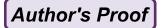
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### Prevalence, Course, and Comorbidity of Anxiety Disorders

Anxiety disorders are the most prevalent mental disorders in the United States, are the most frequently encountered disorders in primary mental health services, and are hypothesized to be the most common presenting problems in psychodynamic therapeutic practices [1]. In fact, when combining both national and international data, the best estimate for lifetime prevalence of anxiety disorders is 16.6% [2]. These disorders include generalized anxiety disorder (GAD), panic disorder (PD), post-traumatic stress disorder (PTSD), obsessive—compulsive disorder (OCD), social phobia, agoraphobia, and specific phobias [2].

Importantly, however, there is a high percentage of comorbidity among these disorders. In a large-scale survey of mental health, Andrews et al. [3] found that panic disorder, social phobia, GAD, and PTSD all had significant odds ratios (ORs) of occurrence with one another. Anxiety disorders have also been found to be highly comorbid with other disorders. For example, Andrews et al. [3] reported that 27.8% of patients with an anxiety disorder also had a comorbid personality disorder and 8.7% had a comorbid substance disorder. Moreover, in a prospective longitudinal cohort study, Moffitt et al. [4] found that of lifetime anxiety cases, 72% had lifetime major depressive disorder. This high rate of comorbidity is an important issue given that ample research has shown that comorbidity is associated with higher levels of severity, greater service utilization, and a poorer prognosis [3–6].

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### The Need for Empirical Research on Treatments for Anxiety Disorders

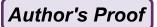
Anxiety disorders are associated with severe impairments in functioning and have significant emotional and financial costs both on personal and societal levels [7–9]. For example, patients with panic disorder have higher rates of morbidity and health care utilization than patients both with and without other psychiatric disorders [10] leading them to account for 20% of all emergency room visits [11]. Similarly, when compared with people suffering from 25 other mental disorders or common physical conditions, people with a diagnosis of GAD report missing the most work [7]. Thus, given the high prevalence, impairment, and cost of anxiety disorders, it is essential to continue to develop and test treatments for anxiety.

Although pharmacological and CBT treatments are widely used to treat anxiety [12] and there is evidence that both are effective (e.g. [13, 14]), there are limitations with both. Concerns associated with pharmacological treatments include: frequent relapse when medication is discontinued (e.g. [14]), unwanted side-effects (e.g. [15, 16]), and potential dependency of some drugs [14, 17]. In addition, some patients fail to respond to CBT, continue to experience symptoms, terminate early, or relapse after treatment (e.g. [18, 19]). Further, a few studies suggest that, at times, CBT may actually worsen the anxiety of some patients [20]. Thus, while pharmacological and CBT interventions have been successful in treating anxiety disorders, like all forms of treatment, they are limited, have problems, and are not helpful for all patients. Thus, it is important to test other types of treatment. Given that psychodynamic therapy is widely used to treat anxiety [12], its efficacy and effectiveness is important to test. Although there is not as extensive a research base for psychodynamic treatments for anxiety as there is for pharmacological interventions and CBT, the work done thus far is promising (e.g. [21]). This empirical literature will be reviewed later in the chapter after a brief review of psychodynamic theory of anxiety.

### 47 A Brief Account of the Psychodynamic Understanding of Anxiety

All of the major psychodynamic schools (e.g., Freudian, object relations, self-psychology) have written about anxiety with writers from Freud through Klein, Fairbairn, Sullivan, and Kohut all making important contributions [22]. Clearly, a short summary for this chapter cannot capture the many essential differences that exist among psychodynamic theorists. However, a review of some of the most significant contributions made by psychodynamic theory in the understanding of anxiety is important as these concepts have implications for treatment. These contributions include: the underlying meaning of symptoms, unconscious conflict, defense, and the impact of object and interpersonal relationships.

The meaning of symptoms, including both unconscious conflict and defense, originated with Freud and continues to be at the heart of most psychodynamic theories. Freud's [23] signal theory suggested that anxiety, which has arisen from a perceived psychological danger, signals an anticipated threat to the ego. As a result, defenses are activated so that a dangerous intrapsychic situation does not become traumatic. If the signal anxiety and/or defenses fail to work properly, an anxiety attack may ensue leaving the individual vulnerable [24]. Freud suggested that treatment should bring the threat into consciousness so that the patient can understand that the danger is not as great as originally perceived. Some of the threats he discussed were apprehension about object loss, castration anxiety, and superego anxiety [22]. For Freud, object loss anxiety is the fear of, or reaction to, separation from a need-gratifying other such as the mother. Castration anxiety is also the fear of being separated from a highly valued object. However, it is specific to concern over bodily injury



(typically the male genitalia) and loss of control and power. Finally, superego anxiety or moral anxiety is a fear of negative self-evaluation from the conscience or society [23].

Following Freud, several dynamic writers have suggested treatments for anxiety that focus on the role of the unconscious and the use of defense. For example, in discussing panic disorder from a psychodynamic perspective, it has been suggested that panic symptoms carry a specific emotional significance and are related to intense unconscious conflicts and their defenses [25, 26]. Also, like Freud, these authors suggest that typical areas of conflict for panic patients include anger, sexual desires, and separation [25, 26]. Similarly, contemporary psychodynamic work on GAD suggests that worry about current events functions as a defensive avoidance against thinking about more difficult issues [27]. This emphasis on interpersonal and object relationships leads to the next figural contribution of psychodynamic theory.

Object and interpersonal relationships are at the center of several dynamic theories of anxiety. In fact, although Sullivan, Fromm-Reichmann, Klein, Fairbairn, and Bowlby explain different aspects, functions, and types of anxiety, internalized object (and interpersonal) relations and interpersonal relationships are paramount in each writer's theory. For example, whereas Sullivan [28] proposed that anxiety originates in the anticipation of disapproval from a primary caregiver early in life, Fairbairn [29] suggested that anxiety centers around separation conflict. Similarly, Fromm-Reichmann [30] emphasized the role of distorted relational views in both the etiology and perpetuation of anxiety whereas Klein [31, 32] focused on an infant's fear of death when he/she is unable to evoke the primary caregiver on demand. In yet a different vein, Bowlby [33] focused on the relationship between attachment style and anxiety.

As highlighted in the discussion of Sullivan, Fromm-Reichmann, Klein, Fairbairn, and Bowlby, dynamic theorists often link anxiety with object relations and/or interpersonal relationships. Importantly, this connection has also been supported by empirical research. For example, studies have shown that worry is often related to interpersonal problems, especially when the worrier is overly nurturing toward others [34] and that worry content among GAD patients is more frequently about relational issues than any other topic [35]. In addition, insecure attachment patterns have been clinically reported for many patients with anxiety disorders [33, 36]. Further, patients suffering from panic disorder frequently describe controlling or critical parents (e.g. [37]). These findings support psychodynamic theorists' suggestion that there is a link between anxiety and object relations or interpersonal relationships. The implications of this connection can be seen in prominent psychodynamic treatment such as Luborsky's [38] Core Conflictual Relationship Theme (CCRT) which focuses on patients' cyclical relational patterns. In sum, psychodynamic theories provide an explanation for the etiology and pathogenesis of anxiety that often includes an emphasis on the underlying meaning of symptoms, unconscious conflict, defense, and both object relations and interpersonal relationships. In order to illustrate how this type of understanding impacts treatment, a clinical example will now be provided.

Clinical Example 104

Sara, a 29-year-old homemaker, presented at the emergency room complaining of panic attacks with prominent symptoms of dizziness, sweating, shortness of breath, and tachycardia. She reported that the first panic attacks occurred the previous week when her husband left for work and that they had reoccurred every morning since. The panic attacks always began with a fear that something terrible was going to happen to either her husband or son and that one of them would die. In order to begin to understand the meaning of Sara's symptoms, her therapist began by exploring the context in which her symptoms occurred.

