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Brief Psychotherapy for Posttraumatic Stress Disorders

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A large-scale study of the effectiveness of psychotherapeutic methods for the treatment of posttraumatic stress disorders was conducted. The sample consisted of 112 persons suffering from serious disorders resulting from traumatic events (bereavement, acts of violence, and traffic accidents) that had taken place not more than 5 years before. Trauma desensitization, hypnotherapy, and psychodynamic therapy were tested for their effectiveness in comparison with a waiting-list control group. The results indicated that treated cases were significantly lower in trauma-related symptoms than the control group.

The posttraumatic stress disorder (American Psychiatric Association, 1980) describes psychological symptoms resulting from extremely serious life events that substantially hinder normal functioning. Psychologists, psychiatrists, and other members of the mental health profession are increasingly being confronted with individuals suffering from this disorder. Although an extensive literature exists concerning the results of adjustment to traumatic events, little research has been conducted on the effectiveness of specific psychotherapeutic methods for the treatment of posttraumatic stress disorders. This article describes a study of the effectiveness of three psychotherapeutic methods for treating these disorders.

Numerous studies have been conducted exploring the effectiveness of psychotherapy in general (Smith, Glass, & Miller, 1980). Because the results did not reveal many differences in effectiveness among different methods, it is considered necessary to specify the treatments as well as the research objectives. This call for specification and the dearth of similar research on the treatment of posttraumatic stress disorders make the evaluation of the effectiveness of psychotherapy after traumatic experiences a useful undertaking.

During the 1970s, a series of hijackings took the Netherlands by surprise. It was this series of events that led to a large-scale research project aimed, first, at determining the effects of and adaptation to diverse shocking events, such as war situations, disasters, accidents, assaults, or the death of a loved one. The second aim was to collect data on effective procedures of assistance to victims of this kind of event. This article describes the study with the second aim (for the complete research, see Brom, Kleber, & Defares, 1986, and Kleber, Brom, & Defares, 1986).

Our comparative outcome research involves three forms of psychotherapy: trauma desensitization, hypnotherapy, and psychodynamic therapy. These brief forms of therapy were attuned to the specific issue of posttraumatic stress disorder.

Trauma desensitization is a behavioral therapeutic technique derived from the systematic desensitization method (Wolpe, 1958). Both the two-factor approach of conditioning (Mowrer, 1960) and the modern cognitive learning theories (particularly that of Abramson, Seligman, & Teasdale, 1978) can serve as a background. After the patient has learned relaxation techniques, he or she is encouraged to reexperience the traumatic event. The patient is then confronted with the previously avoided stimuli, which beforehand are categorized in hierarchies, and he or she learns skills to strengthen the feeling of control (for related treatment methods, see Fairbank & Brown, 1987).

Hypnotherapeutic techniques have received more attention in recent years after many years of having been used by very few therapists. Hypnotherapy can be practiced from various perspectives and with a number of objectives in mind. The emphasis of the hypnotherapists in our study was on behavioral therapy. The goal was to bring the patient in contact with the reality of the traumatic event and to bring about a decrease in the conditioned responses triggered by the event. Hypnosis was used, because it allows flexibility in the way the client deals, both cognitively and emotionally, with the perception of and adjustment to the trauma.

On the basis of cognitive stress theories and psychoanalytic theory, Horowitz (1976) developed a brief psychodynamic therapy, the third form of treatment used in our research. The aim of this therapy is limited to the solving of the intrapsychic conflicts resulting from the traumatic experience, with the therapist playing an active role. Brief psychodynamic therapy has a solid

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theoretical base but is at the same time fairly complex, so it is difficult to summarize it briefly. What does distinguish it in any case is that Horowitz's therapy is explicitly directed at the discontinuation of the present disorders and is not aimed at bringing about personality changes.

We hypothesized that therapies specifically aimed at posttraumatic stress disorders were effective in reducing symptoms related to the disorder. We also assumed that the therapies would not influence personality traits. These assumptions were tested with the use of a control group. In addition we conducted explorative research into which indicators exist for improvement during psychotherapy.

Method

Subjects

The sample consisted of 112 people who were diagnosed as suffering from posttraumatic stress disorders according to *DSM-III*, with the condition that not more than 5 years had elapsed since the incurring event. Of the participants, 79% were women, and 21% were men, with ages ranging from 18 to 73 years (M = 42.0, SD = 14.3). The majority of participants were married (59%); 2% were divorced. The widows and widowers (24%) almost all applied for help because of the death of their partner. The remaining 15% were single. The mean level of education was 3–4 years of high school. The scale for professional status (Jager & Mok, 1971) indicated that the group could be considered lower middle class. Fifty-one percent of the participants at the time of the interview occupied a job outside of their household.

