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CRITICAL REVIEW OF OUTCOME RESEARCH ON INTERPERSONAL PSYCHOTHERAPY FOR ANXIETY DISORDERS

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Abstract

Background—Interpersonal psychotherapy (IPT) has demonstrated efficacy in treating mood and eating disorders. This article critically reviews outcome research testing IPT for anxiety disorders, a diagnostic area where cognitive behavioral therapy (CBT) has dominated research and treatment.

Methods—A literature search identified six open and five controlled trials of IPT for social anxiety disorder (SAD), panic disorder, and posttraumatic stress disorder.

Results—Studies were generally small, underpowered, and sometimes methodologically compromised. Nonetheless, minimally adapted from its standard depression strategies, IPT for anxiety disorders yielded positive results in open trials for the three diagnoses. In controlled trials, IPT fared better than waiting list (N = 2), was equipotent to supportive psychodynamic psychotherapy (N = 1), but less efficacious than CBT for SAD (N = 1), and CBT for panic disorder (N = 1) in a methodologically complicated study. IPT equaled CBT in a group residential format (N = 1).

Conclusions—IPT shows some promise for anxiety disorders but has thus far shown no advantages in controlled trials relative to other therapies. Methodological and ecological issues have complicated testing of IPT for anxiety disorders, clouding some findings. The authors discuss difficulties of conducting non-CBT research in a CBT-dominated area, investigator bias, and the probable need to further modify IPT for anxiety disorders. Untested therapies deserve the fairest possible testing. Depression and Anxiety 00:1–10, 2014.

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Keywords

interpersonal psychotherapy (IPT); *cognitive behavioral therapy (CBT)*; *social anxiety disorder*; *panic disorder*; *posttraumatic stress disorder*

INTRODUCTION

Anxiety disorders have long been considered the psychotherapeutic province of cognitive behavioral therapy (CBT), which holds by far the best empirical track record among psychotherapies for their treatment. The fear extinction paradigm provides a plausible mechanism for CBT in anxiety, particularly but not exclusively for treating posttraumatic stress disorder (PTSD).[1] Cognitively framed interventions seem to add benefit beyond exposure per se in some anxiety disorders, such as social anxiety disorder (SAD).[2]

Interpersonal psychotherapy (IPT) has established efficacy for treating mood and eating disorders[3,4] but has received far less study for anxiety disorders. A growing if still fragmentary literature, however, suggests IPT may benefit patients with anxiety disorders, perhaps by targeting different mechanisms than CBT.[5] Like mood and eating disorders, which IPT, CBT, and medications all treat effectively, anxiety disorders may respond to diverse therapeutic approaches. As no one treatment benefits all patients, it is important that anxiety disorders, the most prevalent category of psychiatric disorder and cause of great disability, suffering, and ongoing cost,[6–9] have a range of empirically supported psychotherapies. Effective treatment can potentially reduce these patients' medical and psychiatric care costs.[9] Further, the field lacks an evidence-based psychotherapy for anxiety comorbid with other disorders, most commonly depression. This article reviews the current empirical literature on IPT for DSM-IV social phobia, panic disorder, and PTSD and considers IPT's future in anxiety treatment.

RATIONALE

Anxiety disorders have interpersonal features, triggers, and contexts. Interpersonal discomfort and dysfunction lie at the heart of SAD. Panic disorder, too, is associated with a range of interpersonal difficulties. Milrod et al. found interpersonal loss events coincided with panic disorder onset in at least half of two patient samples,[10,11] and that such losses might influence psychotherapy treatment outcome.[11] PTSD is characterized by social withdrawal, emotional blunting, anger dysregulation, and interpersonal hypervigilance.[12] Interpersonal traumas have more severe impact than impersonal traumas.[13–16]

Patients with anxiety disorders typically have difficulties confronting others, expressing anger, and expressing their wishes. IPT's goal of interpersonal and affective attunement, focusing on the useful meaning of emotions in the context of relationships, may provide an alternative approach for such patients; assuming, of course, that IPT is effective. IPT has repeatedly lowered anxiety symptoms in treating patients with mood and eating disorders.

HOW DO CBT AND IPT DIFFER?

