



Arts therapies and Schema Focused therapy: A pilot study

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ABSTRACT

Arts therapies and Schema Focused therapy (SFT), use experiential techniques to help patients access and reprocess emotions. We conducted a randomized controlled pilot study to determine the effectiveness of these therapies at evoking emotional states (“schema modes”) in forensic patients, a group that is considered difficult to reach emotionally. Ten male forensic patients with Cluster B personality disorders who were enrolled in a randomized clinical trial of SFT versus usual forensic treatment (“treatment as usual,” TAU) participated in the study. We investigated the effect of Arts therapies versus verbal psychotherapy, and SFT versus TAU on modes. As hypothesized, patients showed significantly more healthier emotional states in their Arts therapy sessions than in their verbal psychotherapy sessions. SFT evoked more childmodes than TAU, at a trend level of significance. Patients in the SFT and TAU conditions showed no differences in schema modes early in therapy, and were equivalent on all baseline characteristics. These findings, though requiring replication in a larger sample, suggest that Arts therapies and SFT have potential for evoking emotional states in difficult to reach patients.

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Introduction

Arts therapies,¹ such as drama, art, music, dance and movement therapies, and psychomotor therapy, are increasingly used in psychiatric and forensic settings as an adjunct, or alternatives, to traditional verbal forms of psychotherapy. Dramatherapists use methods such as role play, masks, improvisation, text and poems. Role playing gives the patient and the therapist the opportunity to play with reality and to experiment and explore the facts of real life (Johnson, 1991). Forensic patients are a group of patients that are difficult to reach emotionally. Many forensic patients are emotionally detached, or tend to express their emotions inappropriately (Bernstein, Arntz, & de Vos, 2007; Day, 2009). Although drama therapy techniques are similar in both general and forensic psychiatry, the emphasis in forensic dramatherapy is on expression

of emotions, exploring destructive behaviour and on the increase of self-control (Blacker, Watson, & Beech, 2008; Reiss, Quayle, Brett, & Meux, 1998).

Art therapists use art methods such as drawing, painting, working with clay, wood or stone. Art therapy in forensic psychiatry aims at creating an art object in which patients' internal processes are externalized into a concrete form. This form can also help the patient understand the events, thoughts and feelings that have led to an offense (Gerber, 1994; Gussak, 2007).

Music therapists use music instruments, singing, songwriting, rap, and body percussion. These methods can be experienced in a receptive and active manner. Forensic musictherapy specifically focuses on aggression and social interaction. For instance, the way you interact with others during musical play gives the music therapist an insight in the patients' dominant social strategies (e.g. playing out loud, or subtle and very quiet). Also aggression can be explored and expressed in a safe and indirect manner, for example, via instruments (e.g. hitting the drums excessively) (Hakvoort, 2002; Reed, 2002).

Dance and movement therapy and psychomotor therapy are founded on the basis that movement and emotion are directly related (Hekking & Fellinger, 2011; Payne, 2006). Forensic Dance and Movement Therapists use structured or free dance and movement exercises to explore the physical aspects of destructive behaviour such as aggression and poor impulse control (Smeijsters, 2005). The psychomotor therapist uses physical exercises that

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¹ In this article, we use the term “Arts therapies” to refer to Drama therapy, Art therapy, Music therapy, Dance and Movement therapy, and Psychomotor therapy. Psychomotor therapy is not technically considered a form of Arts therapy, because these therapists have different educational backgrounds from Arts therapists. However, because Psychomotor therapy has many similarities to the Arts therapies, in this article we group it together with the Arts therapies for the sake of simplicity.

focus on posture, musculature, breathing, and the person's ability to adjust. Forensic psychomotor therapists address a patient's self-perception and self-regulation skills because these are often impaired in forensic patients (Chakhssi, De Ruiter, & Bernstein 2010; Hornsveld, Van Dam-Baggen, Leenaars, & Jonkers, 2004).

There are several potential advantages of Arts therapies, compared to traditional, verbal therapy approaches. First, increasing research suggests that much of cognitive processing is unconscious (e.g. Greenwald, 1992). Arts therapies may be more effective than verbal psychotherapies at facilitating processing at a non-verbal, unconscious level. Second, there is increasing evidence for the importance of emotion in various forms of cognitive processing (David, Miclea, & Opre, 2003; David & Szentagotai, 2006). The Arts therapies incorporate a broader range of methods to evoke and reprocess patients' emotions than in traditional verbal forms of therapy. Finally, many patients have difficulty in accessing and expressing their emotions verbally. Thus, traditional verbal therapies may prove to be unproductive for some patients, particularly for those who are very emotionally detached or cognitively challenged. Arts therapies may prove a more effective alternative especially for these patients.

