

# The Relationship between Selflessness Levels and the Severity of Anorexia Nervosa Symptomatology

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This study examined the relationship of selflessness, the tendency to ignore one's own needs and interests and serve others, to the severity of anorexia nervosa (AN) symptomatology. Measures of selflessness, perfectionism, obsessiveness, self-esteem, disordered eating, body dissatisfaction, drive for thinness and general symptomatology were completed by 205 women with a history of AN (ANh) in various stages of illness and recovery (42 ill, 90 partially recovered and 78 recovered) and 238 female controls. The ANh women's scores on the Selflessness Scale declined significantly as the severity of current pathology decreased. Recovered anorexics scored similarly to female controls. Assertion of one's own needs and interests may be an integral component of recovery from AN, and should be emphasized in therapy. Copyright © 2006 John Wiley & Sons, Ltd and Eating Disorders Association.

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## INTRODUCTION

'Selflessness', or the tendency to relinquish one's own interests and ignore one's own needs in order to serve the interests and well-being of others, is a psychological feature first conceptualized, defined and quantified in eating disorder patients (Bachar et al., 2002). Clinicians and researchers with divergent psychological approaches and theoretical viewpoints have all emphasized the selflessness of patients with anorexia nervosa (AN).

According to self-psychology (Bachar, 1998; Bachar, Latzer, Kreitler, & Berry, 1999; Geist, 1998; Goodsit,

1997), eating disorder patients feel and behave like selfless souls serving others' needs. An anorexic or a bulimic woman cannot imagine that other people would be willing to give up, even temporarily, their own interests and viewpoints to fulfil her needs. In Kohutian terms, eating disorder patients do not believe others can serve as self-objects for them (Kohut, 1977). According to this theory, anorexic women are liable to feel self-guilt whenever they find themselves promoting their own interests (Goodsit). As a result, they often find themselves living life in its narrowest parameters, relinquishing their own interests, compromising their development, giving up their well being and denying even their most basic needs, including nourishment.

Geller et al., from a cognitive and sociological rather than a psychoanalytic perspective, stress

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anorexics' tendency to 'silence their self', or inhibit self-expression in order to secure interpersonal relationships (Geller, Cockell, Goldner, & Flett, 2000). Sociological theories they quote suggest that women in general tend to concentrate on the emotions of others more than on their own, inhibit self-expression, especially anger, and fail to seek and acknowledge their own experiences (Gilligan, Rogers, & Tolman, 1991). Four cognitive schemas stemming from this socialization were proposed: (1) inhibition of self expression to avoid conflict; (2) rejection of one's own needs for the sake of others' to maintain attachment; (3) judgement of self according to external standards and (4) presentation of outer compliance despite an angry and hostile inner self (Jack & Dill, 1992). Using a questionnaire based on these schemas (Jack & Dill), Geller et al. found that anorexic women tend to silence their self more than normal controls and other psychiatric groups.

Using narrative research, Wechselblatt et al. concluded that women encouraged by their families to substitute others' needs for their own are at elevated risk for developing AN (Wechselblatt, Gurnick, & Simon, 2000). Certain personality traits like compliance and perfectionism render them especially susceptible to their family's pressure to attune to the needs of others. The future anorexic subsequently negates her right to need and to be nourished.

Goodsit (1997) and Donovan (1989) took this sense of selflessness one step further, claiming that anorexics feel that they have no right to live or to exist at all. Lifton's (1979) concept of survival guilt was expanded on by Modell (1971), who described the belief that the supply of good things in life is limited and that drawing on it deprives others, primarily close relatives, causing them to suffer. If eating disorder patients believe that success and happiness are achieved at the expense of others, they will tend to give up their portion.

Minuchin, from his family interaction perspective, stressed the self-sacrifice, loyalty and protectiveness of anorexic patients towards their parents (Minuchin, Rosman, & Baker, 1978), the same motives reviewed above from a self-psychological and cognitive sociological perspective. Minuchin furthermore emphasized guilt as the underlying motivation for this self-sacrifice in the service of the family's needs.

Brunton, Lacey and Waller (2005) recently found an association in a nonclinical population between drive for thinness and a construct remarkably similar to selflessness, 'narcissistically abused personality', defined as the placing of others' needs before one's own.