CBT is highly structured, which may reassure some anxious patients. Although CBT protocols vary for different diagnoses, sessions generally begin by setting an agenda and end with assigning agreed-upon homework. The therapist offers a cognitive and/or behavioral psychoeducational rationale for the disorder (catastrophic or exaggerated, irrational thoughts provoke symptoms; behavioral avoidance increases the perceived danger of a threatening situation), helps patients to record cognitions or apotropaic, avoidant behaviors in an anxiety-scaled hierarchy, and then provides a sequential, structured intervention to address the fears, building from mildest to worst. Many protocols have a defined plan for each of the time-limited sessions (e.g., imaginal exposure begins in session no. 3). The interventions typically place the patient in a feared situation, either imaginally or in vivo, to test and hopefully disprove irrational cognitions (“What's the evidence for that thought? Against it?”) and to habituate to and diminish or extinguish fears. Therapists may accompany patients on some in vivo exposure assignments (e.g., driving across bridges who has patient who has specific phobia).

IPT focuses not on thoughts (cognitions) or behavioral tasks but on feelings in interpersonal situations, helping patients to understand them as useful signals of interpersonal encounters. (“What did you feel when she said that? Is it reasonable that you felt angry then? What did you say in response?”) IPT stands on two premises: (1) symptoms reflect a treatable illness that is not the patient's fault, and (2) symptoms arise in an interpersonal context. Originally developed to treat major depression, IPT framed the onset of depressive episodes within one of four empirically supported interpersonal crises: (1) grief (complicated bereavement); (2) a role dispute (struggle with a significant other, which the patient is invariably losing); (3) a role transition (any life change, such as a geographical move, onset of medical illness, marriage or divorce, starting or losing a job); or (4) interpersonal deficits (social isolation). The goal of this time-limited treatment is to resolve the life crisis, helping patients to build social skills, communicate their emotions more effectively,[17] and mobilize protective social supports. Doing so, as numerous randomized controlled trials (RCTs) for depression and eating disorders have demonstrated, yields symptomatic improvement. IPT usually assigns no homework, avoids psychodynamic interpretations,[18] and generally has less structured, more informal, more affect-focused and emotionally charged sessions than CBT.

Yet the therapies do overlap. CBT therapists seek affectively charged cognitions, and their sessions should engage emotions. CBT and IPT share a time-limited format, psychoeducation (albeit disparately emphasizing cognition/behavior vs. emotion in interpersonal context), and a focus on the patient's current life problems. The adaptations of IPT for anxiety disorders described below preserved the original IPT approach for depression, using roughly the same focal problem areas (e.g., role dispute) and linking symptoms to painful interpersonal encounters: for example, a patient bullied by a significant other felt covertly angry but demurred, saying nothing, and later that day had a panic attack.

METHODS

The authors conducted a literature search of PubMed and Google Scholar employing the terms “interpersonal psychotherapy,” “IPT,” and each of the DSM-IV anxiety disorders.

Open and controlled trials were included, but not purely theoretical papers. This search yielded 11 studies: four of social phobia, two of panic disorder, and five of PTSD. Six were open trials, five controlled. This small group of studies, spread across diagnoses, precluded meta-analysis but allowed appraisal of their quality while evaluating IPT's effects across a range of disorders. Published or calculated IPT effect sizes (ESs) are presented for all but one trial.

RESULTS

The literature review revealed an expectable pattern of initial small open trials, mostly conducted by investigators with IPT allegiance, which generally achieved promising preliminary results. In these trials, researchers only modestly adapted standard acute IPT for depression[3] to treat the targeted anxiety disorder. Open trials assess feasibility but cannot demonstrate efficacy. Following these came larger RCTs comparing IPT to CBT and other conditions. Some showed advantages for CBT over IPT, but a subset was conducted by investigators whose allegiance apparently leaned to CBT, raising questions of therapist and researcher allegiance.[19] We review the results by disorder. Studies prohibited outside treatment unless otherwise noted.

SOCIAL PHOBIA (SAD)

SAD is characterized by interpersonal discomfort, deference, and avoidance, a distressing difficulty in social functioning that IPT might seem well targeted to address. SAD is associated with impaired close relationships,[20–22] fewer friendships,[23] greater likelihood of remaining unmarried,[24] and relationship difficulties.[21,25,26] Some of these interpersonal difficulties emerge in childhood and adolescence: peer neglect, peer rejection, harassment, teasing, and bullying,[23,27#x2013;29] arising partly because these individuals have trouble asserting themselves. IPT views these difficulties not merely as sequelae of social anxiety and avoidance but as reciprocal interactions that develop and maintain this disorder. Adaptation of IPT for SAD emphasizes the interplay of symptoms and problems in relationships particularly in the IPT problem area of role transition.

