan and Boyatzis’s study (2010) began by looking at an individual’s relationship with God within an attachment context. According to the researchers, an attachment relationship has four defining traits: 1) providing feelings of comfort and security, 2) seeing the attachment figure as a secure base for exploration, 3) viewing the attachment figure as providing a haven of safety in the presence of threat, and 4) feeling distress if separated from the attachment figure. With this knowledge, the researchers hypothesized that while all women perceive pressure to be thin, those with a strong and accepting relationship with God would have reduced body dissatisfaction and less frequent dieting due to its role as “a salient protective factor” (Homan & Boyatzis, 2010, p. 241).

Limitations of this study include the fact all participants were from a private Christian college. Many of the participants in the study described themselves as “very religious.” Gathering data from a larger, non-Christian university would make the results more applicable to the general population of women.

Ethnicity as a Protective Factor

Body dissatisfaction and a negative body image “have been found to predict dieting, binge eating, purging, excessive laxative use, and cessation of all eating,” (Warren, Gleaves, Cepeda-Benito, del Carmen Fernandez, & Rodriguez-Ruiz, 2005, p. 241). Because an individual’s body image plays such an important role in eating habits, it

is a factor that cannot be overlooked. American society places an emphasis on women having a thin physique. A thin female figure is revered so highly in American culture that both women with and without eating disorders have a moderate amount of dissatisfaction with their own bodies (Warren et al., 2005).

Given this, another factor that has been found to be protective against the development of eating disorders is culture or ethnicity. In a study examining ethnicity and body dissatisfaction (Warren et al., 2005), the researchers proposed that ethnicity could protect females against eating disorders in two different ways: first, ethnic groups that have a non-American ideal of the female physique may portray women as having more realistic and attainable figures. Second, there may be less of an emphasis on a woman's appearance in general as an indicator of her happiness, role in society, and success.

This study examined body satisfaction in Mexican-American, Spanish-American, and European-American women. Mexican-American culture is comprised of various other indigenous cultures, such as Aztec, Mayan, Incan, and Spanish. Mexican-American culture is a culture that idealizes a larger, more voluptuous female physique. Young Latina women have said their ideal body is curvy or "thick". A figure that is "buen cuerpo"—curvy with big breasts, hips, and a round bottom, is considered ideal in Latino culture (Schooler & Daniels, 2013). The culture also places a strong emphasis on family, community, and fatalistic thinking (Warren et al., 2005). Although individuals in this culture are likely to be aware of the American culture's idealized female figure, they are less vulnerable to it since they are associated with a culture that isn't as overly concerned with women's appearances.

Traditionally, Spanish culture has celebrated collectivist values, gender roles, female subordination, and male dominance (Warren et al., 2005). Eating disorder rates and body dissatisfaction are higher in Spanish women than in Mexican women. However, Americans are found to be the most dissatisfied with their bodies and have the most interest in losing weight when compared to Spanish and Mexican women.

In this study, researchers hypothesized that ethnicity would act as a buffer between awareness and internalization of American culture's body ideals for women. That is, although the women would be aware of the high standards American culture has for women's bodies, their culture would prevent them from feeling the need to achieve that standard. The researchers believed that awareness and internalization would be stronger in European women than Mexican women and had no specific prediction for the Spanish women. Using the Sociocultural Attitudes Towards Appearance Questionnaire-Revised and the Body Shape Questionnaire, researchers concluded that "the Mexican American group was less aware of a thin ideal than the Spanish and European American groups (which did not differ significantly) and the European American group had significantly higher internalization than the Mexican American group, which...had significantly higher internalization than the Spanish group" (Warren et al., pg. 245).

The desire to be thin is also felt less in the African American community. In a chapter written by Moore and Linda (2001), the authors state that "[compared to White girls], Black girls are much more likely...to want to gain weight" (Moore & Linda, 2001, p. 116). Similar to Latino culture, the African-American community idealizes a female body that is much more voluptuous than the European ideal (Moore, 2001). "The body ideal in the African American community is heavier and less narrowly defined than that

of the European American community and...Black women report less weight dissatisfaction than White women,” (Moore & Linda, 2001, p. 118).

Another way that ethnicity acts as a protective factor against eating disorders and body dissatisfaction is ethnic women are under-represented in the media. As reported by Schooler and Daniels (2013), “fewer than five percent [of advertisements] featuring human models [are Latino]” (p. 12). Because ethnic women (especially Latinas), don’t compare themselves to the media’s thin ideal, and “social comparisons are typically made primarily to a target who is similar to oneself on salient attributes because such comparisons are believed to provide more relevant information for accurate self-appraisal” (Schooler & Daniels, 2013, p. 11), the underrepresentation of Latinos in the media may actually serve as a protective factor against body dissatisfaction. Because a larger range of diverse body types is acceptable within the Black and Latina communities, these two groups of women tend to be heavier than White women (Moore, 2001).