In this paper, we examine the concept of selflessness in a sample of women with current or past AN. Selflessness is assessed by the Selflessness Scale (Bachar et al., 2002), measuring the tendency to ignore one's own needs and fulfil those of others. Our first hypothesis was that levels of selflessness would be related to the severity of AN symptomatology. Our second hypothesis was that selflessness scores would correlate significantly with measures of AN-related symptoms and with personality variables found in the literature to be associated with AN (obsessiveness, perfectionism and self-esteem).

## METHOD

### *Participants*

Three hundred and eighty-two women aged 13–36 participated in the study. They were a subset of women participating in a larger study on the genetics of AN and comprised two groups:

- (1) Two hundred and ten women with a history of AN (ANh). These women were recruited from the community via announcements on college campuses, in newspapers, and on the internet. Initially, 322 women were screened by telephone to determine provisional study suitability. Ascertainment rules were age between 13 and 35, and an unequivocal lifetime diagnosis of AN by strict DSM-IV criteria. Exclusion criteria, determined upon screening, were organic brain syndrome, mental retardation, insufficient Hebrew language proficiency to complete the battery of questionnaires, unwillingness to provide informed consent, and a history of a medical condition rendering diagnosis uncertain. AN diagnoses were made using an expanded version of the Structured Clinical Interview for DSM-IV (First, Spitzer, Gibbon, & Williams, 1996) (SCID-IV). Interviews were conducted in-person or, for interviewees unable to attend an in-person interview, by telephone. It should be noted that no significant differences in eating disorder assessments have been found between telephone and personal interviews (Keel, Mitchell, Miller, Davis, & Crow, 1999), and we observed no differences in this study. All interviews were conducted by a psychologist (R.B.M.) and best-estimate diagnosis was reached in consultation with a senior clinical psychologist (A.H.Z.), who read precise min-

utes of the interviews. Worst ever and current levels of AN symptomatology were also assessed in the interview. Even though we relied on self-reported clinical information, current and lifetime diagnoses of AN made using the SCID have been shown to be highly reliable (Williams, 1992). A past or present diagnosis of AN was established for 210 women, who participated in the study. These women were divided into three groups according to their level of current AN symptomatology:

- (a) Forty-two currently ill women—Broad criteria for AN were used to determine current symptomatology, in contrast to the strict criteria used for a lifetime diagnosis. Women were considered currently ill if their BMI was below 18, they feared weight gain, and had a distorted body image as defined in the DSM-IV. The amenorrhoea criterion was not required.
- (b) Ninety partially recovered women—These women were weight restored (BMI > 18) but were not necessarily free of severe dietary restriction, or bingeing or purging symptoms.
- (c) Seventy-eight recovered women—These women were weight restored (BMI > 18), were menstruating regularly, did not severely restrict their food intake and had no current bingeing or purging symptoms.

The demographic and clinical characteristics of these three groups are displayed in Table 1.

- (2) The 172 control women with no history of AN were recruited via announcements on college campuses and in the community. Female controls were screened for history of an eating disorder using the following criteria: a BMI of 17.5 or less or over 30 currently or since reaching

current height, an ideal BMI of 17.5 or less, amenorrhoea, an EAT-26 score of above 20 (Garner, Olmsted, Bohr, & Garfinkel, 1982), or body dissatisfaction scores in the highest percentile. In addition, all respondents were asked whether 'eating has ever been problematic or a source of distress for you' and the responses of those replying in the positive were examined. Women who described symptoms compatible with eating disorders, or who fulfilled at least one of the other criteria above, were contacted and interviewed using the SCID-IV. Those with a history of a clinical or sub-clinical eating disorder and those who refused to be interviewed were excluded from the study.

The control and ANh groups did not differ significantly on mean age or level of parental education (data not shown). They differed in their current BMI ( $F = 42.60, p < 0.0001$ ); the mean BMI of the ill group was  $16.92 \pm 1.11$ , that of the partially recovered women was  $20.38 \pm 2.17$ , that of the recovered women  $20.99 \pm 2.04$  and that of the control women  $22.26 \pm 3.58$ . All group differences in BMI, with the exception of that between the partially and fully recovered ANh women, were significant at the  $p < 0.01$  level.