In the first test of IPT for an anxiety disorder, Lipsitz et al.[30] in New York conducted an open trial of 14 weeks of IPT in nine patients with social phobia. IPT was modestly adapted to this population: absent a prominent immediate crisis, such as a role transition, therapists conceptualized therapy itself as a role transition. All patients completed treatment. At termination, 7 (78%) were rated much or very much improved by Clinical Global Improvement Scale (CGI).[31] Patients improved on the Liebowitz Social Anxiety Scale (LSAS)[32] and other instruments (see Table 1).

Subsequently, Lipsitz et al.[33] compared 14 weeks of IPT to manualized supportive psychodynamic therapy in a randomized trial of 70 patients with SAD (91% generalized subtype). The same therapists delivered both therapies, a “crossed therapist” design. Patients in both groups significantly improved, with no statistical between-treatment differences in symptom severity or response rates. Mean LSAS scores decreased from 67.7 to 46.9 in IPT and from 64.5 to 49.8 in supportive therapy. Only a scale measuring concern about negative evaluation showed IPT superior. Limitations of this initial controlled trial of IPT included

overlapping administration of the two therapies by the same therapists and the choice of "control" therapy, which overlaps with psychodynamic therapy recently found efficacious for SAD.[34] Subsequent analyses of treatment adherence raised concerns about suboptimal adherence, particularly for middle sessions,[35] consistent with concerns Falkenstrøm et al.[19] have raised regarding treatment contamination in crossed design studies. The authors recommended that future IPT social phobia studies employ a better defined comparison therapy, different therapists administering each therapy, a larger sample, and more rigorous follow-up assessments.

Borge et al.[36] in Norway compared 10 weeks of group IPT with group CBT in a specialized, tertiary care residential setting for 80 treatment-resistant patients with social phobia. IPT followed Lipsitz et al.'s (unpublished) manual. Although treatment eschewed pharmacotherapy, copious residential therapeutic and milieu activities may have overwhelmed any differences between the relatively low intensity group psychotherapies. Both groups improved significantly on the Anxiety Disorder Interview Schedule[37] and other measures, with no significant between-treatment differences. Both IPT and CBT cohorts showed continued improvement, without between-group differences, at 1-year follow-up—during which most patients received interval treatments.

Stangier et al.[38] at two German sites conducted the largest trial for DSM-IV SAD, randomizing 106 medication-free patients to 16 sessions (and one booster session) of either IPT or CBT, or a waiting list (WL) control. Although nearly all therapists for both therapies had CBT backgrounds (Stangier, personal communication to JL, September 24, 2013), one treatment site had "previously specialized in IPT," the other in CBT. IPT used the Lipsitz et al. manual, CBT followed Clark's cognitive therapy model of social phobia.[38] Ten ses sions lasted a standard 50 min, whereas six sessions could be extended to 100 min (unprecedented for IPT) to allow prolonged behavioral experiments in CBT, which included videotaping. The authors state that separate teams of therapists with comparable training and experience in IPT, CBT, and SAD delivered the therapies. Therapist self-reported adherence ratings (a weak measure) and patient treatment credibility and treatment alliance ratings were high for both treatments, without statistical difference.

Thirty-four of 38 (89%) IPT and 31 of 38 (82%) CBT patients completed treatment. Both psychotherapy groups significantly improved more than the WL. CBT improved more than IPT: 66% of CBT, 42% of IPT, and 7% of WL patients were deemed responders (markedly or moderately improved) by CGI. At 1-year follow-up, 68% of CBT and 32% of IPT met response criteria, with more IPT patients seeking outside treatment during that interval. Both treatments decreased associated depressive symptoms comparably. No significant differences emerged between IPT and CBT groups at treatment completion or on follow-up in self-reported symptoms of social anxiety using the Social Phobia Anxiety Inventory, a well-validated social anxiety measure.[39]

In a process/outcome paper, these researchers[40] examined change mechanisms in 62 of the 76 study patients who received active psychotherapy. Patients and therapists rated common efficacy factors after each session. Therapists reported significantly greater focus on behavioral coping strategies in CBT than IPT and greater use of resource activation and

motivational clarification. No differences appeared in problem activation or the therapeutic relationship.

Summary—In one open and three controlled trials, IPT consistently lowered social anxiety symptoms. It is perhaps unsurprising that a treatment focused on feelings and relationships might benefit patients with SAD. IPT was superior to a WL control, a weak comparator. Controlled trials, however, showed no advantages for IPT over competing therapies in outpatient and residential settings, and one RCT showed less benefit for outpatient IPT than CBT. The studies generally lacked statistical power to determine moderators of outcome. The efficacy of IPT for SAD remains undetermined.

