



# Schema therapy for patients with borderline personality disorder: a single case series

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## Abstract

The effectiveness of schema therapy for patients with borderline personality disorder (BPD) developed by Young was investigated using a single case series trial of six patients who all had primarily a DSM-IV BPD diagnosis. The treatment approach comprised the core elements of schema therapy with an emphasis on schema mode work and limited re-parenting. An A–B direct replication series with follow-up assessments at 12 months was implemented. From baseline to follow-up improvement was large, as indicated by large effect sizes, and improvement was clinically meaningful for five of the six patients included. Three of the six patients did not any longer fulfill the criteria for BPD by the end of the treatment.

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*Keywords:* Borderline personality disorder; Schema therapy; Single case series

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## 1. Introduction

Borderline personality disorder (BPD) is one of the most prevalent personality disorders in both in- and out-patient clinics (Maier, Lichtermann, Klingler, Heun, & Hallmayer, 1992; Maier et al., 1992; Moldin, Rice, Erlenmeyer-Kimling, & Squires-Wheeler, 1994). Many approaches for treatment are proposed for BPD, but there is

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no single treatment approach that seems to be the treatment of choice, although therapy in the form of psychodynamic psychotherapy or dialectical behavior therapy (DBT) is suggested (Oldham et al., 2001).

New approaches are emerging and during the last decade several cognitively oriented approaches have been developed for treating patients with BPD. Among these are cognitive therapy (Beck, Freeman, & Associates, 1990; Layden, Newman, Freeman, & Byers Morse, 1993; Freeman & Fusco, 2003), rational emotive therapy (Ellis, 2001), cognitive coping therapy (Sharoff, 2002), cognitive evolutionary therapy (Liotti, 2002) and schema therapy (Young, 1996; Young & Behari, 1998; Young, Klosko, & Weishaar, 2003; Arntz, 2004).

Schema therapy is based on a cognitive–integrative conceptualization of personality disorders using a broader and more eclectic approach than the usual cognitive therapy approaches, integrating various theoretical formulations (Young, 1994; Arntz, 1994; Young, Klosko, & Weishaar, 2003). Schema therapy targets the establishment of a working relationship through emphasizing the patient's emotions and bonding issues. By specific interventions such as limited re-parenting combined with experiential techniques on adverse childhood interpersonal experiences the patient learns to contain and endure the negative effects of abandonment and despair. In the therapeutic model, the schema mode change is emphasized, where the patient learns to deal with his or her various modes (abandoned child, angry child, punitive parent and detached protector) through experiential techniques and the therapy relationship. By working with a modification of schema modes and maladaptive coping styles the patients are treated for periods of 1–4 years (Young & Behari, 1998; Young, Klosko, & Weishaar, 2003). Schema therapy has rapidly developed into a therapy of wide interest, particularly in the United Kingdom, Scandinavia and the Netherlands. However, schema therapy is not yet a comprehensive and fully empirically-validated theory and therapy of personality pathology in general or of BPD in particular. The concepts used in schema therapy, such as early maladaptive schemas or schema modes, were not developed to correspond directly to any specific personality disorder, but are supposed to define core structures of personality pathology (Young & Gluhoski, 1996). Validation of the role of early maladaptive schemas and schema modes, and relationship to the various personality disorders are now published in several recent studies (Petrocelli et al., 2001; Jovev & Jackson, 2004; Rijkeboer, van den Bergh, & van den Bout, 2005; Nordahl, Holthe, & Haugum, 2005; Arntz, Klokman, & Sieswerda, 2005; Lobbestael, Arntz, & Sieserda, 2005), and the findings are consistent in showing the strong sensitivity of personality pathology.

There is, to our knowledge, no published randomized and controlled study of the efficacy of schema therapy for BPD or for any other specific personality disorder. However, there is one unpublished study conducted by Giesen-Bloo, Arntz, van Dijck, Spinhoven, & van Tilburg (2004), comparing schema therapy with transference focused psychotherapy (TFP). In a multi-site trial, 88 patients were randomized either to schema therapy or to TFP, and they were all treated for a maximum of 3 years. By comparing the treatments on cost-effectiveness, changes in borderline criteria and quality of life, the authors found that schema therapy was

superior to TFP. In addition, the dropout rate was significantly lower in the schema therapy condition (Giesen-Bloo et al., 2004).

