

EMDR in the Treatment of Panic Disorder With Agoraphobia: A Case Description

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The results of preliminary research investigating the application of eye movement desensitization and reprocessing (EMDR) treatment in panic disorder and panic disorder with agoraphobia suggests that reprocessing of past traumas produces significant reduction of anxiety and consequently, remission from panic attacks and avoidance behavior. This article describes the case study of a 30-year-old working professional where EMDR treatment, used to target early childhood traumas, led to reduction in symptoms of panic disorder with agoraphobia. Panic attacks diminished after 17 sessions of EMDR treatment, which followed Leeds's treatment model. Treatment gains were maintained 5 years after termination. The study shows the value of solid preparation work, and of addressing the current triggers and recent events, before targeting historical traumas. EMDR worked as a first-line treatment to resolving the roots of the panic attacks, suggesting that the resolution of traumatic childhood memories can make a significant difference to current symptoms of panic disorder with agoraphobia.

Keywords: panic disorder; agoraphobia; eye movement desensitization and reprocessing (EMDR); cognitive behavioral therapy (CBT); case study; childhood trauma treatment

According to the *Diagnostic and Statistical Manual of Mental Disorders* (5th ed., *DSM-5*) of the American Psychiatric Association (APA, 2013), panic attacks are an abrupt surge of intense fear or discomfort that reaches a peak within minutes and during which time four (or more) of the following symptoms occur: palpitations, pounding heart or accelerated heart rate, sweating, trembling or shaking, sensations of shortness of breath, or smothering and a feeling of choking. Other symptoms include chest pain or discomfort, nausea or abdominal distress, light-headedness, or faint chills or heat sensations, paraesthesias (numbness or tingling sensations), derealization (feelings of unreality) or depersonalization (being detached from oneself), fear of losing control or going crazy, and fear of dying. Panic attacks can be both expected (with an obvious cue and occur in specific situations) and unexpected (occur out of the blue).

To meet the *DSM-5* diagnostic criteria for panic disorder (PD; APA, 2013), the individual must have experienced recurrent *unexpected* panic attacks and there must be more than 1 month of either persistent worry about additional panic attacks or their consequences or a significant change of behavior with the intention

of avoiding another panic attack. One in three people in the general population diagnosed with PD develop agoraphobia (National Institute of Mental Health, 2013). Agoraphobia is marked or intense fear or anxiety triggered by the real or anticipated exposure to a wide range of situations. More than 50% of people in clinical samples reported that panic attacks or PD preceded the onset of agoraphobia (APA, 2013). In the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed., text rev., *DSM-IV-TR*, APA, 2000), the two disorders were linked; a diagnosis of PD was with/without agoraphobia. In the *DSM-5* (APA, 2013), the diagnoses are no longer linked, and an individual may be diagnosed with one or both.

Persons who present with both PD and agoraphobia typically go through each day living in fear of their next panic attack. Many of these individuals have some form of situational avoidance and in severe cases may even become housebound (D. A. Clark & Beck, 2010). White, Brown, Somers, and Barlow (2006) suggested that the development of agoraphobic avoidance is less dependent on the frequency and severity of panic attacks and more likely because of high anticipatory anxiety about the occurrence of panic. Agoraphobia is also more likely among people with more anxiety

sensitivity, diminished sense of control, and those who frequently use avoidance as a coping strategy.

Patients suffering from PD are high users of public health care services, far more than patients diagnosed with other mental health conditions (Batelaan et al., 2007). Approximately 70% of people with PD visit emergency rooms but are often evaluated as potential heart attack cases, thus consuming resources that might be directed to those with medical conditions (Fleet et al., 1996). Also, it is likely that just half the patients diagnosed with PD, with or without agoraphobia, receive interventions consistent with treatment guidelines (Kessler et al., 2006). Early diagnosis can greatly reduce health care costs as well as provide the patient with appropriate and effective treatment, although early diagnosis becomes challenging considering the tendency among health care practitioners to assume the presence of a medical illness based on the patient's presentation. Further complicating the treatment of panic disorder with agoraphobia (PDA) is that the available psychological treatments seem to be both contradictory in approach as well as inconclusive, especially from the perspective of long-term remission of symptoms. There is a need for more effective interventions that work on long-term remission of symptoms for clients diagnosed with PDA.

The Cognitive Model of Anxiety and Cognitive Behavioral Therapy

The cognitive model of anxiety proposes that anxiety is a direct consequence of the appraisal of a situation rather than the situation itself. In other words, "the way you think is the way you feel" (D. A. Clark & Beck, 2010, p. 31). The cognitive theory of PD based on this model posits that panic attacks are caused by catastrophic beliefs about bodily sensations or situational contexts in which such sensations occur (Beck, 1976, 1988; D. A. Clark & Beck, 2010; D. M. Clark, 1986; D. M. Clark, 1988). The model theorizes that a client goes through a "panic cycle" where they first become aware of bodily sensations. They misinterpret these sensations incorrectly believing that a bodily (or mental) catastrophe is happening (e.g., believing that chest tightness and breathlessness means suffocation). Anxiety then turns to panic leading to phobic avoidance of situations where these sensations are likely to occur. Soon there is intolerance (fear) of feeling these sensations. The fear of fear cycle then maintains the PD.

Cognitive behavioral therapy (CBT) seeks to correct these catastrophic misinterpretations through restructuring of cognitions. CBT has been demonstrated via various studies to be effective for the use of

PD (National Institute for Health and Care Excellence [NICE], 2005). CBT is also considered to be effective in combination with pharmacotherapy and has shown the best treatment gains when used in combination with selective serotonin reuptake inhibitors (SSRIs; Sturpe & Weissman, 2002; van Apeldoorn et al., 2008; van Apeldoorn, 2014). The CBT interventions for PD include a combination of (a) *cognitive restructuring* (correcting the misinterpretations), (b) *interoceptive exposure* where clients are trained to carry out exercises that induce the feared physical sensations (Clark, 1996), and (c) *breathing retraining*. For agoraphobia, CBT recommends the use of in vivo exposure where the client is gradually exposed to the feared situations preceded by in-session preparation for catastrophic misinterpretations. Therapist-assisted exposures usually are more effective in agoraphobia treatments involving CBT (Gloster et al., 2011). Other therapies such as bibliotherapy, computer-administered vicarious exposure, Internet-based cognitive behavioral therapy (ICBT) have also shown effective results for PD (Hedman et al., 2013; Kiropoulos et al., 2008).

