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Exploring Termination Setback in a Psychodynamic Therapy for Panic Disorder

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Some of the data has been published before in Svensson et al. (2021) and in Svensson et al. (2019). But none of the analyzes in the present study has been previously reported.

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The data analytic codes are available upon request to the corresponding author. Access to the dataset is governed by rules set forth by Lund University and Swedish data protection laws. Requests for access should be directed to the corresponding author or Martin Svensson (martin.svensson@psy.lu.se).

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Abstract

Objective: Termination in psychodynamic therapy (PDT) is a potentially conflictual and turbulent phase for patients, with a risk for increases in symptoms. However, few studies of PDT have assessed symptoms frequently enough during treatment to determine whether such setbacks are in fact common in PDT.

Methods: In a doubly randomized clinical preference trial, 217 adults (female = 163; M age = 34.8 (12.6)) with panic disorder with or without agoraphobia were treated with panic-focused psychodynamic psychotherapy (PFPP) or panic control treatment (PCT), a form of cognitive behavioral therapy. Participants completed the Panic Disorder Severity Scale-Self Report (PDSS-SR) weekly during treatment (weeks 1-12), and 6, 12 and 24 months after treatment. Using piecewise latent growth curve modeling we tested the trajectories of change focusing on the termination phase in PFPP.

Results: Week-to-week improvement on the PDSS-SR stopped (a termination setback [TS]) in PFPP during weeks 10-12, whereas PCT participants continued to improve. Larger symptom reductions up to week 10 in PFPP predicted a more severe TS. Less avoidant attachment and less severe interpersonal problems also predicted more severe TS. The TSs tended to last, as evidenced by inferior outcomes, up to the 12-month follow-up.

Conclusions: This study provides evidence of a TS in PDT. Resurgence of symptoms as termination approached was more common in PFPP than in PCT. Studies involving weekly assessment of primary and comorbid symptoms, as well as qualitative analyses of the patient experiences of the therapeutic process during termination, in different forms of PDT, are warranted.

Key Words: Termination setback, Resurgence of symptoms, Psychodynamic therapy, Cognitive behavioural therapy, Panic disorder

Public Health Significance Statement:

This study found a resurgence of panic symptoms in the termination phase of a panic focused psychodynamic therapy. It is not clear whether such termination setbacks are a phenomenon that is common across brief, disorder-focused psychodynamic therapies, and whether these can be prevented by working through separation issues more thoroughly or differently during treatment.

Exploring Termination Setback in a Psychodynamic Therapy for Panic Disorder

The termination phase in psychotherapy is often accompanied by feelings of satisfaction, gratitude, determination, and positive expectations (Bhatia & Gelso, 2017; Marx & Gelso, 1987; Quintana, 1993). However, for some patients, termination of a psychological treatment, particularly if therapist-initiated, can be perceived as a stressful event or even a trauma, signifying real loss and can be accompanied by marked increases in symptoms among other reactions (Bostic et al., 1996). The occurrence of symptomatic increases during the termination phase of psychotherapy is recognized as being of both theoretical and practical importance. However, few empirical investigations have been carried out to assess their occurrence or the mechanisms that may help to explain them. This study aims to help fill this gap in the literature.

Of the different therapeutic schools or approaches, the occurrence and potential reasons for negative responses to termination have received the most attention in the psychodynamic therapy (PDT) literature (e.g., Busch et al., 2012; Joyce et al., 2007; Marx & Gelso, 1987; Nof et al., 2017; Safran & Muran, 2000; Strupp & Binder, 1984; Summers & Barber, 2010). As termination approaches, Strupp and Binder (1984) have suggested that patients “...unwittingly employ the gamut of techniques for averting painful separation experiences. For example, they may bring up ‘new’ problems that ‘urgently’ require solutions; [and] there may be a recurrence of the symptoms and problems that brought them to therapy ...” (p. 261). Joyce et al. (2007) imply the possibility of the emergence of what we shall call a ‘termination setback’ (TS): “For the patient, the termination of psychotherapy can stimulate a resurgence of the issues and conflicts that were addressed in the treatment” (p. 4). Likewise, in an entry on the website for the Intensive Short-Term Dynamic Psychotherapy Institute, Jon Frederickson suggests that “we should be on the watch for any return of symptoms as a defense against loss and complex feelings toward the therapist” in therapies with resistant and

fragile patients (ISTDP Institute, 2016, May 10). When treatment of panic disorder with or without agoraphobia (PD/A), specifically, is concerned, Busch et al. (2012) point to the same vicissitudes in the termination phase in the brief Panic Focused Psychodynamic Psychotherapy (PFPP) approach: “Termination permits reexperiencing of conflicts directly with the therapist...[with p]ossible temporary recrudescence of symptoms as feelings are experienced in therapy” (p. 60). Besides recommending continued working through of the core conflicts related to panic and separation, the PFPP-manual does not specifically prescribe how to handle such recrudescence. The effect of adherence or non-adherence hence becomes of interest.

It has been generally assumed that longer-term forms of PDT would have the greater risk of a TS, presumably because the longer time tends to generate a stronger patient-therapist attachment (Joyce et al., 2007). However, Lemma et al. (2011a) have argued that patients often develop intense feelings toward their therapist in short-term PDT, and as termination is preset and definitive, the patient may have intense feelings of separation that can contribute to strong negative reactions as termination approaches.

Whether the PDT is longer-term or brief, the occurrence of a TS may negatively impact the process of continued recovery after termination. According to general psychodynamic theory, a mourning phase ensues after successful termination, which is suggested to result in the patient taking over important positive functions of the therapist. In the best cases, this may spur the patient to continue on her/his own in a kind of self-therapy in a way analogous to self-analysis after psychoanalysis (Falkenström et al., 2007; Lemma et al., 2011a), an internal working-through process that continues after termination leading to recovery and further improvement (Milrod et al., 1997). On the other hand, if this mourning process is halted due to strong and/or inflexible defenses against feelings about the separation from the therapist, as might be involved in a TS, the post-treatment process may not be as successful.