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Therapist: These panic attacks sound very frightening. My hope is that we can begin to understand them

together. Can you tell me about the first morning that it happened?

Patient: I was making breakfast for my 2-year-old son. It was a normal morning.

Therapist: Can you recall what you were thinking about as you were making breakfast?

Patient: When my husband left that morning, he told me to "eat for two" since I am pregnant again. So, I

was thinking about that.

Therapist: When did you learn of your pregnancy?

119 Patient: Two weeks ago.

Therapist: When people learn they are pregnant, they often experience a wide range of emotions. How are you

experiencing the news?

Patient: It is only something wonderful. Well, I was originally upset about not being able to go back to

work, but now realize that I could not be happier to stay home with our children.

Sara's response suggests that she may be conflicted about the birth of the new child and her continued role as a homemaker. On the one hand, she seems to want to be a "good" mother and to take care of her children. Yet, on the other hand, she appears to be feeling a loss of autonomy about not returning to work. Thus, her physical symptoms are likely a manifestation of the anger and loss she feels when her husband leaves her alone with her son during the day and the subsequent guilt that this anger induces. It seems that Sara is attempting to defend against these feelings by using reaction formation (when an affect is disguised as its opposite) as seen by her statements that the pregnancy is "only something wonderful." When this fails and her resentment surfaces, she uses the defense of undoing (performing an action which retracts and disavows a previously expressed affect) as evidenced by her statement that at first she was upset about the news, but now "could not be happier." It seems that when both of these defenses fail, however, panic attacks ensue. In the following interchange, the therapist attempts to help Sara gain awareness into this conflict and become more in touch with her emotions.

Therapist: I can hear how seriously you take being a good mother and it is very clear to me how much you

love your family. It would be understandable, however, if there was also a part of you that feels

frustrated about not being able to return to work.

Patient: Oh I don't know, maybe a little frustrated, but not really.

Therapist: Can you tell me about the "little" bit of frustration that is there?

Patient: I'm not sure.

Therapist: What would be the scariest part if you were frustrated?

Patient: My mom never left me alone even for a second as a child. She gave up everything for me. That is

how I knew she loved me. What would my children think if I were to go back to work and what

would my husband and mother think of me as well?

Sara's object and interpersonal relationships are important in a psychodynamic therapy. Thus, her therapist spent time exploring Sara's enmeshed relationship with her mother as well as her relationships with her husband and son. In addition, they examined Sara's feelings and fantasies about her unborn child. Through this work together, Sara and her therapist identified a Core Conflictual Relationship Theme (CCRT [38]) focusing on what Sara wants from relationships (the wish; W), the response she expects from others (response from other; RO), and her subsequent response both affectively and behaviorally (response of self; RS). The specific CCRT was that Sara wants to be loving and giving to others while at the same time she wants to retain a sense of independence and autonomy. However, she is afraid that others will take advantage of her, abandon her, or view her as being selfish. As a result, she ignores her own needs and is left feeling trapped and angry.

Sara's CCRT was examined in the context of outside relationships as well as in the therapeutic relationship. The therapeutic relationship was also used to provide Sara with a different relational experience in which support and open communication were fostered. It was inside of this relationship that Sara and her therapist were able to make meaning of her physical symptoms, to bring her conflicts into awareness, and to develop new, healthier ways of relating to herself and others. Although Sara's



case is encouraging, it is important to examine whether psychodynamic therapy is efficacious and effective across many cases. Thus, this review will now turn to the empirical findings of psychodynamic therapy in the treatment of anxiety disorders.

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## The Outcome Evidence for Psychodynamic Treatments of Anxiety Disorders

### Efficacy of Psychodynamic Therapy Compared with No or Minimal Treatment for Anxiety

Table 6.1 summarizes the two studies that have compared psychodynamic therapy to a control group in the treatment of anxiety disorders [39, 40]. The purpose of this table, and all the other tables in the empirical sections, is to highlight the magnitude of treatment effects for the primary patient and clinically rated anxiety measures from each study. When measures of anxiety were not used, general symptoms or overall improvement will be reported instead. The tables are not meant to constitute meta-analyses or represent a complete reporting of all outcome effects for every variable examined in the studies reported. Rather, they are provided to organize the magnitude of effects for the primary anxiety variables (patient self-report and independent clinical ratings) in a clear manner.

As presented in Table 6.1, Brom et al. [39] examined whether brief psychodynamic therapy, focusing on solving intrapsychic conflict resulting from trauma, was more efficacious in the treatment of PTSD than a wait-list control [39]. They found that on the primary outcome measure of patient reported total symptoms, psychodynamic therapy was substantially more effective at termination (p < 0.05, d = 0.88).<sup>1</sup>

Table 6.1 Psychodynamic treatments versus controls for anxiety disorders

Hamilton Anxiety Inventory (independent rater)

Citation	N, disorder, and type of dynamic treatment	N, disorder, and type of comparison treatment	Post Tx ES	Follow-up Tx Es
Brom	29 PTSD	23 PTSD	Pt Rated Gen Symp	N/A (no follow-up
et al. [39]	Brief (mean = 18.8 sessions)	Wait-list	d = 0.88	data for wait-list
	psychodynamic focused			group)
•	on solving intrapsychic			
	conflict resulting from			
	trauma			
Crits-Christoph	14 GAD	13 GAD BAI	BAI $d = -0.49$	N/A
et al. [40]	Supportive-expressive	14 GAD HAM-A	HAM-A d=0.26	
	brief psychodynamic	Supportive, nondirective		
	treatment (16 sessions)	therapy (16 sessions)		

<sup>1</sup>Brom et al. [39] will be discussed in more detail in the *Psychodynamic Therapy versus CBT Treatments for Anxiety* section due to its further comparison of psychodynamic treatment to trauma desensitization.



The second study was a pilot study in which GAD patients receiving brief supportive-expressive (SE) psychodynamic therapy were compared to GAD patients receiving brief supportive nondirective therapy [40]. The supportive nondirective therapy was conducted using Borkovec and Mathews' [41] treatment manual and focused on directing patients' attention toward their feelings while creating an accepting, nonjudgmental, and empathic environment. Supportive therapists were prohibited from providing direct suggestion or coping techniques, and they were not instructed to focus on interpersonal relationships. In contrast, SE focused directly on anxiety in the context of problematic relational patterns.

Both groups showed large within-group improvements, and no significant differences were found between SE and supportive therapy on the BAI (d=-0.49), or the HAM-A (d=-0.26) [42]. However, when only patients who achieved symptomatic remission (defined as a termination score on the HAM-A of <7) were examined, a statistically significant difference (p<0.05) was found such that 46% of the SE group versus 12.5% of the supportive group achieved remission. Importantly, the outcome scores were much more variable in the SE group than in the supportive group (SD more than 50% greater in SE group). The authors state that these findings suggest SE therapy may work exceptionally well for a subset of GAD patients, but not for other GAD patients. In contrast, supportive treatment may lead to reliable gains for the majority of patients. This suggests that future research (with more power than a pilot study) should examine whether there are patient characteristics that moderate when psychodynamic therapy is more and less effective. It should also examine what the specific active ingredients in psychodynamic therapy are that cause it to lead to greater remission than supportive therapy. Further, because no follow-up data were provided, it remains uncertain whether the remitters in the SE group maintained their improvement.