Moore and Linda (2001) state that “eating disorders have been a neglected problem among ethnic minority girls and women because they were assumed not to exist in these populations” (Moore & Linda, 2001, p. 112). However, a study done by Smith, Marcus, Lewis, Fitzgibbon, and Schreiner (1998) found similar prevalence rates of binge eating disorder in both black and white women. In this study, 5,115 subjects—over half of whom were women (52% of the total participants were black, 48% white) were recruited through either community-based sampling or a pre-paid health care plan. These individuals met criteria for binge eating disorder using the Questionnaire on Eating and Weight Patterns—Revised (QEWPR), a self-report diagnostic tool. While results of the

study showed a significant difference in BED rates with respect to White women and White men, as well as Black women and Black men ($p < .0001$), there was no significant difference found between White women and Black women when it came to BED rates.

Present Study

As described above, insecure parental attachment style appears to be correlated with the development of eating concerns and body dissatisfaction. Additionally, a secure relationship with God and a strong ethnic identity appear to be protective factors against eating concerns and a negative body image. The primary objective of this study was to investigate whether or not these protective factors—a secure relationship with God and/or a strong ethnic identity—will still work as buffers against eating disorder symptoms and body dissatisfaction even in the presence of an insecure parental attachment. Finally, another question to consider is whether minorities will have less eating disorder symptoms than non-minorities who identify as having an insecure family attachment.

Study Questions. Question 1: Is a secure attachment with a mother and father figure associated with fewer eating disorder symptoms? I hypothesize that women who have a greater secure attachment with their mother or father figure will endorse fewer eating disorder symptoms.

Question 2: Is a secure attachment with God associated with/related to eating disorder symptoms if the individual also has an insecure family attachment? I hypothesize that women who have a greater secure attachment to God will have fewer eating disorder symptoms, even if an insecure family attachment is present.

Question 3: Will minorities who have an insecure family attachment endorse fewer eating disorder symptoms than non-minorities who have an insecure family attachment?

I hypothesize that minority women who are more securely attached to God will be less likely to endorse eating disorder symptoms, even if they experience insecure attachment with their family.

Methods

Participants

A convenience sample was used in this design. The participants in this study were women, 18 and older, contacted through an eating disorder support group on Facebook and from a link posted on the author's personal Facebook page. The study originally had 124 total participants, but only 110 participants' data were used. Reasons for discarding the other 14 participants included the participant omitting too many responses, putting the same numbered response for all questions on a survey (indicating a potentially invalid response set), or the participant was a male and therefore ineligible for this study. All participants (n=110) in this study were women, with 90.1% of the participants identifying as Caucasian, 3.6% as African American, 2.7% Hispanic, and 0.9% as Asian or Pacific Islander, Native American, or other. Of the 110 participants, the majority identified their religious affiliation as Christian/Other (31; 27.9%) while 28 participants (25.2%) identified as Other (Non-Christian). Catholics made up 22.5% of the participants, while 15 participants (13.5%) identified as Lutheran. Eight individuals identified themselves as Methodist (7.2%), while 3 individuals claimed their religious affiliation as Baptist (2.7%). Over half the sample (51.4%) identified as Single/Never Married, while 41.4%

identified as Married. Divorced participants made up 5.4% of the sample, while Separated and Other both made up 0.9%. The ages of participants ranged from 18 to 62, with a mean age of 30.

Measures

There are four research instruments used in this study: a demographic questionnaire, the Relationship Structures Questionnaire of the Experiences in Close Relationships—Revised (ECR-RS; Fraley, Heffernan, Vicary, & Brumbaugh, 2011), the modified version of the Eating Attitudes Test (EAT-26; Garner, Olmsted, Bohr & Garfinkel, 1982), and the Attachment to God Inventory (AGI; Beck & McDonald, 2004).

Experiences in Close Relationships—Revised (ECR-RS). The ECR-RS measures an individual's attachment in multiple contexts. For example, the ECR-RS can identify the within-person variability that exists for many individuals when it comes to types of attachment. For example, an individual may have a secure relationship with their spouse, but an insecure relationship with their mother. The ECR-RS presents statements about the test taker such as "I don't feel comfortable opening up to others" and has the individual choose a response ranging from "Strongly Disagree" to "Strongly Agree." The ECR-RS then presents statements about the individual's mother or mother-like figure, such as "I worry that this person won't care about me as much as I care about him or her." The same statements are asked about the individual's father or father like-figure, romantic partner, and best friend. In this way, separate attachment scores can be computed from one's mother (M) and father (F). Higher scores on any of the scales indicate greater insecurity. For ECR Anxiety (M or F), scores can range from a low of 3 to a high of 21. For ECR Avoidance (M or F), scores can range from a low of 6 to a high of 42.