In this study, our primary aim was to test a central assumption of Arts therapies, namely, that they are more effective than verbal forms of psychotherapy at evoking emotional states, including both "vulnerable" emotional states, such as sadness, fear, and loneliness, as well as joyful, pleasurable emotional states. We tested this assumption using a sample of forensic patients with personality disorders – a group that is generally considered to be very emotionally detached, hostile, and mistrustful, and is often reluctant or unable to show emotions openly. Forensic patients with personality disorders often respond poorly to standard, verbal forms of psychotherapy, such as cognitive-behaviour therapy (Timmerman & Emmelkamp, 2005). Some of these patients, especially those with high levels of psychopathy, are generally considered to lack the emotional prerequisites for successful psychotherapy, such as the capacities for bonding, empathy, and experiencing feelings (D'Silva, Duggan, & McCarthy, 2004). Arts therapies are being increasingly used with forensic patients as a possibly more effective alternative. However, the effectiveness of Arts therapies with forensic patients has never been tested, neither the key assumption that these alternative therapy forms are more effective than standard, verbal therapies at evoking emotions.

A second aim of this study was to compare the effectiveness of Schema Focused therapy (SFT; Young, Klosko, & Weishaar, 2005) to usual forensic treatment for evoking emotional states. SFT is an integrative form of psychotherapy combining cognitive, behavioural, psychodynamic object relations, and humanistic/experiential approaches (Young et al., 2005). SFT has shown effectiveness in treating patients with borderline PD (Farrell, Shaw, & Webber, 2009; Giesen-Bloo et al., 2006), and has recently been adapted for forensic patients (Bernstein, Arntz, & de Vos, 2007). In patients with severe personality disorders, the focus of SFT is on "schema modes", also referred to as emotional states or "parts of the self" that temporarily dominate a person's thoughts, feelings, and behaviour (Young et al., 2005). According to SFT theory, these states are relatively dissociated from each other in patients with severe personality disorders. Thus, patients may shift rapidly between extreme emotional states, or remain rigidly "stuck" in one state to the exclusion of other states. For example, patients with Borderline PD may shift rapidly between states involving emotional pain ("Vulnerable Child mode"), anger or rage ("Angry Child mode"), emotional detachment or numbness ("Detached Protector mode"), and self-punitiveness ("Punitive Parent mode"). The goal of SFT is to ameliorate maladaptive schema modes that block access to emotions (e.g., "Detached Protector mode"), heal the patient's early emotional wounds ("Vulnerable Child mode"), and strengthen

the patient's capacity for healthy self-reflection ("Healthy Adult mode") and spontaneous joy and pleasure ("Happy Child mode").

Although SFT is primarily a verbal form of psychotherapy, it incorporates experiential techniques such as imagery rescripting and role-playing to reprocess patients' emotions (Young et al., 2005). Thus, it bears some similarity to Arts therapies, which are also experientially oriented. On the other hand, Arts therapies incorporate a broader range of experiential methods, and are more focused on experiential as opposed to verbal learning, compared to standard SFT. Recently, some Arts therapists have begun to integrate elements of SFT into their work (Griffith, 2003; Muste, Weertman & Claassen, 2009). The schema mode model appears to provide a useful conceptual framework for Arts therapies, given that Arts therapies use a variety of media (e.g., drama, music, dance) to evoke and reprocess emotions (Muste et al., 2009). From an SFT perspective, the methods used by Arts therapists can be conceptualized as "mode evoking techniques" – techniques for evoking emotional states ("schema modes") that may be more difficult to access via conventional therapies. Thus, the integration of the schema mode conceptual model into Arts therapies may enhance the effectiveness of Arts therapy interventions.

The present study investigated the effectiveness of Arts therapies and SFT in evoking emotional states in forensic patients. The study was conducted as part of a three year, multicenter randomized clinical trial of SFT that is currently taking place in 7 secure hospitals in The Netherlands. The larger clinical trial tests the effectiveness of SFT versus usual forensic psychotherapy ("Treatment as Usual"; TAU) in reducing personality symptoms and recidivism risk in forensic patients with Cluster B personality disorders (Bernstein, 2009). At one of the 7 sites for the clinical trial, Forensic Psychiatric Centre 'de Rooyse Wissel,' patients who were randomly assigned to either the SFT or TAU condition were also given Arts therapy as an adjunctive treatment.

We assessed patients' emotional states ("schema modes") based on randomly selected videotapes of therapy sessions made after patients had received between one and one and a half years of therapy – enough time, we hypothesized, to observe differences in patients' emotional states, if indeed, the treatments had the mode-evoking effects that we predicted. Although the sample size was small, we used several methods to increase the statistical power of our experiment: a repeated measures design, in which patients served as their own controls; two independent raters, whose mode ratings were averaged to improve reliability; and rating two videotaped Arts therapy and verbal psychotherapy sessions per patient (i.e., 40 total sessions were rated), to create more reliable and generalizable composite mode scores.

We hypothesized that patients would show more vulnerable emotions ("Vulnerable Child mode"), less emotional detachment ("Detached Protector mode"), and more healthy modes, including states of healthy self-reflection ("Healthy Adult mode") and spontaneous joy and pleasure ("Happy Child mode"), during: (1) Arts therapy sessions compared to verbal therapy sessions, and (2) SFT therapy versus TAU therapy. Moreover, we predicted that patients: (3) would show the most vulnerable and healthy states, and the least emotional detachment, during the sessions where they received SFT-oriented Arts therapies (i.e., a significant SFT by Arts therapy interaction effect).