Panic Disorder: Because panic disorder patients experience panic attacks, they commonly do not recognize their emotional responses to interpersonal situations, which then overwhelm them with anxiety that seems "out of the blue."[41] IPT helps patients to under stand uncomfortable negative emotions such as anger[17] and to express them directly in social encounters, thus potentially improving both feeling states and social situations.[3] Lipsitz and colleagues conservatively modified IPT for panic disorder, emphasizing IPT problem areas of role transition and role dispute as sources of increased interpersonal stress and limitations in social support (Lipsitz, unpublished manual).

Lipsitz et al.[42] conducted a small open pilot study of 14 weekly IPT sessions for patients with mild to moderately severe panic disorder; half had agoraphobia. Role transitions and role disputes predominated. Nine of 12 (75%) patients met Panic Disorder Severity Scale (PDSS[43]) and CGI response criteria posttreatment, with substantial improvement in panic symptoms, associated anxiety and depressive symptoms, and physical and emotional well-being (Table 2).

Vos et al.[44] in Maastricht compared 12 weeks of once weekly CBT and IPT in an RCT treating 91 patients 18–60 years old with DSM-III or DSM-IV panic disorder with moderate to severe agoraphobia. Outcome was measured 3 and 4 months after treatment began. One of us (JCM) introduced therapists to IPT—unmodified for panic disorder—in an initial two-day workshop. Over the extended course of 9 years, 17 therapists participated in the trial; initial therapists reportedly trained later therapists. "Therapists were masters-prepared or higher-level clinicians with a range of experience in delivering CBT and IPT (1–10 years) prior to this study. To control for individual therapist characteristics, therapists provided care in both treatment modalities" ([44], p. 2663). This description neither addresses therapist allegiance, nor whether therapists possessed equivalent experience with each therapy. A modified CSPRS[45] adherence instrument from the NIMH TDCRP trial assessed therapist adherence, and treatment credibility was measured after the first treatment session. Therapist adherence was reportedly good and treatment credibility equivalent. Nonetheless, the authors acknowledge that "most participating therapists were CBT orientated [sic] and therefore might have had difficulty applying IPT for panic disorder with agoraphobia" ([44], p. 2669).

One primary treatment outcome was idiosyncratic: a behavioral task constituting essentially a prima facie CBT test of learning, which did not address the core elements of the panic

syndrome. The other primary outcome, panic attack frequency status, is also suboptimal, failing to capture the episodic, complex nature of the disorder.[43,46,47] Why the researchers did not employ the PDSS,[43] the standard panic outcome measure,[43,46,47] passes unexplained.

Nine (21%) IPT and 15 (31%) CBT patients dropped out of treatment.[44] Both treatment groups showed panic improvement, with CBT showing significantly greater improvement than IPT in panic frequency ($P < .05$). CBT patients improved significantly on the behavioral task test whereas (unsurprisingly) IPT patients did not ($P < .05$). CBT patients improved significantly on the Inventory of Interpersonal Problems (IIP[48]), but IPT patients (surprisingly) did not. The authors, presumptively CBT allegiant, conclude CBT is the preferred treatment for panic disorder.

Summary—In both an open and a controlled trial, IPT lowered panic symptoms. CBT appeared superior in the latter study, but its methodological issues merit discussion, provided below.

Posttraumatic Stress Disorder: IPT focuses on life events that evoke (or follow from) patients' emotional states. PTSD, as a life-event-defined diagnosis, seems opportune for IPT intervention. Patients with PTSD suffer from affective distancing or numbing and withdraw socially: unable to trust their feelings, they cannot trust their environment. In contrast to the many exposure-based PTSD treatments based on the fear extinction model, we designed IPT as a nonexposure treatment for PTSD, focusing not on reliving and habituating to trauma memories but on affective attunement, using one's feelings to gauge and manage relationships in daily life.[12–14]

Bleiberg and Markowitz[12] conducted a pilot trial of nonexposure-based IPT for 14 patients with chronic PTSD. Therapists used roughly the first half of the treatment rebuilding emotional attunement in benumbed patients (not a typical issue in depression, but a hallmark of chronic PTSD) before applying standard IPT maneuvers to difficulties with trust and expressing emotions in daily relationships. Therapists avoided encouraging traumatic exposure. Patients with varied, but predominantly interpersonal rather than impersonal, traumas received 14 weekly IPT sessions. All but one patient completed treatment. Posttreatment, 12 of 14 no longer met diagnostic criteria for PTSD. Clinician-Administered PTSD Scale (CAPS[49]) scores fell from 67 ($SD = 19$) to 25 ($SD = 17$), a large within-group effect ($d = 1.8$), with improvement across PTSD symptom clusters. Depressive symptoms and social functioning improved. As patients became more comfortable with their emotions and handling daily interpersonal encounters, they exposed themselves without therapist encouragement to traumatic fear reminders—a change necessary for PTSD remission (Table 3).