Abbass et al. [43] begin addressing the issues of power and long-term maintenance in their large meta-analysis evaluating the efficacy of short-term psychodynamic therapy (STPP) as compared to controls (treatment as usual, medical management, psychotherapeutic support, minimal psychological interventions, and wait-list). Their meta-analysis is not included in Table 6.1 because their review summarizes data from studies on a variety of mental disorders and does not focus specifically on anxiety disorders. However, their findings are important as they examine STPP's efficacy in reducing anxiety symptoms. Among the 23 studies used in this review, 12 used anxiety measures. Using these 12 studies in a random effects model, Abbass et al. found that anxiety ratings showed significant (p < 0.05) and large treatment effects relative to controls at 3- to 9-month follow-up (d=0.96), but did not show significant effects when follow-up was less than 3 months (d=0.72) or greater than 9 months (d=0.85). However, when one of the studies used in the review [44] was excluded from analyses, the difference was significant in both the short (d=0.96, p<0.05) and long term (d=1.35, p=0.05). Examining the results with the exclusion of Sjodin et al. [44] is important as this study diverged markedly from the results of the other studies in the review. This is not surprising, given that it was a study conducted on peptic ulcer patients before triple therapy for the eradication of helicobacter pylori was introduced. When this study is taken out, the finding across the other 11 studies is that psychodynamic treatment is more effective than controls in reducing anxiety symptoms. Although this is important, it is even more important to determine how psychodynamic treatment compares to other active treatments. To address this question, the paper will now review the literature on psychodynamic versus pharmacological treatments on anxiety.

<sup>&</sup>lt;sup>2</sup>The pilot study was published as a subsection of a larger report on the effects of SE in the treatment of GAD and will be discussed in full in the *Pre-post within group effectiveness of psychodynamic therapy in the treatment of anxiety* Section.

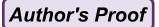


Table 6.2	Psychod	ynamic	treatments	versus p	harmaco	logical	l treatme	nts for	anxiety o	lisorders
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G: ···	N, disorder, and type of	N, disorder, and type of	D . W EG		1
Citation	dynamic treatment	comparison treatment	Post Tx ES	Follow-up Tx Es	
Ferrero	34 GAD post and 3 month	33 GAD post and 3 month	HAM-A	HAM-A	1
et al. [45]	33 GAD 9 month	25 GAD 9 month	d = -0.29	3 month $d = 0.21$	1
	Brief Adlerian psychotherapy	Medication		9 month $d = 0.13$	t
	(10–15 sessions)	(SSRI or SNRI/NaSSA)			t
Ferrero	34 GAD post and 3 month	20 GAD post and 3 month	HAM-A	HAM-A	t
et al. [45]	33 GAD 9 month	18 GAD 9 month	d = 0.21	3 month $d = 0.46$	t
	Brief Adlerian psychotherapy	Brief Adlerian psychotherapy		9 month $d = 0.19$	t
	(10–15 sessions)	(10–15 sessions) PLUS			t
		Medication			t
Wiborg and	20 Panic manualized	20 Panic clomipramine	PAAS $d=0.55$	9 months after	t
Dahl [46]	psychodynamic tx based	alone for 9 months		tx ended	t
	on Davanloo, Malan,		HAM-A d = 1.38	PAAS $d=0.76$	t
	Strupp and Binder			HAM-A d = 0.86	t
	(15 sessions) PLUS				t
	clomipramine				t

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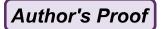
HAM-A Hamilton Anxiety Inventory (independent rater), PAAS panic attack and anxiety scale (patient rated)

# Efficacy of Psychodynamic Treatments Combined or Alone in Relation to Pharmacological Treatments for Anxiety Disorders

Table 6.2 summarizes the naturalistic studies [45] that have examined the efficacy of psychodynamic therapy alone or in combination with medications as compared with pharmacological interventions only in the treatment of anxiety and the primary patient and clinical anxiety ratings for the randomized control trials (RCT [46]). These studies vary in the types of patients used, the type of psychodynamic therapy provided, and the types of comparisons made. However, they are similar in that all provide encouraging results for psychodynamic therapy in the treatment of anxiety.

As presented in Table 6.2, Wiborg and Dahl [46] conducted an RCT in which adult outpatients diagnosed with panic disorder were treated with 9 months of clomipramine or a combination of clomipramine and 15 sessions of manualized psychodynamic psychotherapy based upon the concepts and techniques of Davanloo (1978), Malan (1976; 1979), and Strupp and Binder (1984) [46]. Results showed that, at the end of treatment, all patients who had received therapy and medication were panic free. In addition, the combined group had significantly less anxiety at the end of treatment than the medication alone group as measured by the patient-rated Panic Attack and Anxiety Scale (PAAS; p=0.02, d=0.55) and the external rated Hamilton Anxiety Inventory (HAM-A; p=0.001, d=1.38). This superiority of combined treatment remained 9 months after treatment ended on both the PAAS (p=0.02, d=0.76) and HAM-A (p=0.03, d=0.86). These findings suggest that psychodynamic therapy enhances the effects of pharmacological treatments. However, they do not attend to the effectiveness of psychodynamic therapy in the absence of medication.

In order to fill in this gap, Ferrero et al. [45] compared the effects of GAD outpatients treated with medication, brief Adlerian psychodynamic psychotherapy (B-APP), or combined therapy and medication. B-APP focused on exploring patients' deep-seated needs, self-esteem, self-image, and relational patterns. Patients were assigned at intake to their treatment group by a psychiatrist considering severity and mental ability in treatment placement. Nonetheless, there were no significant differences between the groups for age, comorbidity of Axis I or II disorders, or ratings on the Hamilton Rating Scale for Depression (HAM-D), Hamilton Rating Scale for Anxiety (HAM-A), Social and



Occupational Functioning Scale (SOFAS), or Clinical Global Impression (CGI) scores at the beginning of treatment.<sup>3</sup>

No significant differences were found between the groups on level of improvement evaluated across intake, termination, and 3 months after treatment ended on the CGI (p=0.21), HAM-A (p=0.31), HAM-D (p=0.24), and SOFAS (p=0.12) nor on rate of remission for HAM-A (p<0.42) or HAM-D (p<0.36). In addition, when effect sizes were examined for the primary anxiety measure, the HAM-A, only small differences were found at termination of therapy. This lack of robust differences between the groups is related to the fact that all treatment groups showed progressive improvement on all measures at 3 months post-treatment and they all showed long-term conservation of many of these clinical benefits at 9 months post-treatment.

In fact, the only finding that significantly differentiated the groups was that patients with a comorbid personality disorder made significantly more improvement in the dynamic therapy group than patients treated with medication alone at 3 months after treatment ended (p=0.04). This suggests that dynamic therapy is as successful as medication on improvement and remission of many symptom variables and that it is even more successful than medication in helping GAD patients with a comorbid PD improve their social and occupational functioning. Thus, although any conclusions drawn are tentative due to the small number of studies in this area, these findings combined with Wiborg and Dahl [46] provide support for the efficacy and effectiveness of psychodynamic treatment for anxiety disorders when compared with pharmacological approaches. In order to further explore the efficacy and effectiveness of psychodynamic therapy, this paper will now turn to empirical research that has compared psychodynamic therapy to cognitive and behavioral therapy for anxiety disorders.

# Efficacy of Psychodynamic Therapy Compared with Cognitive, Behavioral, or CBT for Anxiety

Table 6.3 summarizes results from the primary patient and clinical anxiety ratings for overall symptoms in studies that have compared psychodynamic therapy to cognitive [47, 48, 52] behavioral [39, 49, 51, 53], and cognitive-behavioral [50] therapies in the treatment of anxiety. These studies vary in the types of patients used, the kind of psychodynamic therapy provided, and the measures used to assess change. Thus, it is not surprising that the results vary with methodology. Overall, they provide mixed results for psychodynamic therapy in the treatment of anxiety [8, 39, 49, 51], with a few studies raising some questions about the efficacy or fidelity of the psychodynamic treatments delivered [47, 48].