Data collected from 338 people showed that “highly anxious and avoidant people tended to be less committed, less satisfied, and less invested in their relationships, while also viewing alternative partners as more desirable,” (Fraley, Heffernan, Vicary, & Brumbaugh, 2011, p. 620). Results also showed that individuals who ranked high on anxiety or avoidance also reported higher numbers of depressive symptoms. The ECR-RS showed high Cronbach alphas in an adolescent population for avoidance (>0.81) and anxiety (0.86; Feddern & Elklit). For the overall sample in this study, the mean scores for ECR Mother Anxiety was 9.13 ($SD = 1.76$), ECR Mother Avoidance was 19.22 ($SD = 5.30$), Father Anxiety was 7.37 ($SD = 4.05$), and Father Avoidance was 21.64 ($SD = 3.99$). The scores ranged from 5-14; 12-29; 3-18; and 12-29, respectively.

EAT-26. The EAT-26 test is a modified version of the original EAT-40 test. This instrument examines whether an individual is at risk for an eating disorder. Part A of the EAT-26 is used to establish the participant’s age and BMI. Part B of the test contains statements such as “I am terrified about being overweight” and “I avoid eating when I am hungry” and asks the participant how often this statement applies to them, from “always” to “never.” Scores can range from a low of 0 to a high of 78. A score of 20 or higher on the EAT-26 indicates that an individual may have an eating disorder and should see a mental health professional. If the participant answers “yes” to any of the Behavioral Questions (Part C) of the EAT-26, then a referral to a mental health practitioner should be made automatically. Part C of the EAT-26 was not used in this study, because the questions did not apply to the researcher’s primary study questions. The EAT-26 has a high validity score ($r=0.98$) that correlates with the original 40-item test and an alpha of .90 (Garner, Olmsted, Bohr, & Garfinkel, 1982). For the overall sample in this study, the

mean score for the sum scores of the EAT-26 was 11.25 ($SD = 11.25$). The range of scores were from 0-54.

Attachment to God Inventory (AGI). The AGI is a 28-item test that contains statements about how an individual feels about his or her relationship with God. It was designed to assess an individual's attachment to God. The inventory asks the individual on a scale from 1 ("Disagree Strongly") to 7 ("Agree Strongly") how they feel about certain statements, such as "I worry about my relationship with God" and "I am jealous at how close some people are to God." The higher an individual's score on the AGI, the more insecure the individual's attachment with God. Scores can range from a low of 14 to a high of 98. The psychometrics of the AGI showed that the AGI subscale generated internal consistency coefficients of .86 for Avoidance and .87 for Anxiety. The Anxiety factor accounted for 30.42% of the variance between the AGI items and the Avoidance factor accounted for an additional 9.83% (Beck & MacDonald, 2004). For the overall sample in this study, the mean score for AGI Anxiety was 35.91 ($SD = 16.24$). Scores ranged from 14-95. The mean score for AGI Avoidance was 58.68 ($SD = 18.34$), with scores ranging from 14-89.

Procedure

The author compiled a demographics questionnaire, the Experiences in Close Relationships—Revised Scale (ECR-RS), the EAT-26, and the Attachment to God Inventory (AGI). The measures were put into a 95-item survey which could be accessed electronically using the survey website Qualtrics.com. A link to the complete questionnaires was posted on the social networking site Facebook.com, and also in the

invite-only, closed discussion group on Facebook entitled Eating Disorder Support Group and Mentoring. Participants' survey responses were completely anonymous.

Results

Data Transformations

Before conducting analyses, various data transformations were computed for each measure. AGI subscale scores were computed by first reverse coding items 4, 8, 13, 18, 22, 26, and 28 and then summing scores of all the odd-numbered items to get the anxiety subscale total, followed by summing all the even-numbered items to get the avoidance subscale total. Item number 26 on the EAT-26 was reverse coded, then items 1—26 were added together to get one total score. For the ECR-RS, items ECR5M, ECR5F, ECR6M, and ECR6F were all reverse coded. Four total subscales were computed—Mother Anxiety, Mother Avoidance, Father Anxiety, and Father Avoidance.

Experiences in Close Relationships—Revised

The first analysis examined the relationship between participants' self-identified feelings of attachment with their mother and father and their own eating behavior. It was hypothesized that the more anxious and/or avoidant a participant's relationship was with her mother and/or father, the greater amount of eating disorder symptoms she would endorse. This hypothesis was not supported.

To test this hypothesis, a bivariate correlational analyses were conducted between an individual's sum score mother anxiety and father anxiety and the participants' eating disorder symptoms (see Table 2). While the results do not indicate that higher anxiety and avoidance with respect to parental attachment (mother or father) are associated with higher endorsed eating disorder symptoms ($r=.128, p=.05$) and ($r=.602, p=.05$), the tests

did yield some interesting findings. Greater avoidant insecurity in relation to one's mother ($r=.44, p=.001$) was associated with greater insecure anxious attachment to one's father ($r=.261, p=.001$) and lower insecure avoidance to one's father ($r=-.465, p=.001$).