Method

Setting

This study was conducted at Forensic Psychiatric Centre (FPC) de Rooyse Wissel. The clinic admits male patients under the penal measure 'disposal to be treated on behalf of the state' (TBS). These

patients have committed severe crimes but are legally adjudicated to not be fully accountable for these crimes because of a mental disorder or traits of different mental disorders, such as psychotic disorders or personality disorders. Under Dutch criminal law, patients can be admitted involuntarily to TBS clinics if their crimes are judged to have been caused at least partly by the presence of (a) mental disorder(s). The average length of stay in TBS clinics is 8.5 years (Brand & van Gemmert, 2009), during which time patients engage in a multi-modal treatment regimen including therapy, vocational training, and other services. When TBS-clinic patients are deemed to pose an acceptably low risk of recidivism, they are gradually reintroduced into the community (Hildebrand & de Ruiter, 2004). The most prevalent mental disorders in TBS settings are personality disorders, psychotic disorders, sexual disorders (e.g., paraphilias), and mental retardation (Hildebrand & de Ruiter, 2004).

Sample

The patients in this study were selected from a larger sample of forensic patients taking part in a multi centre randomized clinical trial on the effectiveness of Schema Focused therapy (SFT; Young et al., 2005). The RCT was conducted at 7 forensic psychiatric hospitals in the Netherlands. When recruiting for the study is completed, 100–120 patients will receive 3 years of therapy, either Schema Focused therapy (SFT) or treatment as usual (TAU). The SFT is given by psychotherapists that were given extensive training in this therapy form and had to demonstrate competency based on videotaped interviews of their therapy sessions with practice patients. TAU is the customary treatment provided by a particular clinic, which is typically a form of cognitive-behavioural, psychodynamic or humanistic psychotherapy. The purpose of the study is to determine whether SFT is more effective than TAU in reducing recidivism risk and ameliorating personality disorder symptoms.

Inclusion criteria were the presence of a DSM-IV (American Psychiatric Association, 1994) antisocial, borderline, narcissistic or paranoid personality disorder, male gender, and a TBS sentence. Exclusion criteria were (a) the presence of current psychotic symptoms, (b) schizophrenia or bipolar disorder, (c) current drug or alcohol dependence (but not abuse), (d) low intelligence (i.e. Full Scale IQ < 80), (e) serious neurological impairment (e.g. dementia), (f) an autism spectrum disorder (e.g. autism, Asperger's disorder), and (g) pedophilia (i.e. a fixated sexual preference towards children).

The patients in this study were selected from only one of these hospitals, FPC de Rooyse Wissel, because of a unique feature of the research design at this particular site: they were being treated by both a psychotherapist and an Arts therapist. The Arts therapies delivered in this study were Drama therapy, Art therapy, and Psychomotor Therapy. 19 patients were treated at FPC de Rooyse Wissel in the context of the RCT. We only included those patients who had already received at least 1–1.5 years of therapy, and for whom we were able to arrange to tape sessions in both therapy conditions within the same three-month period. In a number of patients, it was not possible to tape sessions in both the Psychotherapy and Arts therapy condition. Therefore we were able to only include 10 patients in our pilot study. The inclusion criteria of the present pilot study were identical to the criteria of the RCT in which this pilot study is embedded. Patients who were randomly assigned to the SFT condition had two sessions a week of psychotherapy and one session a week of Arts therapy. Patients assigned to the TAU condition had one session a week of psychotherapy and one session per week of Arts therapy. Thus, we were able to compare the patients using an experimental design with two crossed treatment conditions: one between subjects factor (SFT versus TAU) and one within subjects factor (psychotherapy versus Arts therapy).

At time of enrolment in the RCT, the patients had an average age of 40.7 years ($SD = 7.4$). Their stay in the current setting was 38.3 months ($SD = 8.4$). Regarding their conviction of crimes, 30% of patients were convicted for murder or attempted murder, 10% for manslaughter or attempted manslaughter, 20% for sexual crimes, 20% for assault, and 20% for property crimes.

Among the Axis I disorders, substance related disorders were most prevalent (100%; $n = 10$), followed by paraphilias (30%; $n = 3$), mood disorder (20%; $n = 2$), anxiety disorders, (20%, $n = 2$) and attention deficit hyperactivity disorder (10%; $n = 1$). In terms of Axis II disorders 90% ($n = 9$) was diagnosed with antisocial PD, 40% ($n = 4$) with borderline PD, 30% ($n = 3$) with narcissistic PD. There were no patients diagnosed with paranoid PD.

The mean Psychopathy Checklist – Revised (PCL-R; Hare, 1991) score was 23.8, ($SD = 7.4$). Six of the patients had a PCL-R score greater than or equal to 25. Three had a PCL-R score greater than or equal to 30. PCL-R scores of 25 and higher are indicative of psychopathy.

