

Empirical Comparison of Two Psychological Therapies

Self Psychology and Cognitive Orientation in the Treatment of Anorexia and Bulimia

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The authors investigated the applicability of self psychological treatment (SPT) and cognitive orientation treatment (COT) to the treatment of anorexia and bulimia. Thirty-three patients participated in this study. The bulimic patients (n = 25) were randomly assigned either to SPT, COT, or control/nutritional counseling only (C/NC). The anorexic patients (n = 8) were randomly assigned to either SPT or COT. Patients were administered a battery of outcome measures assessing eating disorders symptomatology, attitudes toward food, self structure, and general psychiatric symptoms. After SPT, significant improvement was observed. After COT, slight but nonsignificant improvement was observed. After C/NC, almost no changes could be detected.

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Psychotherapy for eating disorders, primarily bulimia, was dominated until recently by one psychotherapeutic technique, cognitive-behavioral therapy (CBT). This therapy was investigated in several randomized controlled studies and found effective.¹⁻⁴ Yet despite the efficacy of CBT, researchers in the field^{2,4} began to stress the need to test the effectiveness of alternative techniques of psychotherapy. They argued that a diversity of effective treatment techniques would provide more opportunity to match patients to appropriate therapy and that a wider range of psychological functions would be tapped by different kinds of therapies.

Thus far there are only two attempts in the literature to compare, in a randomized controlled study of bulimia, CBT and a psychotherapy with psychodynamic features. Fairburn et al.^{2,3} compared CBT with interpersonal therapy (IPT), and Garner et al.⁴ compared CBT with ex-

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pressive-supportive therapy. In the treatment of anorexia there is only one study, Robin et al.,⁵ that compared, in a randomized controlled study, a treatment with psychodynamic features in an individual format (ego treatment) with a family therapy.

A very prominent advantage of the three above-mentioned studies is that the treatment with psychodynamic features was designed to be as credible from the point of view of patient and therapist (to use the terminology of Garner et al.⁴) as the treatment to which it was compared.

The present study is the first attempt to investigate the effectiveness of psychoanalytic psychotherapy with its full components rather than relying on the presence of some of its features in IPT, expressive-supportive therapy, or ego treatment. The specific type of psychoanalytic psychotherapy used was the most modern development of psychoanalysis, namely self psychology as developed by Heinz Kohut.^{6,7} This kind of treatment was compared with a specific cognitive therapy (cognitive orientation treatment)⁸ that is comparable in its encompassing horizons. Both treatments were delivered in an individual format of weekly sessions for a year and did not focus directly on the patient's eating attitudes or behavior. This kind of cognitive therapy was selected for the comparison with self psychology in order to control for the variables of length of therapy and absence of direct focus on the patients' eating patterns. For this reason, we did not choose the usual form of CBT for the comparison.

The self psychological approach to the treatment of eating disorders⁹⁻¹¹ views anorexia and bulimia as specific cases of pathology of the self. According to the self psychological viewpoint, anorexic and bulimic patients cannot rely on human beings to fulfill their selfobject needs; that is, they cannot expect that human beings will give up, even temporarily, their own interests and viewpoint for the sake of fulfilling their self-needs, such as regulation of self-esteem, calming, soothing, and vitalizing. Instead, these patients rely on a substance, food (its consumption or avoidance) to fulfill these needs. Therapy progresses when the patient gives up the pathological preference for food as a selfobject and begins to rely on human beings as selfobjects, starting with the therapist.

According to Kohut,^{6,7} the self psychologically informed therapist, in treating the pathologies of the self, should remain during long periods of the therapy, and in some cases during all of the therapy, in the phase of empathic listening and mirroring before proceeding to

the next evolving task of interpretation. The self psychologist listens with special awareness to the patient's vulnerabilities to further retraumatization in the transference, to empathic failures of the therapist as a selfobject for the patient. The self psychologist does not deviate from the abstinent position—does not, for example, affirm the grandiosity of the patient, but rather acknowledges from within the understandable needs of the patient to feel grandiose. The therapist does not actively soothe or comfort, but rather empathizes with the needs of the patient to merge with a strong and idealizable selfobject. In summary, the self psychologist attends to the patient, giving special attention to how the patient experiences the therapist's impact on his or her sense of self. (A detailed account of the application of self psychology to the treatment of eating disorders can be found in published anecdotal case reports.⁹⁻¹²)

The cognitive orientation treatment is based on Kreidler and Kreidler's work.⁸ The cognitive orientation (CO) theory generated a systematic procedure for exploring the meaning of a behavior.⁸ For predicting overeating, for example, the CO questionnaire of obesity refers to generic themes such as rejection or avoidance of overt expressions of hostility, which are empirically found to govern the behavior of overeating.¹³ The questionnaire items refer to beliefs related to these generic themes, not directly to the behavior of eating. The procedure for modifying behavior then focuses on systematically changing the beliefs related to the themes (such as aggression and avoidance), not beliefs that refer directly to eating behavior.

In psychotherapy according to the CO approach, no attempt is made to persuade the patient that the beliefs she or he holds are incorrect or maladaptive. This is a very crucial difference between CO and the traditional cognitive approach,¹⁴ which Fairburn et al.^{2,3} and Garner et al.⁴ had applied to the treatment of bulimic patients. The therapist working according to the CO theory explains to the patient that the therapist wants to enhance the acquisition of beliefs that the theory states are important in recovering from anorexia and bulimia. These beliefs are the opposite of the ones asked about in the patient's CO questionnaire for anorexia and bulimia. For a detailed account of the application of the CO approach to the treatment of eating disorders, see Kreidler et al. (unpublished manuscript).

