Eating Dysfunctions in College Women: The Roles of Depression and Attachment to Fathers

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Abstract. The authors examined the roles of depression and attachment to fathers in college women's eating dysfunctions. Three-hundred six undergraduate women completed (1) a diagnostic measure of eating dysfunctions that categorized them as asymptomatic, symptomatic but not eating disordered, or eating disordered; (2) 3 dimensional measures of attachment to fathers; and (3) a dimensional measure of depression. Depression was directly related to severity of participants' eating dysfunction; the eating-disordered group had scores consistent with clinical depression. After controlling for depression, 3 facets of attachment to fathers significantly differentiated the 3 groups.

Key Words: attachment security, college women, depression, eating dysfunctions

Eating dysfunctions are recognized as important problems in college women because of their significant association with other psychological problems, their significant impact on physical health, and their tendency to become chronic. Although some college women come forward with eating disorders of clinically significant proportions, many others possess subclinical eating dysfunctions, or “partial syndromes,” representing a continuum of severity and often falling short of criteria for eating disorders as described in the Diagnostic and Statistical Manual-Fourth Edition (DSM-IV). These dysfunctions often have mixed symptomatology that are not characteristic of anorexia nervosa or bulimia nervosa, but more similar to an eating disorder not otherwise specified (EDNOS). Among college women, the prevalence of such “partial syndromes” is believed to be especially high, and some researchers support prevalence rates as high as 61%. Although it is recognized that body dissatisfaction often precedes eating problems in college women, their etiology remains poorly understood.

In responding to the significance of both subclinical and clinical eating dysfunctions in college women, researchers have recently investigated factors that could contribute to their development and, in turn, to their reduction. Among these factors have been undergraduate women's relationships with parents because parents remain important sources of support to their young adult children who are attending college. College students' relationships with parents are often framed in terms of attachment. According to Bowlby's theory of attachment, infants seek behavioral and psychological proximity to caregivers during times of threat, and their early attachment experiences give rise to an internal working model of attachment that includes general beliefs about interpersonal relationships and specific beliefs about themselves in relation to others. These internalized beliefs are said to carry over into adulthood, adolescence, and adulthood and to interact with one's interpersonal relationships. Throughout development, the role of the attachment figure is to foster autonomy by providing a secure base of support and by offering assistance, as needed, without interfering with the offspring's developing independence. Attachment security reflects emotional closeness with parents and the use of parents as sources of support, as opposed to detachment from or overdependence on parents. Such an attachment relationship is believed to be important for the development of self-esteem and healthy psychological functioning. According to attachment theory, feelings of insecurity develop when relationships with parents are lacking or inconsistent in care, responsiveness, and trust.
Attachment security is especially important during late adolescence and early adulthood, when identity formation and emancipation from parents are primary developmental tasks. Among college students, this developmental period brings the opportunity and the need to modify attachment-related beliefs to make them more age-appropriate and representative of current relationships, including those with parents.

For young college women, in particular, who are typically socialized to value interpersonal relationships and connections with other people, the task of separating from parents while retaining important family ties may be especially challenging. In fact, theorists have suggested that insecurity in attachment relationships with parents may result in eating dysfunctions in some young women through weight-reducing behaviors that permit the avoidance of physical maturity as a means of avoiding psychological maturity and independence. Moreover, empirical findings have supported relations between attachment security and both eating disorders and depression in college-aged women.

Although several researchers have found relations between eating dysfunctions and attachment security among adolescent and young adult women, 2 aspects of undergraduate women's attachment to parents would benefit greatly from further exploration. The first is college women's attachment to their fathers, as distinct from their mothers. Traditionally, mothers have been regarded as primary caregivers and as the main attachment figures, whereas at the developmental stages of early and middle adolescence and young adulthood, when eating dysfunctions usually emerge, women's relationships with their fathers may be particularly significant. A second aspect is the degree to which attachment makes a contribution to eating dysfunctions independent of depression, which frequently occurs concomitantly with dysfunctional eating.

Cole-Detke and Kobak are among the few investigators who have conducted simultaneous examinations of the contributions that attachment to fathers and depression make to college women's eating dysfunctions. Their use of the Adult Attachment Interview (George C. Kaplan N, Hain M. An adult attachment interview: interview protocol. Unpublished manuscript. University of California Berkeley; 1985) generated support for the relation between attachment security to fathers and eating dysfunctions in young women, even after accounting for depression. Alienation from fathers was associated with a defensive attachment style characterized by diverting attention from attachment issues and painful childhood memories. Such an attachment style is presumed to develop when the attachment figure is perceived as ignoring or rejecting attachment-seeking behaviors. As suggested by these authors, this type of attachment style "could represent the diathesis which, in combination with sociocultural pressures, eventually places the individual on the path toward the development of an eating disorder." A limitation of Cole-Detke and Kobak's approach, however, is that it requires semistructured interviews that are quite labor- and time-intensive.