The attention to the termination phase in PDT follows from the emphasis on the therapist-patient relationship as a therapeutic motor wherein the patient's feelings about the therapist and their relation are explored and clarified. Following from this emphasis, it is reasonable to consider that patients who have experienced a traumatic loss, or have difficulties more generally with separation situations, attachments and interpersonal relationships, may be at increased risk of experiencing a TS in PDT. Such experiences and difficulties are seen to play an important role in psychodynamic conceptualizations of panic disorder with or without agoraphobia (PD/A) (Milrod & Shear, 1991; Milrod et al., 1997; Shear, 1996). In partial support of these models, there is now a large body of evidence that finds an increased risk of PD/A among individuals who have suffered from childhood separation anxiety disorder (Kossowsky et al., 2013) and/or experienced interpersonal abuse or a significant loss at some time prior to the onset of PD/A (Klauke et al., 2010). Because few trials of PDT for PD/A have been carried out, the relationship between these interpersonal variables and outcomes remains unclear, and the relationship of attachment and interpersonal difficulties to the occurrence of TSs in PDT or any form of therapy has not been examined.

As described above, the psychodynamic literature and clinicians have identified the possibility of TSs occurring in PDT, particularly where the patient has developed an attachment to the therapist, has difficulty coping with separation, and the therapists has not dealt effectively with termination issues. To the best of our knowledge these ideas have never been put to strict empirical test. We have found but one small study assessing symptoms at every week during PDT reporting symptomatic setback during the final phase of therapy (Lemma et al., 2011b). For measures of depression as well as anxiety the authors reported "a rapid initial decline but also a slight tendency for increase in symptom scores in the last few sessions of the treatment" (p. 46). In both cases this was significant ($p < .001$)

In a recent doubly randomized clinical preference trial (Svensson et al., 2021), participants receiving PFPP for PD/A had significantly poorer outcomes ($SMD = -0.64$) at post-treatment compared to those receiving Panic Control Treatment (PCT). Nevertheless, during follow-up this result was reversed; participants in PFPP continued to improve significantly ($SMD = 0.62$) so that at the final 24-month follow-up outcomes in PFPP were equivalent to those of PCT. Based on the PFPP manual's focus on separation and loss (Busch et al., 2012), the idea of a TS related to the separation from the therapist in PFPP came up in discussions within our group. Therefore, we wanted to explore whether a symptomatic setback close to termination (i.e., a TS) had indeed occurred specifically in the PFPP group and might explain its inferior outcome at post-treatment. In addition, if such a TS was found, we wanted to explore whether participant factors such as attachment style, interpersonal problems, the presence of comorbid personality disorders, and therapeutic alliance were associated with the occurrence of a TS in the PFPP condition. We also wanted to explore whether therapist adherence or non-adherence to the PFPP manual during the termination phase of this treatment was related to the occurrence of a TS. Finally, as it was possible that the apparent superiority of PFPP in the follow-up period reflected the recovery of patients having had a temporary TS during the treatment phase of the trial, we examined the relationship between the TS magnitude and outcomes from termination to follow-up until 24 months after treatment termination.

Method

Study Design and Participants

The randomized clinical trial from which the present study was drawn (Psychotherapy Outcome and Self-Selection Effects - Project POSE) was preregistered with ClinicalTrials.gov (NCT01606592) and approved by the Regional Ethical Review Board in Lund, Sweden (DNR-2010/88). A comprehensive account of the design of Project POSE is

provided in the published trial protocol (Sandell et al., 2015) and primary outcome article (Svensson et al., 2021). The project was a multicenter randomized clinical trial with PFPP (Milrod et al., 1997) and PCT (Craske & Barlow, 2007) for patients diagnosed with PD/A, designed to test the comparative effects of two methods of treatment assignment. Participants were randomly allocated to Choice of treatment, Random assignment to treatment, or to a wait-list Control condition. Participants allocated to Control were re-randomized to either the Choice or Random conditions after three months. In the present study, the trajectory of weekly self-reported panic symptoms were estimated separately for PFPP and PCT participants allocated to both the Choice and Random conditions (pooled). The weekly trajectory of panic symptoms in the PCT group was estimated for reasons of statistical comparison. The present study describes how sample size was determined, all data exclusions (if any), all manipulations, and all study measures.

The trial was carried out in 4 regions in Sweden at outpatient psychiatry, primary health care, and youth guidance clinics. Major inclusion criteria were: 1) aged 18 to 70 years; 2) current primary DSM-IV diagnosis of PD/A; 3) if medicated, staying on a stable dose for at least one month prior to trial inclusion; 4) willing to keep medication dosage stable throughout the trial treatment phase (Sandell et al., 2015). Trial information was available via a Project POSE website, advertisements, and at the clinics. Interested individuals could self-refer on the project website or be referred by their local mental health care provider. All participants gave written informed consent to participate. For baseline characteristics of the sample see Table 1.

Randomization

The allocation ratio to the Choice, Random and Control conditions was 4:4:1. At the end of the three-month Control condition, the re-allocation ratio to the Choice and Random conditions was 1:1. For the random condition, a stratification procedure was used so that equal numbers of participants were allocated to PFPP and PCT at each clinic. Randomization

was done using the software Research Randomizer (Urbaniak & Plous, 2010). In the choice condition, participants were provided separate, 500-word written descriptions of the two treatments (PCT and PFPP) before indicating their treatment preference.