Measures

Diagnostic assessments for Axis I and Axis II disorders were conducted using the *Structured Clinical Interview for DSM-IV Axis I Disorders* (SCID-I; First, Gibbon, Spitzer, Williams, & Benjamin, 1997) and the *Structured Interview for DSM Personality-IV* (SIDP-IV; Pfohl, Blum, & Zimmerman, 1995). They were administered by experienced diagnosticians. In a sub-sample of 5 patients, we examined the inter-rater reliability of the SCID-I diagnoses. Percent agreement between raters was perfect (100% agreement) for all 5 diagnoses assessed, except for substance related disorders and paraphilias, which had 80% agreement. In a sub-sample of 5 patients, the inter-rater reliabilities for the SIDP-IV ratings, were ICCs = .45 for Antisocial PD, .74 for Borderline PD, .94 for Narcissistic PD. There was perfect agreement for Paranoid PD.² Only ICCs for these PDs were calculated as they are the main PDs investigated in the RCT.

Mode Observation Scale (MOS; Bernstein, de Vos, & Van den Broek, 2009a)

The MOS is an observational measure that assesses the presence and intensity of schema modes in clinical situations, such as therapy sessions. The MOS rates 18 modes on a 5 point Likert scale (1 = absent, 2 = mild, 3 = moderate, 4 = high, 5 = extremely intense). We asked raters to score the highest intensity for each mode that they observed during the entire session. The 18 modes that are rated in the MOS include the modes originally proposed by Young et al. (2005), and additional modes proposed by Bernstein et al. (2007) for forensic populations. The modes, which are described in Appendix A, are grouped into the following domains: Child Modes, Avoidant and Surrender Coping Modes, Overcompensating Coping Modes, Internalized Parent Modes, and Healthy Modes. Child modes are emotional states involving the spontaneous expression of painful feelings, such as fear, sadness, and anger, as well as impulsive behaviour. The Avoidant and Surrender Coping modes involve attempts to cope with situations and emotions through avoidant or compliant behaviour. The Overcompensating Coping modes involve attempts to cope with situations and emotions through over-compensatory behaviour. The Internalized Parent modes are emotional states involving excessive self-directed criticism or demands. The Healthy modes are emotional states involving the healthy self-reflection or spontaneous joy and pleasure. For purposes of data analysis, we created mode

² SIDP-IV dimension scores were used, so although no patient met criteria for Paranoid PD, an ICC can be calculated.

Table 1
Reliability for the MOS schema modes.

	Agreement (ICC)			
	Stud.–Stud. (<i>n</i> = 21)		Stud.–Exp. (<i>n</i> = 10)	
	Single measures	Average measures	Single measures	Average measures
Child modes	.48**	.65**	.59*	.74*
Avoidant/Compliant modes	.53**	.69**	.83**	.91**
Parent modes	.69**	.82**	.76**	.86**
Overcompensatory modes	.61**	.76**	.67**	.80**
Healthy modes	.76**	.86**	.66**	.80**

Note. ICC, intra-class coefficient; Stud.–Stud., student–student; Stud.–Exp., students–experts.

* $p < .05$.

** $p < .01$.

domain scores by taking the mean of the individual mode scores within each domain.

The inter-rater reliability of the mode ratings for the two students whose mode scores were used in this study are presented in Table 1. The table shows the inter-rater agreement (intraclass correlations) of the students with the average scores of two expert raters (i.e., experienced SFT therapists) ($N = 10$ sessions), and the students with each other ($N = 21$ sessions). These analyses showed that averaging two student ratings was superior to using the ratings from just one student. For the agreement between the two student ratings, the average measures ICCs for the mode domain scores ranged from .65 to .86 (median = .76). For the agreement between the student ratings and the expert ratings, the average measures ICCs for the mode domain scores ranged from .74 to .91 (median = .80).

Therapy Integrity Scale (TIS; Bernstein, de Vos, & Van den Broek, 2009b).

The TIS is an observational measure that we developed to assess the integrity of SFT and Arts therapies. Therapy integrity concerns the extent to which therapists adhere to the interventions of a particular therapy. The TIS contains 109 items of which 55 items relate to psychotherapy and 54 to the Arts therapies. Examples of Arts therapy items are: 'The therapist uses musical instruments during the session' and 'The therapist asks the patient to express his feelings in an artistic manner, for example by creating a painting'. The TIS measures 14 overall techniques that are rated on a 3-point Likert scale (1 = absent to 3 = strongly present). Ten techniques relate to SFT, and 4 to Arts therapies. The Arts therapies techniques referred to drama therapy, music therapy, art therapy, and psychomotor therapy. We asked raters to score the therapeutic techniques that they observed in two therapy sessions per patient ($N = 10$). For the purpose of our analyses, we averaged the ratings of the two sessions, and created a score for all of the SFT intervention items (SFT total score), and a score for all of the Arts therapies intervention items (Arts total score). Internal consistency reliability for the SFT total score and Arts total score, aggregated across student ratings, was excellent with alphas = .98 and .91 respectively. The inter-rater agreement (ICC) between student ratings for the SFT total score was .92 and .75 for the Arts total score.