### Instruments

- (1) The Selflessness Scale (SS,  $\alpha = 0.66$ ) is a 15-item questionnaire on a four-point Likert scale quantifying the tendency to ignore one's own needs and interests and serve others (Bachar et al., 2002). We identified four factors in an exploratory factor analysis: Sacrifice for Family, Sacrifice for Others, Self-Denial and Lack of Self-Interest (see Table 2).

Table 1. Comparison of demographic and clinical variables across recovery status in ANh women

	Ill ( $N = 42$ ), M (SD)	PR ( $N = 90$ ), M (SD)	R ( $N = 78$ ), M (SD)	Comparison, M (SD)
Current age	23.55 (5.21)	23.11 (4.01)	23.94 (3.58)	0.84 (0.44), Ill = PR = R
Mother's education	2.71 (1.04)	2.78 (1.09)	2.78 (0.98)	0.08 (0.92), Ill = PR = R
Father's education	2.78 (1.06)	2.96 (1.16)	2.87 (1.06)	0.37 (0.69), Ill = PR = R
Age of onset	15.32 (2.70)	15.57 (2.65)	15.44 (2.14)	0.15 (0.86), Ill = PR = R
Minimum BMI	14.17 (2.02)	15.10 (1.77)	15.28 (1.39)	6.29 (0.002), Ill < (PR = R)
Severity of history of depression	1.92 (1.81)	2.21 (1.77)	1.98 (1.71)	0.51 (0.60), Ill = PR = R
No. of other DSM-IV diagnoses	2.02 (2.81)	2.81 (2.72)	2.49 (2.32)	1.33 (0.27), Ill = PR = R
Duration of AN (in years)	4.97 (4.07)	3.01 (2.36)	2.13 (1.64)	16.47 (<0.001), Ill > (PR = R)

The group comparisons are a summary of a series of bi-group contrasts. Group means are described as equal if  $p \geq 0.05$ , and unequal if  $p < 0.05$ .

Ill = currently ill, PR = partially recovered, R = recovered.

Table 2. Factor Structure of the Selflessness Scale (Hebrew version)

Item	SF	SD	LSI	SO
4. If the family budget is limited, I will give up my part	0.33			
9. If a member of my family asks me to join him/her in his hobby or leisure time activity, I will join him/her to make him happy, whether I like that activity or not	0.61			
10. If I am in the midst of doing something and it seems to me that someone from my family needs that particular instrument or place, I will usually give it up	0.56			
11. If one of my household members is unhappy, I will immediately try to comfort him/her or make him happy	0.78			
13. I am an expert in guessing what my family or friends need	0.55			
5. If a member of my family is in great difficulty and I cannot help, I will feel there is no point to my life		0.58		
7. I am more bothered by others' problems than my own		0.65		
12. My own enjoyment is the last thing that is important to me		0.74		
15. I sometimes act like a parent towards my parents		0.40		
6*. If someone has obligations towards me, I do not care what his/her difficulties are			0.65	
8*. It is not terrible if I exploit others			0.75	
14*. While waiting in line at the movies or grocery store, I will try to manoeuvre my way towards the front of the line			0.70	
1. I am willing to sacrifice a lot for the benefit of others	0.32			0.54
2. If someone hurts me, I usually forgive them				0.77
3. I usually give in to the will of others				0.76
% Variance accounted for				
Eigenvalue	13.5	12.1	10.8	9.5
Cronbach's alpha lower bound estimate of reliability for scale	2.69	1.59	1.41	1.21
	0.59	0.49	0.56	0.55

SF = Sacrifice for Family; SD = Self-denial; LSI = Lack of Self-interest; SO = Sacrifice for Others.

\*Item reverse-scored.

Factor structure matrix coefficients less than 0.30 omitted.

Rotation method: Varimax with Kaiser normalization.