The design of the present study includes a control nutritional counseling-only group (C/NC) of bulimic patients who had consultation with a dietitian for a period

of 6 months but did not receive any psychological treatment. The two psychological treatment groups, in addition to their psychotherapy, received nutritional counseling from the same dietitian who counseled the C/NC group. The dietitian provided two main forms of counseling: 1) prescribing a diet that fit the needs of the specific patient, taking into account personal preferences as much as possible, and 2) educating the patient on healthy eating patterns with a fixed regular schedules of meals throughout the day. Instructing bulimic patients, the dietitian suggested meals that would include food the patient felt she or he probably would not binge on. Patients were advised to acquire the normal eating patterns gradually: for bulimics, to decrease the number of binge/vomit episodes; for anorexics, to increase the number of meals a day and the number of calories in each meal.

METHODS

Subjects

Thirty-three eating-disordered female patients participated in this study. Twenty-five were bulimic and 8 were anorexic. Mean age \pm SD of the bulimic patients was 24.1 ± 3.3 ; mean years of illness, 6.1 ± 1.4 ; mean binges per day, 2.4 ± 1.5 ; and mean vomitings per day, 1.01 ± 0.54 . Mean age of anorexic patients was 18.1 ± 2.4 ; mean years of illness, 2.9 ± 1.1 ; and mean body mass index (BMI), 16.39 ± 1.09 . None of the patients had previous hospitalization except for 1 anorexic patient who had been hospitalized for 4 weeks 2 years before this study and another anorexic patient who, during the study, needed hospitalization for 5 weeks. (The randomization process, incidentally, placed both of these patients in the SPT group.)

All patients came from families belonging to the upper middle class. Mean years of schooling were 12.9 ± 1.3 . Three of the patients were married, 1 was divorced (all 4 were bulimic), and 29 were single. No appreciable differences could be detected between the groups in these sociodemographic characteristics.

Randomization and Procedure

The target population for this study consisted of all the bulimic and anorexic patients who were referred to the eating disorder units of the psychiatry departments of two general hospitals in Israel. During the 2 years that the study was conducted, 31 bulimic patients, all purging

type, and 13 anorexic patients, all restricting type, arrived at the eating disorder units of the two centers. Another 3 schizoaffective disorder patients and 3 unipolar and bipolar affective disorder patients with comorbidity of eating disorders arrived at the clinics of the hospitals but were not referred to the eating disorder unit. Two additional eating-disordered patients with comorbidity of schizophrenia were referred to the units. None of these patients with comorbidity on Axis I of the DSM were included in the present study. Diagnosis of patients was made by the screening staff of the outpatient clinics. All participating patients fulfilled DSM-IV criteria for anorexia or bulimia. On Axis II of the DSM, several of the patients met some of the features necessary for the diagnosis of personality disorders, but none fulfilled enough criteria to warrant such diagnoses. Among these, 6 were close to fulfilling narcissistic and 4 were close to fulfilling borderline personality disorder criteria.

The bulimic patients were randomly divided among the three groups of this study: the C/NC group and the two psychological treatment groups, SPT and COT. The anorexic patients were randomly divided into the two psychological treatment groups.

The C/NC group had qualities of a control group. Their treatment did not include psychotherapy. We designed an intervention for the control group, nutritional counseling, because it has already been shown in the literature² that merely waiting without any intervention yielded no change in bulimic patients. We did not send anorexic patients to the C/NC group because of the severity of their illness.

All three groups received the same nutritional counseling. All patients met the dietitian weekly for 20 to 30 minutes during the first 3 months of intervention, then bimonthly for 3 months. The patients in the two psychological treatments met with a psychotherapist for 1 year in once-a-week 50-minute sessions.

The 31 bulimic patients were randomly assigned to the three groups in the following numbers: 10 in SPT, 11 in COT, and 10 in C/NC. The 13 anorexic patients were randomly assigned to the two psychological treatment groups: 7 in SPT and 6 in COT. Thus, the total number of patients in each group at the beginning of this study was 17 in SPT, 17 in COT, and 10 in C/NC.

Dropouts

Dropping out occurred between the first and fifth weeks of the research. Three patients from the SPT

dropped out of this study (1 anorexic and 2 bulimics). From the COT group, 5 patients dropped out (4 anorexics and 1 bulimic). From the C/NC group, 3 patients dropped out. No detectable differences in social demographic characteristics or in the severity of illness could be found between the dropouts and the patients who completed the study. The patients who actually participated in this study were distributed among the groups as follows: SPT 14, COT 12, and C/NC 7.

Therapists and Treatment Centers

No significant differences in gain scores in outcome measures were found between the two centers. Moreover, no therapist effect was found.

Patients were randomly assigned to available therapists. The therapists who participated were all successful graduates of SPT and COT courses conducted by experienced supervisors. Therapists brought written or recorded sessions of their patients to weekly group supervision sessions. The same two supervisors conducted the same courses in both clinics.

Each therapist had treated at least 1 patient using each technique. Ten therapists participated in this study, but for the analysis of therapist effect, only eight therapists who had treated at least 2 patients could participate. The eight therapists that were included in this analysis had each treated between 2 and 4 patients. For this analysis, the two psychotherapy groups were combined, but 2 patients had to be omitted because they were treated by therapists who had only 1 patient in the study sample (leaving 24 patients).

Of the 10 therapists who took part in the study, 7 were residents in clinical psychology with master's degrees, 2 were psychiatric social workers, and 1 was a psychiatrist. All therapists that participated in the study had the same training in SPT and COT and had the same experience with eating disorder patients. This, we believe, met one of the chief criteria for a reliable and standardized outcome study, namely, use of therapists trained and supervised specifically for the therapy method under investigation.

In order to make sure that therapists adhered to the specific technique in each therapy, we gave two independent judges (senior clinical psychologists who were not involved in the study) samples of recorded sessions of both techniques. There was no instance in which the judges could not identify correctly the therapy to which a certain session belonged.