CBT and exposure therapies for PDA have two major limitations and criticisms. One is that the long-term maintenance of treatment effects has yet to be established. Although some recent studies indicate that on follow-up CBT interventions for PD may hold up for about a year (DiMauro, Domingues, Fernandez, & Tolina, 2013), other research finds that standard cognitive behavioral treatments may not hold up across several years (Svanborg, Wistedt, & Svanborg, 2008). The second drawback of using cognitive- and exposure-based treatments is that there are high dropout rates. Dropout rates are high because of the inability of many clients to tolerate exposure therapy as well as because of intolerance of medication, especially side effects of SSRIs, which include nausea, drowsiness, headaches, dizziness, and so forth (Furukawa, Watanabe, & Churchill, 2006). So although traditional CBTs are efficacious, the long-term outcome of these studies appears to be limited and the vast majority of patients with PD need prolonged additional treatment (van Balkom, de Beurs, Koele, Lange, & van Dyck, 1996).

Adaptive Information Processing Model and EMDR Therapy

Eye movement desensitization and reprocessing (EMDR) therapy (Shapiro, 2001) is a psychotherapy with integrative features initially developed for the treatment of posttraumatic stress disorder (PTSD). EMDR is widely recognized as a front-line treatment for traumatic stress (APA, 2004; Foa, Keene, Friedman,

& Cohen, 2009; NICE, 2005; World Health Organization, 2013). It is based on Shapiro's adaptive information processing (AIP) model, a hypothetical model which posits that much of psychopathology may be because of the maladaptive encoding of and/or incomplete processing of traumatic or disturbing adverse life experiences (Shapiro, 2001, 2002, 2006, 2007).

The AIP model hypothesizes that all humans have a physiologically based information processing system that maintains a delicate balance and allows information to be processed to an "adaptive resolution." It assumes that traumatic experiences can disrupt this information processing system, leaving associated sights, sounds, thoughts, and feelings unprocessed and dysfunctionally stored and that this may later result in a repeated negative pattern of thinking, feeling, and behaving. Therefore, it is hypothesized that the direct reprocessing with EMDR of these memories of etiological events and other experiential contributors can have a positive effect in the treatment of most clinical complaints.

The most important research underscoring the importance of experiential contributors to both physical and mental health problems is the Adverse Childhood Experiences (ACE; n.d.) Study (Shapiro, 2014). The ACE study (Felitti & Anda, 2007) conducted a longitudinal follow-up of health outcomes of more than 17,000 volunteers between 1995 and 1997 and found a significant association between health risks in adulthood (e.g., alcoholism, depression, cancer, smoking) and the reported number of categories of ACEs (e.g., abuse, neglect, trauma).

AIP Model Conceptualization of Panic Attacks

The AIP theory conceptualizes that the anxiety and fear felt during panic attacks occurs when a current situation elicits the dysfunctional memory network, with its negative affect, cognitions, and perceptions (Shapiro, 2001). Processing of past etiological events that were related to the onset of the PD is therefore a central feature of EMDR treatment for PD and agoraphobia. "While biological factors may predispose some people to anxiety or panic reactions, the ultimate culprit is generally an earlier life experience or experiences that set the problem in motion and that remain locked in the person's nervous system" (Shapiro & Forrest, 1997/2004, p. 66). Leeds (2009, 2012) views PD originating from maladaptive formative experiences in early childhood, especially those related to separation and/or stressful parental interactions.

EMDR treatment follows a three-pronged and eight-phase approach. Treatment addresses past, present,

and future aspects: (a) resolving the early traumatic experiences (assumed by the AIP to be the predisposing factors to current panic attacks), (b) working with current triggers and memories of recent panic attacks, and (c) preparing for future challenges. EMDR therapy begins with Phase 1, history taking, which includes data collection, case conceptualization, and identification of potential treatment targets; and Phase 2, preparation, where the main goal is stabilization and affect regulation. In Phase 3, assessment, target memories are assessed in a controlled manner: The client selects a representative Image; a self-referring "negative cognition" (NC); a preferred positive cognition (PC), which they rate on the Validity of Cognition (VoC) scale (where 1 = *completely false*, 7 = *completely true*); the related emotion, which they rate on the Subjective Units of Disturbance (SUD) scale (where 0 = *no disturbance*, and 10 = *worst possible disturbance*); and the body location of the disturbance.

During Phase 4, Desensitization, eye movements or other bilateral stimulation (tapping, tones) are used to reprocess the disturbing material. Phase 5, Installation, strengthens additional adaptive networks and is considered complete when the target memory is no longer disturbing (SUD = 0) and the PC is experienced as completely true (VoC = 7). Phase 6, Body scan, checks residual body disturbance and is considered "clear" when no disturbing body sensations are identified. Phase 7, Closure, is used at the end of every session to bring the client to equilibrium. Phase 8, Reevaluation, is an ongoing process of reevaluating prior work at the beginning of each subsequent EMDR session.

EMDR Treatment of Panic Disorder With and Without Agoraphobia

Research

Currently, no official guideline is available for the treatment of panic disorder with or without agoraphobia using EMDR Therapy (de Jongh & Horst, 2016). Controlled research on treatment of EMDR with Panic disorder with or without agoraphobia is limited. However, there are a series of individual case reports (Fernandez & Faretta, 2007; Goldstein, 1995; Grey, 2011; Nadler, 1996; Shapiro & Forrest, 1997/2004). These case reports show a decrease in the client's panic attacks, agoraphobic behavior, and overall anxiety.

The first controlled study for PD by Feske and Goldstein (1997) found EMDR to be more effective than an EMDR variant called eye fixation exposure and reprocessing, but there were no differences in outcome at 3-month follow-up. A follow-up study by Goldstein, de Beurs, Chambless, and Wilson (2000) compared

EMDR treatment for PDA to a placebo condition, association and relaxation therapy. EMDR was only better than waitlist on some measures and no different from the placebo control. The authors concluded that their findings did not support the use of EMDR for treatment of PDA. The study was criticized because EMDR treatment provided only one preparation session, which was later thought by the researcher to have probably been insufficient (Goldstein, as cited in Shapiro, 2001). More important, it is possible that the only targets may have been the panic attacks and that maladaptive memory networks related to childhood traumas may not have been reprocessed (Fernandez & Faretta, 2007; Leeds, 2012). A third study by Faretta (2013) examined the difference between two groups of clients with PDA who were independently administered either CBT or EMDR treatment. EMDR treatment followed the standard eight-phase protocol with some changes during Phase 2 (preparation) where education on panic was included and Phase 3 (assessment) where past events included background stressors to first panic attack(s), first, worst and most recent panic attack, contributory ACEs. Current stimuli focused on external and internal cues associated with panic attacks and future templates in which patients rehearsed confronting these cues in the future. No significant differences in outcome were seen between the two groups, but those who were treated with EMDR therapy had lower frequency of panic attacks.