Interventions

The therapies in the study are both manualized, time limited, and of equal length (12 weeks) and duration (around 1000 minutes), with different session frequency and length of sessions as is described below.

PFPP (Milrod et al., 1997) is a manualized, individual psychodynamic treatment for adults with PD/A. In this trial, PFPP comprised 19-24 sessions completed in 12 weeks, with two sessions per week. Individual sessions were 45 minutes in length (total treatment duration = 855-1080 minutes). PFPP proceeds in three phases. Phase I is focused on identifying the content and meaning of panic episodes, and any links between these episodes and experiences with caregivers, difficulty expressing/managing feelings/fantasies, and any prior experiences of trauma/loss. Phase II addresses difficulties managing anger, abandonment fears, and separation situations, with links to panic episodes, through discussion of the patient's feelings/fantasies about past/present relationships and in the transference relationship with the therapist. Phase III is focused on increasing emotional expression and assertiveness around conflicts that arise in the context of panic episodes and treatment termination.

PCT (Craske & Barlow, 2007) is a manualized, individual cognitive-behavioral treatment for adults with PD/A. In this trial, PCT comprised 12-14 sessions, completed in 12 weeks. The first two weeks including two sessions and subsequent weeks one session each. Sessions were 60 minutes in length and extended to 90-120 minutes for sessions involving therapist-led exposure (total treatment duration = 780-1140 minutes). PCT involves psychoeducation about the nature of PD and agoraphobia and training in self-monitoring of symptoms (sessions 1-2); building a hierarchy of agoraphobic situations (session 3); cognitive restructuring techniques

and breathing retraining (sessions 4-6); in vivo and interoceptive exposure (sessions 6-13); and relapse prevention: consolidating treatment gains, how to deal with lapses and planning on how to reach long term goals (session 14). Between-session homework assignments involves symptom self-monitoring and, after the first therapist-led exposure, planned patient-led exposures.

Therapists

Treatment was delivered by 45 therapists: PCT = 20 (12 women, 8 men); PFPP = 25 (17 women, 8 men). Their basic professional training was: clinical psychology (n = 22; PCT = 10, PFPP = 12), social work (n = 16; PCT = 4; PFPP = 12), nursing (n = 2; PCT = 2), and other (social scientist, psychiatric healthcare) professional training (n = 5; PCT = 4, PFPP = 1). All therapists had completed a two-year, state-regulated/approved, post-graduate training course in either CBT or PDT, with 18 of the 45 being further trained (three years) and licensed as psychotherapists by the National Board of Health and Welfare (PCT = 4, PFPP = 14).

Therapists had no affiliation to the authors or their employer. Compared to PCT therapists, the PFPP therapists had longer experience providing psychotherapy but did not differ in the average number of PD/A patients treated before study participation. Before entering the trial, all therapists underwent group-based trainings in either PCT or PFPP, and then completed a supervised treatment case using the per-protocol manual with an adequate level of adherence.

Treatment Adherence

Two groups of graduate clinical psychology students (PFPP = 3, PCT = 5), trained to rate treatment adherence, rated one therapy session drawn from the beginning, middle and termination phase of treatment for every participant. PFPP adherence was rated using a session non-specific scale approved by Professor Milrod, including seven items, each rated on a 7-point Likert scale. PCT adherence was evaluated using a session-specific rating scale approved by Professor Craske, including 3-9 items (varying between sessions), each rated on

a 7-point Likert scale. In both groups adherence was satisfactory, as rated with good-enough inter-rater reliability (Svensson et al., 2021).

Measures

Diagnostic status (PD/A and comorbidity) at intake was assessed via the *Structured Clinical Interviews for DSM-IV* (SCID-I and SCID-II; First et al., 1996; First et al., 1997). Inter-rater reliability for a PD/A diagnosis between the two trial assessors was computed as Kappa coefficient = 1.00 for agreement, based on ten videotaped SCID interviews.

The *Panic Disorder Severity Scale Self-Report version* (PDSS-SR; Houck et al., 2002) is a seven-item measure of the severity of the core features of PD/A over the past week. Items are rated on a five-point scale (0 to 4) with higher scores indicating greater severity. It contains the same seven items and scoring system as the clinician-rated Panic Disorder Severity Scale (PDSS; Shear et al., 1997), and both instruments possess excellent psychometric properties (Svensson et al., 2019). The total score is the sum across items. The PDSS-SR was administered once each week during treatment (weeks 1-12), before start of the first session each week (if more than one), and then at 6, 12, and 24 months after termination (weeks 38, 64, and 116). The clinician-rated PDSS was administered at intake, termination, and each follow-up but not weekly during treatment. In the present study, internal consistency for the PDSS-SR was as follows: week 1 = .80; week 4 = .89; and week 12 = .93. The correlation between the PDSS-SR and PDSS across all common assessments was $r = .86$.

The *Experiences in Close Relationships-Revised* (ECR-R; Fraley et al., 2000) is a 36-item questionnaire about adult romantic attachment style, with two subscales measuring attachment anxiety and avoidance in intimate relations. Higher scores on the two subscales indicate higher levels of Anxious and Avoidant attachment, respectively. Internal consistency in this study was .94 for Anxiety and .91 for Avoidance.

The *Inventory of Interpersonal Problems* (IIP; Horowitz et al., 2000) is a 64-item self-rating scale identifying a person's most salient interpersonal difficulties through eight subscales (Domineering, Vindictive, Cold, Socially avoidant, Non-assertive, Exploitable, Overly nurturant, and Intrusive). In this study the total scale was used, with internal consistency .95. Higher scores indicate more interpersonal distress.