The pre- and post-therapy assessment procedures were conducted by the same evaluator, who was not the therapist. This evaluator was also experienced in treating eating disorder patients and had special training in the use of the measuring instruments. Before therapy was initiated, patients were invited to two assessment sessions. They were interviewed to determine current disorder status, and they completed the measuring scales. At the end of each therapy (or at the end of the waiting/nutritional counseling), these assessment procedures were repeated.

Criteria for Withdrawing Patients From the Study

For bulimic patients, those who did not show any improvement in their eating disorder symptomatology or who were even worse after 6 months of intervention were scheduled to be offered psychotropic medication (fluoxetine) and to be withdrawn from the research. This criterion of offering medication and withdrawal from the study after 6 months without clinical improvement was proposed by Walsh.¹⁵ There were 3 such patients in the COT group and 1 in the SPT group, but when these patients had been offered the medication, only 2 of them agreed to it (1 in SPT and 1 in COT). After 5 weeks they showed no improvement and insisted on cessation of the medication, with our approval. Under these circumstances, none of them were actually withdrawn from the study.

For anorexic patients, the decision of an internist expert in eating disorders to hospitalize a patient was a reason for withdrawal of the patient from the study. No scheduling of medication was offered to the anorexic patients. Only 1 patient (from the SPT group) needed hospitalization; she was hospitalized for 5 weeks due to her physical condition. The same therapist who treated her at the outpatient clinic continued treating her in the ward. Because the hospitalization was brief, we did not withdraw this patient from the study. All patients who participated in the study had been given full explanations about the nature of the study and the randomization procedure. All patients had signed a statement of informed consent.

Instruments and Measurements

Patients were assessed with the four measures listed below. Patients were also administered a questionnaire, not relevant to the present report, tapping the "cognitive

orientation beliefs system.⁸ This mapping of the cognitive orientation system is very complex and will be the focus of another work.

DSM-SS (DSM Symptomatology Scale for Anorexia and Bulimia): This scale (Appendix A) was developed especially for the present study. It is the quantification on a 5-point severity scale (1 = absent; 5 = most extreme manifestation) of each symptom described in the DSM-IV for anorexia and bulimia. There are four items relevant to anorexia and seven items relevant to bulimia.

It happened that every patient in the sample suffered from one of the two disorders (either restrictive anorexia or bulimia), and not a mixture of the two (such as anorexia, bingeing-purging type). Therefore, for patients who suffered from anorexia, the items of the questionnaire that describe bulimia symptoms were actually considered missing values, and vice-versa for the bulimia patients. A global score for the DSM-SS was derived from averaging the scores across the items; the higher the score, the higher the severity of the eating disorder. The interjudge reliability of the DSM-SS is high ($r = 0.91$). The concurrent validity is also quite high. The correlation between the DSM-SS and the Eating Attitudes Test (EAT 26, described below) is $r = 0.54$, $P = 0.003$ before therapy and $r = 0.64$, $P < 0.001$ after therapy in the whole population of the three groups. Construct validity, which can be derived from the correlation between the DSM-SS and the Brief Symptom Inventory (BSI, described below), is $r = 0.48$, $P = 0.007$, before intervention and $r = 0.51$, $P = 0.003$ after intervention, in the population consisting of the three groups. Internal consistency measured by the alpha coefficient was 0.79.

*EAT 26 (Eating Attitudes Test)*¹⁶: This is a self-report questionnaire. It measures concern about weight, food intake, and eating behaviors and attitudes. Higher scores represent a higher tendency to hold abnormal attitudes about food, weight, and eating habits.

*BSI (Brief Symptom Inventory)*¹⁷: The BSI is a brief self-report scale developed from its longer parent instrument, the SCL-90. It includes 53 items, each of which represents a symptom or a negative state of mind. An overall score, the Global Severity Index (GSI), can be derived, which is the average symptom load for the entire scale. The higher the score, the higher the tendency of the subject to report suffering from the listed symptoms.

*Selves Questionnaire*¹⁸: This is a free ideographic measure that asks subjects to list up to 10 attributes for each of the following self states: 1) actual self, 2) ideal self, 3) ought self, 4) can self, and 5) future self. For each self state, subjects are asked, after listing their attributes, to rate the extent to which each attribute applies. The higher the score, the greater the cohesion of the self; that is, the smaller the discrepancies between the self states.

Several studies reviewed by Higgins et al.¹⁹ found significant correlations between discrepancies in self states and low self-esteem, depression, and psychosomatic disturbances, establishing by these relationships construct and concurrent validities ranging between 0.40 and 0.50.

The evaluation of the Selves Questionnaire in the present work was done by an independent evaluator, a clinical psychologist, who was not a part of either the clinical or the research team. He did not know that the questionnaire belonged to a patient population, nor did he know that he scored questionnaires of the same subjects before and after some kind of intervention.

Statistical Analysis

Parametric tests were always accompanied in this study by nonparametric tests. This was done in order to strengthen the validity of the findings, given the possibility that assumptions essential for parametric tests might not be met fully. The results from the nonparametric tests always confirmed those of the parametric tests. Because of space limitations, the nonparametric test results are not presented.

RESULTS

Comparisons at Baseline

To ensure the equivalence of the three groups, we examined the differences among them on all the pre-therapy assessment measures by using one-way analysis of variance. No significant differences between groups were obtained on any of the measures, and therefore it can be assumed that the three groups were equivalent at the beginning of the intervention.

Comparisons at Outcome

Within Groups: The within-group comparisons revealed that only in the SPT group was the improvement signifi-

cant. A multivariate analysis of variance (MANOVA) was used to compare the means of all the outcome measures after the introduction of SPT with the means of those measures before SPT was introduced. The overall F -test for the before-and-after SPT comparison was statistically significant (overall $F=49.48$, $df=4,9$, $P<0.001$). Improvement was indicated in all four outcome measures, as displayed in Table 1. A Bonferroni procedure revealed that in two of the measures (the DSM-SS and Selves Questionnaire), the improvement was statistically significant ($t=7.68$, $df=13$, $P<0.001$, for the DSM-SS, and $t=4.05$, $df=8$, $P=0.004$, for the Selves Questionnaire).