- (2) The Brief Symptom Inventory (BSI,  $\alpha = 0.96$ ) is a 53-item checklist scored on a five-point Likert-like scale from 'not at all' to 'very much' (Derogatis, 1975). The nine dimensions of the BSI are: somatization, obsessive-compulsion, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism.
- (3) The Child and Adolescent Perfectionism Scale (CAPS,  $\alpha = 0.91$ ) consists of 22 items, each with five response categories (Hewitt & Flett, 1989). It measures self-orientated and socially prescribed perfectionism.
- (4) The Eating Attitudes Test-26 (EAT-26,  $\alpha = 0.93$ ) is a 26-item self-report factor-analytically derived scale, widely used as a screen for eating disorders (Garner & Garfinkel, 1979). Scoring is on a six-point Likert scale with answers ranging from 'never' to 'always'. In order to calculate a screening cut-off score, the three least frequent categories ('never', 'rarely' and 'sometimes') are scored zero, 'often' 1, 'usually' 2 and 'always' 3.

To calculate correlations, we scored the scale from never (zero) to always (five), to maximize variance.

- (5) The Eating Disorder Inventory (EDI-2) is a self-report measure of symptoms generally related to eating disorders (Garner, 1991). In the present study, two of its eleven subscales were used, to assess Body Dissatisfaction (EDIBd,  $\alpha = 0.92$ ) and Drive for Thinness (EDIDt,  $\alpha = 0.93$ ). The seven-item EDIDt assesses preoccupation with body weight, fear of gaining weight, desire to be thin and food intake restriction. The nine-item EDIBd measures overall (dis)satisfaction with the shape and size of various body parts. Respondents are asked to state how often (on a scale of never = 0 to always = 5) they think, for example, that their hips or thighs are too large.
- (6) The Maudsley Obsessive-Compulsive Inventory (MOCI,  $\alpha = 0.79$ ) is a 30-item yes/no inventory that assesses obsessions and compulsions (Hodgeson & Rachman, 1977).

- (7) The Rosenberg Self-Esteem Scale (SES,  $\alpha = 0.9$ ), a ten-item instrument scored on a four-point Likert scale, was used to assess self-esteem, with higher scores indicating higher levels of self-esteem (Rosenberg, 1965). Discriminant validity for the SES has been shown in the context of eating disorders (Fairburn, Cooper, Doll, & Welch, 1999; Fairburn, Welsh, Doll, Davies, & O'Connor, 1997; Gual et al., 2001).

### *Translation of Instruments*

The SS was written originally in Hebrew. We used Hebrew translations of the BSI (Bachar, Cannetti, Bonne, DeNour, & Shalev, 1997), the EAT-26 (Koslowsky et al., 1992), the EDI (Niv, Kaplan, Mitrani, & Shiang, 1998) and the MOCI (Zohar, LaBuda, & Moschel-Ravid, 1995) that had been previously used in research in Israel. We translated the CAPS and the SES into Hebrew, making every effort to preserve both the overall meaning and the nuances of the original English sentences. An independent psychologist with English mother tongue and excellent knowledge of Hebrew then back-translated the scales and minor discrepancies were discussed and resolved.

### *Procedure*

Approval for the study was obtained from the Ethics Committee of the Hebrew University of Jerusalem. Participants filled out a booklet of self-report questionnaires after providing informed consent and those who reported having had AN or who screened positively for eating pathology were interviewed as described above.

Exploratory factor analysis (Kaiser's normalized varimax rotation) was employed for the SS by entering the answers of all female respondents participating in our broader genetic study ( $N = 1116$ ), to determine the optimal factor structure of the scale.

We compared the mean selflessness scores of currently ill women with those of partially recovered anorexics and recovered anorexics using one-way analysis of variance. The pattern of intercorrelations between the SS and the other self-report questionnaires administered was calculated and observed within the ANh group and within the group of control women. SPSS version 11.0 was used for all analyses.

## RESULTS

### *Exploratory Factor Analysis*

Kaiser–Meyer–Olkin's measure of sampling adequacy for the intercorrelational matrix was 0.73. When all 15 items were entered into an exploratory factor analysis, the spree plot indicated four factors and there were four factors with eigenvalues above 1, which together explained 45.93% of the variance. We named these factors 'Sacrifice for Family', 'Self-denial', 'Lack of Self-interest' and 'Sacrifice for Others' (see Table 1).