The sample consisted of 19 persons who had experienced a violent crime, 4 who were involved in a traffic accident, and 83 who had lost a loved one as a result of murder/suicide (17), traffic accidents (17), acute illness (31), or chronic illness (18). The person who was mourned nearly always was a member of the immediate family, and some cases involved the death of more than one member of a family. Six patients experienced an event that did not fall under one of these categories.

The level of psychological distress at the pretest indicated that most of the patients were in crisis at the time of their application (Tables 1, 2, and 3). In comparison with a group of phobics (Arindell & Ettema, 1981), our group proved to have statistically significant higher scores on somatic symptoms, state anxiety, hostility, and psychoneuroticism but a lower score on phobic symptoms. The scores on the Impact of Event Scale were considerably higher than those reported by Horowitz, Wilner, and Alvarez (1979). The scores on the personality questionnaires were compared with those of patients of general psychiatric outpatient wards. Our patients proved socially more skillful and less rigid, and they had higher self-esteem than this group. Although these differences point in the direction of less pathology, the scores of our patients on trait anxiety and trait anger point in the opposite direction. Although these differences are statistically significant, their significance in absolute terms seems limited.

In summary we can state that the general picture of our sample is lower middle class, neurotic, and with crisislike symptoms.

Procedure

Two admission interviews were conducted by one of the authors (D.B.). In the first interview a general assessment of the patient was made, and the incurring event was discussed. The second interview was conducted to observe the reaction to the first in order to make sure the patient could stand a confronting therapy. In this interview the course of the patient's life history was discussed. The 112 selected persons were randomly assigned to psychodynamic treatment (n = 29, 2 therapists), hypnotherapy (n = 29, 2 therapists), trauma desensitization (n = 31, 3 therapists), and the waiting-list group (n = 23).

The treatment was carried out by therapists who were trained and experienced (>10 years) in the specific method they conducted. Each therapist conducted the form of therapy that he or she preferred outside of the research setting. In order to assure adherence to the procedures, supervisory sessions by senior advisors were held (P. B. Defares, trauma desensitization; O. van der Hart, hypnotherapy; M. J. Horowitz, psychodynamic therapy). The mean length of treatment was 15.0 sessions for trauma desensitization (SD = 2.9), 14.4 sessions for hypnotherapy (SD = 1.4), and 18.8 sessions for psychodynamic therapy (SD = 2.6).

Measurements were taken before, after, and 3 months after treatment; the waiting-list group was measured before and after a waiting period of 4 months. The patients in the waiting-list condition received treatment outside of the research setting.

Measures

We focus in this article on the data from the standardized questionnaires, disregarding the physiological and behavioral tests that were administered. The domains that were covered by the questionnaires were general symptoms, symptoms of the coping process, and personality.

General symptoms were assessed by means of the Dutch version of the Symptom Checklist–90 (SCL–90), which was validated by Arindell and Ettema (1981), who obtained a dimensional structure of the following five subscales: (a) Social Inadequacy (inadequacy in interpersonal relationships, negative frame of mind, sense of inferiority); (b) Somatization (physical complaints); (c) Agoraphobia; (d) Hostility (symptoms of an aggressive nature); and (e) Psychoneuroticism (the sum score of the 90 items). Cronbach's alpha-coefficients ranged between .74 and .96. In addition, a sixth dimension was used that was based on the findings from the literature in the area of complaints (Kleber et al., 1986) that develop after traumatic events. This dimension, which we refer to as *trauma symptoms*, consists of 27 items that have bearing on fears, negative emotional experiences, tensions, concentration and memory disturbances, lack of interest in the external world, and sleep disturbances. On this dimension, no validation data are available at present.

The State–Trait Anxiety Inventory and the State–Trait Anger Inventory were translated and validated for the Netherlands by Van der Ploeg (1980; Van der Ploeg, Defares, & Spielberger, 1981). The reliability coefficients of the four scores range between .85 and .91. The symptoms of the stress response syndrome were assessed by the administration of the Impact of Event Scale (Horowitz et al., 1979), which was translated and validated by Brom and Kleber (1985). The two subscales of intrusion and avoidance present in the original scale were reaffirmed in our study with minor changes, and reliability scores were .72 and .66 (in a second sample, they were .81 and .78). The external validity of the scale is reported elsewhere (Brom et al., 1986).