MANOVA comparing the means of all the outcome measures before and after the COT treatment and before and after the waiting/nutritional consulting intervention in the C/NC group yielded no significant results. A look at Table 1 reveals that in the C/NC group there was almost no difference before and after in the GSI, a slight worsening in the EAT 26, and a slight improvement on the DSM-SS; none of these differences were significant. In the COT group there was improvement on all four outcome measures, but this did not reach Bonferroni criteria for significance.

Between Groups: Table 1 reveals that patients treated with SPT improved more than patients in the other two groups on three of the outcome measures. (In the GSI the improvement was identical with SPT and COT.) MANOVA was performed on the gain scores of three outcome measures (DSM-SS, EAT 26, GSI) in the three groups. Since the C/NC group was not administered the Selves Questionnaire, this measure was omitted from the overall comparisons between the groups conducted by the MANOVA. This analysis revealed that in the overall comparisons of the three outcome measures, the differences between the three groups were statistically significant, as reflected by the overall F -test ($F=2.21$, $df=6,46$,

$P=0.048$). MANOVA comparing the differences in gain scores between the SPT and the C/NC found that the improvement of the SPT patients was significantly greater than the improvement of the C/NC patients (overall $F=5.01$, $df=3,14$, $P=0.014$). In one measure, the DSM-SS, the difference was statistically significant by the Bonferroni procedure ($F=12.63$, $df=1,19$, $P=0.002$).

The MANOVA between the two psychotherapy groups, SPT and COT, unlike the MANOVA between the SPT and the C/NC, was statistically significant, only one-tailed ($F=2.73$, $df=3,17$, $P=0.038$). The difference in the DSM-SS was statistically significant by the Bonferroni procedure ($F=13.78$, $df=1,24$, $P=0.001$). Because only patients who completed all of the three outcome measures two times during the investigation could participate in the MANOVA, some patients were not included in this calculation (2 in the SPT group, 3 in the COT group, and 1 in the C/NC group), leading to the somewhat less significant results in the MANOVA comparison between the SPT and COT as versus the univariate analyses of variance and the nonparametric analyses of variance.

The Selves Questionnaire was administered only to the two psychotherapy groups, so the following comparison is between these two groups. In this measure, too, SPT patients improved significantly more than COT patients. A t -test comparing the gain scores in the two groups found a significant difference ($t=1.76$, $df=15$, $P=0.05$, one-tailed). That is to say, after treatment, discrepancies in the self in SPT patients were reduced significantly more in comparison with the COT patients.

Bulimic Patients Only: In order to rule out the possibility that there is a dependency between the kind of treatment and the specific diagnosis (bulimia or anorexia), we have repeated the comparisons between the three groups for the bulimic patients only. Details about comparisons

TABLE 1. Group means and standard deviations of outcome measures for the three groups

Scale	SPT Group		COT Group		C/NC Group	
	Before SPT	After SPT	Before COT	After COT	Before C/NC	After C/NC
DSM-SS	3.34 ± 0.61	2.11 ± 0.87	3.09 ± 0.54	2.70 ± 0.76	3.59 ± 0.99	3.29 ± 1.13
EAT 26	35.42 ± 15.57	26.67 ± 17.48	27.56 ± 14.61	21.56 ± 16.67	35.67 ± 20.93	37.00 ± 20.62
GSI	1.67 ± 0.89	1.30 ± 0.82	1.72 ± 0.94	1.36 ± 0.97	1.64 ± 0.46	1.53 ± 0.73
Selves Questionnaire	3.33 ± 4.37	7.46 ± 6.22	3.35 ± 6.01	4.02 ± 6.7	NA	NA

◆ *Note:* SPT = self psychological treatment; COT = cognitive orientation treatment; C/NC = control/nutritional counseling; DSM-SS = DSM Symptomatology Scale for Anorexia and Bulimia; EAT 26 = Eating Attitudes Test; GSI = Global Severity Index; NA = not applicable.

between the anorexic patients (2 in the COT and 6 in the SPT groups) will be given in the section below where we present data about the percentage of patients remitted. The comparisons between the three groups of bulimics (see Appendix B and Appendix C) yielded results identical with those of the whole population of patients presented above; namely, significantly greater improvement of SPT patients in the within-group comparison. (The MANOVA before and after was statistically significant only in SPT patients, not in the COT or C/NC groups: overall $F=15.39$, $df=3,3$, $P=0.025$.) The between-group comparison in the bulimic group reveals that the MANOVA between the SPT and the C/NC was statistically significant (overall $F=6.28$, $df=3,8$, $P=0.017$). The improvement in the SPT patients was significantly greater in comparison with the COT only on the DSM-SS ($t=3.70$, $df=16$, $P=0.002$).

The effect size analysis in the bulimic patients reveals that the magnitude of the therapeutic effect of SPT versus the other two groups (see Appendix C) was even greater, except on the Selves Questionnaire, than in the whole population.

Effect Size

Another way to present the effectiveness of psychotherapy is as a computation of effect size of the therapeutic change.²⁰ To estimate the effect size, we computed for each measure the difference between the average gain score observed in the SPT patients (after SPT minus before SPT) and the average difference observed in the C/NC group (after C/NC minus before C/NC) divided by the common standard deviation. A global estimate of the strength of effect was derived by averaging these ratios across measures. The outcome of this computation was an average effect strength of 0.93 SD. We also calculated the effect size of the therapeutic change of the

SPT over the COT. That is to say, we computed, for each measure, the difference between the average gain score observed in the SPT patients and the average gain score observed in the COT patients divided by the common standard deviation. When these ratios were averaged across measures, the average effect size of the therapeutic change for SPT over COT was 0.71 SD. The effect size of the therapeutic change for COT over C/NC was 0.46 SD.