Procedure

In all four of the treatment conditions, four consecutive therapy sessions were videotaped. All the Psychotherapists and Arts therapists in both the SFT and TAU conditions had more than 5 years experience in treating patients with personality disorders.

All of the Psychotherapists and Arts therapists in the SFT condition had received similar training in SFT, consisting of following general workshops in SFT and a series of specialized workshops in SFT for forensic patients. They were all under supervision of an experienced Schema Focused Clinician who is a certified supervisor

in the International Society for Schema Therapy (D.P.B.). All of the therapists in the SFT condition had at least 3 years of experience in providing SFT to forensic patients before starting this study.

The distribution of the Arts therapies across the two treatment conditions was as follows. Patients in the TAU condition had received either psychomotor therapy or drama therapy, while SFT participants were offered either psychomotor therapy, drama therapy or art therapy.

All patients were 12–18 months in therapy. The average time in treatment for patients in the SFT condition was 14.1 months ($SD = 2.4$), and 13.8 months ($SD = 3.5$) for patients in the TAU condition. There was no significant difference between time in treatment in the two conditions ($t = .63$, $df = 8$ $p = .54$). The tapes of Psychotherapy and Arts therapy sessions were made during a three-month period. We randomly selected 2 tapes per patient per condition (Psychotherapy and Arts therapy) to be rated by the MOS. Students from Maastricht University were extensively trained to rate the MOS. The students then independently rated 10 tapes that were also rated by the experienced SFT therapists. Their ratings were tested for inter-rater reliability. The ratings were made blind to any information about the patients, including patients' identity, criminal or clinical history, diagnosis, or treatment condition. The students watched videotapes of whole therapy sessions, which usually lasted for 45–50 min, and rated them with the MOS and the TIS.

Data analysis

The inter-rater reliability was determined using the intra-class correlation coefficient (ICC). Because multiple raters had assessed each tape, we made use of the two-way random effects model (ICC; Shrout & Fleiss, 1979). Given the pilot character of this study in a small sample, and the fact that assumptions of normality of distribution were violated, we chose non-parametric statistics to test the effects of the different treatment conditions. Mann–Whitney U tests were used to compare SFT versus TAU, and to compare the four treatment conditions among each other. Wilcoxon signed-rank tests were applied to compare Psychotherapy and Arts therapy. We also calculated the effect size with Cohen's d . When $\bar{E}S = (\bar{X}_{G1} - \bar{X}_{G2})/s_{pooled}$ calculating d for the comparisons SFT versus TAU, and all four treatment conditions among each other, we used the pooled standard deviation with the formula.

All data were analyzed with the Statistical Package for the Social Sciences (SPSS, 2005), version 13.0.

Results

Preliminary analyses

To determine whether the patients that were randomly assigned to the SFT and TAU conditions were different regarding their

Table 2
Descriptive information for MOS schema mode domain scores per therapy condition.

	Psychotherapy TAU ^a		Arts therapy TAU ^b		Psychotherapy SFT ^c		Arts therapy SFT ^d	
	M	Std.	M	Std.	M	Std.	M	Std.
Child modes	1.20	.17	1.56	.26	2.42	.92	2.28	.84
Avoidant/Compliant modes	3.19	.83	1.83	.20	2.75	.97	2.62	1.18
Parent modes	1.16	.31	1.03	.06	1.69	1.35	1.25	.39
Overcompensatory modes	1.49	.56	1.04	.08	1.33	.60	1.45	.59
Healthy modes	2.44	2.00	4.42	1.73	2.38	1.15	3.13	1.51

^a N=2.

^b N=2.

^c N=3.

^d N=3.

baseline (i.e., pre-therapy) characteristics, we compared the two groups on the following baseline variables using independent samples *t*-tests on: age, time in treatment, DSM-IV personality disorder symptoms (by SIDP-IV interview), and PCL-R scores. At baseline, there were no significant differences in the aforementioned characteristics. Thus, the randomization procedure created groups that were equivalent at baseline on these variables.

In addition, we compared the patients in the SFT and TAU conditions with regard to schema modes early in treatment, using MOS scores rated from videotapes of patients' 3 month psychotherapy sessions. No equivalent tapes had been made from patients' Arts therapy sessions early in therapy. Three-month psychotherapy session tapes were available for 8 of the 10 patients (SFT, *N*=5, TAU, *N*=3). There were no significant differences in patients' 3-month mode domain ratings for Child Modes Avoidant/Compliant Modes Parent Modes, Over compensatory Modes or Healthy Modes Thus, at 3 months, the SFT and TAU patients were equivalent with respect to schema mode domains that were observed during psychotherapy sessions.