Two small Australian trials piloted group IPT for PTSD. Robertson et al.[50] treated 13 patients with PTSD lasting more than 1 year for 8 weeks. All reported adult traumas, seven combat-related traumas; most had been symptomatic for decades. Ten patients were male, mean age was 54 (10.2). Nine had received prior exposure-based treatments. Medications ($N = 12$) were held stable. All completed group IPT, reporting gains in interpersonal focal areas

by week 4, and showing ESs on the Impact of Events Scale (IES) of $d = 0.67$ for avoidance, 0.63 for hyperarousal, but no significant change in intrusion symptoms. Psychosocial functioning improved ($d = 0.78$). Gains persisted at 3-month follow-up. Depressive symptoms and general well-being significantly improved. Overall, PTSD symptom improvement was considered "modest." Some benefits, such as decreased isolation, may reflect general qualities of group therapy rather than IPT specificity.

Ray and Webster[51] conducted another small 8-week trial of 2-hr group IPT sessions for nine male veterans ages 56–75 with primary PTSD. All had multiple diagnoses, mostly depression and alcohol abuse; all had previously received CBT, apparently without response, and eight were taking antidepressant medication. Substance dependence, psychosis, suicidality, and personality disorders were exclusion criteria. The investigators developed a manual based on Wilfley et al.'s[52] group IPT model (not inherently PTSD-focused). Group size ranged from two to four patients. Therapist characteristics are not described.

All patients in this small, chronically ill, older sample with high mood and prior substance comorbidity completed treatment, with significantly improved ($P = .044$) PTSD symptoms on the IES-R,[53] persisting at follow-up—a trend for depressive symptom improvement on the Beck Depression Inventory (BDI-II);[54] but no interpersonal functioning improvement on the IIP.[48] Mean scores are not reported. The authors pronounce group IPT "feasible" treatment for PTSD.

Krupnick et al.[55] conducted the first controlled trial for PTSD, comparing group IPT to a WL for 48 multiply traumatized, low-income, largely minority, nontreatment-seeking women recruited from public family planning and gynecology clinics near Washington, DC. Medications were held stable. Groups of three to five women received 16 2-hr sessions conducted by paired female therapists. Only one of the five therapists had prior IPT training; they reported 5–20 years of clinical experience in group and psychodynamic psychotherapy.

The women treated in group IPT had a mean 6.8 ($SD = 4.2$) interpersonal traumas. Given the high-risk population, attrition from IPT was considered low (71% attended at least half of sessions), but obtaining assessments was difficult: 20/32 (63%) IPT patients and 7/16 (44%) WL subjects completed termination ratings; at 4-month follow-up, 26 (81%) IPT and 10 (63%) WL subjects were rated. CAPS scores in the IPT group fell from 65.2 ($SD = 20.9$) at baseline to 40.6 (21.3) at treatment end and 38.5 (24.4) at 4-month follow-up; for WL, scores were 62.6 (16.6), 56.6 (25.1), and 41.6 (26.7) ($P < .001$). The IPT patients improved on four of five IIP subscales (all but aggression), whereas WL group scores actually worsened over time. IPT produced significantly greater reductions on the Hamilton Depression Rating Scale.[56]

Campanini et al.[57] used group IPT as an adjunctive intervention for 40 Brazilian patients with PTSD secondary to interpersonal violence who had not responded to at least 12 weeks of pharmacotherapy for PTSD. As in the Krupnick et al. study,[55] treatment consisted of 16 2-hr group sessions; mixed in were two individual sessions before group, one at mid-treatment, and one posttreatment. IPT did not focus on trauma exposure. Six groups

comprised six to eight patients apiece. Patients maintained steady doses of their psychotropic medications, mainly antidepressants.