The *Working Alliance Inventory – Short Revised* (WAI-SR; Hatcher & Gillaspay, 2006) is a 12-item measure of three components of therapeutic alliance (task, goal, and bond). The WAI-SR was assessed by the patients at week 2, 6, and 12. The total scale was used, with internal consistency for week 2 = .91; week 6 = .93; and for week 12 = .96.

Sample Size

The sample size was determined by power analysis for the primary aim of the parent study (Svensson et al., 2021) and not for the exploratory analyses reported in this paper. Power calculations were performed using Power IN Two-level designs (PINT v. 2.12, September 2007; Bosker et al., 2003) for change scores on the PDSS. Allowing for attrition, 221 participants were recruited.

Statistical Analysis

All analyses were performed using all available data. No data points were excluded. The occurrence of a TS was assessed using Latent Growth Curve Modeling (LGCM; e.g., Bollen & Curran, 2005), a form of Structural Equation Modeling (SEM). LGCM is similar to Longitudinal Multilevel Modeling (MLM; e.g., Singer & Willett, 2003), and under similar model setup and constraints the two should yield the same estimates. However, LGCM has some advantages; first, assumptions of equal residual variances over time and across groups are easier to relax than in MLM, and second, model fit indices developed in SEM can be used to evaluate how well a model fits to data. We used commonly accepted criteria for model fit (e.g., Kline, 2016): For the Root Mean Square Error of Approximation (RMSEA) < .05

indicates good fit, while .05 – .08 indicates acceptable fit, Comparative Fit Index (CFI) > .95, and Standardized Root Mean Square Residual (SRMR) < .10 indicate good fit.

As recommended in growth curve modeling (e.g., Singer & Willett, 2003) we started by graphing the trajectories of change in PCT and PFPP. Based on these graphs, it seemed like a TS might occur at around week 10 in PFPP. In PCT there was no indication of a TS. As a second step, we used the Bilinear Spline Model (Kohli & Harring, 2013; Preacher & Hancock, 2015) as an exploratory approach to identify the time-point for a potential breakpoint, or ‘knot,’ in the growth curves. To test mean differences between slopes, a piecewise/segmented growth curve model with fixed loadings for two phases was specified, based on the break-point identified by the exploratory model. In this model, the intercept represents model-implied initial status of the outcome variable, the slope for the first phase represents the rate of change over time for the first segment, and the second slope the rate of change in the second segment. Predictors of TS were entered to predict all three random effects for the treatment period (i.e. intercept and slopes for the two segments). In the case of working alliance at week 12, this was modeled not as a predictor but as a dependent variable that was regressed on the random effects, to keep the temporal precedence criterion for causal inference. To explore the relationship between TS and panic symptoms during follow-up we included the post-treatment measurements as distal outcomes, which were regressed on the random effects based on the weekly measures during treatment.

Analyses were conducted using Mplus 8th edition (Muthén & Muthén, 1998-2017), using Maximum Likelihood with robust standard errors. These analyses include all available data, under the Missing At Random (MAR; Rubin, 1976) assumption. We conducted sensitivity analyses for therapist effects, missing data, and by using only patients who were randomized to the respective treatment methods. The results of these analyses are reported in the supplementary material. The data analytic codes for this study are available from the

corresponding author. Access to the dataset is governed by rules set forth by Lund University and Swedish data protection laws. Requests for access should be directed to the corresponding author or Martin Svensson (martin.svensson@psy.lu.se).

Results

Descriptive Statistics

A comprehensive account of the sample is provided in Svensson et al. (2021); see also Table 1. Between November 2011 and May 2017, 604 adults were screened and 221 with a primary DSM-IV diagnosis of PD/A were included and randomized to the Choice, Random or Control conditions. Two participants randomized to the Control condition dropped out and two were excluded after completing it, leaving 217 participants available for randomization. Sufficient number of observations for the analyses was provided by 208 participants. The therapist-level ICC for PDSS-SR across all observations was .03, and for specific occasions it ranged between .02 at week 9 in the PCT group, and .23 at week 10 in the PFPP group.

Was there a Termination Setback in PFPP?

To test for differential reactions as treatment termination approached, we started by exploring graphs of mean PDSS-SR values across weeks, separately for PFPP and PCT, for potential breakpoints in the trajectory across weeks. Figure 1 shows the mean trajectories of observed PDSS-SR scores across weeks. There appeared to be a breakpoint at week 10 in PFPP, where the PDSS-SR scores suddenly start to increase. However, for PCT there does not seem to be any such breakpoint; if anything, the slope seems to be getting steeper (i.e. in the direction of improvement).

The Bilinear Spline Model, applied to PFPP data, fit well to the data ($\chi^2(79) = 104.65$, $p = .03$, RMSEA = .05, 90% CI for RMSEA [.02, .08], probability RMSEA < .05 = .39, CFI = .97, SRMR = .06). As mentioned, this model estimates the time of the breakpoint in the longitudinal trajectory from the data. The model-estimated breakpoint was right before week

10 (9.84, $se = 0.27$), confirming the visual impression from Figure 1. To test for a TS in the PFPP group a two-group segmented/piecewise LGCM was next estimated with fixed loadings for a breakpoint at week 10. Thus, the first segment (Slope 1) comprised weeks 1 to 10, with Slope 1 loadings = 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 9, 9; the second segment (Slope 2) comprised weeks 10 to 12, with Slope 2 loadings = 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 2. This model fit was adequate ($\chi^2(138) = 199.38, p < .001$, RMSEA = .06, 90% CI for RMSEA [.04, .08], CFI = .95, SRMR = .07). Constraining Slopes 1 and 2 to equality in the PCT group so that there was only a single, linear slope across the whole treatment period, led to no significant decrease in model fit (scaled χ^2 difference (4) = 2.17, $p = .70$). Thus, the data supported a purely linear model for the PCT group over a model with a breakpoint at week 10.