Table 2 presents the effect sizes of the therapeutic change in each measure of each intervention technique over the other. Because the Selves Questionnaire was administered only to the two psychological treatment groups, the effect size of the therapeutic change in this measure is displayed only between the SPT and the COT.

Percentage of Patients Remitted

A case is considered remitted in the present work if the patient can no longer be diagnosed as suffering from either anorexia or bulimia according to the DSM-IV. For bulimia, binges and vomiting must have occurred not more than once a week, if at all, during the last 3 months. For anorexia, there must be a BMI score of 18 or greater and the occurrence of menstruation.

According to these criteria, 9 of the 14 SPT patients (64%), 2 of the 12 COT patients (17%), and 1 of the 7 C/NC patients (14%) were considered remitted at the end of therapy. The differences between SPT and COT and between SPT and C/NC in remission rates are statistically significant (Fisher's exact probability test, $P<0.02$ and $P<0.05$, respectively). The difference between the COT and C/NC remission rates was not statistically significant.

We then considered the two disorders separately. Of the anorexic patients, 5 of the 6 treated with SPT (83%) and none of the 2 treated with COT remitted. Of the

TABLE 2. Effect size of the therapeutic improvement between the psychological treatments (SPT and COT) and between each of them and C/NC

Scale	SPT over COT	SPT over C/NC	COT over C/NC
DSM-SS	1.46	1.65	0.17
EAT 26	0.17	0.65	0.74
GSI	0.008	0.42	0.55
Selves Questionnaire	1.13	NA	NA
Global effect size	0.71	0.93	0.46

◆ *Note:* SPT = self psychological treatment; COT = cognitive orientation treatment; C/NC = control/nutritional counseling; DSM-SS = DSM Symptomatology Scale for Anorexia and Bulimia; EAT 26 = Eating Attitudes Test; GSI = Global Severity Index; NA = not applicable.

bulimic patients, 4 of the 8 treated with SPT (50%), 2 of the 10 treated with COT (20%), and 1 of the 7 in the C/NC group (14%) remitted.

Jacobson and Truax²¹ suggested criteria for clinical significance of therapeutic changes. For patients suffering from a prominent DSM-IV Axis I diagnosis, like the patients in the present study, the first of their three criteria is most fitting: post-therapy level of functioning should fall outside the range of the dysfunctional population. "Range" is defined as exceeding two standard deviations in the direction of improvement from clinical baseline. The number of patients in each group fulfilling these criteria was identical with the number of patients reported above as remitted: 64% in the SPT group, 17% in the COT group, and 14% in the C/NC group, differences being statistically significant as reported above.

Stability of Changes

A year after termination of therapy, patients from the two psychotherapy groups were invited for follow-up. The DSM-SS, the EAT 26, and the BSI were administered. Only half of the patients returned for follow-up. This rate may reflect a lack of enthusiasm by these eating disorder patients to cooperate in a follow-up investigation, or it may be a reflection of our limited resources to reach out to these patients. The number of patients examined at follow-up (8 in the SPT group and 5 in the COT group) limits the possibility of drawing conclusions with certainty about the whole sample. Nevertheless, analysis of the data gathered from these patients revealed that in the two psychotherapy groups, on all three outcome measures, a slight continued improvement occurred during the year following termination of therapy. This improvement was not significant in either of the two groups, nor was there a significant difference between groups.

DISCUSSION

Self Psychology for Eating Disorders

Self psychology was found to have positive outcomes in the treatment of bulimia and anorexia patients. This conclusion is based on a randomized, controlled study comparing self psychology (SPT) with another psychological treatment, cognitive orientation therapy (COT), and a controlled nutritional counseling group (C/NC). Outcomes were rated by clinicians other than the therapists

involved. The measures employed assessed a range of areas, including clinical symptoms, attitudes toward food and weight, and self structure.

The effect size of the therapeutic improvement across measures in the SPT group over the C/NC group was 0.93. This effect size is greater than that reported in Smith et al.²⁰ for long-term dynamic psychotherapy (0.69 SD). It might be that the greater effect size found in the present study in the SPT treatment group is due to the greater standardization in the implementation of SPT. In Smith et al., patients were heterogeneous with regard to the level of the intrapsychic damage (Oedipal or Object Relations or Self). Therefore, they needed heterogeneous dynamic devices, rather than the more homogeneous, crystallized, and well-conceptualized approach of self psychology.

Studies of Psychotherapy for Bulimia and Anorexia

The research literature on psychotherapeutic interventions with eating disorders does not include data about effect size of the therapeutic change. The effect size gained in SPT patients in the present study in the symptomatology of the eating disorders (DSM-SS) was very substantial: 1.65 SD over the C/NC group and 1.46 over the COT group. The percentage of patients achieving remittance in the studies of bulimia ranges from slightly less than 50%^{2,4} to slightly more than 50%.^{22,23} The present study intended to investigate the effectiveness of one psychotherapeutic technique over another in the specific field of eating disorders. Dividing the samples into the two disorders, anorexia and bulimia, leaves small numbers in each group. Nevertheless, the results of the present study do supply a good estimation even if we divide the patients into the two conditions. With regard to bulimia, 4 out of the 8 bulimic patients treated by SPT were symptom free and could not be diagnosed as bulimic at the end of therapy. They were well within the range of remission rate of CBT treatment, the leading treatment in the field of the psychotherapy of bulimia.

With regard to anorexia, controlled randomized studies investigating the effectiveness of a specific psychotherapy are very rare. Cooper and Fairburn²⁴ found that CBT was effective with bulimic anorexics but not with the restrictive type. Gowers et al.²⁵ accomplished a random allocation study, but their focus was not the efficacy of one psychotherapeutic technique over another. Their study dealt with ambulatory versus inpatient

treatment. They combined cognitive, behavioral, and dynamic elements for individual and family therapy in 10 to 12 sessions and achieved a 60% remission rate. In a previous study of the same group,²⁶ there was a 47% remission rate.