Thirty-three (83%) patients completed the trial. All had at least one outcome evaluation. CAPS scores fell from 72.3 (s.e. = 4.7) to 36.5 (5.4) ($P < .001$, ES = 1.2), with impressive improvements across symptom clusters. There were significant improvements on all measures (e.g., BDI: 26.2 [1.8] baseline, 13.3 [1.6] endpoint, $P < .0001$, ES = 1.2; SAS: 2.59 [.12] baseline, 2.17 [.11] endpoint, $P < .0007$, ES = 0.63).

Summary—IPT lowered PTSD symptoms in both individual and group formats. The question of relative efficacy remains unclear, as the sole randomized trial compared group IPT only to a WL control. Markowitz et al. are completing a randomized trial comparing individual IPT, prolonged exposure, and relaxation therapy[13] for 110 patients with chronic PTSD. The comparison to exposure-based treatment may prove revealing. Research has suggested that affect-focused therapy may particularly benefit PTSD patients with high levels of dissociative symptoms.[58,59]

CONCLUSIONS

In the trials under review, IPT lowered anxiety symptoms, was well tolerated, and had low attrition—generally nonsignificantly lower attrition than CBT. IPT thus shows promise as a treatment for the three anxiety disorders that have received study, but how much promise remains unclear. Studies are few, underpowered, and of sometimes limited quality. Moreover, whereas IPT outperformed a WL control in treating social phobia and PTSD, it showed no advantages relative to competing anxiolytic psychotherapies, and was found inferior to outpatient CBT in one generally well-designed social phobia trial and one less rigorous panic disorder trial. IPT ESs ranged from $d = 0.5$ (moderate) to $d = 1.8$ (large).[60]

A challenge facing IPT and other non-CBT psychotherapies (e.g., psychodynamic psychotherapy[61]) in anxiety disorders research is the omnipresent predominance of CBT. CBT has come so to dominate the anxiety disorders that its success complicates research comparing it to non-CBT treatments. The ubiquity of CBT for anxiety resembles the hegemony of psychoanalysis in its heyday, except that psychoanalysts did not conduct research.[62,63] Although IPT and CBT research on depression started roughly contemporaneously, on a “level playing field,” IPT therapists entering anxiety disorders research may feel they are climbing uphill, facing the ubiquitous exposure model dominating the research-world view.[5] Studies comparing IPT to CBT risk a systematic bias if investigators and therapists have primary CBT training and allegiance, and learn IPT only secondarily. Such therapists may have greater belief, confidence, and competence in CBT, even if technically adherent to IPT interventions. Like researcher allegiance,[19,64,65] therapist allegiance may subtly but powerfully influence outcomes.

Falkenström et al.[19] meta-analyzed “crossed therapist” psychotherapy trials in which psychotherapists delivered more than one treatment modality to patients. Researchers have justified this design as controlling for therapist factors but have unfortunately ignored the likelihood of differential competence and allegiance among psychotherapists practicing

multiple therapies. Falkenström et al. found that only one (3%) of 39 randomized “crossed therapist” trials measured therapist treatment allegiance, another five (13%) mentioned the concept without assessing it, and the remainder (64%) never mentioned it. In studies ignoring treatment allegiance, investigator allegiance strongly influenced treatment outcomes, whereas those that mentioned (and presumably considered) allegiance did not show researcher allegiance effects. CBT studies were less likely to mention allegiance ($P = .002$).[19]

Stangier et al.'s[38] social phobia study made attempts to address potential biases. One of its treatment sites had an IPT “tradition,” balancing site allegiance, but therapists in the two treatments had predominantly CBT backgrounds. Self-assessed (i.e., weakly measured) therapist adherence and treatment credibility scores were grossly equivalent for IPT and CBT, albeit experienced psychotherapy researchers recognize the crudeness of even the best adherence measures.[66,67] Stangier et al. acknowledge among study limitations that

> [I]t cannot be excluded that slight, nonsignificant differences in outcome expectations between IPT and CT therapists might reflect different acknowledgment of empirical support for the efficacy of the treatments ([38], p. 697).

All research has limitations, and this study addressed many of them. We conclude that Stangier et al.'s finding of a substantial outcome difference between IPT and CBT remains likely meaningful.

By contrast, the manifold methodological problems of Vos et al.'s[44] panic disorder study may well have biased its results. It was likely unwise to compare unmodified IPT for depression (particularly with Lipsitz's modification available) to a well-characterized, better tested CBT approach specific for panic disorder. Relaxation therapy might have been a more appropriate comparator for an initial controlled IPT trial. The authors do not report whether therapists had equal experience in or allegiance to each therapy they provided. The authors do not use the term “allegiance”; they concede that most “therapists were CBT orientated and therefore might have had difficulty applying IPT” ([44], p. 2669). Choosing an idiosyncratic, CBT-specific primary outcome measure further favored a positive CBT outcome. An additional suggestion of compromised delivery is the remarkable outcome that IPT did not significantly improve scores on the IIP,[48] as it almost invariably has.