Challenges in EMDR Treatment

An essential element during EMDR reprocessing is the elicitation of associations to related memories. However, during reprocessing of panic attack memories, childhood memories of dysfunctional attachment may be uncovered, thus exposing patients to the “full intensity of deep feelings of dread, loneliness, hurt, anger or grief for which some patients may not be adequately prepared” (Leeds, 2012, p. 113). Elicitation of intense affect was also identified by Goldstein (as cited in Shapiro, 2001) who explained several reasons why the participants in his study (Goldstein et al., 2000) did not show the expected response to treatment:

This raises the question of how agoraphobic clients are different, from people with PTSD for example, in ways that might affect the process and outcome of EMDR treatment. Possible explanations include observations that people with agoraphobia are more avoidant of intense affect, that they have highly diffused fear networks, and that they have difficulty making accurate cause-effect attribution for anxiety and fear responses.

It is my belief that they often come into therapy feeling overwhelmed and confused by seemingly inexplicable forces. The first order of business in therapy is to provide a lot of structure, reassurance, and to focus on concrete anxiety management skills. In the early stage of therapy, perhaps they are not ready to engage in a process that is as emotionally provocative as is EMDR. (Goldstein, as cited in Shapiro, 2001, p. 363)

Noting that the absence of adequate preparation may have prevented the full provision of EMDR in this study, Shapiro (2001) recommended that the preparation phase for clients with agoraphobia “must include a full preparation phase which may last over multiple sessions” (p. 363). Therefore, cases of PDA require what Leeds (2012) calls “an extended preparation phase” with careful attention to concrete anxiety management skills, resource development and installation for self-soothing and affect tolerance followed by EMDR reprocessing of core material. This extended preparation phase allows clients to gain confidence with some remission of symptoms so that they feel prepared to approach the traumatic life experiences which are theorized as the basis of the condition.

Leeds’s Model for Treating Panic Disorder With Agoraphobia

Leeds (2009, 2012) developed two models for EMDR treatment planning for clients with PD—one for those with agoraphobia (Model I) and a second for those without agoraphobia (Model II). His model for PDA is outlined in Table 1. Leeds’s model is marginally different from the standard EMDR protocol of past-present-future targeting of memories in that he recommends first working with background stressors to panic attacks as well as the panic attack memories, and “pruning associations” (Leeds, 2009, p. 265) to core childhood memories when these are elicited during processing. Contributory childhood events are not targeted until panic attacks are at least 50% less intense, less frequent, and of shorter duration and/or when the client is less distressed by their panic attacks. This modification is thought to give the client confidence—and to build his or her affect tolerance so that he or she is better able to work on and resolve painful contributory childhood experiences.

Method

Purpose

1. Replicating Leeds’ model for treatment PDA using EMDR psychotherapy to see its effectiveness

TABLE 1. Leeds's (2009, 2012) Treatment Plan for Cases of Panic Disorder With Agoraphobia or With Other Comorbid Disorders (Model II)

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1. History taking (Phase 1)
 - a. Clinical assessment, diagnosis, and case formulation
 - b. Selecting appropriate treatment goals
 - c. Selecting and sequencing of initial targets
 2. Preparation (Phase 2)
 - a. Psychoeducation on panic
 - b. Teaching and rehearsing self-control procedures
 - i. Breathing exercises and other calming procedures for anxiety
 - ii. Sensory focusing and other procedures for decreasing depersonalization
 - c. Introduce EMDR and informed consent to treatment.
 - i. Explain that childhood experiences are likely to emerge as later targets.
 - d. Consider installing one or more (needed) resources for self-soothing, self-acceptance, or connection before or after beginning reprocessing core maladaptive memory networks of etiological experiences from childhood.
 3. Reprocessing of targets
 - a. Past panic attacks
 - i. Background stressors to first panic attacks (if any were identified)
 - ii. First panic attack
 - iii. Worst or representative panic attack
 - iv. Most recent panic attack
 - b. After some gains on reprocessing memories of panic attacks; contributory childhood experiences of perceived abandonment, misattunement, humiliation, fear, and early parent-child reversals can be addressed.
 - i. These can be addressed in the order they emerge during reprocessing.
 - ii. When patients can tolerate it, these can be addressed in the order of central importance to core maladaptive memory networks of avoided emotional material.

Current stimuli

 - i. External cues (associated with panic attacks)
 - ii. Internal (interoceptive) cues

c. Future templates

 - i. For external and internal cues
 4. In vivo exposure to external cues (generally done independently)
 5. Reevaluation and further reprocessing, if indicated
 6. Install one or more resources to represent emergence and consolidation of new sense of self, free of avoidance of core maladaptive memory network.
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From Leeds, A. M. (2009). *A guide to the standard EMDR protocols for clinicians, supervisors, and consultants* (p. 260). New York, NY: Springer Publishing.

2. Testing the hypothesis that resolving childhood traumas resolves PDA
3. Checking the maintenance of EMDR treatment effectiveness in the long term

Design (or Procedures)

Descriptive Case Study. The treatment took 17 sessions during which identified targets were reprocessed

to SUD = 0, VoC = 7, clear body scan. Follow-up was done at intervals of 6 months, 1 year, and 5 years.

Participant(s)

The participant was a 30-year-old working professional diagnosed with PDA seen in the author's private practice setting. Client was referred by a physician at the local hospital. The physician had conducted multiple

medical tests on the client assuming there was a cardiac disorder. When the medical reports were negative, the physician suggested she visit a psychologist and psychiatrist as the symptoms seemed anxiety related. The participant met the inclusion criteria for this case study, which included self-report of symptoms; examination and diagnosis by a psychiatrist; and meeting *DSM IV-TR* criteria for PDA (Criteria A and B; APA, 2000).

Treatment

The author is an EMDR-trained therapist with a master's in Clinical Psychology. She has been in private practice since 2001. She was trained in EMDR in 1999 and has been using the therapy in private practice and with survivors of natural disasters in group settings. She is an EMDR Humanitarian Assistance Programs (EMDR-HAP) facilitator and supervisor in training. The treatment plan used Leeds's treatment model for PDA described earlier in this article. It also used a minor deviation in which a future template was installed as each targeted memory was reprocessed to $SUD = 0$, $VoC = 7$. This was to use the anxiety reduction gains achieved with reprocessing of targets and to incorporate them into current areas of avoidance.