Due to the great efforts needed to test the validity and effect of schema therapy of BPD in a randomized controlled trial, a natural first step was to do a preliminary study of the effectiveness of schema therapy of BPD in a single case series. Thus, the purpose of the present study was to evaluate the effectiveness of Young's schema therapy with a limited number of patients with primarily a diagnosis of BPD. In order to do so we set up a study measuring baseline levels of symptoms, and subsequently the pre-, post- and follow-up levels of clinical changes in BPD criteria, clinical impairment, global symptomatic distress and interpersonal problems.

## 2. Method

### 2.1. Design

A single case series using an A–B design, with 12 months follow-up was implemented (Barlow & Hersen, 1984). All patients were measured pre-treatment three times, over a 10 weeks period, with symptom measures on anxiety and depression as a baseline control measure. In addition the patients were assessed pre-treatment on clinical interviews, and the SCID-I and II. The battery of measures was administered at pre-treatment, at 20th session, at 40th session, at post-treatment (65–120 sessions) and by follow-up (12–16 months after termination). The pre-treatment consultations were brief and did not involve any treatment or interventions.

### 2.2. Subjects

There were six patients, all women, who were referred to therapy for their BPD at our outpatient clinic, Department of Clinical Psychology. They were consecutively treated as they were referred, starting with the first patient in 1998 and all patients had completed treatment by the end of 2003. All patients satisfied the DSM-IV criteria for BPD (American Psychiatric Association (APA), 1994). Four patients had a co-morbid diagnosis of recurrent major depression, two patients were dysthymic, two patients had an eating disorder diagnosis (Bulimia Nervosa), and three patients had anxiety diagnoses, such as social phobias or obsessive compulsive disorder. One patient had a diagnosis of substance abuse (alcohol) and two patients had unspecific somatoform disorder (pain). The patients had also co-morbid diagnoses of other axis II disorders: two patients had avoidant, one had dependent and one had histrionic personality disorder. However, their main diagnosis based on the clinical assessment was BPD with moderate to severe impairment. The patients' age ranged from 19 to 42, and three of them were married, one lived together with her partner, and two were single at the time of inclusion. Three of them had part-time jobs, one was unemployed and two were students. All of them had received psychological or psychotropic treatment before ( $M = 3.1$  years). Three of the patients were treated

with psychotropic medication (SSRI, lamotrigin) at the start of the study, but none of them was taking the medications on a regular basis, so they were asked to stop using them during the trial. A short presentation of the patients follows:

*Patient 1:* A 26-year old married female with two children. She worked part time as a waitress in a café. She was repeatedly on sick leave and was referred to treatment by her physician for anxiety and depression. She had on a previous occasion been treated with both psychotherapy and psychotropic medications. Her husband was reported to have been abusive with her, and she had suicidal ideas and one episode of a suicidal attempt.

*Patient 2:* A 19-year old female with a boyfriend and no children. She had left school in her mid-teens and had since then been supported by the social welfare care, by boyfriends or by her parents. She was severely depressed at the time of referral and had self-mutilated by burning herself with cigarettes. The patient had been treated with various forms of therapies and medications, but she had a history of treatment non-compliance and drop-outs. She had been sexually abused as a child and has also been exposed to sexual assault in adult life. No suicidal attempts were reported, but she had outbursts of anger towards family members that she was unable to control.

*Patient 3:* A 24-year old, single, female student with a history of recurrent major depression, and eating disorder (bulimia). She was referred to treatment by her physician due to social anxiety, suicidal ideas, and abuse of pills and alcohol. She has been treated with psychotropic medication in periods over the last 3 years, but did not receive any psychotropic treatment by referral. Her impulsive behavior was related to casual sexual relationships and substance abuse, and by the time of referral she was about to drop-out from her studies.