Pole and associates and Wonderlich and Swift investigated perceptions of parenting and depression simultaneously in groups of college women with eating dysfunctions. Pole and colleagues found that women with bulimia perceived less maternal care than did a group of normal controls, but the differences were only marginally significant for paternal care; furthermore, they did not include anorexic symptomatology. Wonderlich and Swift found no significant effect for parenting after controlling statistically for the effects of depression; however, they grouped participants with eating dysfunctions according to their type of dysfunction (anorexia, bulimia anorexia, and bulimia) rather than according to the severity of their symptoms. One aspect of both Wonderlich and Swift's and the Pole et al studies that may make them less applicable to college women is that neither included eating dysfunctions falling short of a clinical diagnosis (ie, symptomatic but not eating disordered).

Therefore, our aim in conducting the current study was to investigate further the relation between paternal attachment security and severity of eating dysfunctions among college women while considering the potential impact of concurrent depression. This study was designed to make diagnoses of eating disorders following DSM-IV criteria while simultaneously retaining the ability to characterize eating dysfunctions in terms of their severity, including subclinical as well as clinical dysfunctions. It was also designed to use brief, self-report, dimensional measures of attachment with higher efficiency relative to semistructured interviews. Unlike traditional categorical measures of attachment that classify individuals as secure or insecure, these measures place individuals along a continuum of dimensions of attachment-related constructs that may have different impacts on outcomes.

**METHOD**

**Participants**

Participants in our study were 306 undergraduate women enrolled in psychology courses at a midsize coeducational Catholic university in the Midwest. The women ranged in age from 17 to 42 years (M = 19.38, SD = 2.43). Forty percent were freshman, 16% were sophomores, 27% were juniors, and 17% were seniors. Most of the participants identified as White (83%); 9% as African American; 5% as Asian American; 1% as Latino; and 2% said that they were of another ethnic group or did not report their ethnicity. The majority of the participants indicated that they lived on campus in university resident halls or apartments (71%).

**Measures**

**Parental Attachment Questionnaire (PAQ)**

The PAQ is a 55-item self-report measure designed to assess attachment to parents. It assesses 3 dimensions: affective quality of parental relationship, parental role in providing emotional support, and parental role in fostering autonomy. Internal consistency and test-retest coefficients
are reported to be high \((r > .80)\). In addition, construct validity is supported by positive and significant correlations between the FAQ and the Family Environment Scale.\textsuperscript{22}

**Inventory of Parent and Peer Attachment–Parent Form (IPPA–Parent Form)**

The IPPA-Parent Form\textsuperscript{23} is a 31-item self-report measure designed to assess attachment to the individual's primary caregivers along 3 dimensions: mutual trust, quality of communication, and extent of alienation. Internal consistency and test-retest reliability are reported to be high \((r > .85)\). In addition, construct validity of the IPPA–Parent Form has been demonstrated by a correlation of .56 with the Cohesion subscale of the Family Environment Scale.

**Parental Bonding Inventory (PBI)**

The PBI\textsuperscript{24} is a 25-item self-rating measure that seeks information about participant's recollections of parents during the first 16 years of their lives. The instrument contains 2 scales: a care scale and a protection scale. The care scale reflects parental warmth, affection, and empathy. The protection scale reflects parental control, intrusion, and overprotection. Psychometric support for the measure includes reliability coefficients of .63 and higher. Concurrent validity coefficients range from .48 to .78 when PBI scores are compared with clinicians' independent ratings of parental care and protection.

Each of the 3 attachment measures can be completed with respect to either one's mother or father. We chose to focus on attachment to fathers in the current study.

**Questionnaire for Eating Disorder Diagnoses (Q-EDD)**

The Q-EDD\textsuperscript{25} is a 50-item self-report questionnaire that operationalizes DSM-IV criteria for an eating disorder diagnosis. The Q-EDD detects individuals who are suffering from an eating disorder (the eating-disordered group) and those not suffering from an eating disorder (the asymptomatic group). The Q-EDD also distinguishes a third group of individuals, those with some symptoms of an eating disorder who fall short of a DSM-IV diagnosis (the asymptomatic group). The measure also detects individuals suffering from anorexia nervosa, bulimia nervosa, and eating disorder not otherwise specified (EDNOS).

Mintz and associates\textsuperscript{26} reported 3 studies of the Q-EDD's psychometric properties. Two-week test-retest reliabilities ranged from .85 to .94. Convergent validity was demonstrated by significant correspondence between Q-EDD diagnoses and scores on the Eating Attitudes Test\textsuperscript{26} and the Bulimia Test-Revised.\textsuperscript{27} Criterion validity was demonstrated by correspondence between diagnoses made by the Q-EDD and clinical interviews ranging from 90% to 100% across the 3 studies.