Treatment Course. Seventeen treatment sessions were provided. The history taking and preparation phases (Phases 1 and 2) extended across six sessions during which history was collected and preparation strategies were taught and practiced (Table 2). Reprocessing of past targets (Phase 3) began with the panic attack memories including background stressor, first panic attack, and recent panic attacks (Table 3). Reprocessing of past targets continued with the contributory childhood events, done across five sessions (Table 4). Reprocessing of current stimuli (present triggers including external and interoceptive cues) and final future templates are outlined in Table 5.

Case Description

Client History

The history taking phase in Leeds's (2009) treatment involves clinical assessment, diagnosis and case formulation, selection of treatment goals, and initial targets (see Table 1). This phase was conducted in Session 1 (see Table 2).

Initial Presentation. Pam (name changed to protect anonymity) presented for therapy in December 2010; she was then 30 years old and working as an interior designer. Her presenting complaints were

sadness, lethargy, sleep disturbance, and physical sensations such as palpitations, tremors, sweating, chest pains, and dizziness, which hadn't been explained by medical examinations. She experienced these physical sensations for the first time in October 2010 while traveling to work by public transport. She was terrified that she was having a heart attack and sought medical intervention. Doctors evaluated her blood pressure, electrocardiogram (ECG), and also ran a 2-D echogram. Her test reports were normal. Immediately after the first episode, she took off from work for a week and continued to experience similar physical sensations every couple of days. In the next couple of months, she began fearing experiencing these sensations while traveling. She put in an application to request medical leave, took a 3-month sabbatical from work and temporarily moved in with distant family. She sought therapy in December 2010.

Pretreatment Assessment and Diagnosis. Diagnosis and medication being initial considerations, the client was administered the Minnesota Multiphasic Personality Inventory (MMPI). The MMPI is a written psychological assessment used by mental health professionals to assist with the diagnosis of mental disorders and the selection of appropriate treatment methods. It provides clear, valid descriptions of people's problems, symptoms, and characteristics in broadly accepted clinical language. On the MMPI, elevation of T scores above 70 is considered clinically significant. Pam's MMPI test did not reveal any clinically significant elevations. Mild indications of somatization and social introversion were indicated. Pam was given a diagnosis of Axis-1 PDA. Pam's symptoms met the *DSM-IV-TR* diagnostic criteria (APA, 2000). The Multimodal Life History Questionnaire (Lazarus & Lazarus, 1991) was also administered at intake. The questionnaire gathers information on areas such as personal and social history, modality analysis of presenting problems, interpersonal relationships, biological factors, and trauma history.

Client History. Pam is the eldest child in her family. She stated that her father was a chronic alcoholic. The earliest memory of his drinking was at age 9 years when her father came home in a drunken rage and became physically and verbally abusive with her mother, tried to tear off his clothes, and violently broke furniture in the house. Pam said she had to intervene to calm him down. She disclosed that this was the onset of her anxiety and that she became overprotective of her mother and two younger sisters, while trying to calm her father down during the drinking episodes. Another very disturbing memory was of being alone

TABLE 2. Treatment Record: Phases 1 and 2, History Taking and Preparation

Session No.	Date	Anxiety at Start of Session	Activity Target/Session Focus	Pretreatment	Posttreatment	Selected NC/PC	Session Outcome
				SUD VoC	SUD VoC		
1.	December 3, 2010	High anxiety reported Trembling hands	History taking Psychodiagnostic evaluations	N/A	N/A	N/A	Treatment plan
2.	December 5, 2010	High anxiety reported with frequent panic attacks	Target sequencing Psychoeducation on panic and EMDR Daily anxiety chart and thought log	N/A	N/A	N/A	Assessment and treatment plan
3.	December 8, 2010	Lower anxiety reported after keeping thought log and anxiety chart	In-session analysis of thought log and anxiety chart Square breathing, diaphragmatic breathing, and sensory focusing	N/A	N/A	N/A	Anxiety reduction Better rapport More collaborative work
4.	December 10, 2010	Using square breathing reduced duration of panic attacks.	In-session analysis of thought log and anxiety chart Family session for education on anxiety management skills Calm/safe place RDI (only symbolic resources)	N/A	N/A	N/A	In-session anxiety reduction while practicing calm place exercise
5.	December 13, 2010	Anxiety reduction reported after accessing calm place and symbolic resource between sessions	In-session analysis of thought log and anxiety chart RDI (mastery resources)	N/A	N/A	N/A	Reduction of intense affect around daily life disturbance Physical agitation reduced
6.	December 20, 2010	Using anxiety management skills and calm place	Assessment of readiness for EMDR Phase 3 Selection of first target for EMDR reprocessing	N/A	N/A	N/A	Increased anxiety

Note. SUD = subjective units of disturbance; VoC = validity of cognition; NC = negative cognition; PC = positive cognition; N/A = not applicable; RDI = resource development and installation.

TABLE 3. Treatment Record: Phase 3, Reprocessing Past Targets—Panic Attacks

Session No.	Date	Anxiety at Start of Session	Activity Target/Session Focus	Pretreatment	Posttreatment	Selected NC/PC	Session Outcome
				SUD VoC	SUD VoC		
7.	December 22, 2010	Using anxiety management skills and calm place	Background stressor to first panic attack—finding husband drunk and passed out	10 4	N/A	I cannot trust. I can have faith (in him).	Target incomplete
8.	December 25, 2010	Using anxiety management skills and calm place	Background stressor Phases 4–7	5 N/A	0 7	I cannot trust. I can trust (final PC).	Target complete
9.	December 31, 2010	Reduction of mood swings Improved sleep Reduced calling of husband to check whereabouts	First panic attack	6 2	0 7	I can't handle it. I can handle it.	Target Incomplete
10.	January 1, 2011	Reduced anxiety Fewer panic attacks More socializing	Recent panic attacks Representative- home alone after the first panic attack	3	0	I'm not in control. I can learn to manage/handle (these attacks).	Target complete

Note. SUD = subjective units of disturbance; VoC = validity of cognition; NC = negative cognition; PC = positive cognition; N/A = not applicable.