*Patient 4:* A 22-year old married housewife with a 2-year old child. Her husband was a salesman and was traveling frequently on business trips. She suffered from recurrent depressive disorders and bulimia. She had been treated with therapy at an outpatient clinic for two periods. She was taking psychotropic medication at the time of inclusion, but did not use them as prescribed. She agreed to stop the medication at the start of her treatment. She had no episode of suicidal attempts, but she struggled with suicidal ideas and was jealous especially on the days when her husband was away.

*Patient 5:* A 42-year old, married mother of one teenage child. She was on sick leave from her job as a cleaner in a primary school, and suffered from a lot of recurrent depressions and suicidal ideas. She had received psychotherapy several times during the last 15 years and been treated with psychotropic medication on previous occasions. She was on and off SSRI medication by the time of referral, but she wanted to stop using drugs when she was included in the therapy trial. She had been hospitalized on one occasion in her early 20s for depression and suicidal behavior.

*Patient 6:* A 21-year old single female with no children. She was in her second year of college to become a pre-school teacher. She suffered from anxiety disorders, dysthymia and unspecific pain symptoms. She was treated with group therapy on a previous occasion but quit attending the group, as she felt completely left-out. She

reported that she was not able to manage her anger in the groups, so she preferred individual therapy. She had some self-damaging or self-punishing behaviors such as denying herself pleasures and deliberately starving herself. She reported of having been sexually abused by one of her grandfathers, as a child.

### 2.3. Instruments

A clinical assessment of the patients' axis I and axis II diagnoses was conducted before inclusion and by post-treatment (SCID-I and SCID-II). The BPD diagnosis was set by both the patient's physician (or a previous therapist) and by the therapist in the study. In addition, a comprehensive battery of standard self-report measures were administered. These measures included the symptom checklist 90, revised (SCL-90R; Derogatis, 1992), Beck depression inventory (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961), Beck anxiety inventory (BAI; Beck, Epstein, Brown, & Steer, 1988), inventory of interpersonal problems (Horowitz et al., 1988), and the Young schema questionnaire (YSQ, second ed.; Young & Brown, 1991).

The SCL-90-R global severity index (GSI) was used as an indicator of current intensity and perceived distress (Derogatis, 1992), and the IIP was used as a global score of non-specific interpersonal distress (Horowitz et al., 1988). The maladaptive schemas were measured as a composite of abandonment/instability (AB), mistrust/abuse (MA), emotional deprivation (ED), and defectiveness/shame (DS). These are the most prominent schemas of patients with BPD (Young & Behari, 1998). In addition, the DSM-IV general adaptive functioning scale (GAF; axis V) was used as a global indicator of functioning, and severity ratings of adaptive functioning (GAF) were done by the therapist at pre-treatment and at post-treatment.

### 2.4. Procedure

The treatment followed the protocol outlined by Young (1996). The authors devised a Norwegian checklist based on the protocol, which was used as guidelines throughout the therapies. An outline and the clinical application of the treatment are presented in Nordahl and Nysæter (2005). See also schema therapy for BPD on the following internet address [www.schematherapy.com](http://www.schematherapy.com).

The patients were treated for at least 18 months, to a maximum of 36 months, so the patients did not have a fixed number of sessions. The patients received treatment on a weekly basis and were administered questionnaires at every session. The sessions were each of 60 min duration for a mean period of 22 months (18–36 months range). Treatment was faded at least 6 months by the end of the therapy for all patients. The patients were treated by the same therapist (HMN), who has had appropriate training and experience with schema therapy. Training and teaching had been provided by the developer of schema therapy (Jeffrey E. Young), as part of an educational program in advanced cognitive therapy. In addition to the patient's therapist, a team consisting of the referring physician and a nurse from the local community healthcare were involved in the treatment to provide help with medical

and practical domestic problems. These two had a more supportive role, but they were meeting the therapist on a regular basis. The main elements of the therapy were (1) to develop a schema mode formulation of the patients in order to share an understanding of the patient's modes, distress and interpersonal difficulties, (2) to bond with the patient through re-parenting (soothing, support, guidance) and helping the patients with their emotional deprivation, (3) work on schema modes and interpersonal coping skills, (4) managing crisis and enhancing problem solving, and (5) gradual termination and fading of therapy (Young, 1996; Young & Behari, 1998).