The occurrence of a TS in participants receiving PFPP was tested by comparing the model with a breakpoint at week 10 with a model with a single, linear slope in the PFPP group. A statistically significant deterioration in model fit between these two models would be evidence of different means for Slope 1 and Slope 2, i.e. that average change per week differed between the first phase (weeks 1 to 10) and the second phase (weeks 10 to 12). The test was highly significant (scaled χ^2 difference (1) = 6.68, $p < .001$), supporting the hypothesized difference in rate of change between the two phases in the PFPP group. The difference between the two slopes (weeks 1-10 and weeks 10-12) in the PFPP group was estimated to -0.67 ($se = 0.25, z = -2.73, p < .01$, 95% CI [-1.15, -0.19]). Interestingly, there was also a statistically significant and fairly large negative correlation between Slopes 1 and 2 in the PFPP group ($-.43, se = .17, z = -2.56, p = .01$, 95% CI [-.76, -.10]), indicating that those who made large gains from weeks 1 to 10 were more likely to experience a TS (or experienced a more severe such setback) in weeks 10 to 12.

Was the Termination Setback Specific to PFPP?

In a sense, the specificity of the TS was tested already in the previous section, since tests supported linear change across all weeks for PCT but a breakpoint at week 10 for PFPP. However, a more direct way of testing the specificity is to test the difference in rate of change for Slope 2 between PFPP and PCT. A between-group equality constraint on the PFPP and the PCT means of Slope 2 showed significant evidence of deterioration in model fit (scaled χ^2 difference (1) = 8.26, $p < .01$), indicating that the groups differed in the means of Slope 2. The difference between the slopes in the two groups was -0.70 (se = 0.22, $z = -3.16$, $p < .01$, 95% CI [-1.14, -0.27]) showing that from week 10 the two treatment groups diverged significantly in outcome, in the direction of deterioration for participants receiving PFPP and continued improvement for those receiving PCT. The effect size d of this difference according to the formula proposed by Feingold (2009) and Feingold (2015) was $2 \text{ (weeks)} \times -0.70 \text{ (slope difference)} / 4.51 \text{ (pre-treatment SD)} = -0.31$ (se = 0.10, $z = -3.16$, $p < .01$, 95% CI [-0.50, -0.12]).

In order to explore the possibility of a difference between the slopes in PDSS-SR scores in the PFPP and PCT groups *before* the TS occurred in weeks 10-12 in PFPP, we imposed a between-group equality constraint on the means of Slope 1, i.e. setting the rate of change from weeks 1 to 10 to be equal between PFPP and PCT. A significant difference in model fit between this model and the unconstrained model would indicate that the mean of Slope 1 differed between PCT and PFPP, i.e. that the groups differed on the PDSS-SR up to week 10. The test showed no difference in model fit (scaled χ^2 difference (1) = 0.20, $p = .65$) in comparison with the unconstrained model, indicating no evidence for a difference in outcome between treatments up to week 10. In addition, the difference between coefficients in the unconstrained model was only 0.03 (se = 0.07, $z = -0.44$, $p = .66$, 95% CI [-0.17, 0.10]).

How Frequent was the Termination Setback?

To get an individual level estimate of TS, a TS score was calculated as PDSS-SR at week 10 (or week 9 if the response was missing week 10) minus PDSS-SR at week 12. Negative scores were thus taken to indicate a TS. Results showed that a TS was significantly more common among those receiving PFPP (45%; 43/96) than PCT (22%; 17/77) ($\chi^2 (1, N=173) = 9.73, p < .01$). A stricter definition of TS was calculated for weeks 10 to 12 using the inverse of the definition of clinical response as defined by Furukawa et al. (2009), i.e. a $\geq 40\%$ reduction from baseline on the PDSS-SR. Thus, under this stricter definition, an increase/worsening from week 10 to week 12 of $\geq 40\%$ of the baseline PDSS-SR score constituted a TS. Accordingly, 16.7% (16/96) of those receiving PFPP experienced such a TS compared to 6.5% (5/77) of those receiving PCT; this difference again being significant ($\chi^2 (1, N=173) = 4.15, p < .05$). Using either of these TS definitions, there was no association between the occurrence of a TS and use of psychotropic medication during treatment in either the PFPP or PCT groups ($p > .35$). Neither was there an association between a TS and additional medication in the PFPP group during the follow-up period ($p = .96$). However, having had a TS according to the strict definition (but not the lenient one) in PFPP was associated with seeking additional psychotherapy during follow-up ($p = .02$).

Was the Termination Setback Predictable?

To test whether a TS could be explained by a participant's attachment and interpersonal difficulties, and therapist adherence to PFPP, we entered the total scores on the ECR Anxiety and Avoidance subscales, the total IIP score, presence/absence of personality disorder, and therapist adherence in the final phase of treatment, as predictors of all random effects (Intercept and Slopes 1 and 2) in the PFPP group. ECR, IIP, personality disorder and adherence variables were entered in separate models. Continuous variables (ECR, IIP and adherence) were grand mean centered, while personality disorder was a binary dummy variable.

ECR avoidance predicted Slope 2 negatively in the PFPP group (standardized coefficient = $-.23$, $se = 0.12$, $z = -1.96$, $p < .05$, 95% CI $[-.46, -.00]$), indicating that the more avoidantly attached participants had less severe TSs. We also tested an interaction between scores on the ECR Anxiety and Avoidance subscales and TS severity, but this had no significant effect ($p = .29$). Higher IIP total scores also predicted Slope 2 negatively in the PFPP group (standardized coefficient = $-.27$, $se = 0.14$, $z = -1.95$, $p = .05$, 95% CI $[-.53, -.00]$), indicating that participants with greater interpersonal problems had less severe TSs. However, neither the presence of a comorbid personality disorder ($p = .96$) nor therapist adherence in the final phase of PFPP predicted Slope 2. Indeed the latter relationship was far from significant ($p = .52$) even when it was restricted to the theoretically most pertinent subscales (Subscale 3: Exploration of anger/fear of abandonment and Subscale 7: Focus on transference).