Durham et al. [47, 48] is an example of a study that raises concerns about the efficacy of psychodynamic treatment for anxiety as compared to cognitive therapy. These investigators compared the effects of cognitive therapy, psychoanalytic therapy, and anxiety management training in an RCT with GAD adult outpatients. All treatments were delivered at 1 or 2 week intervals during a 6-month period and were further divided into two groups, one termed the high contact condition (16–20 h of treatment) and the other termed the low contact condition (8–10 h of treatment). They found that psychoanalytic therapy led to significant improvements on several different measures in both the high and low contact groups, but that cognitive therapy led to greater improvements. Similarly, low contact analytic therapy was significantly worse than anxiety management training in lowering patients symptoms on the STAI-T at termination (d=-0.80) and 6 (d=-0.90) and 12-month follow-up (d=-1.12).

<sup>&</sup>lt;sup>3</sup> It should be noted, however, that there was a nonsignificant indication that the therapy alone group had less severity as indicated by the CGI at the onset of treatment (p<.07).

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market and a second				
t3.2 Citation	N, disorder, and type of dynamic treatment	N, disorder, and type of comparison treatment	Post Tx ES	Follow-up Tx ES
t3.3 Brom et al. [39]	29 PTSD Manualized Brief (mean=18.8 sessions)	31 PTSD Trauma desensitization	Gen Symp	Gen Symp
t3.4	psychodynamic therapy focused on solving	(mean=15 sessions)	d = -0.26	3 month $d = 0.23$
13.5	intrapsychic conflict resulting from trauma			
t3.6 Durham et al. [47, 48]	11 GAD post	15 GAD post and 6 months	STAI-T	STAI-T
t3.7	12 GAD 6 month		d = -0.84	6 month $d = -0.71$
t3.8	10 GAD 12 month	13 GAD 12 months		
t3.9	AP (Analytic-based therapy; exploration of	CT (cognitive therapy based		12 month $d = -1.33$
t3.10	symptoms, relationships, development,	on Beck and Emery)		
t3.11	transference, and resistance)	High contact: 16–20 sessions		
t3.12	High contact: 16–20 sessions			
t3.13 Durham et al. [47, 48]	13 GAD post	18 GAD post	STAI-T	STAI-T
t3.14	14 GAD 6 months		d = -0.87	6 month $d = -1.38$
t3.15	12 GAD 12 months	14 GAD 6 and 12 months		
t3.16	AP Low contact: 8–10 sessions	CT Low contact: 8–10 sessions		12 month $d = -1.38$
t3.17 Durham et al. [47, 48]	13 GAD post	14 GAD post and 6 months	STAI-T	STAI-T
t3.18	14 GAD 6 months		d = -0.80	6 month $d = -0.90$
t3.19	12 GAD 12 months	12 GAD 12 months		
t3.20	AP Low contact: 8–10 sessions	Anxiety Management (8–10 sessions)		12 month $d = -1.12$
t3.21 Klein et al. [49]	18 Phobic <sup>a</sup>	48 Phobic <sup>b</sup>	Pt-ODI $d = 0.04$	
t3.22	Supportive dynamic (26 weekly sessions) PLUS	Behavior therapy (26 weekly sessions)	IR-ODI $d = -0.31$	
t3.23	imipramine	PLUS imipramine		
t3.24 Leichsenring et al. [50]	28 GAD Manualized STDP based on Luborsky	29 GAD Manualized CBT focused on	STAI-T $d = -0.82$	6 month
t3.25	and Crits-Christoph (up to 30 sessions)	changing and controlling worry		STAI-T $d = -0.93$
t3.26		(up to 30 sessions)	HAM-A $d = -0.48$	HAM-Ad=-0.65
t3.27 Milrod et al. [8]	26 Panic	23 Panic	PDSS $d=0.95$	
t3.28	Panic-focused psychodynamic psychotherapy	Relaxation Training		
t3.29	(twice weekly for 12 weeks)	(twice weekly for 12 weeks)		
t3.30 Pierloot and Vinck [51]	Nine Elevated scores on TMAS	13 Elevated scores on TMAS	STAI-T $d = -0.09$	STAI-T
t3.31	Short-term psychodynamic treatment influenced	Systematic desensitization (20 sessions)		3 months $d = -0.30$
t3.32	by Malan (20 sessions)			

<sup>13.33</sup> Gen Symp total general symptoms (patient measured), STAI-T State-Trait Anxiety Inventory (patient measured), HAM-A Hamilton Anxiety Inventory (independent rater), Pt-ODI 13.34 patient rating of overall degree of improvement, IR-ODI independent rating of overall degree of improvement, PDSS panic disorder severity scale (independent rater), TMAS t3.35 Taylor manifest anxiety scale

<sup>43.36</sup>  $^{\circ}$ Only 17 of the phobic patients in the ST Group were used in the IR-ODI calculation 13.37  $^{\circ}$ Only 44 of the phobic patients in the BT group were used in the IR-ODI calculation



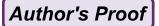
It is important to note, however, that there were several methodological problems in Durham et al.' [47, 48] work. First, there were manuals in the cognitive therapy but not in the analytic therapy. Second, there were no checks of adherence to the treatment methods so fidelity to stated brand name treatments cannot be validated. Third, there was no assessment of therapist competence. Finally, as Leichsenring et al. [54] note, the therapies were not equally performed. The psychologists delivering the cognitive therapy had between 2 and 10 years of postqualification in the cognitive therapy they were providing. In contrast, the psychiatrists conducting the analytic treatment were training in psychoanalysis and were not reported to have had any special training in brief therapeutic interventions even though the trial was limited to 6 months of treatment.

Perhaps even more important than these methodological concerns is Durham, Chambers, MacDonald, Power, and Major's [55] later finding that cognitive therapy's initial superiority over analytic therapy in the 1994 and 1999 studies disappeared by 8-year follow-up. Specifically, they found that 36% of participants in the cognitive group had recovered and 42% of participants in a combined control group of participants who had received either analytic therapy or anxiety management had recovered. Unfortunately, because Durham and colleagues [55] combined the analytic therapy and anxiety management participants in the comparison at 8-year follow-up, it is impossible to conclude how cognitive therapy directly compared to analytic therapy at follow-up.

A direct comparison between short-term psychodynamic treatment and behavior therapy was reported by Klein et al. [49]. In this study, phobic patients were randomly assigned to imipramine plus 26 weekly sessions of behavior therapy (BT), placebo pill plus 26 weekly sessions of BT, or imipramine plus 26 weekly sessions of supportive dynamic therapy (ST). BT consisted primarily of systematic desensitization and relaxation training whereas ST focused on expression of feelings and discussion of interpersonal relationships, anxieties, and conflicts. Results showed that both ST plus imipramine and BT plus imipramine led to robust improvements. Eighty-five percent of patients in the BT plus imipramine group and 89% of patients in the ST plus imipramine group reported having made moderate to marked improvement. Similarly, ratings by an external rater show that 82% of patients in the BT plus imipramine group and 76% of patients in the ST plus imipramine group made moderate to marked improvement at termination. Neither of these differences were significant (p>0.10). This suggests that behavioral therapy and short-term psychodynamic therapy are equally effective in the treatment of phobias when combined with imipramine and that both are highly effective in combination with imipramine. However, it remains unclear as to whether either behavioral or psychodynamic therapy would be effective without imipramine and whether comparing the two treatments without the inclusion of pharmacological treatment would lead to differential efficacy.

Pierloot and Vinck [51] also compared psychodynamic and behavioral therapies in the treatment of anxiety. Like Klein et al. [49], they found both to lead to some positive change, however, their results were more varied. On two measures, there was a trend, although not significant (p>0.05), in which systematic desensitization led to more positive change at the end of treatment, but not at 3-month follow-up. Specifically, at termination, patients in the systematic desensitization group tended to show greater positive change on the TMAS (d=-0.49) and on the State-Trait Anxiety Index, Form State (STAI-S) (d=-0.37), than patients in the psychodynamic therapy group. Yet, at 3-month follow-up, the difference had disappeared for the TMAS (d=-0.03) and had trended toward a reversal for the STAI-S (d=0.33). Moreover, the positive changes made between termination and follow-up were significantly greater in the dynamic therapy group than they were in the systematic desensitization group (p<0.05). These findings combined with Durham and colleagues' [55] results suggest that cognitive and behavioral treatments may lead to more immediate symptom reduction, but that the difference in the effects of these treatments may diminish after termination while psychodynamic treatment may lead to continued improvement.