Therapy Integrity

We used the TIS to determine the therapy integrity of patients who received SFT versus TAU, and Arts therapy versus psychotherapy. With regard to therapy integrity, we created a SFT total score, representing the sum of all SFT intervention items. The mean SFT total score was *M* = 16.9 (*SD* = 4.6) for TAU Psychotherapy, *M* = 18.9 (*SD* = 3.6) for SFT Psychotherapy, *M* = 11.5 (*SD* = .6) for TAU Arts therapy, and *M* = 17.1 (*SD* = .9) for SFT Arts therapy. We conducted non-parametric Mann–Whitney *U* and Wilcoxon signed-rank tests to test whether the differences in the TIS SFT total scores were significant across therapy conditions. There was a main significant effect for SFT total score for the Psychotherapy versus Arts therapy distinction (*T* = 5.0, *p* = .02). There was also a significant main effect for the SFT versus TAU condition (*U* = 2.0, *p* = .03). There was no significant interaction between the Psychotherapy versus Arts therapy distinction, and the SFT versus TAU distinction (*U* = 7.0, *p* = .29). Thus, there was greater adherence to SFT techniques in the SFT sessions compared to the TAU sessions, and in the Psychotherapy sessions compared to the Arts therapy sessions.

Table 3
Main and interaction effects of the MOS schema mode domain scores.

Schema modes	SFT vs TAU		Psychotherapy (PT) vs Arts therapy (AT)		SFT/TAU vs PT/AT	
	Z	<i>p</i>	Wilcoxon (<i>z</i>)	<i>p</i>	Z	<i>p</i>
Child modes	−1.71	.09	−.56	.58	−1.07	.28
Avoidant/Compliant modes	−.21	.83	−.77	.44	−1.93	.05
Parent modes	.00	1.00	−1.07	.29	−.53	.60
Overcompensatory modes	−.43	.67	−.17	.87	−2.41	.02
Healthy modes	−.54	.59	−2.09	.04	−1.29	.20

Note. PT, Psychotherapy (e.g. SFT and TAU). AT, Arts therapy (e.g. SFT and TAU). Z, Mann–Whitney *U* test *z*-score.

With respect to Arts therapy sessions, tapes of 7 out of 10 patients showed the use of experiential techniques specific to one of the Arts therapy disciplines (i.e., Drama, Psychomotor, or Art Therapy). The tapes of 3 patients did not show any Arts therapy experiential techniques. Instead, they consisted of verbal therapy elements only, where the therapist and patient discussed problems that the patient was experiencing. With regard to these 3 tapes, 1 belonged to the SFT Arts therapy condition (drama therapy), and 2 tapes to the TAU Arts therapy condition (psychomotor therapy). In contrast, none of the tapes of the Psychotherapy condition sessions were rated as showing experiential techniques specific to an Arts therapy discipline. Fisher's Exact Test showed a significant difference between the Psychotherapy and Arts therapy conditions for the presence of Arts therapy interventions (Fisher's Exact Test = .002, 2-tailed).

Comparisons of schema modes at 12–18 months in therapy

The schema mode mean scores across the 4 therapy conditions at 12–18 months into therapy are given in Table 2. To test whether the differences in mean schema mode scores were significant across therapy conditions, we conducted non-parametric Mann–Whitney *U* and Wilcoxon signed-rank tests, with alpha set at two-tailed *p* < .05. Results are presented in Table 3.

Comparing the Psychotherapy versus Arts therapy distinction, there was only one significant main effect, the Healthy mode domain (*T* = 7.00, *p* < .05). Patients showed more Healthy modes in the Arts therapy condition than in the psychotherapy condition. The effect sizes were *d* = .07 for the Child domain scores, *d* = −.33 for the Avoidant/Compliant domain scores, *d* = −.47 for the Parent domain scores, *d* = −.21 for the Overcompensatory domain scores, and *d* = .80 for the Healthy domain scores.

Second, with regard to the SFT versus TAU condition, no significant main effects were found. However, there was a trend towards significance for Child modes (*p* = .09), with a very large effect size of *d* = 1.55. The other effect sizes were *d* = .39 for the Avoidant/Compliant domain scores, *d* = .59 for the Parent domain scores, *d* = .26 for the Overcompensatory domain scores, and *d* = −.59 for the Healthy domain scores.