We do not question the great anxiolytic utility of CBT. The concern is whether IPT received a fair test of its antipanic potential in a trial that bears marks of significant allegiance effects. The limited economic resources of both research funding and healthcare delivery make it essential that science proceed as objectively as possible, attempting to counter the press of experimenters' beliefs.

Hence, under present circumstances, testing the true current of IPT or other non-CBT psychotherapy in a sea of CBT requires using scientifically open-minded competing teams of experience-matched, equally well-trained rival therapists of polarized allegiance as a minimum requirement.[19] Each team should believe in and have expertise in delivering one therapy. The “crossed therapist” design will likely bias trials if anxiety therapists are CBT

allegiant. Early controlled trials might compare IPT for anxiety to relaxation therapy rather than directly to CBT, allowing calibration of IPT before comparing it to a "gold standard."[68,69]

Another observation from this review is that researchers made minimal, conservative adaptations to standard IPT for depression in these initial applications of IPT to anxiety disorders. This approach has the virtue of preserving coherence and simplicity; trans-diagnostic therapy holds considerable appeal. Because IPT addresses the interpersonal context wherein the disorder occurs rather than disorder-specific thought and behavior patterns, IPT adaptations have presumed a rough equivalence in target and techniques. In contrast, "CBT" for varying anxiety disorders varies considerably in approach: therapists expert in Panic Control Therapy (PCT[70]) might feel incompetent conducting prolonged exposure[71] for PTSD, and vice versa.

Yet more specific adaptations of IPT to particular anxiety disorders might yield greater efficacy. IPT researchers might learn from important incremental developments in CBT, where early treatments evolved to more effective interventions more specifically targeting maintaining factors of these disorders. Thus, interoceptive exposure in PCT[70] replaced earlier exposure efforts in panic disorder to agoraphobic situations. Manipulating safety behaviors and internally focused attention[39] improved outcome beyond Beckian cognitive restructuring of socially anxious thoughts in early social phobia protocols.[72] IPT adaptations for anxiety disorders might require more specifically syndrome-tailored strategies to maximize benefits.

The reviewed studies lacked the mediating probes and statistical power to examine mechanisms explaining IPT's effects. IPT might benefit different patient subsamples than CBT. IPT might work through building interpersonal skills for deskilled patients, mobilizing social support,[13] increasing emotional understanding as measured by reflective function,[14] or other mechanisms.[73] IPT tended to lower depressive symptoms, but most anxiety study patients did not meet mood disorder criteria, making it unlikely that treating depression accounted for improvements in their anxiety disorders. Mediating factors require further study.

The literature search revealed research gaps. Although "interpersonal problems are highly relevant to the treatment of generalized anxiety disorder (GAD) patients,"[74] no IPT trials exist for GAD. Newman et al. found no added benefit to grafting an interpersonal/emotional processing module onto CBT for GAD,[75] an Iranian pilot study similarly blended IPT with CBT,[76] but IPT itself has not been studied. Nor for obsessive compulsive disorder (OCD). Removed from the DSM-5 anxiety disorders section, and hence (like PTSD) technically no longer an "anxiety" disorder, OCD appears so internally cognitively focused that an IPT approach seems implausible. In contrast, the rich interpersonal and life event aspects of social phobia and PTSD seemingly lend themselves to an IPT approach.

It appears premature to draw conclusions about IPT from two handfuls of underpowered studies, some with allegiance effects. IPT for anxiety disorders is in its infancy. More research is needed[62]—despite the National Institute of Mental Health's current movement

away from funding clinical outcome trials. Patients and the field of psychotherapy benefit from the existence of competing but complementary models of psychotherapy, with likely differential response profiles among patient populations, and potentially differing underlying neural mechanisms and etiological features. If IPT and other treatments ultimately show comparable efficacy to CBT in treating anxiety disorders, patient preference and other moderators may influence the differential therapeutics of treatment selection.