Characteristics of the personality were assessed by the Dutch Personality Questionnaire (Luteijn, Starren, & Van Dijk, 1975), a thoroughly investigated and widely used instrument, comprising the following subscales: (a) Inadequacy (feeling anxious and depressed); (b) Social Inadequacy (incompetence in contact with others); (c) Rigidity; (d) Discontentment (suspicious of and hostile toward others); (e) Conceit (satisfied with oneself and not wanting to have anything to do with others and their problems); (f) Dominance (desire to be superior to others); and (g) Self-esteem. Furthermore, the Introversion–Extraversion scale of the Amsterdam Biographical Questionnaire, another well-documented instrument developed and tested by Wilde (1970), was used. Finally, the scale for internal versus external control developed and tested by Andriessen (1972) was used. Cronbach's alpha-coefficients for these measures ranged between .80 and .89, with one exception of .69.

Results

Dropouts

We regarded as dropouts all patients with whom the decision to start a treatment was agreed on but who discontinued this treatment against the advice of the therapist. A total of 12 participants discontinued treatment in this manner. This amounts to 11% of the total number of accepted patients. This is low, in comparison with the available figures about premature withdrawal from therapy. Garfield (1978) reported dropout percentages of between 30% and 65%. Our low percentage evidently has to do with the brief duration of the therapies, the specific nature of the complaints, and the well-defined structure that was offered. The 12 dropouts were evenly distributed over the treatment conditions and received a mean number of six sessions. The dropouts did not differ significantly from the remaining participants in terms of sociodemographic background, symptoms, or personality characteristics (univariate F values ranged from .0 to 3.0; mean F value = .4; p values ranged from .96 to .08).

Analysis

The data were analyzed in four steps: (a) a multivariate analysis of variance (MANOVA) in order to minimize familywise error rates; (b) the comparison in one test between the effects of the treatment conditions and the eventual changes in the same variables in the waiting-list condition, and (c) the analysis of the effect of the treatment in comparison with the waiting-list group, controlling for the differences in initial scores. These steps constitute a rigorous testing of the effectiveness of the treatments. A fourth step was (d) the analysis of various indicators for the success of the treatments.

Before entering into the analyses, we offer some comments on the interdependency of the variables. Using so many variables undoubtedly creates a certain degree of interdependency. We conducted a principal component factor analysis with varimax rotation on the pretreatment variables, which yielded six factors, explaining 72.6% of the variance. Criterion for assigning a variable to a factor was a factor loading of over .60 on one factor and under .30 on the other factors. The most important factor includes most of the variables concerning symptoms. Intrusion and avoidance, however, were found to occupy separate factors. Emotional state was another factor, including state anxiety and state anger. The remaining two factors consisted of personality measures. Because this analysis upheld the general partition that we maintained (general symptoms, symptoms of coping and personality), and for the sake of clarity and replicability, we decided to present the variables as they were measured. One should be aware, however, that symptoms can be considered under the heading of neurotic symptoms and emotional state, that intrusion and avoidance are relatively independent, and that the personality measures comprise variables related to social functioning and related to self-esteem.

Multivariate Analysis of Variance

The first analysis we present here is a MANOVA. We entered the most important variables in this test and found a box-M value (21, 183) of 92.3 (p = .14), indicating that our data comply with the specifications for a MANOVA. Hotellings' test yielded a value of .52 with a p value of .05. These data do not provide insight but protect against interpretation of one-way analyses of variance (ANOVAs), like the ones we use, without a sound basis. On the basis of this analysis, we can state that in our study this basis is present.

The main findings are reported in Tables 1, 2, and 3. In these tables the simple tests between pretest, posttest, and follow-up measurements can be seen, as well as the t tests between the raw difference scores of a treatment condition and the control group and the results of the t tests with the use of the residual gain scores, which we describe here.

An important methodological drawback of difference scores, composed of raw scores, concerns the high correlations between these difference scores and the scores on the pretest. These impede the interpretation of the results. A solution for this problem is the calculation of so-called residual gain scores. These residual gain scores, based on the actual differences between pre- and posttesting and on mean group improvement, give an indication of the actual improvement, without being related to the scores on the pretest. The formula with which we have calculated these scores was derived from Meltzoff and Kornreich (1970) and reads as follows:

$$\text{Residual gain} = \frac{Z_1 - R_{01} * Z_0}{1 - R_{01}},$$

whereby Z_1 = transformed posttest score, Z_0 = transformed pretest score, and R_{01} = correlation between raw scores of pre- and posttestings. For this calculation the raw scores are converted into Z scores.