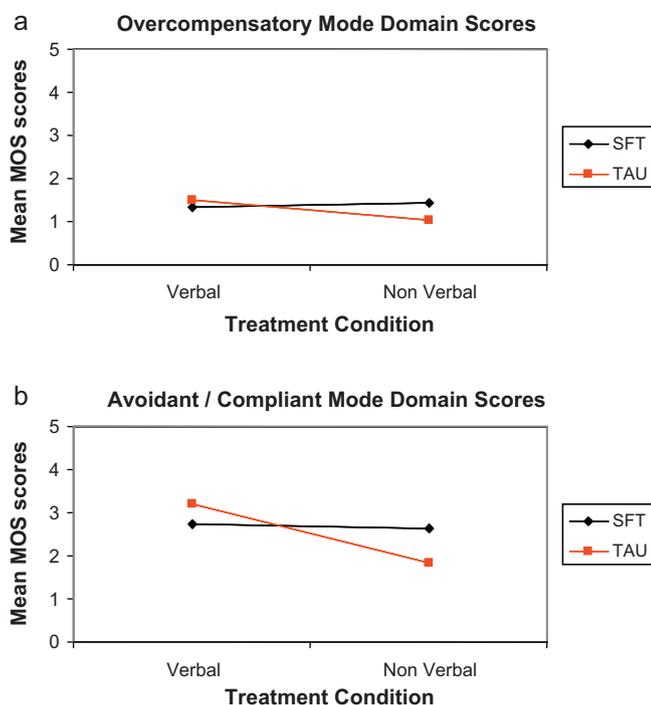


Fig. 1. (a, b) Significant interactions effects for the Overcompensatory mode domain score and Avoidant/Compliant mode domain scores.

Finally, a significant interaction was found for the Overcompensator mode domain scores (Fig. 1a) ($U = 1.00, p < .05$). The TAU patients showed slightly more Overcompensatory modes in the Psychotherapy sessions, while the SFT patients showed slightly more Overcompensatory modes in the Arts therapy sessions. The interaction effect for the Avoidant/Compliant mode domain scores almost reached significance (Fig. 1 b) ($U = 3.00, p = .054$). For the Avoidant/Compliant mode domain scores, there was little difference within SFT patients between the Arts therapy and psychotherapy conditions. However, in the TAU patients, there were slightly more intense Avoidant/Compliant modes in the verbal psychotherapy condition than in the Arts therapy condition (Table 3). Interaction domains for the remaining mode domains scores were non significant. The effect sizes were $d = .81$ for the Child domain scores, $d = -1.77$ for the Avoidant/Compliant domain scores, $d = .36$ for the Parent domain scores, $d = -1.67$ for the Overcompensatory domain scores, and $d = .67$ for the Healthy domain scores.

Discussion

The results of this pilot study partly confirmed our main hypothesis regarding Arts therapies. Arts therapies evoked more healthy self-reflection, and healthy states in general (i.e., a domain score that combined healthy self-reflection and spontaneous joy and pleasure), compared to verbal forms of psychotherapy. To our knowledge, these findings are the first empirical confirmation of a central assumption of Arts therapies, namely that they are more effective than conventional therapies at evoking emotional states, including negative and positive emotions. These findings are also noteworthy because they occurred in a patient population – forensic patients with personality disorders – that is often characterized by emotional withdrawal and hostility. Thus, they support the clinical impression that Arts therapies are effective at accessing emotions even in “difficult-to-reach” patient populations, such as forensic patients (Smeijsters & Cleven, 2006). These results may be explained by the focus on experiential work in Arts therapies.

Although there are verbal elements in Arts therapies, especially at the beginning and end of sessions, when exercises are introduced and discussed, respectively, the main focus is on doing and experiencing in the “present moment” (Stern, 2004). In experience-based exercises, there is less time to think, plan, and act deliberately, than in verbal forms of psychotherapy. The aim of Arts therapy interventions is to trigger spontaneous thoughts, feelings, and behaviour in interactions with others, via the use of certain media and exercises.

Of course, in this study, we did not directly test the hypothesis that experiential techniques per se accounted for the success of Art therapies in evoking emotional states. These effects could be attributable to other aspects of the Arts therapies that were delivered, or to the personal qualities of the Arts therapists themselves, as the Arts therapies and verbal therapies were provided by different therapists. Thus, although we hypothesize that experiential techniques are the mechanism through which Arts therapists evoke emotional states, this hypothesis remains untested. In our latest research, we are using an experimental protocol to determine whether specific schema modes are evoked when Arts therapists perform different experiential interventions. This directly tests the hypothesis that experiential techniques are the mechanism through which Arts therapists evoke changes in patients' emotional states.

The results of our current study partially confirmed our hypothesis about SFT. SFT evoked more vulnerable emotional states than TAU, and more child modes in general, a domain that included vulnerable, lonely, impulsive, and angry states. However, our hypothesis, that SFT patients would show less emotional detachment and more healthy modes than in the TAU condition, was not confirmed. One of the central aims of SFT is to reach the patient's vulnerable side, so that the therapist can provide for some of the patient's unmet early developmental needs (e.g., the need for secure attachment) within appropriate limits (“limited reparenting”) (Rafaeli, Bernstein, & Young, 2010; Young et al., 2005). Like Arts therapies, SFT uses experiential methods to bypass maladaptive coping modes, so that the vulnerable side of the patient can be accessed. To our knowledge, this study is the first empirical demonstration that SFT is more effective in accessing patients' vulnerable emotions than conventional therapies. The use of experiential techniques, along with SFT's focus on patients' early needs, may explain SFT's success in accessing vulnerable emotional states. In comparison with both SFT and Arts therapies, patients showed the least vulnerability and the most emotional detachment in conventional forms of verbal psychotherapy (i.e., the TAU verbal psychotherapy condition). In working with forensic patients who are typically quite emotionally detached, standard verbal therapy methods may not be sufficient to access more vulnerable emotions (Bergman, 2000).