### *Comparison of Mean Selflessness Scores Across Levels of Recovery*

The ANOVA comparing the mean Selflessness scores of currently ill women to partially recovered and recovered women was significant ( $df = 2$ ,  $F = 6.51$ ,  $p < 0.01$ ). The mean score of currently ill women was highest ( $\text{mean} = 28.17 \pm 5.71$ ), that of recovered women lowest ( $\text{mean} = 25.06 \pm 4.58$ ) and that of partially recovered women between the two ( $\text{mean} = 27.07 \pm 4.68$ ). The test for linearity based on a linear contrast among the group means was significant ( $df = 1$ ,  $F = 12.6$ ,  $p < 0.001$ ) and the test for deviation from linearity was insignificant ( $df = 1$ ,  $F = 0.43$ ,  $p = 0.52$ ). The mean scores of healthy controls ( $25.64 \pm 4.58$ ) did not differ significantly from that of the recovered group ( $df = 249$ ,  $t = 1.02$ ,  $p = 0.31$ ).

### *Correlations*

The correlations with perfectionism and obsessiveness were significant and positive within both the ANh group and the control group. Self-esteem correlated significantly and negatively with selflessness for the ANh women but not the control women. The correlations between the SS and measures of pathology (disordered eating, body dissatisfaction, drive for thinness and general symptomatology) were also significant within the ANh group but not within the control group. The Pearson correlations of the total SS with symptoms of pathology and personality variables associated with eating pathology in both groups are shown in Table 3.

## DISCUSSION

We observed a close relationship between levels of selflessness and levels of AN symptomatology, with

Table 3. Correlation of total Selflessness scores with symptoms of pathology and personality variables associated with AN in the ANh group ( $N=210$ ) and the control group ( $N=172$ )

Scale (construct)	Pearson correlation (p)	
	History of AN	No history of AN
Symptoms of pathology		
EAT-26 (current disordered eating)	<b>0.183 (0.008)</b>	0.039 (n.s.)
EDlbd (body dissatisfaction)	<b>0.203 (0.003)</b>	-0.009 (n.s.)
EDIdt (drive for thinness)	<b>0.135 (0.05)</b>	-0.029 (n.s.)
BSI (general symptomatology)	<b>0.245 (0.000)</b>	-0.054 (n.s.)
Personality variables		
CAPS (perfectionism)	<b>0.256 (0.000)</b>	<b>0.184 (0.016)</b>
MOCI (obsessiveness)	<b>0.277 (0.000)</b>	<b>0.224 (0.004)</b>
SES (self-esteem)	<b>-0.314 (0.000)</b>	-0.013 (n.s.)

Correlations significant at the  $p < 0.05$  levels are indicated in bold print.

selflessness scores increasing steadily with the severity of AN symptomatology. This relationship was also expressed in the positive correlations observed within the ANh group between selflessness scores and variables related to anorexic symptomatology (EAT-26 scores, body dissatisfaction, drive for thinness) and to a general measure of pathology (BSI). As expected, currently ill anorexics had higher selflessness scores than partially recovered anorexics, who in turn scored higher than recovered anorexic women. The scores of recovered anorexic women did differ significantly from those of female controls.

There are at least two possible explanations for this interesting result. One is that selflessness is an underlying vulnerability for AN, that girls who are particularly selfless are more prone to AN, and that a decline in selflessness will contribute to recovery from the disorder. An alternative possibility is that recovery from AN is associated with a general lifting of the pathological psychological profile that includes selflessness.

The positive correlations observed both within the ANh group and within the control group with perfectionism and obsessiveness indicate a possible connection between being selfless and being stoic, neat and meticulous. Expressing personal needs and interests appears not to go hand in hand with being obsessive and striving for perfection. Ideal behaviour may be generally perceived by women with a history of AN as being, *inter alia*, selfless and altruistic, with 'perfect' people labouring and making sacrifices for the good of others.

In the ANh group, there was a significant negative correlation between self-esteem and selflessness. This might suggest that the tendency of AN patients

to be selfless is rooted in a pervasive sense of unworthiness and low self-esteem, as if the anorexic women is asserting: 'I do not deserve to treat myself well, I should be attuned only to the needs of others'. In contrast, the selflessness of women who have never suffered from AN appears to be unrelated to self-esteem.

AN is often conceptualized as the extreme of a behavioural syndrome normally distributed in the entire population. However, the between-group difference we observed in the correlational pattern of selflessness with self-esteem, variables related to anorexic symptomatology, and general psychopathology is more in line with the perception of AN as an etiologically distinct condition, since the underlying motivation of the ANh women to be selfless appears to differ qualitatively in some respects from the motivation of other women to be selfless.