Attachment to God Inventory and EAT-26

The second analysis examined the relationship between an individual's attachment to God and any links this relationship had to endorsement of eating disorder symptoms. Since study question one and related hypotheses were not supported, the second study question had to be altered. Therefore, the researcher analyzed whether one's attachment to God was more predictive of eating disorder symptoms than parental attachment.

To test this, the researcher computed a stepwise regression analysis, with the predictors being ECR Mother Total and ECR Father Total scores entered into the first step and the AGI scores entered into the second step with EAT-26 scores being the criterion variable. Results from this analysis revealed that 4.2% of the variance in the EAT Sum scores were accounted for by the addition of AGI to family attachment as a predictor. Although the overall significance, computed by an ANOVA, shows that these results are approaching significance ($F(3, 105) = 2.59, p = .057$), it should be noted that the variance accounted for by the addition of AGI was very small. That said, attachment to God may be of use as a predictor of eating disorder symptoms in conjunction with family attachment.

Ethnicity

As there were very few minority participants in this study ($n=10; 9\%$), the results of this analysis should be reviewed with caution. A series of t -tests were conducted to

examine whether or not minorities and non-minorities (the independent variable) differed with respect to the study variables, which served as the dependent variables in these analyses (see Table 3). AGI scores were the only dependent variables to be significantly different between minorities and non-minorities. Specifically, results indicate that minority participants have less insecure avoidance to God ($M= 45.20, SD= 20.03$), while Caucasian participants have a greater insecure avoidant attachment to God ($M=60.42, SD= 17.55$), $t(107)=2.69, p<.01$). There were no other differences between these two groups.

BMI and Attachment

The researchers also examined BMI and the relationship of BMI to the study variables for exploratory purposes. Bivariate correlational tests were conducted between BMI and all other variables. Analyses revealed that participants' BMI had no relationship with any other variable examined during this study.

Discussion

The aim of the present study was to examine any possible links between females in insecurely attached families (either avoidant or anxious) and their endorsement of eating disorder behavior, compared to the endorsement of eating disordered behavior by females in securely attached families. "Attachment" refers to a relationship that, by consensus, must meet the following four criteria: 1) provides feelings of comfort and security to an individual, 2) the individual sees the attachment figure as a base for exploration, 3) the individual views the attachment figure as providing a safe haven in the presence of a threat, and 4) the individual experiences feelings of distress if separated from the attachment figure (Homan & Boyatzis, 2010). An insecure attachment is one

that has “lower levels of cohesiveness, expressiveness, encouragement of personal growth...” (Latzer, Hochdorf, Bachar, & Canetti, 2002, pg. 583-4). This study also looked at possible protective factors against eating disorder behavior, such as ethnicity and an individual’s attachment to God.

The first objective of the present study was to analyze the relationship between parental attachment and the amount of eating disorder symptoms endorsed by an individual. Previous research in this area has shown that individuals diagnosed with AN or BN come from families with a significantly less amount of family cohesion and expressiveness compared to non-eating disordered individuals (Latzer, Hochdorf, Bachar, & Canetti, 2002). Specifically, the AN and BN individuals came from self-reportedly avoidant families, while the non-clinical population reported coming from securely-attached families.

Results from the current study did not support the findings of previous research. Findings of the current study suggest that parental attachment styles and eating disorder symptoms may not be significantly related. However, an interesting finding in the analyses revealed that individuals with high avoidance scores for their mother also showed high anxiety scores for their father, and *low* avoidance scores for their father. A reason for this may be if the participant cannot, for whatever reason, avoid their father, their anxiety around their father may increase. They are unable to avoid father, so they are always anxious when in their father’s presence. Another reason for these findings could be that an avoidant relationship with one’s mother leads a child to have an anxious attachment with their father. Their mother may be physically or emotionally absent, and the individual’s father is uncomfortable raising a child alone. Examples of anxiety-related

items on the ECR—RS include “I’m afraid that this person may abandon me” and “I worry that this person won’t care about me as much as I care about him or her.”

Avoidant-related items include “It helps to turn to this person in need” and “I find it easy to depend on this person.” A possible reason for the inconsistent findings in the present study could be there was not a large enough number of participants to yield any significant results in terms of a clinical population. Because of the anonymity of the participants of the study, the researcher was not able to identify those participants that came from the general population and those who came from the eating disorder support group. It would be interesting to see how each group’s sets of responses differed from one another.