**Beck Depression Inventory-II (BDI-II)**

The BDI-II\textsuperscript{28} is a 21-item self-report measure designed to assess the cognitive, affective, motivational, and somatic symptoms of depression. The BDI-II represents a revision of the original BDI.\textsuperscript{29} The author of the BDI replaced 4 items of the original BDI with 4 new items to index symptoms of severe depression and revised 2 items. High internal consistency reliability and convergent and discriminant validity have been reported.\textsuperscript{28}

We also administered a questionnaire to obtain demographic information, including age, year in school, ethnicity, and residence (on campus/off campus).

**Procedure**

We recruited interested students from undergraduate psychology courses and assured respondents that their responses were completely anonymous. They were given course credit for their participation through separate credit vouchers. Institutional Review Board approval was granted for this study before we began data collection.

**RESULTS**

Two-hundred one women (66%) were categorized as asymptomatic on the basis of their responses to the Q-EDD; 69 (22%) were categorized as symptomatic, and we categorized 36 (12%) as eating disordered.

To examine relations between eating dysfunctions as assessed by the Q-EDD and depression as assessed by the BDI-II, we performed a one-way analysis of variance and found a significant effect for the BDI-II, \(F(2, 301) = 32.86, p = .000\). A post hoc Student-Newman-Keuls test\textsuperscript{30} found that the 3 groups' scores were significantly different from each other in ascending order, from asymptomatic to eating disordered; Means = 7.8 for the asymptomatic group, 12.53 for the symptomatic group, and 17.48 for the eating-disordered group. Thus, we found a direct relation between level of eating dysfunction and depression, with the eating-disordered group scoring above the cut point of 16 on the BDI, which has been found to suggest clinically significant depressive symptomatology.\textsuperscript{31}

Because we were interested in following up the Cole-Dette and Kobak\textsuperscript{15} finding that alienation from fathers was significantly associated with eating disorders after controlling for depression, we selected the attachment subscales for examination that appeared to measure paternal alienation. These were IPPA alienation, PAQ effective quality, and PBI care. We then conducted a multivariate analysis of covariance (MANCOVA) in which 7 measures of Q-EDD status served as independent variable and the attachment subscales served as dependent variables. Depression, as assessed by the BDI-II, was the covariate. Results of the analysis revealed that, as expected, depression was a significant covariate (Wilks's \(\lambda = .86, F(3, 237) = 14.68, p = .000\)). Results also revealed significant relations between each of the 3 paternal attachment subscales and eating-disordered symptoms, after controlling for depression (alienation scale from the IPPA, \(p = .02\), Affective Quality of Relationship scale from the PAQ, \(p = .03\), and the care scale from the PBI, \(p = .003\)). In addition, the overall model was also significant (\(p = .05\)).
After accounting for the effects of concomitant depression, we found that the highest level of paternal alienation was reported by the symptomatic group (adjusted $M = 20.91$), who scored significantly higher ($p < .01$) than the asymptomatic group (adjusted $M = 18.0$), but not significantly different from the eating-disordered group (adjusted $M = 19.08$). The scores of both the asymptomatic and eating-disordered groups were not significantly different from each other. The lowest level of Paternal Affective Quality of Relationship was reported by the symptomatic group (adjusted $M = 99.92$), who scored significantly lower than the asymptomatic group (adjusted $M = 108.05$), but not significantly different from the eating-disordered group (adjusted $M = 106.74$). Again, the symptomatic and eating-disordered groups' scores were not significantly different from each other. Finally, the symptomatic group also reported the lowest level of paternal care (adjusted $M = 22.29$). This score was significantly lower than that reported by the asymptomatic group (adjusted $M = 26.94$), but not significantly different from that reported by the eating-disordered group (adjusted $M = 25.79$). The asymptomatic and eating-disordered groups' scores were not significantly different from each other.

We compared demographic variables, including age, year in school, ethnicity, residence (on campus/off campus), and parents' marital status across the 3 diagnostic groups. Results revealed that there were no significant differences. In addition, we found no significant relations between these demographic variables and either depression or attachment to fathers.

In summary, the 3 groups differed significantly in level of depression in ascending order, with the eating-disordered group scoring just above the cut point of 16, suggesting clinically significant symptoms of depression. By contrast, after we accounted for the effects of concomitant depression, the group that reported the most insecure attachment to fathers was the symptomatic group, which reported the highest level of alienation and the lowest levels of affective quality of relationship and care in regard to their fathers.