TABLE 4. Treatment Record: Phase 3, Reprocessing Past Targets—Contributory Childhood Experiences

Session No.	Date	Anxiety at Start of Session	Activity Target/Session Focus	Pretreatment	Posttreatment	Selected NC/PC	Session Outcome
				SUD VoC	SUD VoC		
11.	January 24, 2011	Returned to work	Preparation to target childhood contributory memories Target reprocessing of father in drunken rage	10	N/A	I cannot show my emotions. I can let it out, and show my emotions.	Target incomplete
		Increased socializing Panic attacks reduced in frequency and intensity		2	N/A		
12.	January 28, 2011	Increase in anxiety Intense panic attack at work	Paused reprocessing to manage intense affect Phase 2 (preparation and stabilization)	N/A N/A	N/A N/A	N/A	Anxiety reduction
		Could manage intense affect between sessions	Continued reprocessing of father in a drunken rage memory	N/A N/A	0 7	Final PC I have choices now.	
13.	February 2, 2011	Increased confidence	Father drunk driving and having car accident	9 4	0 7	Can't show my emotions/have to be strong Can show my emotions	Target complete
15.	February 7, 2011	Calmness and confidence	Forging marksheet	7	0	I need to be strong/perfect. I can show my emotions, I can be myself.	Target complete
				3	7		

Note. SUD = subjective units of disturbance; VoC = validity of cognition; NC = negative cognition; PC = positive cognition; N/A = not applicable.

TABLE 5. Treatment Record: Phase 3, Reprocessing Current Stimuli and Future Templates

Session No.	Date	Anxiety at Start of Session	Activity Target/Session Focus	Pretreatment SUD VoC	Posttreatment SUD VoC	Selected NC/PC	Session Outcome
16.	February 17, 2011	Panic attacks dropped to negligible Travelled freely in public transport Moved back in with her husband Handled isolation better	Present triggers External cues Interoceptive cues	External cues: 1 or 2 Interoceptive cues 2	0 0	External cues: NC: I can't completely trust. PC: I can trust on some occasions. Interoceptive cues: NC: I can't manage/handle. PC: I am in control, I can manage.	Targets complete
17.	February 23, 2011	Reported calmness, confidence, and cheerfulness No panic attacks Anxiety negligible	Reevaluation (present triggers) Future templates for remainder areas of avoidance	N/A	N/A	N/A	Termination by mutual agreement

Note. SUD = subjective units of disturbance; VoC = validity of cognition; NC = negative cognition; PC = positive cognition; N/A = not applicable.

with her sister at home after her father left the house in a drunken rage. He then had an accident, and she called her father repeatedly through the night while trying to keep a brave front for her younger sister.

Pam stated that she soon lost interest in academics and developed high anxiety around earning money to manage her family. By 12th grade, her anxiety was very high and she did not write her exam at all. Later, she forged her marksheet to get a job and began working. She also continued keeping a watch on her fathers' drinking believing that his alcohol consumption reduced to occasional social drinking because of her constant monitoring.

Pam married at age 26 years and at the outset barred her husband from any drinking and strictly forbade alcohol to be brought home. Her husband while complying with her demands, also engaged in social drinking, and this led to frequent verbal quarrels. Her husband would also often be unreachable on the phone, and Pam reported severe anxiety when her calls to him went unanswered. On one occasion (which was the precipitating event to the panic attacks), her husband arrived home at midnight from an official gathering, extremely drunk. Scared of a fight with his wife, he fell asleep in the basement of their apartment building. Pam reported spending a distressing night trying to reach her husband, calling him several times an hour. Early the next morning, he was discovered by the building security who helped her carry him back home. This event reminded Pam so much of her childhood that she had an emotional breakdown resulting in a loud verbal fight. Their relationship went into a downward spiral thereafter and Pam reported that they had verbal fights almost every day. In subsequent months, Pam reported experiencing mild chest pains frequently. She stopped initiating work projects. She also began avoiding socializing with friends and workmates, and her only outings were restricted to a monthly family gathering. A few months later, she reported having her first panic attack.

Case Conceptualization. Pam's anxiety was conceptualized with the AIP model (Shapiro, 2001) as originating with the distressing childhood experiences with her alcoholic father and triggered by current events with her husband. Leed's (2009, 2012) model plan for treating PDA was the basis for treatment planning (see Table 1).

Preparation Phase

In Leed's (2009) treatment model for PDA, the preparation phase includes psychoeducation, daily diary, self-control strategies, providing information about

EMDR and AIP, calm (safe) place, and resource development and installation. This phase was conducted in Sessions 2 through 6 (see Table 2).

Psychoeducation. Pam's immediate worry, as with many patients diagnosed with PD, was the health risks these attacks posed. She was also not fully convinced about the need for psychological intervention and believed that her symptoms were definitely physical. Psychoeducation on panic and anxiety, the triune brain model, the nervous system, sympathetic arousal, and the panic cycle helped her recognize that although she was experiencing very extreme and distressing physiological symptoms, these experiences actually posed no threat to physical health. Worries of people with anxiety disorders are usually dismissed with "it's all in your head"; a strong therapeutic alliance is therefore based on validation of fears along with offering a scientific rationale for the patient's symptoms.

Daily Diary. Pam was asked to keep a daily diary to monitor her panic attacks. The diary had two sections: The first section was a daily anxiety chart that tracked anxiety across a 12-hour period. This was done using a graphical representation with timings on the Y axis—8 a.m., noon, 4 p.m., 8 p.m., and midnight. The X axis measured the level of anxiety from 0 to 10. The peak points (anxiety above 5) on the daily anxiety chart were noted. The second part to the diary involved maintaining a thought log which described her reaction to the disturbing event(s) during those peak points. An example of this was "8 p.m.: Anxiety level (8). Thought log 'Calling husband to ask when he was coming back home, got no response to my calls and messages. Sent him many texts, he sent back a text saying 'I'm fed up.' I was anxious and angry with his behavior.'" In-session analysis of the diary indicated that panic attacks were being triggered by arguments with husband or when thinking about moving back in with him.

Self-Control Strategies. Pam was also taught self-control strategies such as square breathing, diaphragmatic breathing, and sensory focusing. Leeds (2009) explains that such anxiety management methods reduce the frequency and severity of the panic attacks but do not eliminate panic attacks or the fear of further panic attacks. EMDR therapy uses breathing retraining as a preparatory tool to help clients manage the intense affect originating from the autonomic nervous system during the panic attacks. Clients are educated that these are preparatory processes to stabilize them and that EMDR reprocessing of past panic attacks as well as contributory childhood events is the more direct intervention toward reducing panic attacks.

Providing Information About EMDR and Adaptive Information Processing Model. Phase 2 preparation also included explaining the AIP model and standard EMDR protocol. Explanation of the AIP model gave Pam insight about contributory childhood experiences, and we arrived at a structured treatment plan beginning with the recent panic attacks and going back to past targets with similar experiences.