The most recent and well-planned study investigating the psychotherapy of anorexia was performed by Robin *et al.*⁵ They compared family therapy and individual ego treatment, using very young patients, ages 12 to 19. In one of the rare examples of such a study design in the field of eating disorders, the two treatments were designed to be equally credible from the point of view of both patient and therapist. The ego treatment resembles the IPT. The therapist, in the terms of Robin *et al.*,⁵ takes an "authoritative stance," helping the patient deal with developmental issues. After a year of therapy, all patients from both groups were menstruating, and 82% from family therapy and 50% from the ego treatment met the dual criteria of target weight and menstruation. When we compare these latter results with the number of anorexic patients in the SPT group, 5 out of 6, who reached remission at the end of therapy in our study, we can estimate that SPT patients were well within the range of the psychotherapies mentioned above.

One should keep in mind that a high rate of therapeutic improvement is reported in studies where the age of anorexics is young, less than 19 years.^{5,27} The mean age of anorexic patients in our study was 18.1. Setting a criterion for target BMI for cure is arbitrary; in this study, it was 18. It might be that setting a higher target will decrease the number of patients considered remitted. Absence of a long history of previous hospitalization (as is the case in our sample) has also been associated with better response to treatment.²⁷

Effects of Psychodynamic Approaches

Only recently in bulimia literature did studies appear that compare dynamically oriented techniques administered as credibly as CBT, the leading technique in the field. In the individual therapy format (the format that is most appropriate to investigate psychodynamically oriented techniques), only two groups of researchers published data. Fairburn *et al.*¹⁻³ compared CBT with IPT, and Garner *et al.*⁴ compared CBT with expressive-supportive psychotherapy.

In their first attempt to compare CBT and psychodynamically oriented psychotherapy (focused short-term psychotherapy), Fairburn *et al.*¹ were struck by the find-

ings that those therapies had equivalent impact on the symptomatology of bulimia. Fairburn *et al.*¹ were surprised that therapy that does not focus on the symptoms of bulimia and eating habits could bring about an improvement in bulimia equivalent to that seen with CBT, which does focus on that aspect. They raised the possibility that perhaps involving behavior elements during the dynamically oriented therapy, such as asking patients to do self-monitoring of their binges and vomiting episodes, caused that change. In subsequent research, Fairburn *et al.*² compared CBT and dynamically oriented therapy (interpersonal psychotherapy; IPT), but without including self-monitoring of patients' behavior in the latter technique. They replicated their findings that the therapy with psychodynamic elements (IPT in that study) produced equivalent results in treating bulimic symptoms, mainly bingeing. In this latter study, IPT was also equal to CBT in reducing the severity of the general psychiatric symptoms and improving social functioning, although somewhat less effective in ameliorating purging symptoms and less effective in changing attitudes toward weight and shape. These differences disappeared almost completely in a follow-up of several years.³ Fairburn *et al.*³ concluded that bulimia can be treated successfully without focusing on the patient's eating attitudes and behavior.

Garner *et al.*⁴ found that both CBT and expressive-supportive therapy led to significant improvement in symptomatology of eating disorders. Expressive-supportive therapy was equal to CBT in reducing binge eating. Where differences in outcome were found, they favored CBT. CBT was marginally superior in reducing vomiting and significantly superior in ameliorating disturbed attitudes toward shape and weight, depression, and poor self-esteem. About 30% of CBT patients and 10% of expressive-supportive therapy patients could not be classified as bulimic at the end of therapy. Fairburn²⁸ suggested that expressive-supportive therapy in the study by Garner *et al.* yielded somewhat less effective outcomes than CBT, in contrast with the equivalent results of IPT and CBT in his studies,^{2,3} because the expressive-supportive therapy is less focused than the IPT.

The results of the present study may suggest another possible explanation for these differences between IPT and the expressive-supportive therapies. The expressive-supportive therapy was indeed less focused than IPT, and also it did not allow full usage of all the dynamic elements. Fairburn²⁸ defines IPT as "dynamic to the here and now," and not dealing with the transference and the

past. The expressive-supportive therapy does enrich the dynamic scope in comparison with IPT, but it still does not use the transference as central domain in therapy. The self psychological approach employs the psychodynamic approach in all its scope. The self psychological approach fulfills the necessary definition²⁹ of psychoanalytic psychotherapy, being a long-term psychotherapy that explicitly uses the relationship between therapist and patient as the primary therapeutic tool and pays attention to transference and countertransference reactions. It might be that the fuller operation of the psychodynamic psychotherapy in the present study led to better outcomes of SPT in comparison with IPT and expressive-supportive therapies in the above-mentioned studies.

The improvement achieved in SPT was not restricted to the eating disorder symptomatology, but was found also in an intrapsychic variable, cohesion of the self, as expressed by fewer discrepancies between self states (a tremendous effect size of SPT over COT on the Selves Questionnaire, 1.13). The inclusion of a measurement of such an intrapsychic theoretical construct is of special significance. This is because researchers comparing the effectiveness of psychoanalytic psychotherapies with other therapeutic techniques do not usually include measures that will tap areas theoretically supposed to be improved by psychodynamic techniques.³⁰

In the changing of attitudes toward shape and weight (EAT 26), the improvement achieved in SPT patients (near to significance) was much smaller than the improvement achieved by the same patients in DSM-SS and the Selves Questionnaire. Yet calculating the effect size of SPT over the control group on EAT 26 found a magnitude of therapeutic change that was not insubstantial: 0.65. Weak impact of psychodynamic therapies on attitudes toward weight and shape was observed by Garner et al.⁴ and Fairburn et al.¹