The second objective of the current study was to identify if one’s attachment to God was more predictive of eating disorder symptoms than one’s attachment to parents. Previous research on one’s attachment to God indicates that women who have a secure relationship with God show significantly less internalization of the cultural idealization of being thin and lower body dissatisfaction, two factors that are positively correlated with eating disorder symptoms (Homan & Boyatzis, 2010). Past findings have shown that women who view God as harsh and judgmental are more likely to strive for physical perfection through methods such as dieting (Homan & Boyatzis, 2010). Findings from the current study support the hypothesis that an individual’s attachment to God is more predictive of an eating disorder than one’s attachment to her parents. Specifically, if an individual reported a secure relationship with God, she endorsed fewer eating disorder symptoms. If an individual reported either an insecure attachment or avoidant attachment with God, she was more likely to have increased eating disorder symptoms.

The third objective of the present study was to examine if minorities endorse fewer eating disorder symptoms than non-minorities who have an insecure family attachment. Past research done by Warren et al. (2005) revealed that Mexican-American women are less likely to internalize the European-American unrealistic ideal of female perfection and the ultrathin physique. Another study done by Moore (2001) found that African-American females strive for a larger, more voluptuous figure than European-Americans. The same study found that Black women reported less weight dissatisfaction than White women. Since body image is strongly related to eating habits and eating disorder behavior (Warren et al., 2005), it makes sense that minorities' lessened pressure to fit the European-American ideal of thinness is related to a lower amount of eating disorder symptoms for that population. The present study analyzed whether or not minorities and non-minorities differed with respect to the study variables. The only significant finding among minorities and non-minorities was that minorities show a less avoidant relationship to God when compared to non-minorities. This is an interesting finding, as a more secure relationship with God is associated with fewer eating disorder symptoms, and previous research has shown that minorities report less eating disorder symptoms than Caucasians. A secure relationship with God and less pressure to be thin may act as protective factors for ethnic women when it comes to developing an eating disorder. Reasons for this may include women with a secure attachment to God derive more of their self-worth from their relationship with God than from their appearance.

Results of the current research provide important clinical implications. While many forms of eating disorder treatment include a family therapy dimension, especially for minors (National Eating Disorders Association, 2014), spirituality is a dimension that

may be commonly overlooked. While spirituality and religion in treatment is not something that can be forced in treatment, it is certainly an area that should be encouraged and explored, if the client is open to it. While “spirituality” in the present study was defined as one’s relationship with God, the term can be used much more widely. As stated by Homan and Boyatzis (2010), women involved in a supplementary spirituality group during their eating disorder inpatient treatment, “in which [the women] received spirituality readings and self-help exercises,” showed less body dissatisfaction and eating disorder symptoms compared to the women not involved in the spirituality group (2010, p. 241). Along with spirituality, meditation, journaling, and daily positive self-affirmations are activities that should be highly encouraged. While adding a spirituality factor to treatment may be helpful, it is also essential that preventative measures be taken. Teaching children of both genders to practice self-affirmations and positive thinking around their bodies is something that should occur from a young age. The presence of a role model who has both a healthy relationship with food and their body image would be beneficial for young girls.

Though the present study contributed to the existing knowledge of parental attachment, eating disorder symptoms, and protective factors, it is not without limitations. One limitation of this study is that the sample was not generalizable to the population, as 90% of the participants were Caucasian. Because this study examined ethnicity as a protective factor against eating disorder symptoms, it would be interesting to see if a more diverse sample would yield different results, especially with respect to differences between minorities and non-minorities and their differences with the study variables. An additional limitation of this study, due to the low number of participants, was that certain

interactions between variables were not able to be assessed. Another limitation of this study was the difference in ages between participants. The range of ages was 18-62, with a mean age of 30.36. Because many of the participants were 30 and older, the effect of their parental attachment may not be as strong as it is for a participant who is 18 and possibly still living at home with both their parents. This discrepancy in ages may have contributed to the lack of significant findings while researching whether or not a secure parental attachment is associated with fewer eating disorder symptoms. A third limitation of this study was that it was correlational in design, so one cannot assume that one study variable caused another variable to occur. Just because a female has a secure relationship with God does not mean that she will never develop an eating disorder or endorse eating disorder symptoms. There may be confounding variables affecting this relationship. For example, a woman with a secure relationship with God may see her body as a place to hold her children and nothing more. She may never have viewed her body as anything but 'a vessel for reproduction'. On the contrary, a woman who has an insecure relationship with God may also have been bullied and teased about her weight when she was growing up, and her body dissatisfaction and tendency to diet have nothing to do with her relationship with God.

Despite these limitations, the current study was able to explore two of the three initial study questions. Results showed that parental attachment is not associated with endorsement of eating disorders, and minorities and non-minorities only differ in their avoidant relationship to God. Because parental attachment was not found to be associated with eating disorder symptoms in the present study, the original objective of examining women with an insecure family attachment and a strong attachment to God was modified.