Calm (Safe) Place Exercise. Pam was also introduced to the “Calm (Safe) place exercise,” a mechanism used during the preparation phase for self-regulation. Pam accessed a place that she associated with calmness—the Lotus temple in Delhi. She was asked to bring up an image of the place and eye movements were used to enhance the positive feelings. She mentioned feeling “no tension in the mind and absolute calmness” at the end of the exercise.

Resource Development and Installation. The resource development and installation (RDI; Korn & Leeds, 2002) protocol was also used to install resources. RDI is used in the preparation phase of EMDR therapy; it has ego strengthening benefits and prepares clients for EMDR reprocessing. The client can be asked to access three types of inner resources—mastery, relational, or symbolic—that represents a needed capacity and is associated with positive affect. With Pam, RDI was initially used to develop and install calming symbolic resources (image of Buddha). At this point, she could not access mastery resources (memories of positive experiences), but as she gained further confidence, we worked on accessing mastery resources to handle challenging situations. She identified needing qualities such as “trust in self” and “hope” especially during stressful times such as husband’s unavailability or seeing him drinking at social events. Such incidents left her feeling hopeless and out of control. Positive memories around these resources included managing complex work assignments under pressure (trust in self) and times when her father had listened to her and not had alcohol (hope). We then used slow and short sets of eye movements (6–8 passes) to install these resources. Developing mastery resources modulated the intense affect around daily life disturbance and reduced Pam’s physical agitation (see Table 2).

By the 6th session, Pam could better manage affect between sessions, and we discussed moving to Phases 3–8 of EMDR treatment, which included desensitization and reprocessing of target memories. The following factors supported this clinical decision:

1. Pam was practicing anxiety management skills such as square breathing, sensory focusing, and the calm place between sessions. She reported better control over her psychophysiological arousal.

2. Her physical agitation had reduced. In-session observation was absence of hand tremors.
3. Pam reported reduced anxiety of open spaces and was able to leave the house for brief periods although only in the company of familiar people, in familiar surroundings, and for not more than an hour.
4. Her extended family offered her support by accompanying her for therapy and learning the anxiety management skills. They helped her to manage the panic attacks by coaching her to use breathing skills and sensory orientation.
5. She was considering going back to work as compared to contemplating quitting the job altogether.

Phase 3: Reprocessing of Past Targets—Memories of Panic Attacks

Targeted memories were reprocessed using Leeds (2009, 2012) model. See Tables 1 and 3. This phase was completed in Sessions 7 through 10. Targets included background stressors to first panic attack (i.e., husband’s drinking and subsequent fights), first panic attack while traveling by train (also identified as the worst), and other recent panic attacks (e.g., those during the week she spent at home after the first episode and panic attacks triggered by husband’s unavailability). Future templates of returning to work and traveling by local transport were also installed. After completing Session 10, Pam took a 3-week break from therapy. She rejoined work and reestablished her regular routine. She also needed this time to attain requisite permission from her supervisor to leave work early for sessions.

Sessions 7 and 8. The first memory to be reprocessed—which we recognized as the background stressor to the first panic attack—was the event of finding husband drunk and passed out in the apartment basement. Her initial NC was “I cannot trust.” The SUD for this memory fell from 10 to 0 and the PC “I can trust” was installed to a VoC of 7. We also developed future templates using the same PC where she imagined herself managing an upcoming family gathering where her husband would most likely have a couple of drinks. “I will say yes if he asks for permission, won’t feel very bothered and will just enjoy the party.” This target took two 90-minute sessions to complete.

Session 9. A reevaluation of symptoms at the beginning of Session 9 showed visible changes. She reported reduction in mood swings, improved sleep, and feeling an overall sense of calmness. Her anger toward her husband reduced, anxiety diminished, and she did not feel the need to constantly call her husband to check his whereabouts.

We then targeted the first panic attack which had occurred while traveling to work on a train. This was also reported as the worst panic attack. Her NC was “I can’t handle it” and SUD was a 6. The reprocessing in Sessions 7 and 8 had brought up connections where she recognized that fights with her husband had precipitated the attacks and that there was nothing really wrong with her physically (her biggest fear was that she had some medical illness). We then installed the PC “I can handle it,” and it reached a VoC of 7. We also installed some future templates around using the train to go back to work (she had avoided trains and other forms of local city transport since the panic attacks started). We also developed some self-control strategies she could try if the panic attacks occurred while traveling.

Session 10. A reevaluation of symptoms at the beginning of Session 10 showed calmness and reduction of anxiety. In this session, we targeted more recent panic attacks and chose the most disturbing of these which was being at home alone during the week after the first panic attack. Image was of her sitting alone at home, experiencing a panic attack. Her NC was “I’m not in control.” The SUD for this event was a 3. At the end of the session, SUD dropped to 0; her PC for this target was “I can learn to manage/handle (these attacks)” which was installed to a VoC of 7.

Phase 3: Reprocessing of Past Targets—Contributory Childhood Experiences

Contributory childhood experiences were reprocessed in Sessions 11 through 15 (see Table 4). Past experiences around father’s drinking and parent–child role reversal memories were targeted.

Session 11. When Pam returned to therapy after the 3-week break, she reported more stability and less anxiety. She stated that her panic attacks had diminished in frequency and intensity. Pam also reported meeting friends on weekends, and she also participated actively in two family celebrations. But she still had notable disturbance around her husband’s drinking and would experience a sense of anger and disappointment at herself for giving him permission to drink or not stopping him in time. In earlier sessions, Pam and I had discussed targeting her childhood experiences using EMDR which we had hypothesized as the basis of the current fear and panic attacks. We decided that now may be the time to approach this material. There was some anxiety, and we spent part of this session doing preparatory work around her feelings about addressing these memories. RDI was used

where she developed inner resources of calmness and soothing.

We began with the memory at age 9 years when her father came home in a drunken rage and began breaking household furniture. Image was of him breaking a cupboard and screaming. The NC was “I cannot show my emotions,” and the initial PC was “I can let it out and show my emotions.” During desensitizing, Pam was able to connect with body sensations of panic (heart racing and shortness of breath), which closely resembled the panic she felt recently while traveling and when she had fights with her husband. We had to regulate the emotions using various distancing strategies. At session end, this memory was not completely reprocessed.