In self-rating of general psychiatric symptoms (BSI), improvement of SPT patients was even smaller, the effect size of SPT over C/NC being 0.42 SD. Perhaps the BSI is less susceptible to therapeutic change. A similar observation was made by Shefler et al.³¹

The present study, which is the fourth randomized, controlled study that compared psychodynamic techniques with another therapy in treating eating disorders (preceded by Robin et al.⁵ on anorexia and Fairburn et al.^{1,2} and Garner et al.⁴ on bulimia), contributes to the possibility first raised by Fairburn et al.¹ that psychotherapy that does not focus on eating behavior can bring about significant improvement in eating disorders. The

present study, like Fairburn et al.² and Garner et al.,⁴ did not use self-monitoring in the two psychological treatments (COT and SPT), hence precluding the possibility that the changes occurred due to techniques associated with behavior therapy. Moreover, dietary management was well controlled in the present study. The nutritional counseling was identical for the C/NC group and the two psychological treatment groups. The significantly better outcomes achieved by the SPT patients in comparison with either of the two other groups (COT and C/NC) point to the specific psychodynamic treatment intervention as leading to the improvement.

Cognitive Orientation Therapy

A salient example of the common misconception of comparing two techniques that are not designed to be equally credible is the work of Russell et al.²⁷ They conducted a well-designed, controlled study comparing the effectiveness of family therapy versus individual therapy in a group of patients from both eating disorders, anorexia and bulimia. The individual therapy was defined by them as "nonspecific" and "control condition." (Results favored family therapy for patients under 19 and showed a trend toward the superiority of individual therapy for those over age 19.) It should be stressed that Russell and his associates noticed the inequality between the two therapies and called for designing more specific and systematically well-conceptualized therapies for individual interventions.

The present study is the first systematic application of cognitive orientation therapy in the treatment of patients with major psychiatric illness. Considering the lack of experience in the field, the achievement of COT patients versus C/NC patients can be regarded as encouraging and calls for further research. In comparing means before and after intervention between COT and C/NC, we found no significant difference. But the global effect size of COT over C/NC was by no means insubstantial: 0.46. In contrast to the control group, the COT group's trend of improvement could be detected in all outcome measures.

The cognitive orientation treatment is characterized by features that make it potentially very helpful in the treatment of eating disorders. It does not involve the disputation of the patients' beliefs, an important stance in the treatment of eating disorder patients.³² Rather, the therapy seeks to cause the pathological beliefs to retreat into the background while opposite beliefs are advanced

to the foreground. Second, researchers in the field of cognitive therapy^{14,33} suggest that attention to more generic beliefs rather than superficial beliefs about weight and shape will bring about better results. The cognitive orientation approach, with its wide scope of beliefs and its systematic way of arriving at generic beliefs,¹³ may fulfill such a requirement.

Limitations of This Study and Suggestions for Future Research

Several methodological shortcomings of the present study are worth mentioning. The sample was small. Additional clinical conclusions could perhaps be made based on differences that did not reach significance because of the smallness of the sample. A larger number of patients would have allowed identifying a separate course of development following therapy in either anorexia or bulimia or subtypes of both, as Russell *et al.*²⁷ could detect in their therapeutic sample trial of patients from both disorders. Replication of the present study, perhaps in bigger countries than Israel, would reach a greater sample of patients. We did not use adherence-to-therapy questionnaires. Yet several findings suggest that therapists adhered to the specific therapies in which they had been trained. As mentioned above, patients from both psychological treatment groups, before and after therapy, answered the CO questionnaire covering the belief clusters that were found to distinguish large samples of anorexic and bulimic subjects from normal control subjects (Kreitler *et al.*, submitted for publication). The analysis and presentation of these findings are very complex and are the subject of another work. Yet it is important to emphasize that patients in the COT group had changed their CO belief clusters significantly more than SPT patients, suggesting adherence to the cognitive orientation treatment by the therapist while treating this group. Patients in the SPT group improved significantly more than COT patients in reducing discrepancies between self states, suggesting adherence by the therapists to self psychology when treating SPT patients. Nevertheless, in order to ensure adherence to technique, a detailed manual and an adherence-to-therapy questionnaire need to be developed, a task beyond the scope of this initial step in applying these techniques to eating disorders.

One-year follow-up on half of the patients in the two psychological treatment groups revealed that in both groups, small and insignificant improvements were observed in all outcome measures investigated. The uni-

directionality of this trend does supply enough of a hint to suggest that changes achieved in therapy were stable for at least a year, but again we recommend that replications of this study mobilize the resources needed for executing the treatment trials and the follow-up on much larger samples.

We suggest that future studies add additional measurement points along the course of therapy (e.g., every 4 or 6 months) to ascertain the optimal usual length of therapy. If it could be shown, for example, that substantial effect size is achieved in half a year, then studies comparing SPT to the usual CBT might be possible.

Finally, one of the inherent problems with treatment studies is dropout. We know that the dropouts in the present study did not differ on any of the sociodemographic data or on the baseline of any of the outcome measures. But we do not know whether they have gone elsewhere for therapy or whether they differed on a crucial and yet unquantifiable measure of willingness to be cured. The dropout rate in our sample was 25%. This is somewhat higher than the rate of 15% reported by Garner *et al.*⁴ Garner's patients were bulimic only, whereas our sample also included anorexics. Not all of Garner's patients fulfilled the dual criteria of bingeing and vomiting. We did not implement an intent-to-treat analysis because the dropouts in our study left within the first few sessions of the therapy, which lasted one year. Most of them did so after the second or third session, and all by the fifth session, a time that sufficed only for intake and perhaps the initial presentation of the treatment, but not the actual starting of it.

Controlled, randomized research that compares long-term psychodynamic psychotherapy with another approach is very rare, almost absent, in clinical literature at large. Yet psychodynamic psychoanalytic therapies are the most widely used among clinicians,³⁰ and these therapies have fertilized the development of other approaches.