<sup>&</sup>lt;sup>4</sup>Because there was no direct comparison, Durham et al. [55] is not included in the table.



Further support for this argument comes from Brom and colleagues' [39] RCT which contrasted wait-list control, psychodynamic therapy, hypnotherapy, and trauma desensitization in the treatment of patients with PTSD. Similar to these findings, at post-treatment on combined scores of intrusion and avoidance, psychodynamic treatment appeared to have slightly weaker effects as compared to trauma desensitization (d=-0.26). However, the therapeutic gains continued in the psychodynamic treatment group, and at 3-month follow-up, the psychodynamic patients appeared to have slightly stronger positive effects as compared to trauma desensitization (d=0.23).

When within-group effect sizes from pretest to follow-up were examined, psychodynamic treatment had large effects on both the Intrusion (d=1.12) and the Avoidance (d=0.94) subscales. Trauma desensitization also fared well when comparing within-group effect sizes from pretest to follow-up. However, the differences between the two scales for trauma desensitization were greater on the Intrusion subscale (d=1.07) than on the Avoidance subscale (d=0.69). Thus, Brom and colleagues [39] conclude that both psychodynamic therapy and trauma desensitization are more effective in treating PTSD than control comparisons, but that the treatments may lead to differential results depending on the timing of assessments (i.e., at termination or follow-up) as well as the specific measures utilized (i.e., what types of changes are being assessed). Specifically, trauma desensitization may lead to more improvements in the short term whereas psychodynamic treatment may lead to greater gains in the long term. Moreover, psychodynamic therapy and trauma desensitization may be equally effective in reducing intrusion, but psychodynamic therapy may lead to greater gains in the area of avoidance.

Leichsenring et al. [50] also found that the relative success of CBT and short-term psychodynamic therapy (STDP) in the treatment of GAD depended on the measures used for assessment. To avoid some of the methodological flaws mentioned earlier in previous studies, Leichsenring and colleagues used experienced therapists well trained in their respective approaches, manuals in both treatments, and adherence and competency checks to ensure that the therapies were being delivered properly. They found significant positive effects for all outcome measures, indicating that both CBT and STDP led to improvements (effect sizes ranged from d=0.41-d=2.67). This was also true for all outcome measures at 6-month follow-up, indicating that the improvements were retained. In fact, when the within-group effect sizes for all measures used in this study are averaged, STDP shows a large effect at termination (d=1.16) and 6-month follow-up (d=1.10). Average CBT within-group effect sizes also show a large effect at termination (d=1.73) and 6-month follow-up (d=1.71).

When the two groups were compared at termination, no significant differences (p>0.05) were found for the Hamilton Anxiety Rating Scale (HAM-A; d=-0.48), Beck Anxiety Inventory (BAI; d=-0.33), Hospital Anxiety Scale (HAS; d=-0.57), or the Inventory of Interpersonal Problems (IIP; d=-0.08) despite the tendency for CBT to have larger effect sizes. Similarly, at 6-month follow-up, CBT continued to have larger effect sizes, but no significant differences (p>0.05) were found for the HAM-A (d=-0.65), BAI (d=-0.37), HAS (d=-0.63), or IIP (d=-0.07). However, CBT was significantly (p<0.01) superior at termination in reducing symptoms as measured by the Penn State Worry Questionnaire (d=-0.98), State-Trait Anxiety Inventory (d=-0.82), and Beck Depression Inventory (d=-0.76). At 6-month follow-up, this significant (p<0.05) superiority remained on all three measures (respective effect sizes: d=-1.04, d=-0.93, d=-0.59). If the between-group effect sizes of all measures used in this study are averaged, medium effect sizes are found such that CBT is superior to psychodynamic therapy at both termination (d=-0.57) and 6-month follow-up (d=-0.61).

Thus, both treatments were associated with significant improvements in anxiety, depression, and interpersonal functioning, and no significant differences were found between the two therapies on the majority of measures. However, CBT was significantly superior in measures of trait anxiety, worrying, and depression. In discussing these findings, Leichsenring et al. [50] note that the reduction of worry is a core element of the CBT treatment used in this trial but not of the applied STDP. Thus, they suggest that this specific difference may account for the superiority of CBT on the Penn



State Worry Questionnaire and in part, on the State-Trait Anxiety Inventory. (This measure also contains several items about worry). One way to look at this would be to accept that the two treatments focus differentially on symptoms. Thus, some types of outcome measures will favor one treatment while others will present the inverse pattern.

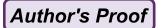
Although no outcome measures were associated with more positive change for psychodynamic therapy in this study, other studies have suggested that psychodynamic therapy may be more effective in some domains [39, 56]. For example, Gibbons and colleagues used a pooled study database of five trials utilizing similar methods with varied study populations in order to examine the unique and common mechanisms of change across psychodynamic and cognitive psychotherapies. They found that psychodynamic therapy led to significantly (p<0.05) greater gains in self-understanding of interpersonal patterns than cognitive therapy between intake and termination (d=0.47). Importantly, improvements made during treatment in self-understanding were significantly predictive (p<0.05) of improvement in symptoms of anxiety on the BAI from termination to follow-up, controlling for change on the BAI from intake to termination. This suggests that changes in self-understanding preceded symptom change in anxiety. Thus, it seems that psychodynamic therapy's focus on self-understanding of interpersonal patterns may be an important mechanism of change in the treatment of anxiety symptoms.

Other promising results for psychodynamic therapy in the reduction of anxiety come from Milrod, Leon, Busch and colleagues' [53] RCT comparing panic focused psychodynamic psychotherapy (PFPP) and relaxation training in the treatment of 49 patients with panic disorder.

Results found that, at termination, PFPP had been significantly more effective than relaxation training in reducing the severity of a broad range of symptoms on the Panic Disorder Severity Scale (p<0.0, d=0.95). At termination, PFPP had also been more successful in lowering functional impairment as measured by the Sheehan Disability Scale (p=0.01, d=0.74), and it trended toward being more effective in the reduction of depressive symptoms on the Hamilton Depression Scale (p=0.07, d=0.53). Finally, relaxation training had a significantly higher attrition rate than PFPP: 7% of patients in the PFPP group versus 34% of patients in the relaxation training group dropped out of treatment (p=0.03).

Follow-up analyses for this RCT were reported by Milrod, Leon, Barber, Markowitz, and Graf [53] in order to determine whether Axis II comorbidity moderated the treatment effects found for PFPP and relaxation training. Results showed that on the Panic Disorder Severity Scale (PDSS), PFPP was superior to relaxation therapy both for patients with (d=1.19) and without (d=0.55) an Axis II disorder and that the effect size was even larger for the personality disorder patients. In addition, when only Cluster C was considered, PFPP outperformed relaxation therapy for patients with (d=1.35) and without (d=0.69) a Cluster C personality disorder and again the effect size was even larger for the Cluster C group. Because only five subjects with an Axis II diagnosis did not have a Cluster C personality disorder, the effects of other Axis II disorders could not be separated from the effects of Cluster C. Thus, the conclusion which can be drawn is that Cluster C comorbidity increased the efficacy of PFPP while it decreased the efficacy of relaxation therapy. These results are consistent with the APA Practice Guidelines for Panic Disorder [16], which recommend psychodynamic psychotherapy for PD patients with comorbid personality disorders.