Session 12. By the next session, Pam reported a major panic attack while she was at work, and she had to call her husband to help her get back home. She also had various somatic complaints of head heaviness, headaches, and backaches. We paused targeting of memories to work with the emerging disturbance and went back to Phase 2 (preparation and stabilization). For this session, we worked with some self-control strategies to manage intense panic attacks and other self-soothing skills. We practiced square breathing in session along with diaphragmatic breathing. She did future rehearsal with using anxiety management skills if she got a panic attack at work. Her husband accompanied her for this session and also discussed how he could support her if there was an intense panic attack.

Session 13. Pam said that she felt sufficiently stable and that she recognized the direct link between the panic sensations and body sensations when we had worked with the childhood memory. We returned to the same target memory (father in drunken rage). Several *cognitive interweaves* had to be used as there was blocked processing. Cognitive interweaves are statements or questions that is offered to the client by the clinician in response to a blockage in the processing or to facilitate relevant connections, optimize generalization effects, help the client with affect regulation, address defensive responses, and maintain dual awareness (Hensley, 2009, 2016). She seemed especially to be “looping” around the information that she should have taken on more responsibility for her mother and sisters and in getting her father to stop drinking. She was asked questions so she could differentiate between standards for an adult and standards for a child. For example, “Whose role was it to manage your father when he was drunk” or “How old were you when this [incident] happened.” Processing then progressed

as she recognized that her mother should have taken on more responsibility and since she didn't, Pam had no choice but to behave "grown-up" and step in. Positive associations emerged as she recognized "I had no choice then, but I have a choice now" and felt that although she had lost her childhood, she has choices now to live her life the way she wants. PC of "I have choices now" was installed. The PC reached a VoC of 7, and she could also visualize herself being more assertive at work with her boss and juniors to whom she felt she could delegate work more confidently.

Sessions 14 and 15. At the beginning of the next session, Pam reported feeling more confident especially at her workplace. We targeted the other past memories which also involved parent-child role reversal as well as the one about forging her marksheet when she failed her exam. Cognitive interweaves and stabilization skills were used when required. The gains were visible. As per Pam's self-report, panic attacks dropped to negligible. She travelled freely across the city using various forms of public transport. She was able to mingle with people. She also moved back in with her husband and was able to handle the isolation she had earlier felt in her far-flung home by planning get-togethers with friends.

Phase 3: Reprocessing of Current Triggers

External cues (i.e., husband's social drinking, father's current occasional drinking, husband not answering calls) and interoceptive cues (i.e., panic sensations while traveling/at work) were processed (see Table 5).

Session 16. For people presenting with PD, present triggers include both (a) external cues such as places, people, smells, and/or sounds, which may be perceived as threat cues or associated with rising anxiety, and (b) interoceptive cues such as body sensations and anxiety-provoking thoughts. The first 30 minutes of the session targeted external cues including husband's social drinking, father's current occasional drinking, and husband not answering calls. These triggers had already reduced in intensity but still maintained their emotional effects because of conditioning (Leeds, 2009, 2012). These reprocessed spontaneously in this session and required focusing on body sensations to reduce disturbance.

The next 60 minutes were spent on targeting interoceptive cues experienced while traveling by train. At this point in the treatment, Pam was no longer experiencing severe panic attacks and only occasionally had brief thoughts of fear. Nevertheless, interoceptive cues such as shortness of breath, chest pains, and

palpitations were targeted with the hypothesis that these can reoccur. These cues were reprocessed with her worst fear, which was having these panic sensations while traveling by train or when she was at work. We set up the standard protocol for both targets around physical sensations when (a) traveling by train and (b) at work. NC for both targets was "I cannot manage/handle," and the SUD was 2. Again, she could successfully reprocess these targets to SUD = 0, VoC = 7. PC was "I am in control and can manage."

Future Template

Session 17. The future template had been incorporated into the treatment plan alongside the reprocessing. This was to use the anxiety reduction gains made from reprocessing of targets and incorporate them into current areas of avoidance. Leeds mentions use of the "positive template" during this phase of therapy in which the patient imagines approaching formerly anxiety-provoking internal cues and being in formerly avoided locations (Leeds, 2009, 2010b). Pam was asked to imagine approaching fearful situations such as the local train, going back to work, setting limits with her husband, and moving back to her isolated home. We then worked on the remainder of avoidance and other areas of conflict in her life. We used the future template (Shapiro, 2001) to address challenging life situations such as disagreements with her husband, having guests over at home where drinks would be part of the occasion, meeting people in social contexts, and not taking overresponsibility at home or at work.

Treatment Termination

At this point, we mutually decided to terminate therapy. Client's goal at therapy initiation was reduction of panic symptoms as she had clearly opted for symptomatic relief. After 17 sessions, she reported absence of panic attacks since a month and reduction of agoraphobic symptoms. She also reported calmness, cheerfulness, and confidence both at work and with her family and feeling "like a new person." We mutually agreed on follow-ups at intervals of her choice. She also agreed to seek immediate intervention should the symptoms recur.

Results

In Pam's case, all identified target memories reached a SUD of "0" indicating no disturbance and a VoC of "7" indicating adaptive strengthening of the positive belief. The treatment took 17 sessions during which identified targets were reprocessed to SUD = 0, VoC = 7, clear

TABLE 6. Follow-Up Self-Report Data

6-Month Follow-Up	1-Year Follow-Up	5-Year Follow-Up
Absence of panic attacks	No panic attacks	Complete elimination of panic attacks
Did not meet criteria for agoraphobia	No agoraphobic symptoms	Remission from agoraphobic symptoms
Infrequent verbal fights with husband, with significant reduction of anxiety regarding husband's whereabouts		Occasional disagreements with husband which were managed with more open communication
Occasional work-related anxiety	Took on challenging projects at work	Fears about living conditions reduced; took a job out of the country
Continued to disallow alcohol to be brought into the home	Designed a bar for her husband; planned a cocktail party for friends	

body scan. Follow-up was done at intervals of 6 months (in person), 1 year (by phone), and 5 years (by phone). Self-report data is summarized in Table 6.