In the specific field of eating disorders, Pike,³⁴ in a paper presented at the 8th International Conference of Eating Disorders, estimated that in private practice, the vast majority of clinicians are using psychodynamic techniques. She therefore called for empirical study of those techniques. In general practice, not related specifically to eating disorders, Jensen and Bergin³⁵ found that among therapists who defined themselves as eclectics, 70% said that the psychoanalytic psychodynamic approach laid the foundation for their work. It is hoped that the present study will encourage further research on

outcome and process of this important and fundamental theory and technique.

CONCLUSIONS

After a year of a psychoanalytic psychodynamic therapy, self psychology, patients showed a marked improvement in overt eating disorder symptomatology as well as in intrapsychically hypothesized variables such as the cohesion of the self. These findings may support the long-held psychoanalytic assumption that solving underlying problems can reduce overt behavioral symptoms, even

if the latter are not directly focused on in the session. The psychodynamic technique was subjected to rigorous evaluation in a controlled, randomized study. Outcomes were rated by clinicians other than the therapists involved. This technique was compared with a controlled nutritional counseling-only group and with a type of cognitive therapy that is equivalent to the psychodynamic technique in its duration and scope of areas covered. The application of self psychology to the treatment of anorexia and bulimia can enrich the current repertoire of therapy techniques in the field, which has thus far been dominated by one technique—CBT.

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APPENDIX A. DSM-SS (DSM Symptomatology Scale for Anorexia and Bulimia)	
1. Weight _____ Height _____	
2. Intense fear of gaining weight or becoming fat, even though underweight: (Choose) 1 = not at all, 2 = slightly, 3 = moderately, 4 = to a great extent, 5 = to a very great extent	
3. Disturbance in the way in which one's body weight or shape is experienced: (claims that she is fat, even though she is very thin): 1 = not at all, 2 = slightly, 3 = moderately, 4 = to a great extent, 5 = to a very great extent	
4. Has the menstrual cycle appeared consecutively in the last 3 months? If not, has she ever menstruated? never menstruated?	
5. Weekly occurrences of binge eating: 1 = none, 2 = once a week, 3 = two times a week, 4 = every day, 5 = several times daily	
6. A sense of lack of control over eating during the binge: 1 = not at all, 2 = slightly, 3 = moderately, 4 = to a great extent, 5 = to a very great extent	
7. Self-induced vomiting: 1 = never, 2 = once a week, 3 = two times a week, 4 = every day, 5 = several times daily	
8. Misuse of laxatives, diuretics, or amphetamines: 1 = not at all, 2 = up to 5 tablets per week, 3 = 5 tablets each day, 4 = 10 tablets each day, 5 = 20 tablets each day	
9. Fasting: 1 = never, 2 = once a month, 3 = twice a month, 4 = once a week, 5 = several times a week	
10. Excessive exercising in order to prevent weight gain: 1 = none, 2 = half an hour a day, 3 = one hour a day, 4 = two hours a day, 5 = several hours a day	
11. Excessive preoccupation with body weight and shape: 1 = not at all, 2 = to a slight extent, 3 = to a moderate extent, 4 = to a great extent, 5 = to a very great extent	
SCORING SYSTEM	
In Question No. 1: Body Mass Index of . . .	
	> 19 is scored 1
	18-18.9 is scored 2
	17-17.9 is scored 3
	16-16.9 is scored 4
	≤15.9 is scored 5
In Question No. 4: If the menstrual cycle appeared consecutively in each of the last 3 months, score 1. If the menstrual cycle had appeared once, but has not appeared in the last 3 months, score 3. If the menstrual cycle has never occurred, score 5.	
In each of the other DSM-SS items: A score of 1 is given in the absence of the symptom, a score of 5 is given to the most extreme manifestation of the symptom, and the intermittent degrees 2, 3, and 4 are given in between.	

APPENDIX B. Bulimic patients: means and standard deviations of outcome measures for the three groups						
Scale	SPT Group		COT Group		C/NC Group	
	Before SPT	After SPT	Before COT	After COT	Before C/NC	After C/NC
DSM-SS	3.11 ± 0.62	1.95 ± 0.55	3.03 ± 0.56	2.74 ± 0.81	3.59 ± 0.99	3.29 ± 1.13
EAT 26	37.83 ± 8.61	26.33 ± 16.18	30.14 ± 13.74	25.86 ± 16.52	35.67 ± 20.93	37.00 ± 20.62
GSI	1.53 ± 0.43	1.15 ± 0.60	1.74 ± 1.08	1.54 ± 1.04	1.64 ± 0.46	1.53 ± 0.73
Selves Questionnaire	4.73 ± 4.46	8.07 ± 7.33	1.36 ± 5.58	1.67 ± 6.06	NA	NA
<i>Note:</i> SPT = self psychological treatment; COT = cognitive orientation treatment; C/NC = control/nutritional counseling; DSM-SS = DSM Symptomatology Scale for Anorexia and Bulimia; EAT 26 = Eating Attitudes Test; GSI = Global Severity Index; NA = not applicable.						

APPENDIX C. Bulimic patients: effect size of therapeutic improvement between the psychological treatments (SPT and COT) and between each of them and the C/NC			
Scale	SPT over COT	SPT over C/NC	COT over C/NC
DSM-SS	1.75	1.94	-0.05
EAT 26	0.46	0.93	0.62
GSI	0.37	0.47	0.20
Selves Questionnaire	0.62	NA	NA
Global effect size	0.90	1.15	0.22

Note: SPT = self psychological treatment; COT = cognitive orientation treatment; C/NC = control/nutritional counseling; DSM-SS = DSM Symptomatology Scale for Anorexia and Bulimia; EAT 26 = Eating Attitudes Test; GSI = Global Severity Index; NA = not applicable.