The research presented thus far has compared psychodynamic treatments to cognitive and behavioral treatments as well as to controls and pharmacological interventions. Results have generally suggested that psychodynamic therapy demonstrates efficacy in relation to controls and that it is generally as efficacious as medication. However, the conclusions with regards to pharmacological interventions are preliminary due to the small number of studies in this area. Finally, the efficacy of psychodynamic therapy in relation to cognitive, behavioral, and CBT is more mixed, although there is a general trend for CBT to demonstrate small to moderate effects over psychodynamic treatments for anxiety disorders.



Another way to examine the effects of psychodynamic treatment of anxiety disorders is to evaluate pre-post within-group treatment changes. This allows an evaluation of the amount of improvements patients make in psychodynamic therapy between intake and termination and between intake and follow-up. This allows a direct evaluation of the amount of change patients make during psychodynamic therapy. Thus, this paper will now move to discussing the effectiveness of psychodynamic therapy in leading to change.

## Pre-Post Within-Group Effectiveness of Psychodynamic Therapy in the Treatment of Anxiety

Table 6.4 summarizes the within-group (pre-post change) effect sizes for the primary patient- and clinician-rated outcome measures of anxiety (overall symptoms or improvement when a measure of anxiety was not provided). This table only includes published studies that use psychodynamic therapy in the treatment of anxiety disorders. When the pre-post treatment effect sizes of these studies are averaged (random effect, weighted for sample size), psychodynamic psychotherapy has a large mean effect for patient (d=1.05; range d=0.25-3.20) and clinician (d=1.62; range d=0.56-2.34) ratings on the primary outcome scales for the studies (N=269). These summary scores are not meant to constitute a meta-analysis or represent a complete reporting of all outcome effects for every variable examined in the studies reported. Rather, they are provided to organize the magnitude of effects for the primary anxiety variables in a clear manner. However, whereas this summary score is not a meta-analysis, it is important to note that the summary effect sizes are comparable to Stewart and Chambless [58] meta-analytic finding that effect sizes for CBT range from 0.83 to 2.59 depending on the specific anxiety disorder being targeted. For example, they found that across 11 effectiveness studies of CBT for GAD, the mean pre-post effect size was 0.92 for generalized anxiety. Across 17 effectiveness studies of CBT for panic disorder, the mean pre-post effect size for panic attacks was 1.01. And, across 11 effectiveness studies of social anxiety disorder, the mean pre-post effect size for social anxiety symptoms was 1.04.5

In addition to examining the summary of within-group effect sizes across numerous studies, it is also useful to look directly at effectiveness studies of psychodynamic psychotherapy for anxiety disorders in naturalistic settings. Reviewing both RCT's and effectiveness research in naturalistic settings is important as they provide different types of information. Efficacy studies tend to have high internal validity, enabling them to provide information about which treatment leads to the best results under controlled conditions. In contrast, effectiveness research has higher external validity and helps to identify if a treatment is feasible and effective in real-world settings [61]. In order to examine whether psychodynamic treatments of anxiety are likely to be effective as well as efficacious, this chapter will now turn to research examining the effectiveness of psychodynamic treatments for anxiety in naturalistic settings.

Three studies have examined the effectiveness of psychodynamic psychotherapy for anxiety disorders in naturalistic settings [21, 27, 57]. Crits-Christoph et al.' [27] study was an open trial of brief supportive-expressive (SE) psychotherapy in the treatment of GAD; Milrod et al.' [21] study was an open trial of panic-focused psychodynamic psychotherapy (PFPP) in the treatment of panic disorder; and Slavin-Mulford et al.' [57] study was an open trial of short-term psychodynamic psychotherapy in the treatment of anxiety spectrum disorders. All three studies suggest that psychodynamic therapy is effective in treating anxiety.

<sup>&</sup>lt;sup>5</sup> The measure of effect size in this study was Hedge's g [59] rather than Cohen's d [60] which is more commonly reported in meta-analyses. The two measures are based on slightly different computational formulas, but with large samples, the choice of formula leads to limited or no change in transforming g to d.

### Author's Proof

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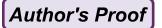
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Table 6.4 Psychodynamic treatments for anxiety disorders pre–post follow-up

t4.1	Table 6.4 Psychod	lynamic treatments for anxiety disorders pre-post follow-	-up	
t4.2	Citation	N, disorder, and type of dynamic treatment	Pre-Post ES	Pre-follow-up ES
t4.3	Ferrero et al. [45]	34 GAD post and 3 month	HAM-A	HAM-A
t4.4		33 GAD 9 month	d = 0.57	3 month $d = 1.58$
t4.5		Brief Adlerian psychotherapy (10–15 sessions)		9 month $d = 1.53$
t4.6	Wiborg and	20 panic manualized psychodynamic tx based on	PAAS $d=3.23$	9 month
t4.7	Dahl [46]	Davanloo, Malan, Strupp and Binder (15 sessions)	HAM-A d = 2.29	PAAS $d=2.54$
t4.8		PLUS clomipramine		HAM-A d = 1.88
t4.9	Brom et al. [39]	29 PTSD	Gen Symp	Gen Symp
t4.10		Manualized brief (mean = 18.8 sessions)	d = 0.92	3 month
t4.11		psychodynamic focused on solving intrapsychic		d = 1.28
t4.12		conflict resulting from trauma		
t4.13	Durham	11 GAD post	STAI-T	STAI-T
t4.14	et al. [48]	12 GAD 6 month	d = 0.26	6 month $d = 0.39$
t4.15		10 GAD 12 month		12 month $d = 0.23$
t4.16		AP (analytic-based therapy w/exploration of		
t4.17		symptoms, current relationships, development,		
t4.18		transference, and resistance-no support used)		
t4.19		High contact condition: 16–20 sessions		
t4.20	Durham	13 GAD post	STAI-T	STAI-T
t4.21	et al. [48]	14 GAD 6 month	d = 0.49	6 month $d = 0.12$
t4.22		12 GAD 12 month		12 month $d = 0.13$
t4.23	*** 1	AP: Low contact: 8–10 sessions	222 7 27	
t4.24	Klein	18 Phobic PTODI	89% Pt-ODI	
t4.25	et al. [49] <sup>a</sup>	17 Phobic ERODI	76% IR-ODI	
t4.26 t4.27		Supportive dynamic (26 weekly sessions) PLUS imipramine		
t4.28	Leichsenring	28 GAD	STAI-T $d = 1.02$	6 month
t4.29	et al. [50]	Manualized STDP based on Luborsky	HAM-A d = 2.14	STAI-T $d=0.94$
t4.30		and Crits-Christoph (up to 30 sessions)		HAM-A d = 2.02
t4.31	Milrod et al. [8]	26 Panic	PDSS $d=2.07$	
t4.32		Panic-focused psychodynamic psychotherapy		
t4.33		(twice weekly for 12 weeks)		
t4.34	Pierloot and	9 Elevated scores on Taylor Manifest Anxiety Scale	STAI-T $d=0.52$	STAI-T 3 months
t4.35	Vinck [51]	Short-term psychodynamic tx influenced by		d = 0.54
t4.36		Malan (20 sessions)		
t4.37	Crits-Christoph	61 GAD brief supportive-expressive psychotherapy	BAI $d = 1.25$	
t4.38	et al. [40]	(16 weekly sessions + 3 monthly booster sessions)	HAM-A d = 1.18	
t4.39	Milrod	21 Panic 16 weeks	ASI $d = 1.19$	6 month
t4.40	et al. [21]	17 panic 6 month	PDSS $d=2.08$	ASI $d = 1.66$
t4.41		PFPP (2× weekly 24 sessions)		PDSS $d = 1.81$
t4.42	Slavin-Mulford	12 GAD, 1 Panic, 4 PTSD, and 4 Anxiety	BSI Anx $d=0.89$	
t4.43	et al. [57]	Disorder NOS	GAF $d = 1.44$	
t4.44		STPP (duration varied; mean sessions = 29)		
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HAM-A Hamilton Anxiety Inventory (independent rater), PAAS panic attack and anxiety scale (patient measured), Gen Symp total general symptoms (patient measured), STAI-T State-Trait Anxiety Inventory (patient measured), Pt-ODI patient rating of overall degree of improvement, IR-ODI independent rating of overall degree of improvement, PDSS panic disorder severity scale (independent rater), BAI Beck Anxiety Inventory (patient measured), ASI Anxiety Sensitivity Inventory (patient measured), STPP short-term psychodynamic psychotherapy, BSI Anx brief symptom inventory anxiety subscale (patient measured), GAF global assessment of functioning scale (independent rater) "Klein et al. [49] did not provide information for calculating within-group effect sizes. However, the percentage of patient improvement as reported by the patients and independent raters was provided

Crits-Christoph et al.' [27] study included 26 adult outpatients with GAD. Exclusionary criteria included acute medical disorders, any current or past history of schizophrenic disorders, bipolar disorder, Cluster A Axis II disorders, and anyone who met criteria within the past year for substance dependence or abuse, OCD, eating disorder, major depression, or borderline personality disorder.