### 3. Results

The patients' scores on the anxiety symptoms, depressive symptoms, general symptomatic distress, interpersonal distress during pre-treatment, treatment periods, at post-treatment and follow-up are shown in Fig. 1. For the patients' depressive (BDI) and anxiety (BAI) symptoms the baseline measures are also shown. Baseline scores of all patients on depressive or anxiety symptoms indicate that there was no evidence of spontaneous recovery over a 10 weeks period before the commencement of schema therapy. Note that the global scores of the SCL-90-R and the IIP were multiplied by 10 in order to fit them into Fig. 1.

Effect size (ES) is the effect vs. standard deviation (s.d.) ratio, and is calculated on the mean change in the individual test scores for pre- and post- or follow-up scores divided by the pooled s.d. of the scores (Cohen, 1992). By using Cohen's *d* for estimating the size of changes in the group of 6 patients as a whole, the results show that the pre-treatment to follow-up effects were large, with effect size ranging from 1.8 to 2.9. Based on the self-report scores, five of the six patients had greatly improved on general symptomatic and interpersonal distress 12–16 months after treatment. However, patient 1 had only small changes from pre-treatment to follow-up, and relapsed during the follow-up period. By post-treatment, the patients were re-diagnosed on the SCID-II. Three of the six patients did not fulfill the criteria of DSM-IV BPD any longer (patients 2, 4 and 6), whereas the rest still fulfilled the criteria, but to a lesser extent (for a criterion to be rated absent, there should not be any evidence of it during the last 6 weeks). The pre-treatment to follow-up changes on maladaptive schemas for the six patients were significant with an effect size of 1.8.

The most interesting finding, considering the often-reported variability of symptomatic distress in patients with BPD (Gunderson, 2001), is that, the gains after therapy ended were maintained during the follow-up period. Only one patient (patient 1) relapsed. No one had attempted suicide, and self-mutilation and self-damaging behaviors were significantly reduced. The general adaptive level of functioning (GAF score) increased from a mean score of 52 to 68, which is a relatively large improvement ( $Es = 2.8$ ). However, overall there were still some residual symptoms and mild impairments in functioning by the end of the therapy and the follow-up, for all the six patients.