Patient-rated WAI-SR at weeks 2 and 6 was treated as predictor of Intercept and Slopes 1 and 2, while the WAI-SR at week 12 was treated as dependent variable predicted by Intercept and Slopes 1 and 2. The WAI-SR at week 2 predicted Slope 2 significantly (standardized coefficient = $-.34$, $se = 0.16$, $z = -2.11$, $p = .04$, 95% CI $[-.65, -.02]$), meaning that higher alliance predicted less TS. At week 6, results were very similar (standardized coefficient = $-.35$, $se = 0.14$, $z = -2.50$, $p = .01$, 95% CI $[-.62, -.12]$). Alliance at week 12 was predicted significantly from Slope 2 (standardized coefficient = $-.45$, $se = 0.18$, $z = -2.54$, $p = .01$, 95% CI $[-.80, -.10]$), indicating that a larger TS predicted worse alliance at week 12.

How did Termination Setback Relate to Outcome at Follow-up?

To explore whether the deterioration in self-reported panic symptoms implied by the TS was followed by gains between post treatment and 24 month, we used the previous model with weekly treatment scores on the PDSS-SR modeled as two phases for PFPP, while adding the 6-, 12- and 24-month follow-up scores for the PDSS-SR as distal outcomes, which were regressed on the random effects (intercepts and slopes) based on weekly measures during

treatment (see Figure 2). This model tests whether patients who have similar baseline values and similar gains from week 1 to 10, but differ in terms of symptom change from week 10 to 12 (i.e., the TS period), are likely to show different follow-up scores on the PDSS-SR.

The model fit was adequate ($\chi^2(199) = 295.55, p < .001$, RMSEA = .07, 90% CI for RMSEA [.05, .08], probability RMSEA < .05 = .04, CFI = .94, SRMR = .07). The regressions of PDSS-SR at 6- and 12 month follow-up on Slope 2, controlling for Intercept and Slope 1, were both positive and statistically significant (standardized coefficient at 6 months = .26, $se = .13, p < .05$, 95% CI [.00, .52], standardized coefficient at 12 months = .39, $se = .15, p < .01$, 95% CI [.10, .69]). This means that patients who experienced a TS in the PFPP group at 6- and 12-month follow-up, did not fully recover from the TS but continued to show worse outcomes than they likely would have done had they not experienced a TS. At the 24-month follow-up, Slope 2 no longer significantly predicted scores on the PDSS-SR (standardized coefficient = .25, $p = .12$, 95% CI [-.07, .56]).

Sensitivity Analyses

Sensitivity analyses of therapist effects, missing data, and subsample differences (randomized versus full sample) confirmed the robustness of the results of our main analyses. For details, see Online Supplement.

Discussion

To our knowledge, this is the first study to explore the possibility that patients receiving a form of PDT experience an increase in symptoms towards the end of their treatment, a phenomenon which we have referred to as a termination setback (TS), and which has been widely described, mostly on a theoretical basis, in the psychodynamic literature. Consistent with a visual inspection of the weekly panic symptom reports during the treatment phase of the trial, piecewise linear latent growth modelling provided evidence of a sudden increase in self-reported panic severity during the last three weeks of PFPP but not PCT. Indeed, nearly

half (or one-fifth when using a stricter definition) of those receiving PFPP experienced a TS, as indicated by deterioration in self-reported panic symptoms from weeks 10 to 12 of a 12-week treatment. Importantly, this TS between weeks 10 and 12 occurred despite the trajectory of panic symptoms in the PFPP group being the same as in PCT up to week 10. Our analyses indicated that those who were making the fastest recovery in weeks 1 to 10 of PFPP were most likely to experience a TS in the final three weeks of this treatment. During the follow-up period, these patients (with a TS) improved at about the same rate as those who had not had a TS, but nevertheless continued to stay behind in terms of symptom levels at least for the first year of follow-up.

Our findings are in line with those of Lemma et al. (2011b) but in contrast to those of Milrod et al. (2016); however the latter study did not measure symptoms frequently enough to properly detect a possible TS. As shown in a previous publication from this trial (Svensson et al., 2021), those receiving PFPP had significantly worse outcomes than PCT at treatment termination but improved significantly more during the two year follow-up period so that PFPP was equivalent to PCT at the final assessment point. Due to the fact that those receiving PFPP improved between treatment termination and 24-month follow-up, it might be reasonable to expect that this improvement after termination of PFPP would reflect a “recoil” or “catching-up” by those who had had a TS. This conjecture found partial support: after adjustment for initial severity and outcome from weeks 1 to 10, the occurrence and severity of TSs among those receiving PFPP were significantly related to continued worse outcome at the 6- and 12-month follow-ups, but not at 24-month follow up. This finding can be interpreted in relationship to psychodynamic theory, which would predict worse outcome during follow-up for patients experiencing a TS due to problems internalizing the therapist’s therapeutic functions (Falkenström et al., 2007; Kramer, 1959; Ticho, 1967). Still, descriptive statistics indicated that some “catching-up” might have occurred, but this was not strong enough or

clear enough to show up as statistically significant findings. Previous analyses suggest that neither medication nor additional psychotherapy predicted post-treatment outcome (Svensson et al., 2021). In the present study we found that those in PFPP with severe TS were more prone than other patients to seek additional therapy after the study, but this did apparently not help them to fully recover from the deterioration of the TS.