The new objective was to see if one's attachment to God was more predictive of eating disorder symptoms than one's attachment to parents. Results of this analysis proved to be significant, such that the more secure an individual's relationship was with God, the less eating disorder symptoms they displayed.

The findings from this study contribute additional information to the already existing body of knowledge and literature. Specifically, the current study contributes information regarding the relationship between parental attachment, eating disorder symptoms, and protective factors, such as spirituality and ethnicity. Researchers looking to explore this topic further could examine the level of acculturation of minorities into American culture and their endorsement of eating disorder symptoms, or more closely examine parental attachment and eating disorder symptoms among females in a younger age demographic. Future researchers could also examine men who endorse eating disorder symptoms and see if they display similar patterns in relation to parental attachment and attachment to God. They could also examine individuals who have a history of an eating disorder, but do not currently endorse symptoms, and examine the relationship between symptoms and parental attachment. Finally, future researchers could explore individuals who have an insecure parental attachment but a secure attachment with a spouse or best friend, and assess if this secure attachment has a "softening" effect on any eating disorder symptoms.

References

- American Psychiatric Association (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.) Arlington, VA: American Psychiatric Publishing.
- Benjamin, L. S. (1974). Structural analysis of social behavior. *Psychological Review*, *81*, 392-425.
- Dallos, R., & Denford, S. (2008). A qualitative exploration of relationship and attachment themes in families with an eating disorder. *Clinical Child Psychology and Psychiatry*, *13*(2), 305-322. doi: 10.1177/1359104507088349
- Feddern, D., & Elklit, A. (n.d.). Attachment in adolescence: A validation of the questionnaire ECR-RS. Informally published manuscript, Aarhus University, Denmark.
- Retrieved from http://www.bps.org.uk/system/files/images/dagmar_feddern_poster.pdf
- Feeney, J. A., Noller, P., & Hanrahan, M. (1994). Assessing adult attachment. In M. B. Sperling (Ed.), *Attachment in adults: Clinical and developmental perspectives* (pp. 128-152). New York, NY: Guilford Press.
- Fraley, R. C., Heffernan, M. E., Vicary, A. M., & Brumbaugh, C. C. (2011). The experiences in close relationships-Relationship Structures Questionnaire: A method for assessing attachment orientation across relationship. *Psychological Assessment*, *23*(3), 615-625.
- Garner, D. M., Olmsted, M. P., Bohr, Y., & Garfinkel, P. E. (1982). The eating attitudes test: Psychometric features and clinical correlates. *Psychological Medicine*, *12*, 871-878. Retrieved from <http://www.eat-26.com/Docs/Garner-EAT-26-1982.pdf>
- Hazan, C., & Shaver, D. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*, *52*, 511-524.

- Homan, K. J., & Boyatzis, C. J. (2010). The protective role of attachment to God against eating disorder risk factors: Concurrent and prospective evidence. *Eating Disorders, 18*, 239-258.
- Humphrey, L. L. (1989). Observed family interactions among subtypes of eating disorders using structural analysis of social behavior. *Journal of Consulting and Clinical Psychology, 57*(2), 206-214. doi: 10.1037/0022-006X.57.2.206
- Latzer, Y., Hochdorf, Z., Bachar, E., & Canetti, L. (2002). Attachment style and family functioning as discriminating factors in eating disorders. *Contemporary Family Therapy: An International Journal., 24*(4), 581.
- Moore, R., & Linda, S. (2001). Challenging the myth of the golden girl: Ethnicity and eating disorders. In R. H. Striegel-Moore & L. Smolak (Eds.), *Eating disorders: Innovative directions in research and practice* (pp. 111-132). Washington, DC: American Psychological Association.
- National Eating Disorders Association (2014). *Treating an Eating Disorder*. Retrieved November 30, 2014, from <http://www.nationaleatingdisorders.org/treating-eating-disorder>
- Ringer, F., & Crittenden, P. M. (2007). Eating disorders and attachment: The effects of hidden family processes on eating disorders. *European Eating Disorders Review., 15*(2), 119-130. doi: 10.1002/erv.761
- Schooler, D., & Daniels, E. A. (2013). "I am not a skinny toothpick and proud of it": Latina adolescents' ethnic identity and responses to mainstream media images. *Body Image, 11*, 11-18.