Because the residual gain scores are not very illuminating measures, an ANOVA was also conducted as a check on these results. In this case the posttest score was introduced as the dependent variable, the condition (i.e., in each case one therapy as opposed to the waiting-list condition) as the independent variable, and the pretest score as the covariate. This procedure resembles the residual gain score analysis and yields results that are so similar that only the former results are presented here.

Direct tests between the therapies without the control condition on the effect scores on symptoms or personality measures did yield only one significant difference in univariate ANOVAs, indicating that we should consider the therapies as equally effective, mean $F(2)$ = .9 with a mean p value of .40. The comparison on some variables between one therapy condition and the control group yielded significant results, and that between another therapy condition and the control group yielded nonsignificant results. This creates difficulties in interpretation. In the next description we refer to the comparisons between each therapy condition and the control group as they appear in Tables 1, 2, and 3.

Symptoms of Coping

The symptoms of intrusion and avoidance, which are central elements of the process of coping, lessened considerably in the treatment groups but not in the control group. At the postmeasurement, the effects of the psychodynamic therapy seem fewest; but these effects appear to continue, so that at follow-up

Table 1
Symptoms of Coping

Therapeutic technique	Intrusion		Avoidance		Total	
	M	*SD*	*M*	*SD*	*M*	*SD*
Trauma desensitization						
Pretest	24.1	5.3	18.9	9.0	47.4	12.0
Posttest	14.7[abc]	9.8	10.7[abc]	8.9	28.0[abc]	19.5
Follow-up	16.0[ab]	9.5	12.3[a]	10.4	31.3[ab]	21.1
Hypnotherapy						
Pretest	25.7	4.6	20.5	8.0	50.8	11.7
Posttest	17.1[abc]	10.5	12.9[ac]	10.7	33.7[ac]	22.9
Follow-up	15.7[ab]	10.9	12.5[a]	10.4	31.7[ab]	22.0
Psychodynamic therapy						
Pretest	23.8	7.1	18.0	10.2	46.3	13.5
Posttest	18.4[a]	8.3	12.0[ac]	8.6	32.7[ac]	16.5
Follow-up	15.0[a]	8.8	9.7[ab]	7.6	27.0[ab]	17.0
Waiting list						
Pretest	24.2	5.8	22.3	6.9	51.1	14.1
Posttest	22.3	6.4	20.5	8.7	46.5	15.2

[a] p value of the t test on the difference with the pretest is less than or equal to .05.
[b] p value of t test on the pretest–posttest or pre-follow-up differences between treatment and control is less than or equal to .05.
[c] p value of the t test on the residual gain scores beween treatment and control is less than or equal to .05. (Residual gain scores are only calculated for the pretest–posttest differences.)

measurement they match those of the other therapies. Trauma desensitization and hypnotherapy have a stronger influence on the symptoms of intrusion, and psychodynamic therapy has more influence on the symptoms of avoidance.

General Symptoms

In the treatment conditions there is a general drop of the scores of almost all the symptom dimensions. The control group shows slight but not statistically significant improvement. The direct confrontation of the treatments and control group, however, reduces the number of significant results. The use of residual gain scores further reduces the number of statistical results. The psychodynamic therapy seems to withstand the comparison best. Although some differences among the treatment methods can be observed in the data we present, these differences seem only to have significance in their separate relation to the control group and not in direct comparison.

The treatment effects of the three therapies are most apparent in the complaints strongly indicative of posttraumatic stress disorders, such as trauma symptoms, state anxiety, and psychoneuroticism. This points to the specificity of these forms of treatment.

Personality

It was not our aim to bring about changes in personality with the therapeutic techniques we used. Nor did we expect any shifts in the measures that represented the various aspects of the personality. Nevertheless, some statistically significant changes in the scores can be observed. The patients considered themselves to be less distressed, and an increase in self-esteem was apparent. An even greater decrease in the score on trait anxiety indicates that in addition to the decrease of feelings of anxiety, the clients' general inclination to respond to situations with anxiety decreased. These results withstood the more rigorous testing procedures, especially in the psychodynamic therapy.