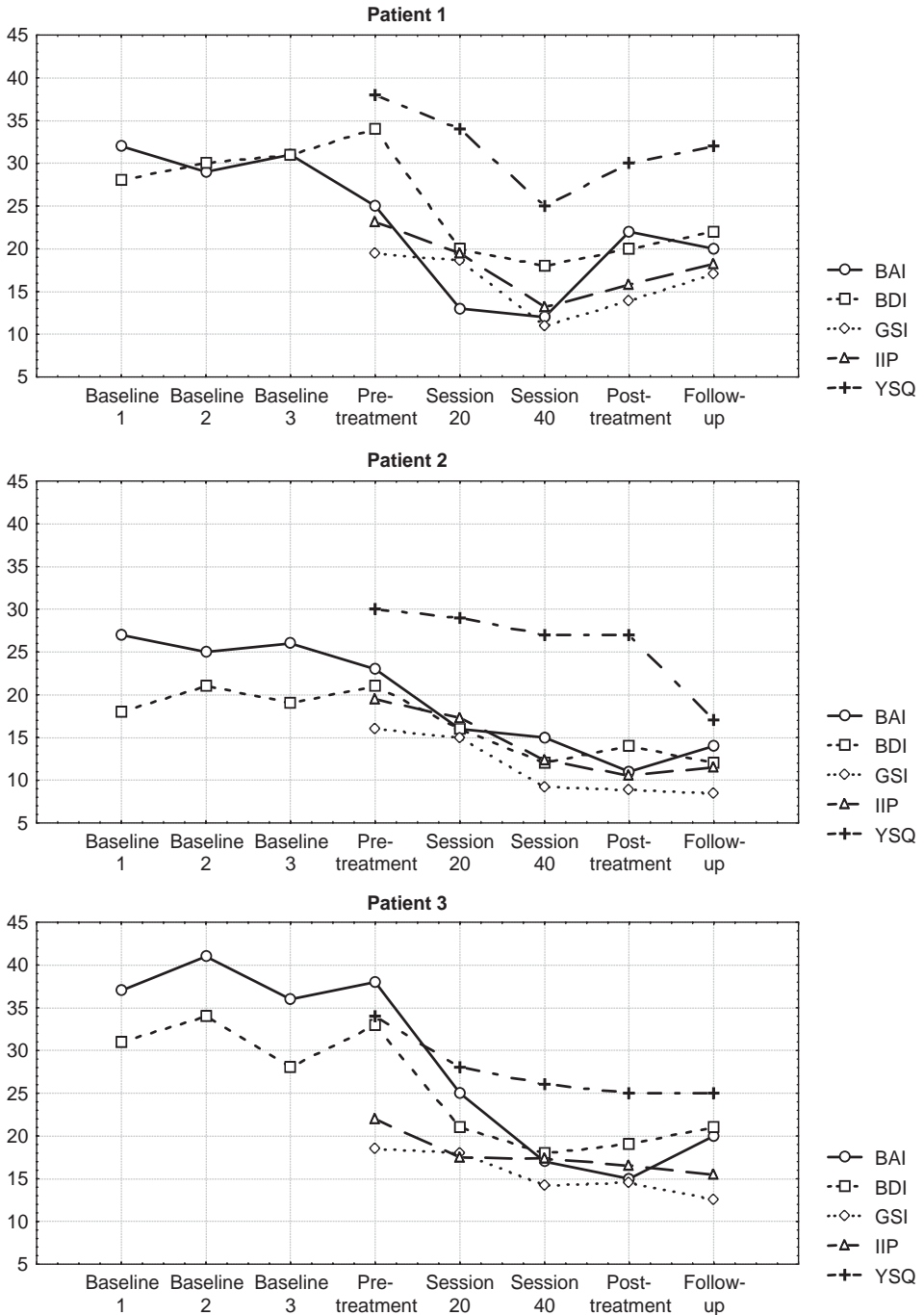


Fig. 1. Scores on the standardized measures at baseline, pre-treatment, 20th session, 40th session, post-treatment and follow up for each patient.