- Smith, D., Marcus, M., Lewis, C., Fitzgibbon, M., & Schreiner, P. (1998). Prevalence of binge eating disorder, obesity, and depression in a biracial cohort of young adults. *Annals of Behavioral Medicine, 20*(3), 227-232.
- Stice, E., Marti, C., & Rhode, P. (2013). Prevalence, incidence, impairment, and course of the proposed DSM-5 eating disorder diagnoses in an 8-year prospective community study of young women. *Journal of Abnormal Psychology, 122*(2), 445-457. doi: 10.1037/a0030679
- Strober, M. (1987). Familial contributions to the etiology and course of anorexia nervosa and bulimia. *Journal of Consulting and Clinical Psychology, 55*(5), 654-659. doi: 10.1037/0022-006X.55.5.654
- T.H.E. Center for Disordered Eating (n.d.). *Types of Eating Disorders*. Retrieved June 19, 2014 from <http://www.thecenternc.org/types-of-eating-disorders.html>
- Ty, M., & Francis, A. P. (2013). Insecure attachment and disordered eating in women: The mediating processes of social comparison and emotion dysregulation. *Eating Disorders, 21*(2), 154-174. doi:10.1080/10640266.2013.761089
- Warren, C. S., Gleaves, D. H., Cepeda-Benito, A., del Carmen Fernandez, M., & Rodriguez-Ruiz, S. (2005). Ethnicity as a protective factor against internalization of a thin ideal and body dissatisfaction. *International Journal of Eating Disorders, 37*(3), 241-249.

Table 1

Demographic Characteristics of Participants

Variable	Frequency	Percent
Marital Status*		
Single/Never Married	57	51.4
Married	46	41.4
Separated	1	.9
Divorced	6	5.4
Other	1	.9
Ethnicity		
Caucasian	100	90.1
African American	4	3.6
Asian/Pacific Islander	1	.9
Hispanic	3	2.7
Native American	1	.9
Other	1	.9
Religious Affiliation		
Baptist	3	2.7
Catholic	25	22.5
Lutheran	15	13.5
Methodist	8	7.2
Christian, Other	31	27.9
Other	28	25.2
Highest Level of Education		
Grade 12 (High School/GED)	4	3.6
Some college	26	23.4
Bachelor's degree	38	34.2
Some graduate school	23	20.7
Master's degree	17	15.3
Doctoral degree	2	1.8
Other	1	.9

*Not every participant who answered the demographic questions completed the entire survey.

Table 2

Intercorrelations for ECR^a (Mother and Father Scores) and EAT-26^b Sum Scores

(N=110)

Measure	1	2	3	4	5	6	7
1.ECRMomAnxiety	--	.440**	.047	.138	.652**	.178	.125
2.ECRMomAvoidance	--	--	.261**	-.099	.968**	.160	.131
3.ECRDadAnxiety	--	--	--	-.465**	.234*	.527**	.011
4.ECRDadAvoidance	--	--	--	--	-.045	.507**	-.064
5.ECRMomTotal	--	--	--	--	--	.185	.146
6.ECRDadTotal	--	--	--	--	--	--	-.050
7.EATSumScore	--	--	--	--	--	--	--

**correlation is significant at the 0.05 level*

***correlation is significant at the 0.01 level*

a=Experiences in Close Relationships—Revised Scale

b=Eating Attitudes Test

Table 3

Mean Differences in Attachment and Eating Disorder Symptoms for Minority and Non-Minority Participants

Variable	<u>Non-Minority</u>		<u>Minority</u>	
	<u>(n=99)**</u>		<u>(n=10)</u>	
	M	SD	M	SD
ECRMomAnxiety	9.02	1.80	9.90	1.60
ECRMomAvoidance	19.32	5.50	18.30	3.60
ECRMomTotal	28.34	6.50	28.19	4.24
ECRDadAnxiety	7.32	3.99	7.82	4.69
ECRDadAvoidance	21.63	3.78	21.73	5.80
ECRDadTotal	28.94	4.15	29.54	4.39
AGIAnxiety	37.10	16.42	43.80	24.54
AGIAvoidance** ^a	60.42	17.56	45.20	20.03
EatSumScore	10.99	10.72	13.64	15.67
BMI	26.11	6.31	27.80	5.89

*a=**correlation is significant at the 0.01 level*

****One participant did not identify their ethnicity status.**

APPENDIX A
Demographics Questionnaire

What is your age?

What is your gender?

Male

Female

What is your marital status?

Single/Never Married

Married

Separated

Divorced

Widowed

Other

What is your ethnicity?

Caucasian

African American

Asian or Pacific Islander

Hispanic

Native American

Other

What is your religious affiliation?

Baptist

Catholic

Lutheran

Methodist

Christian/Other

Jewish

Other

What is the highest level of education you have completed?

Did not graduate from high school

Grade 12 (High school/GED)

Some college

Bachelor's degree

Graduate degree

If you are currently attending college, please indicate your year in school:

Freshman

Sophomore

Junior

Senior

Graduate student

Other

What is your occupation?

APPENDIX B

ECR-RS

Instructions: Please answer the following questions with respect to your mother or mother-like figure. Please select from “Strongly Disagree, Disagree, Somewhat Disagree, Neither disagree nor agree, Somewhat Agree, Agree, Strongly Agree.” When you are finished, please answer the same questions in regard to your father or father-like figure.