Discussion

In this article we reported on a controlled outcome study for posttraumatic stress disorders, disorders that are known to therapists as tenacious. For psychotherapeutic treatments specifically aimed at posttraumatic stress disorders, this study confirms that which had already been found in general evaluative studies of psychotherapy. The treatments do benefit some in comparison with a control group and using stringent methodological techniques, but they do not benefit everyone, the effects are not always substantial, and the differences between the therapies are small. Actually, clinically significant improvements could be observed in about 60% of the treated patients and in 26% of the untreated group. The similarity of the results in the three treatment conditions may be due to similarities in the behavior of the therapists, which we did not measure directly; if so, this behavior certainly is based on quite diverging theoretical considerations.

The therapeutic effects on the symptoms of intrusion and avoidance, which proved to be fairly independent dimensions, best survived the tests. This is an important finding, because these dimensions are central elements in coping with extreme stress.

Our conjecture was that short-term psychotherapy would not lead to personality changes. Some changes in the examined personality characteristics, however, did seem to take place. It is possible that a treatment consisting of 15 sessions can have an influence on some stable characteristics in the individual. A second explanation would be that the dimensions we used are more situationally specific than the literature conveys.

Here, we go into more detail about the differences among the three therapies. It is striking that in psychodynamic therapy the effects on the intrusion dimension of the Impact of Event Scale clearly lag behind those on the avoidance dimension. This is just the opposite in both of the other treatment conditions; effects on intrusion in trauma desensitization and hypnotherapy are greatest. Perhaps this result as well as the established positive aftereffects of psychodynamic therapy are specifically linked to the treatment method. Horowitz (personal communication, March 1981) expects a delayed effect from psychodynamic therapy. The objective of this therapy is to get the process of coping going. In contrast to the objective of trauma desensitization, it is not so much the breaking through of the avoidance tendencies as much as it is the investigation and release of the need to avoid. Both of the other forms of therapy, most notably trauma desensitization, strive to bring about confrontations with images in order to put an end to conditioned responses. In this regard the therapy forms substantially differ from one another, and this is mirrored in the results. The clients who underwent psychodynamic therapy were usually in the middle of a process

Table 2
General Symptoms

Therapeutic technique	Social inadequacy		Somatization		Agoraphobia		Hostility		Psycho-neuroticism		Trauma symptoms		State–Trait Anxiety Inventory		State–Trait Anger Inventory	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Trauma desensitization																
Pretest	19.2	8.0	38.1	12.2	14.7	7.3	7.6	2.9	218.3	66.7	79.2	21.8	55.7	12.4	14.2	6.8
Posttest	15.8[a]	7.1	30.2[a]	13.1	11.4[a]	6.0	7.0	3.1	172.2[a]	65.0	56.2[ab]	24.1	45.1[ab]	13.2	12.3	6.0
Follow-up	16.4[a]	9.1	31.7[a]	13.0	11.3	6.7	7.3	3.2	171.9[ab]	73.3	55.7[ab]	26.9	41.4[ab]	14.8	12.7	6.0
Hypnotherapy																
Pretest	20.0	7.1	41.4	14.0	16.8	7.4	10.7	5.1	241.6	54.3	85.0	16.9	58.2	10.3	12.3	3.2
Posttest	17.2	9.0	33.3[a]	18.8	13.3[a]	6.5	8.3[ah]	5.0	194.4[a]	84.4	65.4[a]	29.4	45.0[ab]	15.7	10.9	1.9
Follow-up	15.9[a]	7.7	30.8	17.2	13.0	7.1	7.1[ab]	2.6	177.2[ab]	76.4	62.0[a]	28.2	43.4[ab]	13.7	11.8	4.8
Psychodynamic therapy																
Pretest	20.2	7.1	41.6	12.7	16.9	8.5	10.5	4.9	234.0	58.9	81.6	25.2	51.7	10.7	11.7	3.7
Posttest	15.0[ab]	6.2	29.7[a]	12.4	11.7[a]	6.5	7.4[ab]	2.6	169.6[abc]	57.9	57.0[ab]	21.1	40.1[abc]	13.2	10.8	2.5
Follow-up	13.4[a]	6.3	26.6[a]	13.2	10.4[ab]	5.6	6.1[ab]	1.5	152.1[ab]	57.1	52.2[ab]	24.3	38.3[ab]	14.0	10.9	1.9
Waiting List																
Pretest	17.1	8.1	38.4	11.0	13.6	5.6	8.0	4.3	205.4	52.6	73.2	18.2	49.2	12.8	12.8	5.2
Posttest	16.8	8.1	33.8	11.5	11.6	5.5	8.0	3.9	193.3	67.7	66.4	24.3	48.2	13.0	14.1	6.1

[a] *p* value of the *t* test on the difference with the pretest is less than or equal to .05.
[b] *p* value of the *t* test on the pretest–posttest or the pre-follow-up differences between treatment and control less than or equal to .05.
[c] *p* value of the *t* test on the residual gain scores between treatment and control less than or equal to .05. (Residual gain scores are calculated only for the pretest–posttest differences.)