We found reasonable internal reliability for the total SS. In an exploratory orthogonal factor analysis, we identified four subscales: Sacrifice for Family, Self-Denial, Sacrifice for Others, and Lack of Self-Interest. The robustness of this factor structure should be examined in future research.

It has previously been established that the tendency to place other's needs before one's own is associated with restrictive eating attitudes in a nonclinical sample of young women (Brunton et al., 2005). We have now shown that this association is true in a population of women with a past or present diagnosis of AN and that anorexic women tend to be more selfless than non-anorexic women.

Recently, an association between Selflessness scores and specific genetic polymorphisms in the DRD4, IGF2 and DRD5 genes has been reported

(Bachner-Melman et al., 2005). Future studies should include this finding in the genetic etiological component of AN.

Fully 76% of the ANh group underwent some form of psychotherapy. Therapy may have been instrumental both in moderating selflessness and in alleviating anorexic symptomatology, accounting for the observed association between the two. Self-psychological therapy directly addresses the anorexic's refusal or inability to believe that she deserves to promote her own needs and interests. It confronts and interprets the self-guilt experienced by the anorexic when she is not attuned to the needs of others and occupies psychological and physical space. Bachar et al. (1999) found that both eating pathology and the cohesion of the self improved more following self-psychological treatment than following a specific cognitive treatment. Future research should further compare the relative contributions of therapies specifically targeting self-cohesion and strength as opposed to other approaches. Unfortunately, our current data do not include detailed information on the specific nature of the psychotherapy undergone by our participants.

Given the cross-sectional nature of our design, we cannot determine whether the less recovered women in our sample were *a priori* more selfless than the women who have recovered to a greater degree. Prospective studies are needed to establish the relative contributions of onset levels of selflessness and recovery.

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## REFERENCES

- Bachar, E. (1998). The contributions of self psychology to the treatment of anorexia and bulimia. *American Journal of Psychotherapy*, 52, 147–167.
- Bachar, E., Cannetti, L., Bonne, O., DeNour, A. K., & Shalev, A. (1997). Physical punishment and signs of mental distress in normal adolescents. *Adolescence*, 32, 945–958.
- Bachar, E., Latzer, Y., Canetti, L., Gur, E., Berry, E., & Bonne, O. (2002). Rejection of life in anorexic and bulimic patients. *International Journal of Eating Disorders*, 31, 43–48.
- Bachar, E., Latzer, Y., Kreidler, S., & Berry, E. (1999). Empirical comparison of two psychological therapies: Self psychology and cognitive orientation in the treatment of anorexia and bulimia. *Journal of Psychotherapy Practice and Research*, 8, 115–128.
- Bachner-Melman, R., Gritsenko, I., Nemanov, L., Zohar, A. H., Dina, C., & Ebstein, R. P. (2005). Dopaminergic polymorphisms associated with self-report measures of human altruism: A fresh phenotype for the dopamine D4 receptor. *Molecular Psychiatry*, 10, 333–335.
- Brunton, J. N., Lacey, J. H., & Waller, G. (2005). Narcissism and eating characteristics in young nonclinical women. *Journal of Nervous and Mental Disease*, 193, 140–143.
- Derogatis, L. R. (1975). *Brief Symptom Inventory*. Baltimore, MD: Clinic Psychometric Research.
- Donovan, D. (1989). The paraconscious. *Journal of the American Academy of Psychoanalysis*, 515, 223–251.
- Fairburn, C. G., Cooper, Z., Doll, H. A., & Welch, S. L. (1999). Risk factors for anorexia nervosa: Three integrated case-control comparisons. *Archives of General Psychiatry*, 56, 468–476.
- Fairburn, C. G., Welsh, S., Doll, H. A., Davies, B. A., & O'Connor, M. E. (1997). Risk factors for bulimia nervosa: A community-based case-control study. *Archives of General Psychiatry*, 54, 509–517.
- First, M. B., Spitzer, R. L., Gibbon, M., & Williams, J. B. W. (1996). *Structured Clinical Interview for DSM-IV Axis I Disorders (SCID), Clinical Version: Administration Booklet*. Washington DC: American Psychiatric Press.
- Garner, D. M. (1991). *Eating Disorders Inventory-2: Professional manual*. Odessa, Fla: Psychological Assessment Resources.
- Garner, D. M., & Garfinkel, P. E. (1979). The Eating Attitudes Test: An index of the symptoms of anorexia nervosa. *Psychological Medicine*, 9, 273–279.
- 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.
- Geist, R. (1998). Self psychological reflections on the origins of eating disorders. *Journal of the American Academy of Psychoanalysis*, 17, 5–28.
- Geller, J., Cockell, S. J., Goldner, E. M., & Flett, G. L. (2000). Inhibited expression of negative emotions and interpersonal orientation in anorexia nervosa. *International Journal of Eating Disorders*, 28, 8–19.
- Gilligan, C., Rogers, A. G., & Tolman, D. L. (1991). *Women, girls and psychotherapy*. New York: Haworth Press.
- Goodsit, A. (1997). Eating disorders: A self psychological perspective. In D. Garner, & P. E. Garfinkel (Eds.), *Handbook of psychotherapy for eating disorders* (pp. 55–82). New York: Guilford Press.
- Gual, P., Perez-Gaspar, M., Martinez-Gonzalez, M. A., Lahortiga, F., de Irala-Estevéz, J., & Cervera-Enguix, S. (2001). Self-esteem, personality, and eating disorders: Baseline assessment of a prospective population-based cohort. *International Journal of Eating Disorders*, 31, 261–273.