1. I prefer not to show this person how I feel deep down.
2. I'm afraid that this person may abandon me.
3. I find it easy to depend on this person.
4. I worry that this person won't care about me as much as I care about him or her.
5. It helps to turn to this person in times of need.
6. I usually discuss my problems and concerns with this person.
7. I don't feel comfortable opening up to this person.
8. I often worry that this person doesn't really care for me.
9. I talk things over with this person.
10. Please answer the following questions with respect to your father or father-like figure.
figure.
11. It helps to turn to this person in times of need.
12. I'm afraid that this person may abandon me.
13. I usually discuss my problems and concerns with this person.
14. I talk things over with this person.
15. I don't feel comfortable opening up to this person.
16. I find it easy to depend on this person.
17. I worry that this person won't care about me as much as I care about him or her.
18. I often worry that this person doesn't really care for me.

19. I prefer not to show this person how I feel deep down.

APPENDIX C

EAT-26

Instructions: Part A includes questions regarding your BMI. Part B asks about your eating and exercise habits. Part C asks about specific sets of behavior in the past 6 months.

Part A: Complete the following questions:

Birth date:

Gender:

(Male, Female)

Height:

Current Weight (lbs):

Highest Weight (excluding pregnancy):

Lowest Adult Weight:

Ideal Weight:

Part B: Answer the following statements with one of the following: Always, Usually, Often, Sometimes, Rarely, or Never

1. Am terrified about being overweight.
2. Avoid eating when I am hungry.
3. Find myself preoccupied with food.
4. Have gone on eating binges where I feel that I may not be able to stop.
5. Cut my food into small pieces.
6. Aware of the calorie content of the foods that I eat.
7. Particularly avoid food with a high carbohydrate content (i.e., bread, rice, potatoes, etc.)
8. Feel that others would prefer if I ate more.
9. Vomit after I have eaten.
10. Feel extremely guilty after eating.
11. Am preoccupied with a desire to be thinner.
12. Think about burning up calories when I exercise.
13. Other people think that I am too thin.
14. Am preoccupied with the thought of having fat on my body.
15. Take longer than others to eat my meals.
16. Avoid foods with sugar in them.
17. Eat diet foods.
18. . Feel that food controls my life.
19. Display self-control around food.
20. Feel that others pressure me to eat.
21. Give too much time and thought to food.
22. Feel uncomfortable after eating sweets.
23. Engage in dieting behavior.
24. Like my stomach to be empty.
25. Have the impulse to vomit after meals.
26. Enjoy trying new rich foods.

Part C: Behavioral Questions. Answer the following questions with one of the following: Never, Once a month or less, 2-3 times a month, Once a week, 2-6 times a week, Once a day or more

In the past 6 months, have you:

1. Gone on eating binges where you feel that you may not be able to stop?
2. Ever made yourself sick (vomited) to control your weight or shape?
3. Ever used laxatives, diet pills, or diuretics (water pills) to control your weight or shape?
4. Exercised more than 60 minutes a day to lose or to control your weight?
5. Lost 20 pounds or more in the past 6 months

APPENDIX D

Attachment to God Inventory.

Please answer the following questions on a scale of 1—7, with 1 being “Disagree Strongly” and 7 being “Agree Strongly.”

1. I worry a lot about my relationship with God.
2. I just don't feel a deep need to be close to God.
3. If I can't see God working in my life, I get upset or angry.
4. I am totally dependent upon God for everything in my life.
5. I am jealous at how God seems to care more for others than for me.
6. It is uncommon for me to cry when sharing with God.
7. Sometimes I feel that God loves others more than me.
8. My experiences with God are very intimate and emotional.
9. I am jealous at how close some people are to God.
10. I prefer not to depend too much on God.
11. I often worry about whether God is pleased with me.
12. I am uncomfortable being emotional in my communication with God.
13. Even if I fail, I never question that God is pleased with me.
14. My prayers to God are often matter-of-fact and not very personal.
15. Almost daily I feel that my relationship with God goes back and forth from "hot" to "cold."
16. I am uncomfortable with emotional displays of affection to God.
17. I fear God does not accept me when I do wrong.
18. Without God I couldn't function at all.
19. I often feel angry with God for not responding to me when I want.
20. I believe people should not depend on God for things they should do for themselves.
21. I crave reassurance from God that God loves me.
22. Daily I discuss all of my problems and concerns with God.
23. I am jealous when others feel God's presence when I cannot.
24. I am uncomfortable allowing God to control every aspect of my life.
25. I worry a lot about damaging my relationship with God.
26. My prayers to God are very emotional.
27. I get upset when I feel God helps others, but forgets about me.
28. I let God make most of the decisions in my life.