Discussion

Treatment Implications

The case study of Pam offers a clinical picture of a client diagnosed with PDA and the treatment plan using Leeds model. The Treatment plan which used the EMDR three-pronged protocol with all eight phases (as modified by Leeds) resulted in remission from PD and agoraphobic symptoms. As per the client's self-report, the effects were maintained across a period of 5 years. Leeds's model emphasizes background stressors as well as childhood experiences (and not just the panic attacks memories) as being necessary events to reprocess for complete remission from panic symptoms. This is particularly important from the viewpoint that PD and agoraphobia often start after interpersonal stressors (de Jongh, ten Broeke, & Renssen, 1999; de Jongh & ten Broeke, 2009; Kleiner & Marshall, 1987; Faravelli & Pallanti, 1989; Horesh, Amir, Kedem, Goldberger, & Kotler, 1997). Shapiro (2001) wrote,

For most anxiety disorder symptoms, a disturbing experience is the initial cause, and the anxiety that was generated may have become linked to any number of things [such as sounds or objects] that were present at that time. Those things may cause anxiety to come up automatically at a later date, and the response may link to everything present during that time. The web of anxiety responses can become more and more complex and all-encompassing. (p. 67)

Target Sequencing. Sequencing targets in a manner that allows for initially reprocessing background stressors, followed by the first, worst, and most recent

panic attacks and finally targeting of childhood contributory events allows a chain of associations to emerge spontaneously, thus permeating the entire memory network. This method of target sequencing is also particularly helpful when clients initially do not see the past-present link. Pam, like many clients, was initially doubtful about the link between her current symptoms and her past history of growing up with an alcoholic father. Careful target sequencing was required where the past was targeted only after Pam had made gains in the form of reduction of panic symptoms. By this time, she had adequate affect tolerance to approach more painful childhood memories, and during reprocessing of the first childhood contributory event (father in a drunken rage), she could connect the body sensations she was feeling while reprocessing the memory to the physiological arousal she experienced during panic attacks and during fights with her husband. This was possible because of careful "pruning" of associations (Leeds, 2009, 2012) which allowed her brain to absorb material and organize information based on her readiness.

Future Template. In Pam's case, the future template was used throughout the treatment plan (Sessions 8, 9, 12, 13, and 17). The future template can be viewed as a "positive template" that is an expansion of the installation phase (Shapiro, 2001). In effect, the absence of disturbance measured on the SUD scale (0) along with strengthening of the positive belief measured on the VoC scale (up to a 7) can be further reinforced within the same session by exploring how the client might perceive, feel, act, and believe in future similar situations. It is probable that sessions which incorporated such a future template aided in immediate anxiety reduction, increased self-belief, and allowed Pam to approach previously avoided people/place and situations. "Imagining positive outcomes seems to assist the learning process" (Shapiro, 2001,

p. 213). Pam was also able to approach the situations discussed during future template work and report positive changes by the next session (e.g., managing her husband's drinking at a social event, train travel, delegating work). Reduction of such avoidance probably allowed the new learning to start integrating rapidly into an overall positive schema and emerging sense of self. At the end of treatment, Pam was not just free from panic attacks and agoraphobia but had also developed a healthier worldview. She could take appropriate adult responsibility and learn to delegate without micromanaging. She developed an adult understanding about alcohol consumption and learnt to differentiate social drinking from addiction.

Clinical Considerations

Pam sought help soon after her first major panic attack. The avoidance behaviors had not generalized extensively. Although early intervention could be the key to faster treatment gains, seeking help immediately could also explain the straight forward and fairly quick remission from symptoms in Pam's case. Not all cases of PDA are straightforward and require careful and considerable treatment planning (Fernandez & Faretta, 2007).

Recommendations to Clinicians/ Future Research

Leeds's model has been thus far shown to be effective with two cases of PD (Leeds, 2009). However, published studies of the model's application with clients who have PDA is limited to Elisa Faretta's (2013) study on the comparison between EMDR and CBT where the EMDR condition was organized based on the Leeds (2009, 2012) model. The results of the study however do not discuss the treatment efficacy of Leeds's model. Future research may be needed to demonstrate efficacy of Leeds's model for PD and PDA with a larger client base. Also, replication of Leeds's model with more complex cases such as PDA diagnosed with comorbid conditions such as generalized anxiety disorder (GAD), obsessive-compulsive disorder (OCD), or a personality disorder is required to further establish the validity of the model.

A factor missing in EMDR treatment of PDA are controlled studies, which use the protocol in its entirety. The effectiveness of treatment for PDA that show reduction in panic attacks and agoraphobic symptoms using all three prongs and all eight phases of the EMDR protocol seem to be thus far limited only to one single-case study (Fernandez & Faretta, 2007) whereas another single-case study by Grey (2011) demonstrated

effectiveness of EMDR in a client diagnosed with PDA and comorbid major depressive disorder (MDD). Controlled studies concerning the use of EMDR therapy in the treatment of PDA have mostly been done by one group (Feske & Goldstein, 1997; Goldstein et al., 2000; Goldstein & Feske, 1994). However, as noted by reviewers (Fernandez & Faretta, 2007; Leeds, 2012; Shapiro, 2001), these studies had some deficiencies in their application of the EMDR protocol especially regarding adequate preparation, targeting of trauma memories, and use of the future template.

Using the EMDR protocol in its entirety is an important factor to consider in the treatment of anxiety disorders (Logie & de Jongh, 2014; Leeds, 2009; Shapiro, 2001, 2006). The treatment plan for cases of PDA needs to focus on remission of PD and not merely reduction of panic attacks. Clients may show significant gains from the Phase 2 (preparation) as well as from EMDR reprocessing of panic attacks. But present triggers (including external and interoceptive cues) as well as future templates are required to be incorporated appropriately into the overall treatment plan to show symptom reduction. Also, when targeting present triggers, it is especially important to reprocess interoceptive cues (body sensations and anxiety-provoking thoughts). Any remaining agoraphobic avoidance and future panic attacks will probably occur because of the overly conditioned associations that remain from these cues (Leeds, 2009).

Future-Related Work. The value of using future-related work as part of the three-pronged protocol interwoven within the treatment framework for PDA also needs further exploration. The treatment plan for Pam incorporated the future template while reprocessing past experiences (first prong) and present triggers (second prong). This process may be similar to the "flash forward procedure" proposed by Logie and de Jongh (2014), which addresses a client's irrational fears that persist after the core memories of past events appear to have been fully processed. The flash forward has been proposed as part of the second prong of the EMDR three-pronged approach because "even though the client's focus is on the future, the fears are experienced in the present, triggered by anticipatory thoughts, and so they are considered current fears suitable for processing in the second prong" (Logie & de Jongh, 2014, p. 26). Clients diagnosed with PDA and other anxiety disorders often "live in the future" anticipating catastrophic outcomes for future events. Therefore, the flash forward procedure may be the "missing link" between targeting memories in the past (first prong) and the future template (third prong).

The authors de Jongh and Logie propose that only when the future anticipatory anxiety in the present has been reprocessed can the installation of a PC in relation to a future scenario with a positive outcome (future template) occur effectively. Further research employing such future templates can be valuable in PDA treatment.

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