COMMENT

Results portray 3 divergent groups in terms of their level of eating dysfunctions (asymptomatic, symptomatic, and eating-disordered) and also in terms of levels of depression and security of attachment to fathers. The asymptomatic group reported the lowest levels of depression and the highest levels of paternal attachment security. The symptomatic group scored mildly depressed and most insecurely attached to fathers; they had the highest scores on alienation from fathers and the lowest scores on paternal care and emotional quality of the relationships with fathers. The eating-disordered group was characterized by clinically significant levels of depression and by intermediate levels of paternal attachment security, with scores between the asymptomatic and the symptomatic groups on alienation from fathers, paternal care, and emotional quality of relationships with fathers.

Findings from the present study partially replicate those of Cole-Deitke and Kobak, who reported that after they controlled for depression, the characteristic of attachment that differentiated women reporting elevated eating-disordered symptoms from those reporting relatively few eating-disordered symptoms was alienation from their fathers. It is surprising that although symptomatic women (those having symptoms of eating disorders but not meeting diagnostic criteria) reported only mild levels of depression, they reported the greatest degree of insecurity in attachment to fathers after we controlled for depression. Eating-disordered women, by contrast, reported the highest levels of depression; after controlling for depression, however, they reported that attachment to their fathers was essentially as secure as that indicated by asymptomatic women.

We can offer at least 3 possible explanations for the differences between these 2 groups. First, the symptomatic and the eating-disordered groups may represent 2 distinct, qualitatively different types of eating dysfunctions that may have different etiologies. Second, the 2 groups may represent 2 points in the chronological development of eating disorders. Finally, integrating results of the present study with those of Cole-Deitke and Kobak suggests a third perspective on the relations among eating dysfunctions, depression, and perceptions of attachment. Although the greater preoccupation with food and body image present in women with eating disorders of diagnostic proportions does not protect these women from depression, it may serve to distract them from painful attachment-related feelings and cognitions regarding their fathers. In addition, the presence of significant depression among those with diagnosable eating disorders may distract them from reflecting on relationships with their fathers. Moreover, the more intense (and perhaps more visible) symptoms of eating dysfunctions among women in the eating-disordered group may elicit attachment behaviors from fathers who were previously unavailable. Prospective longitudinal research is needed to clarify the relations among depression and attachment in these two groups.

These results have several implications for college administrators, counselors, and other professionals involved in student life. First, the high concordance between eating dysfunctions and depression suggests that college women seeking treatment for eating dysfunctions should be assessed for comorbid depression; those seeking treatment for depressive symptoms should be assessed for concurrent eating dysfunctions. In addition, because attachment to fathers among eating-disturbed college women is independent of heightened levels of depression, it may be important in treatment to address college women's perceptions of their relationships with their fathers. It may be especially important to attend to these perceptions (1) in women who are symptomatic but not eating-disordered and (2) in eating-disordered women as the severity of their disorder diminishes. In addition, given the high prevalence of both subclinical and clinically significant eating dysfunctions among undergraduate women, identification of women in need of treatment may
be a very important task for college professionals. The present study and others that preceded it suggest that the majority of eating dysfunctions among college women appear to be subclinical in nature. Because subclinical conditions may be less severe and less easily detected than more overt dysfunctions, it is especially important for campuses to offer screenings for eating dysfunctions to all undergraduates. In this context, clinicians should choose assessment measures that are sensitive to both clinically significant disorders and subclinical manifestations that may be precursors of clinically significant eating disorders. Identification and treatment of women who exhibit subclinical symptoms may serve to prevent the development of clinically significant eating disorders in many college women.

Limitations

Several limitations of the present study must be noted. The cross-sectional design cannot settle issues regarding cause: symptoms of eating dysfunctions may contribute to perceptions of insecure attachment to fathers, rather than the reverse. The present data, similarly, cannot resolve issues regarding the temporal unfolding of symptoms of depression and eating dysfunctions, whether depression precedes eating dysfunctions, eating dysfunctions precede depression, or whether they occur concurrently. Self-report data may also be a limitation of the study, in that self-report of eating-disordered symptoms, attachment, and depressive symptoms may not be congruent with ratings of trained observers. Although the nonclinical nature of the sample helps to extend the findings of Cole-Detke and Kobak to women with eating disorders who are not seeking treatment, findings may not generalize to a clinical group. The sample contained a high proportion of Catholic women, and although there is no a priori reason to believe findings are specific to such women, it will be important to replicate findings in a more heterogeneous sample. In addition, the sample was limited to women enrolled in introductory psychology courses. Although the majority of participants were freshmen who had not yet begun coursework in their major, the sample may reflect a higher number of students with an interest in psychology. Finally, the current study did not investigate depression and paternal attachment security in women who exhibit different types of eating dysfunctions (eg, anorexic or bulimic symptoms or combined anorexic/bulimic symptoms). Therefore, future research should investigate whether depression and paternal attachment security vary as a function of type of eating disorder.

NOTE

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