Table 3
Personality

Therapeutic technique	Inadequacy		Social inadequacy		Rigidity		Discon-tentment		Conceit		Dominance		Self-esteem		Locus of control		Introversion/ extraversion		State–Trait Anxiety Inventory		State–Trait Anger Inventory	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Trauma desensitization																						
Pretest	22.7	10.1	14.6	8.8	27.7	8.3	20.1	7.6	10.6	5.1	13.1	5.7	21.1	7.9	19.6	5.9	39.0	17.3	53.8	13.8	17.7	5.7
Posttest	18.2[ab]	9.7	13.5[b]	8.6	26.3	8.5	18.9	7.9	12.4[a]	5.7	12.8	5.5	22.7[a]	7.8	18.8	5.6	41.7	17.0	47.2[b]	12.7	17.2	4.6
Follow-up	18.2[ab]	12.0	13.5[ab]	8.5	29.2	8.6	18.9[b]	7.9	10.8	5.5	12.8	5.3	24.0[a]	8.4	19.0	7.3	41.9	18.5	47.4[ab]	15.7	17.3	5.1
Hypnotherapy																						
Pretest	23.9	8.1	13.8	6.7	28.6	8.7	21.6	6.1	11.2	5.1	12.5	6.5	22.9	7.1	22.9	4.6	44.8	15.6	57.3	10.4	21.1	5.4
Posttest	19.3[ab]	11.1	13.6	7.2	28.7	10.4	23.0	6.8	12.4	5.8	13.5	7.1	23.5	8.2	22.3	5.5	42.7	16.1	45.1[abc]	16.1	20.0	6.8
Follow-up	16.3[ab]	10.6	11.8[b]	6.5	28.4	9.1	23.2	7.4	11.3	5.8	13.2	7.2	25.0	9.3	21.4	5.0	44.6	21.2	45.9[ab]	13.7	18.3	5.9
Psychodynamic therapy																						
Pretest	25.0	8.5	13.5	8.1	25.6	8.5	20.6	7.3	11.0	5.7	12.5	6.8	22.0	6.7	19.8	6.0	47.0	7.8	57.5	10.2	20.4	4.4
Posttest	18.4[abc]	9.8	12.2[b]	7.6	24.0	8.6	22.2	13.5	11.8	6.4	16.0[bc]	7.2	25.3	7.3	18.5	6.8	50.3	18.7	45.2[abc]	10.9	18.1[c]	4.5
Follow-up	17.5[ab]	9.8	11.2	7.3	22.6	8.8	18.3	9.3	12.8	6.3	12.4	7.8	26.9[ab]	7.0	18.6	7.2	51.1	17.2	41.9[ab]	11.6	16.9[a]	4.0
Waiting list																						
Pretest	17.2	9.4	11.3	7.1	27.3	7.0	20.7	8.1	10.9	4.0	14.1	4.7	24.7	4.6	17.2	6.5	46.5	16.0	50.4	10.8	18.6	7.8
Posttest	18.1	10.9	12.9	8.1	30.1	9.8	21.7	8.7	10.6	4.2	13.2	5.8	24.1	6.4	17.4	6.8	45.0	15.2	51.4	11.3	19.9	7.3

[a] *p* value of the *t* test on the difference with the pretest is less than or equal to .05.
[b] *p* value of the *t* test on the pretest–posttest or pre-follow-up differences between treatment and control is less than or equal to .05.
[c] *p* value of the *t* test on the residual gain scores between treatment and control is less than or equal to .05. (Residual gain scores are calculated only on the pretest–posttest differences.)

of coping for which therapy paved the way. The message of trauma desensitization is that coping should for the most part be finished during the course of the therapy, although several coping skills are taught that could be of use at a later time.

Finally, our findings clearly show the importance of specification of the research instruments. To continue this line, we should look for instruments that are capable of incorporating clinically relevant issues, such as the above mentioned different mechanisms within each of the therapeutic approaches. Both conclusions make it clear that the process of psychotherapy must be taken into consideration if we want to establish a more explicit link among theory, therapy, research methods, and disorders.

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