- Hewitt, P. L., & Flett, G. L. (1989). The Multidimensional Perfectionism Scale: Development and validation. *Canadian Psychology*, 30, 339.
- Hodgeson, R. J., & Rachman, S. (1977). Obsessive-compulsive complaints. *Behaviour Research and Therapy*, 15, 389–395.
- Jack, D., & Dill, D. (1992). The Silencing the Self Scale: Schemas of intimacy associated with depression in women. *Psychology of Women Quarterly*, 16, 97–106.
- Keel, P. K., Mitchell, J. E., Miller, K. B., Davis, T. L., & Crow, S. J. (1999). Long-term outcome of bulimia nervosa. *Archives of General Psychiatry*, 56, 63–69.
- Kohut, H. (1977). Preface to psychodynamics of drug dependence. In J. D. Blaine, & D. A. Julius (Eds.), *Psychodynamics of drug dependence* (pp. 64–71). Washington DC: Government Printing Office.
- Koslowsky, M., Scheinberg, Z., Bleich, A., Mark, M., Apter, A., Danon, Y., & Solomon, Z. (1992). The factor structure and criterion validity of the short form of the Eating Attitudes Test. *Journal of Personality Assessment*, 58, 27–35.
- Lifton, R. (1979). *The broken connection: On death and the continuity of life*. New York: Simon and Schuster.
- Minuchin, S., Rosman, B. L., & Baker, L. (1978). *Psychosomatic families: Anorexia nervosa in context*. Cambridge, MA: Harvard University Press.
- Modell, A. (1971). The origin of certain forms of pre-oedipal guilt and the implications for a psychoanalytic theory of affects. *International Journal of Psychoanalysis*, 52, 337–345.
- Niv, N., Kaplan, Z., Mitrani, E., & Shiang, J. (1998). Validity study of the EDI-2 in Israeli population. *Israel Journal of Psychiatry and Related Sciences*, 35, 287–292.
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, N.J.: Princeton University Press.
- Wechselblatt, T., Gurnick, G., & Simon, R. (2000). Autonomy and relatedness in the development of anorexia nervosa: A clinical case series using grounded theory. *Bulletin of the Menninger Clinic*, 64, 91–123.
- Williams, J. B. W. (1992). The Structured Clinical Interview for DSM-III-R (SCID): Multisite test-retest reliability. *Archives of General Psychiatry*, 49, 630–636.
- Zohar, A. H., LaBuda, M., & Moschel-Ravid, O. (1995). Obsessive-compulsive behaviors and cognitive functioning: A study of compulsivity, frameshifting, and type A activity patterns in a normal population. *Neuropsychiatry, Neuropsychology, and Behavioral Neurology*, 8, 163–167.