We were not able to confirm our hypothesis that SFT-oriented Arts therapies – that is, Arts therapies that integrate various SFT elements, such as the schema mode conceptual model – would be the most effective of the 4 treatment conditions at evoking emotional states. In most respects, SFT-oriented Arts therapies were as effective as the Arts therapies delivered in the TAU condition, and also as standard, verbal SFT. On the other hand, we did find a few significant interactions effects. These indicated that the TAU Arts therapy condition was more effective than the TAU verbal therapy condition at reducing emotional detachment, avoidant and compliant modes in general, and over compensatory modes. With respect to these modes, TAU Arts therapy was the most effective of the 4 treatment conditions delivered. While our findings suggest that SFT-oriented Arts therapies are generally effective at evoking modes, they also suggest that the integration of SFT with Arts therapies might benefit from further development and testing.

This pilot study has several limitations. First, only 10 patients participated, 6 in the SFT condition and 4 in the TAU condition. Thus,

any generalizations about the effectiveness of Arts therapies or SFT at evoking schema modes must be considered tentative until these findings can be confirmed in a larger sample. On the other hand, we rated schema modes from 40 therapy sessions (4 sessions per patient), giving us a larger sample of observations on which to base our conclusions. Second, the within-subjects nature of our experimental design meant that patients in the TAU and SFT conditions received both verbal therapy and Arts therapy. It is possible that synergistic effects occurred from the combination of verbal and Arts therapies. We do not know whether the same findings would have been obtained had we used a purely between-subjects design, where patients were assigned to either Arts therapy or verbal therapy, but not to both conditions. Third, although our use of multiple therapists in each condition was a methodological strength, our design would have been improved by the inclusion of larger number of therapists. Fourth, different Arts therapies were involved in the SFT and TAU conditions. The Arts therapies in the TAU condition consisted of psychomotor therapy and drama therapy, while the SFT condition consisted of psychomotor therapy, drama therapy and art therapy. Another drawback is the number of overall TIS techniques that referred to the Arts therapies. Although the number of items on the TIS that related to psychotherapy and Arts therapy was virtually equal (e.g. 55 items refer to psychotherapy, 54 to Arts therapy), more overall techniques referred to psychotherapy. Of the total of 14 overall techniques, only a total of 4 were for the different kinds of Arts therapies. These differences might have affected the results we obtained. Fifth, only 7 of the 10 Arts therapy patients received Arts therapy experiential interventions during the 2 sessions that we randomly chose to be rated. However, they undoubtedly received experiential interventions in some of their other Arts therapy sessions, as these types of interventions are the major focus of the therapies that they received. Sixth, we used a newly developed instrument, the MOS, to assess schema modes. Although the reliability we obtained with the MOS was acceptable to good for most of the modes we assessed, this instrument requires further validation. Seventh, we conducted multiple statistical tests, which carry a risk for spurious significance (experiment-wise Type 1 error). We did not control for multiple comparisons because the dependent variables we tested (i.e., the schema modes) were independent. Moreover, because this was a pilot study, we did not want to increase the risk of making type II errors (i.e., missing important new findings). The fact that nearly all of our findings were consistent with our hypotheses makes it less likely that they occurred just by chance. Eighth, the Arts therapies share certain elements, but drama-, music-, art- and psychomotor are also very different, for example with regard to their goals and range of interventions. However, in our study, we did not differentiate between the effects of the different Arts therapies. Finally, we do not know what patients' mode scores were at the beginning stage of the Arts therapies, because these early sessions were not videotaped. However, patients in the SFT versus TAU conditions did not show differences in schema modes in their 3-month verbal psychotherapy sessions, nor did they differ on their baseline characteristics. Thus, the randomization procedure appears to have resulted in equivalent groups at the beginning of therapy. This increases our confidence that the effects we obtained were the result of the treatments the patients received, and not due to some pre-existing differences between the groups. Of course, it would be desirable to replicate this study in a larger sample, using more patients and therapists in each treatment condition, and rating schema modes in sessions occurring in early, middle, and late therapy.

These findings support the effectiveness of Arts therapies and SFT for evoking emotional states in forensic patients with Cluster B personality disorders. Although these findings require replication in a larger sample, they suggest that these therapy forms have potential for treating patient populations that are difficult to reach

emotionally. Of course, whether these approaches will ultimately lead to improved patient outcomes remains an open question. Future studies should investigate the mechanisms underlying these therapy forms, and test their effectiveness with regard to treatment outcomes.

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Appendix A. Schema modes for forensic settings (MOS, Bernstein et al., 2009a)

Child modes	Involve feeling, thinking, and acting in a "child-like" manner
Avoidant/Compliant modes	Involve attempts to protect the self from pain through avoidant or compliant forms of coping
Parent modes	Involve internalized dysfunctional parent "voices"
Overcompensatory modes	Involve extreme attempts to overcompensate for feelings of shame, loneliness, or vulnerability
Healthy modes	Involve healthy forms of emotional expression and adaptation

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