Several writers have suggested that vicissitudes in the termination/separation process are related to the patient's personality and level of functioning (Abbass, 2015; Della Selva, 2004; Summers & Barber, 2010). Our findings for participant characteristics of an interpersonal nature and personality disorder were mixed. Although the presence of personality disorder, often associated with relationship disturbances, did not predict a TS, higher scores on the measures of avoidant attachment and interpersonal difficulties did predict a less severe TS (or no TS). While significant, the standardized beta coefficients for both avoidant attachment (-.23) and interpersonal difficulties (-.27) were in the lower end of the moderate range. Nevertheless, these findings suggest that persons who tend to shun close relations or who have general relationship problems may be less subject to a TS.

By way of contrast, regarding the patients with TS, our results show that these were the patients in PFPP who had improved most in the first 10 weeks. They had less interpersonal and attachment difficulties, so it seems reasonable to think that they had been ready and willing to relate to the therapist in the first place. However, complicating things, patients who reacted with a TS rated the working alliance as weaker than other patients in weeks 2, 6, and 12. We do not fully understand these findings, but one, tentative, explanation may be that these patients, together with the therapist, work hard during the initial and middle phases, with the therapist confronting and interpreting the unconscious themes behind the panic disorder. The focus on symptoms results in a good outcome but also provokes a strained alliance. If the internalizing of the therapist's therapeutic objectives is not stabilized, the focus of the

therapist on separation issues in the termination phase may then destabilize rather than stabilize the obtained therapeutic gains. However, further studies have to address this issue.

The issue of individual differences requires further exploration, preferably using some specific measure of separation sensitivity. According to the PFPP manual (Milrod et al., 1997), the termination phase should be guided by the patient's reactions outside of therapy and towards the therapist, concerning rejection, loss and separation. Does the occurrence of a TS then suggest poor implementation or non-adherence to this manual, and thus insufficient attention to termination issues on the part of the therapist triggering late-treatment difficulties as has been suggested in the PDT literature (Marx & Gelso, 1987; Quintana & Holahan, 1992)? Or may a too strong focus on separation and autonomy at the very end of treatment actually provoke a TS for some patients? The null finding for a relationship between a TS and independently-rated therapist adherence during the final sessions of PFPP does not support either of these speculations. Future process studies of recorded sessions as well as qualitative analyses of the available post-therapy interviews may help us deepen our understanding of the factors that generated a TS.

If a TS is indeed avoidable by focusing interventions in different ways on separation issues, our findings point to a potential for improvement in acute outcomes for PFPP. As a counterfactual thought experiment, one may speculate that if the trajectory of symptom change in PFPP would have continued along the same path as during weeks 1 to 10 through the remaining three weeks of treatment, as occurred in the PCT condition, the estimated difference in outcomes at post-treatment between PFPP and PCT in terms of SMD would then have been very small ($11 \times 0.03 / 4.51 = 0.07$). So, if a TS may be prevented by some different actions by the therapist, outcomes for PFPP may be improved. Further research should explore whether this may apply to PDT in general. With its consistent focus on symptoms and separation/autonomy, PFPP can be argued to distinguish itself from other

forms of PDT. In this context it may be appropriate to speculate somewhat on how a TS might be avoidable in PFPP. As mentioned before, a TS may be due to problems internalizing the therapist's therapeutic functions, and the question is how to stabilize obtained gains instead of destabilizing them. As our results imply, this may be a technical as well as a relational issue. A solution in the traditional psychodynamic theory tradition may be to address time-limitation and termination issues even earlier and more thoroughly. Another solution may be to broaden the psychodynamic technique in the termination phase by stabilizing the patient's gains through empathic understanding, summarizing advances, and previewing how to handle lapses, thus bringing a smoother closure to the treatment. Maybe, as in Brief Dynamic Interpersonal Therapy (Lemma et al., 2011a), the therapist could prepare the patient for the ending by formulating a summarizing "goodbye letter" focused on which problems have been worked on and which remain. Yet another suggestion would be to schedule booster sessions to mitigate the experience of definitive separation and also offset any post-treatment relapse. Such speculations need to be tested in future research.

While not a focus of this study, it is interesting now to speculate whether TSs occur in non-psychodynamic therapies as well. According to Goldfried (2002) "lapses" at termination may occur in CBT with "complex cases." Albeit not specifically focusing on termination issues, mixture studies of trajectories in CBT suggest that such lapses are not common enough to form distinct clusters (e.g., Goldin et al., 2017; Joesch et al., 2013; Lukaschek et al., 2019; Teachman et al., 2008). Our findings showed that, relative to PFPP, those receiving PCT were significantly less likely to experience a TS. At the individual level, and using the more strict definition a TS, relatively few (6.5%) of the participants receiving PCT experienced a sudden and clinically significant increase in self-reported panic symptoms relative to baseline, in the last three weeks of their treatment. Reading the PCT protocol no reference is made to possible negative termination reactions, suggesting that this is not generally something that PCT

therapists expect to happen. Further studies are needed to ascertain whether TSs are common in other forms of psychotherapy.