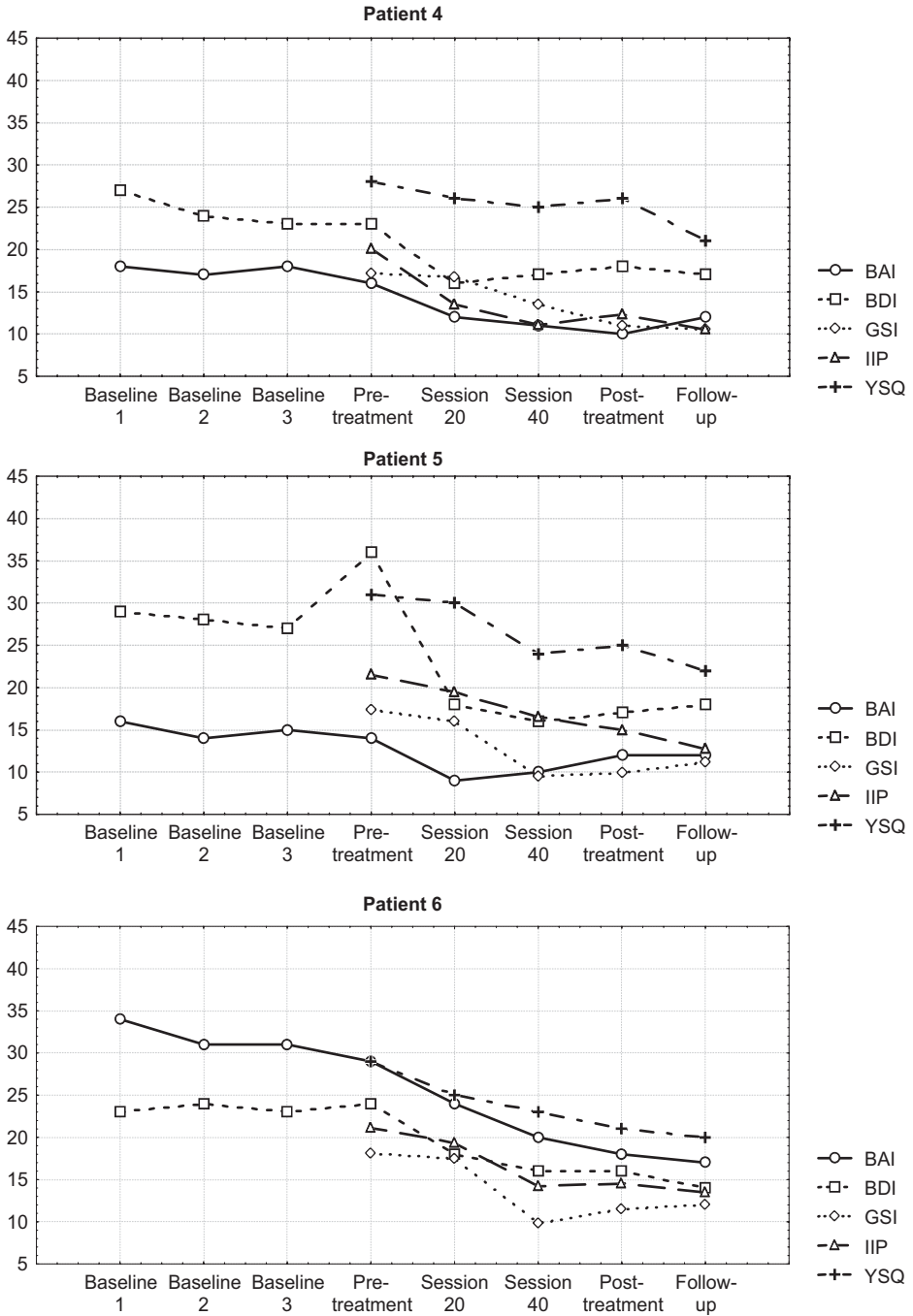


Fig. 1. (Continued)



#### 4. Discussion

The results of the preliminary case series of schema therapy for patients with BPD show that five of the six patients attained clinically gains, and that the gains are not attributed to spontaneous recovery. All patients improved systematically during the therapy, and most importantly, the gains of treatment had maintained for over a year after termination in five of the six cases. However, patient 1 did not maintain her gains of therapy from post-treatment to follow-up.

Patient 1 had a high level of stress and conflicts with her two children and her husband. In addition, the family was offered help by counseling services, but the relationship with the child health care service was tense and they declined. Thus, the continuous intra-familial conflicts and tension was beyond the control of both the therapist and the community health service, which might be one of the important factors that contributed to the patient's relapse.

One of the elements of the treatment, the patients reported to have been among the most helpful, was the schema modes conceptualization. The content and dynamics of the schema modes are easily conveyed to the patients, and they can easily identify with the model. Also, addressing the emotional deprivation of the patient, and providing a nurturing base by the therapist through limited re-parenting, combined with developing skills for coping with his or her schema modes, seem to be crucial elements. The experiential techniques, which are an important part of schema therapy, are particularly suitable for helping the patient with his or her childhood traumas, and also cause the patients to develop their own self-soothing capacity and impulse-postponement behaviors. However, which element of schema therapy is the most effective remains to be empirically investigated from better controlled studies.

The study has at the least three limitations. First is the problem of generalization. Any generalization of the effects of schema therapy in a single case trial is limited due to the small number of patients included. Second, the delivery the schema therapy relied on only one experienced schema therapist, thus the feasibility of the treatment by other therapists is uncertain. Finally, the therapist himself conducted assessment of the patients' BPD diagnosis after treatment. The lack of an independent assessor in the study may limit the validity of the findings on recovery from BPD. On the other hand, the fact that the self-report measures showed a similar decrease in psychopathology as the therapist's assessment, is at odds with the interpretation that the therapist's assessment was biased.

The present study should be considered as an indication and a preliminary test of the effects of schema therapy for patients with BPD. The results of the present study, together with the preliminary results from Dutch study (Giesen-Bloo et al., 2004), indicate that schema therapy could both be a suitable and an effective approach to the challenging task of treating patients with BPD.

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