These patients received manualized SE from therapists who had more than 10 years post doctoral experience and special training in SE for GAD. Treatment consisted of 16 weekly sessions and 3 monthly booster sessions. It was conducted using Luborsky's [38] general SE manual in conjunction with Crits-Christoph et al. [62] GAD specific SE manual. This approach focuses on understanding anxiety in the context of interpersonal/intrapsychic conflicts using the Core Conflictual Relational Theme which focuses on patients' cyclical relational patterns.

Results showed that, at the end of 16 weeks, 79% of patients no longer qualified for GAD. This considerable reduction in diagnosis occurred alongside a significant and large decrease in anxiety symptoms as measured by the HAM-A (p<0.01, d=1.41) and BAI (p<0.01, d=1.99). Moreover, significant improvements were found for worry as measured by the Penn State Worry Questionnaire (p<0.01, d=0.95), interpersonal functioning as measured by the Inventory of Interpersonal Problems (p<0.05, d=0.25), and depression as measured by the Hamilton Depression Rating Scale (p<0.01, d=1.15) and Beck Depression Inventory (p<0.01, d=1.09).

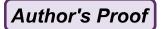
In a later study [62], additional SE patients were added to the 1996 sample, and it is this larger sample that is reported in Table 6.4. These additional SE patients were obtained from the following: 13 patients originally excluded due to comorbid MDD, seven patients originally excluded because they met all the criteria of DSM-IV GAD except that their worry was only in one sphere, and 15 patients who had been randomized to SE in a pilot study comparing SE and supportive, nondirect therapy. With this combined sample, Crits-Christoph etr al. [62] found that SE therapy led to statistically and clinically meaningful change on the HAM-A (p<0.01, d=1.18), BAI (p<0.01, d=1.25) and Inventory of Interpersonal Problems (IIP; p<0.01, d=1.07). These numbers are somewhat lower than were reported in the 1996 paper. Because the 2005 paper did not examine these differences, it is unclear as to what caused the drop. One possibility is that the comorbid MDD patients responded less favorably than the noncomorbid patients to SE. However, this possibility remains the work of future research.

At this time, the most important point is that with this larger sample, SE remained highly effective. In fact, these effect sizes are similar in magnitude to those found for CBT treatments. Specifically, this investigation demonstrated effect sizes of 1.18 and 1.25 for reducing anxiety symptoms which is comparable to the Stewart and Chambless [58] finding that across 11 effectiveness studies of CBT for GAD, the mean pre-post effect size was 0.92 for generalized anxiety. These findings suggest that psychodynamic therapy is effective in treating anxiety disorders in the short term. However, because no follow-up data was collected, it is unclear as to whether these gains are maintained.

Milrod et al.' [21, 26] study helps to begin addressing the issues of how well changes are maintained after treatment. Because their 2001 work is an expanded report of their 2000 study and provides additional assessment measures and increased sample, only the results presented in the 2001 report will be discussed. In this study, 21 patients with panic disorder were recruited, 81% of whom had at least one comorbid Axis I diagnosis. Unlike Crits-Christoph et al.' [27] study, major depression was not used as an exclusionary category and 24% of patients had comorbid major depression. Other Axis I comorbidities included: dysthymia (24%), GAD (24%), specific phobia (24%), and social phobia (14%).

Patients were treated with 24 sessions at twice-weekly intervals of Panic-Focused Psychodynamic Psychotherapy (PFPP). PFPP is a manualized treatment that focuses on the underlying emotional meanings of panic symptoms and on current social and emotional functioning through utilization of free association, exploration of fantasies, interpretation of defenses, and the therapeutic relationship. Results showed significant and substantial improvements at termination on the Panic Disorder Severity Scale (d=2.08, p<0.001), Hamilton Anxiety Scale (d=1.72, p<0.001), Hamilton

<sup>&</sup>lt;sup>6</sup> The measure of effect size in this study was Hedge's g [59] rather than Cohen's d [60] which is more commonly reported in meta-analyses. The two measures are based on slightly different computational formulas, but with large samples, the choice of formula leads to limited or no change in transforming g to d.



Depression Scale (d=0.89, p<0.002), and Sheehan Disability Scale (d=1.55, p<0.001). In addition, significant and substantial improvements were found at termination on the Body Sensations Questionnaire (d=1.30, p<0.001), Agoraphobic Cognitions Questionnaire (d=1.27, p=0.001), Marks and Mathews Fear Questionnaire 1 (d=1.12, p=0.002), Marks and Mathews Fear Questionnaire 2 (d=1.39, p<0.001), and Anxiety Severity Index (d=1.19, p<0.001). Moreover, these gains were maintained on all measures at 6-month-follow-up. In fact, when termination scores were compared to follow-up scores, there was a trend on the Anxiety Sensitivity Index (d=0.31, p=0.08) and on the Marks and Mathews Fear Questionnaire 1 (d=0.42, p=0.10) for the gains to increase. Thus, it seems that at follow-up, additional small effect size gains were made even over the treatment termination scores, although these levels of chance did not reach traditional levels of significance.

When Milrod et al.' [21] within-group effect sizes are compared to the within-group effect sizes obtained in CBT for panic disorder, PFPP seems to do as well if not better than CBT. Specifically, the effect sizes found on the Panic Disorder Severity Scale at termination in Milrod et al.' [21] study was 2.08. Comparatively, Stewart and Chambless [58] report a mean pre-post effect size of 1.02 for general anxiety symptoms, 1.01 for panic attacks, and 0.83 for avoidance in their meta-analytic review of 17 effectiveness studies that used cognitive, behavioral, or a combination of cognitive and behavioral interventions in the treatment of panic disorder. Thus, like Crits-Christoph et al.' [27] results, this suggests that psychodynamic therapy is highly effective in the treatment of anxiety disorders and that these large within-group changes are consistent with the within-group changes found in CBT.

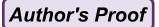
Although Crits-Christoph et al. [27] and Milrod et al. [21] provide important information about the outcome of psychodynamic therapy, they do not explore how the process of therapy (e.g., techniques) is related to change. Slavin-Mulford et al.' [57] study helps to begin addressing this gap by examining which therapeutic techniques were most related to outcome in an open trial of short-term psychodynamic therapy for anxiety disorders. In this naturalistic study, 21 patients with a diagnosed anxiety disorder (12 GAD, one Panic, four PTSD, and four Anxiety Disorder NOS) were accepted into treatment regardless of comorbidity. The majority of patients had at least one comorbid Axis I diagnosis (57% mood disorder; 10% eating disorder; 5% adjustment disorder) as well as a comorbid personality disorder (67%).