Strengths and Limitations

The present study benefits from: (1) a large, well-defined sample of treatment-seeking adults; (2) who completed continuous/weekly assessments of their primary condition (PD/A); (3) during the course of two manualized, disorder-specific treatments; (4) delivered under randomized and self-selection conditions; (5) in routine care; (6) by therapists who underwent training in their respective treatments; (7) received regular supervision and were adherent to the two treatments; and (8) the use of state-of-the-art statistical analyses; besides (9) follow-up assessments were conducted for two years; (10) sensitivity analyses were conducted and confirmed the robustness of the results of our main analyses. These strengths also confer certain limitations on the inferences that can be drawn about the occurrence of, and influences on TSs, in PDT and CBT more broadly. We administered a weekly measure of panic symptoms only; thus we do not know whether other measures of psychopathology would have provided evidence of a TS for participants receiving either PFPP or PCT. Panic disordered patients, if fearfully dependent and concerned with separation, loss, and abandonment (Milrod et al., 1997), may be particularly prone to react with a setback during termination; thus our findings may not extend to other conditions. Also, our findings may not extend to other forms of PDT or CBT, or when these treatments are delivered outside the context of a treatment trial. Our sample included a mix of participants who were randomized to or self-selected their treatment, which strictly speaking, prevents causal interpretation of between-group differences. However, our previous study showed no effects of the method of allocation, and this was supported by sensitivity analyses carried out in the present study. Our predictor analyses were constrained by the measures administered as part of the trial from which the current data were drawn; other unmeasured variables might have better explained the

occurrence of a TS in the PFPP condition. Self-report symptom measures, whether of panic or any condition, may be relatively weak indicators of the kinds of difficulties that clients experience in the termination phase of PDT. Future studies are needed that employ a range of measures that may address the breadth of the patient's experience of termination in psychotherapy. That should include some measure of traumatic loss to contribute to the understanding of the dynamics of TS. In addition to assessment of adherence, ratings of competence of delivery might have illuminated how the therapists handled terminations issues. Indeed, our implementation of the PFPP-manual may not have been optimal, despite adequate adherence ratings. Finally, our analyses should be viewed as exploratory, since the data was collected for other purposes and the time-point of the TS had to be estimated from the data rather than hypothesized a priori based on theory. There is yet no consensus on a definition of TS, and the two definitions applied in this study are only provisional. Further discussion and research are needed to arrive at the best definition.

Conclusions

An important implication, in the clinical context, is that termination work may be at least as important in short-term psychodynamic treatments as it is said to be in long-term ones (Lemma et al., 2011a). It is true that short-term PDT manuals (e.g., Crits-Christoph et al., 1995; Milrod et al., 1997) state that termination work is important, but this is seldom as elaborated and exemplified as one might wish. If future studies replicate the present findings with short-term PDTs, it may be that modifications to how termination is handled can improve outcomes. There remains a gap in the literature as to the prevalence of termination setbacks across all forms of psychotherapy, irrespective of length, because too few trials measure symptoms at sufficiently frequent intervals during the treatment phase. The present study adds to a growing consensus that weekly (if not more frequent) assessment during

treatment trials is needed to properly identify potential moderators and change mechanisms in treatment.

Table 1. Baseline characteristics by treatments

	Total (<i>N</i> = 217)	Treatments	
		PCT (<i>n</i> = 102)	PFPP (<i>n</i> = 115)
<i>Demographics, n (%)</i>			
Female	163 (75.1)	74 (72.5)	89 (77.4)
Basic level of education	21 (9.6)	9 (8.8)	12 (10.4)
High school	113 (52.1)	55 (53.9)	58 (50.4)
University education	81 (37.3)	37 (36.2)	44 (38.2)
Employed	189 (87.1)	86 (84.3)	103 (89.6)
Age at entry, years, <i>M (SD)</i>	34.8 (12.6)	35.6 (13.5)	34.1 (11.8)
<i>Current psychiatric conditions, n (%)</i>			
Panic disorder with agoraphobia	180 (82.9)	84 (82.4)	96 (83.5)
Panic disorder without agoraphobia	37 (17.1)	18 (17.6)	19 (16.5)
Any axis I diagnosis besides PD/A	155 (71.4)	67 (65.7)	88 (76.5)
Any personality disorder	52 (23.5)	21 (20.6)	31 (27.0)
Number of axis I diagnoses besides PD/A, <i>M (SD)</i>	1.7 (1.7)	1.4 (1.4)	2.0 (1.8)
<i>Clinical characteristics</i>			
Current panic episode, months, <i>Median (IQR)</i>	12 (29)	10 (37)	12 (26)
Panic Disorder Severity Scale-Self Report version, <i>M (SD)</i>	12.4 (4.5)	12.2 (4.6)	12.5 (4.4)
Experiences in Close Relationships-R: Anxiety, <i>M (SD)</i>	3.2 (1.3)	3.2 (1.3)	3.3 (1.4)
Experiences in Close Relationships-R: Avoidance, <i>M (SD)</i>	3.4 (1.1)	3.4 (1.1)	3.5 (1.2)
<i>Inventory of Interpersonal Problems, M (SD)</i>	55.6 (12.5)	54.3 (12.2)	56.7 (12.8)
Previous psychotherapy, <i>n (%)</i>	134 (61.7)	60 (58.8)	74 (64.3)
Current psychotropic medication, <i>n (%)</i>	114 (52.5)	58 (56.9)	56 (48.7)

PCT, Panic Control Treatment; PFPP, Panic-Focused Psychodynamic Psychotherapy; PD/A, Panic Disorder with or without Agoraphobia; IQR, Interquartile Range

Figure 1. Estimated PDSS-SR trajectories and observed scores across weeks in treatments.

PCT = Panic Control Treatment; PFPP = Panic-Focused Psychodynamic Psychotherapy.

Lines show estimated trajectories, while circles show observed means.

Figure 2. Path diagram of Latent Growth Curve models of PDSS-SR in PFPP and PCT.

In PFPP, the trajectory of change is split up into two parts, one from week 1 to 10 and the second from week 10 to 12. Outcomes at weeks 38, 64 and 116 (6, 12 and 24 months post-treatment) are regressed on Intercepts and Slopes in both groups.

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