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TABLE 1

Studies of IPT for social anxiety disorder

Study	Design	IPT	Adaptation	Outcome	Remarks and effect sizes
Lipsitz et al.[42]	Open trial *N* = 9	14 weeks	Minimal	78% improved (CGI) Attrition = 0%	ES: LSAS subscales *d* = 1.28– 1.73
Lipsitz et al.[33]	RCT: vs. SP *N* = 70	14 weeks	Minimal	IPT = SP (LSAS, CGI). Attrition: IPT = 22%, SP = 21%	Crossed therapist design; 12-month f/u ES: LSAS total (IPT) = 0.74
Borge et al.[36]	RCT: residential IPT vs. CBT *N* = 80	10 weeks @ 4 group and one individual session/week; 1 year f/u	Group adaptation of Lipsitz model	IPT = CBT (ADIS, SPAI). Attrition: IPT = 8%, CBT = 20%	Strong milieu effects may have obscured therapy effects; ES: ADIS subscales (IPT) *d* = 0.60–0.91
Stangier et al.[38]	RCT: IPT vs. CBT vs.WL *N* = 106	16 sessions, one booster session; 1 year f/u	Lipsitz model	Response: CBT (66%) > IPT(42%) > WL (7%) (CGI); CBT = IPT (SPAI) Attrition: IPT = 11%, CBT = 18%	Crossed therapist design; therapist allegiance unmeasured ES: IPT vs. WL *d* = 0.95 (LSAS); *d* = 0.79 (SPAI)

ADIS, Anxiety Disorder Interview Schedule; CBT, cognitive behavioral therapy; CGI, Clinical Global Improvement Scale; ES, effect size (Cohen's *d*); f/u, follow-up; IPT, interpersonal psychotherapy; LSAS, Liebowitz Social Anxiety Scale; RCT, randomized controlled trial; SP, psychodynamic supportive psychotherapy; SPAI, Social Phobia Anxiety Inventory; WL, waiting list.

TABLE 2

Studies of IPT for panic disorder

Study	Design	IPT	Adaptation	Outcome	Remarks and effect sizes
Lipsitz et al.[42]	Open trial *N* = 12	14 weekly sessions	Minimal	75% response (PDSS, CGI) Attrition: 17%	ES:PDSS *d* = 1.50
Vos et al.[44]	RCT: IPT vs. CBT *N* = 91	12 weekly sessions	None	CBT > IPT (panic frequency, behavioral test) Attrition: IPT 21%, CBT 31%	9-year study, 17 therapists in crossed therapist design; idiosyncratic outcomes 1-month f/u assessment. ES: panic attack frequency (IPT) *d* = 0.51

CBT, cognitive behavioral therapy; CGI, Clinical Global Improvement Scale; ES, effect size (Cohen's *d*); f/u, follow-up; IPT, interpersonal psychotherapy; PDSS, Panic Disorder Severity Scale; RCT, randomized controlled trial.

TABLE 3

Studies of IPT for chronic posttraumatic stress disorder

Study	Design	IPT	Adaptation	Outcome	Remarks and effect sizes
Bleiberg and Markowitz[12]	Open trial $N = 14$	14 weekly sessions	Exposure to trauma reminders prohibited	Pre/post-CAPS 67 → 25 Attrition: 7%	Large effect sizes: CAPS $d = 1.8$
Robertson et al.[50]	Open trial $N = 13$	8 weekly group IPT sessions	"Specially prepared" treatment manual; standard group IPT?	"Modest" IES improvement Attrition: 0%	Results stable on 3-month f/u; ES: IES subscales $r = 0.63–0.67$
Ray and Webster[51]	Open trial $N = 9$	8 weekly 2-hr group IPT sessions	Based on group IPT manual (Wilfley et al., 2000)	IES significantly improved ($P < .05$) Attrition: 0%	Some symptomatic slippage on 2-month f/u; (ES: not calculable)
Krupnick et al.[55]	RCT: IPT vs. WL $N = 48$	16 weekly 2-hr group IPT sessions	Adapted for low-income, highly traumatized minority women	IPT > WL (CAPS, $P < .001$) Attrition: 29% IPT	Gains persisted at 4-month f/u ES: CAPS $d = 1.31$
Campanini et al.[57]	Open augmentation of med trial $N = 40$	16 weekly 2-hr group IPT	Similar to Krupnick et al., IPT did not focus on trauma exposure	CAPS 72 → 37, with large effect size (1.2) Attrition: 17%	Medication nonresponders; ES: CAPS $d = 1.17$

CAPS, Clinician-Administered PTSD Scale; ES, effect size (Cohen's *d*); f/u, follow-up; IES, Impact of Events Scale; IPT, interpersonal psychotherapy; RCT, randomized controlled trial; WL, waiting list.