These patients received once or twice weekly 50–60-min sessions of short-term psychodynamic psychotherapy (STPP). The decision about frequency of sessions was decided collaboratively between patient and therapist through a consideration of the patient's needs.<sup>8</sup> Treatment was organized, aided, and informed (but not prescribed) by the technical guidelines delineated in four treatment manuals [38, 63–65]. Additional technical material specific to the STPP treatment of anxiety [62] was actively integrated into the treatment of these patients. Key features of the STPP model include [66]: [1] Focus on affect and the expression of emotion; [2] The identification of patterns in actions, thoughts, feelings, experiences, and relationships with these patterns being explored/formulated using the Core Conflictual Relationship Theme (CCRT) format [67]; [3] Emphasis on past experiences; [4] Focus on interpersonal experiences; [5] Emphasis on the therapeutic relationship/alliance; [6] Exploration of wishes, dreams, or fantasies; and [7] Exploration of attempts to avoid topics or engage in activities that may hinder the progress of therapy.

Results showed statistically significant changes at the end of treatment on anxiety symptoms, global distress, interpersonal distress, and social/occupational functioning.

<sup>&</sup>lt;sup>7</sup>The measure of effect size in this study was Hedge's *g* [59] rather than Cohen's *d* [60] which is more commonly reported in meta-analyses. The two measures are based on slightly different computational formulas, but with large samples, the choice of formula leads to limited or no change in transforming *g* to *d*.

<sup>&</sup>lt;sup>8</sup> The mean number of sessions attended by these twenty-one patients was 29 (SD=15), and the median was 24. The maximum number of sessions attended by a patient was 64.



Specifically, there was a significant and large decrease in anxiety symptoms as assessed by patient self-report on the Brief Symptom Inventory Anxiety Scale (p<0.01, d=0.89). Likewise, global symptomatic distress as measured by the clinician-rated Global Assessment of Functioning scale (GAF, d=1.44) and patient-rated Global Severity Index (GSI, d=0.92) were both shown to significantly decrease over the course of treatment (p<0.01) with large effects. In addition, significant (p<0.05) improvement in interpersonal functioning was also found with changes ranging from small (patient-rated Interpersonal Sensitivity subscale of the Brief Symptom Inventory, d=0.33) to large (externally rated Global Assessment of Relational Functioning, d=1.23). Moreover, the patient-rated Social Adjustment Scale (d=0.53) and clinician-rated Social and Occupational Functioning Assessment Scale (d=0.84) also showed significant changes (p<0.05) with medium to large effects. Finally, at termination, most patients (76%) reported that their anxiety symptoms were within two standard deviations of the normative mean. This is similar to or even more encouraging than over psychodynamic (e.g. [40, 45, 48]) and CBT [18, 68, 69] studies on anxiety disorder patients.

Importantly, Slavin-Mulford and colleagues [57] study also examined the relationship between the use of specific therapeutic techniques and subsequent change. A significant direct process-outcome link between psychodynamic-interpersonal therapist techniques and changes in anxiety symptoms was observed (r=0.46, p=0.04). Further, results showed that several individual PI techniques were meaningfully related to outcome. These included: [1] focusing on wishes, fantasies, dreams, and early memories; [2] linking current feelings or perceptions to the past; [3] highlighting patients' typical patterns; and [4] helping patients to understand their experiences in new ways. This compilation of techniques fits well with psychodynamic theories for anxiety as well as the empirically supported treatments derived from them [21, 27]. Thus, Slavin-Mulford and colleagues' [57] work along with the other research presented previously suggests that psychodynamic treatments and techniques are likely helpful in the treatment of anxiety disorders. This being said, many questions remain such as which patient (e.g., Axis I and II comorbidity) and therapist (e.g., experience) variables moderate the outcome of psychodynamic therapy in the treatment of anxiety disorders. Thus, it will be the job of future research to begin filling in the gaps. This paper now summarizes the research presented so far and offers a road map for the research still needed.

### **Summary and Future Directions**

Psychodynamic therapy is widely used to treat anxiety [12], and many studies have begun examining its efficacy and effectiveness with promising results. The few effectiveness studies which have been conducted in naturalistic settings indicate that psychodynamic treatments for anxiety demonstrate large effects [21, 27, 57]. Patients in these studies treated with psychodynamic therapy evidenced considerable reduction in diagnosis, anxiety symptoms, depression, and global distress (i.e., large effects). In addition, randomized control trials suggest that psychodynamic treatment for anxiety symptoms tends to be more efficacious than controls [43]. Moreover, the few studies which have compared psychodynamic therapy to medication, suggest that psychodynamic therapy is as efficacious as pharmacological interventions (e.g. [45, 46]). Finally, the efficacy of psychodynamic therapy in relation to cognitive, behavioral, and CBT is more mixed, although there is a general trend for CBT to demonstrate small to moderate effects over psychodynamic treatments for anxiety disorders (e.g. [49, 50]). Importantly, however, many of the studies comparing CBT to psychodynamic therapy found large effects for both treatments (e.g. [50]).

Despite these encouraging findings, much work remains. For example, there are no diagnosis-specific controlled trials of psychodynamic therapy for social phobias or specific phobias [1] and there has only been one randomized control trial which has included a psychodynamic treatment for PTSD [39]. The need for more psychodynamic research on GAD [62] and panic disorder [21]



 has also been called for in recent research. Moreover, given that anxiety disorders are frequently comorbid with one another [3], more studies examining the anxiety spectrum as a whole would help to represent the types of patients who actually present for treatment in clinical practice. Finally, it will be important for future research to examine the moderating effects of Axis I and Axis II comorbidity.

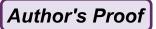
Concerns with regards to the moderating effects of Axis I comorbidity were raised by Crits-Christoph et al.' [27, 40] finding that the pre-post effect sizes declined when patients with comorbid MDD were included. However, other types of patients were added at this time making it unclear as to whether the comorbid MDD was involved in this decrease in effect size. Unfortunately, other research has generally failed to clarify the effects of comorbidity as many studies have utilized stringent exclusionary criteria such as eliminating patients with comorbid major depression (e.g. [50]).

The potential moderating effects of Axis II comorbidity have also been raised by a few studies which suggest that psychodynamic therapy for anxiety disorders may be even more effective than CBT or pharmacological approaches when patients have a comorbid personality disorder [8, 45]. Specifically, Ferrero et al. [45] found that psychodynamic therapy was as successful as medication among GAD patients when Axis II comorbidity was controlled, but that it was even more successful than medication in helping GAD patients with a comorbid PD improve their social and occupational functioning at 6-month follow-up. In addition, Milrod et al. [8] found that Cluster C comorbidity increased the efficacy of PFPP whereas it decreased the efficacy of relaxation therapy. These findings suggest that future research should examine which Axis I and II disorders moderate different anxiety disorders and the direction of these effects.

Future research should also continue to examine how the process of psychodynamic therapy for anxiety disorders is related to outcome. Slavin-Mulford et al.' [57] work has begun this process by suggesting that specific psychodynamic/interpersonal techniques are related to reduction in anxiety in short-term psychodynamic psychotherapy. However, much work in this area remains. For example, it will be important to examine which intervention strategies work best with which types of anxiety disorder patients (i.e., comparison between patients with and without a personality disorder as well as comparisons between different disorders such as GAD versus panic). If similar process research was also conducted for CBT and other treatments of anxiety disorders, it may be possible to determine which process variables are critical for sustained change in patients with different anxiety disorders. This type of process and outcome research could also help to explain which treatment factors in psychodynamic therapy lead it to have more gradual but also longer-term progress than other forms of treatment with some patients (e.g. [39, 51]). In addition, process and outcome research could provide important information about which specific factors in psychodynamic therapy and CBT lead them to help patients differentially, depending on the symptoms being targeted [39, 50]. Thus, while research generally suggests that psychodynamic therapy is useful in the treatment of anxiety disorders, there is much work to be done.

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5	Evidence-Based Psychodynamic Treatments for Anxiet	v Disorders: A Review

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