

PRACTICE REVIEW

Cognitive Behavioral Therapy for Psychosis in Clinical Practice

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Across two continents, Cognitive–Behavioral Therapy for Psychosis (CBT-P) has been endorsed as an adjunctive treatment for individuals who experience persistent positive symptoms of schizophrenia. The moderate effect sizes reported in early studies and reviews were followed by better controlled studies indicating more limited effect sizes. This article provides a review of the literature that addresses the effectiveness of CBT-P, including particular areas of emphasis and practice elements associated with this approach. In addition, because the majority of research on CBT-P has been performed in the United Kingdom, implications for implementation and sustainability of this practice in the United States are presented.

Keywords: cognitive behavioral therapy, psychotic symptoms, psychosis, schizophrenia

Finding the “right” treatment for schizophrenia has been the elusive hope of many individuals, families, and health care providers. Although antipsychotic medications have demonstrated significant benefits for many individuals who experience psychotic symptoms, many more continue to report distressing symptoms. According to Gould, Mueser, Bolton, Mays, and Goff (2001), the number of individuals who continue to experience persistent psychotic symptoms, despite taking medication, varies between 25% and 50%.

Various forms of psychosocial treatments have been applied to ease the distress of psychotic symptoms that are unresponsive to medication. One form of therapy that has shown some promise is cognitive–behavioral therapy for psychosis (CBT-P). Over the past decade, there has been a resurgence of interest in the use of cognitive–behavior therapy, which is widely used for anxiety and depression, for psychotic symptoms. However, most of the research conducted in the area of CBT-P has mainly emerged from the United Kingdom (Wykes, Steel, Everitt, & Tarrrier, 2008).

The focus of this article is to review the literature that addresses the effectiveness of CBT-P. We also review particular areas of emphasis (e.g., hallucinations and delusions) and practice elements associated with this approach (e.g., formulation). Finally, for clinicians practicing in the United States, we consider factors that influence the implementation and sustainability of this form of treatment in the United States. Within this review, in order to differentiate Cognitive–Behavioral Therapy (CBT) for different diagnoses (e.g., depression, anxiety, psychosis), studies that use Cognitive–Behavioral Therapy for Psychosis will be referred to as CBT-P.

Effectiveness of CBT-P for the Treatment of Positive Psychotic Symptoms

In both the United States and the United Kingdom, CBT-P is recommended as an adjunctive treatment for individuals who experience persistent positive symptoms of schizophrenia (see Schizophrenia PORT guidelines; Dixon et al., 2010; NICE clinical guideline; National Collaborating Centre for Mental Health, 2009). The basis for this decision rests on a wide range of controlled research studies. The number of studies is so large that several meta-analyses have been conducted to discern and summarize the state of this form of treatment. In preparing for this review, we identified seven meta-analyses (Gould et al., 2001; Lynch, Laws, & McKenna, 2010; Pfammatter, Junghan, & Brenner, 2006; Pilling et al., 2002; Rector & Beck, 2001; Wykes et al., 2008; Zimmerman, Favrod, Trieu, & Pomini, 2005) that reviewed the use of CBT-P for individuals with schizophrenia.

Meta-analytic procedures offer a simple metric, the effect size, by which to measure the relative benefits of a given therapy compared with a variety of control conditions. In general, the effect sizes are calculated using outcome measures that tend to reflect overall symptoms (i.e., at times including all symptoms combined and at other times separating symptoms into categories). The majority of studies examined in the meta-analyses focused on positive symptoms (e.g., hallucinations and delusions), and all studies included clients who were concurrently treated with antipsychotic medications.

Due to differences in research methodologies between research studies, results of meta-analytic reviews have varied in the effect sizes reported for CBT-P. However, with the exception of Lynch et al. (2010), the majority of reviews have been favorable (Kingdon, 2010). For example, Rector and Beck (2001), in one of the earliest reviews of controlled studies of CBT-P (compared to routine care), reported an average effect size of $d = 1.31$ for positive symptoms. Since that time, several additional meta-analyses have been conducted and have reported more modest effect sizes. For example, Wykes et al. (2008) reported a mean weighted effect size (Smith and Glass’s delta procedure-described

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in Gould et al., 2001) of 0.399 ($n = 24$ studies) favoring CBT-P when delivered by individual clinicians for positive symptoms.

Based on a review of the above meta-analyses, three factors appear to influence the outcome of studies: (a) procedures related to raters who are blinded to group assignment; (b) the inclusion of a follow-up assessment several months after the posttreatment assessment; and (c) the inclusion of an active control group (e.g., supportive counseling, Befriending).

The first factor, procedures related to raters who are blinded to group assignment, focuses on whether raters who conducted outcome assessments were aware of group placement. In their meta-analysis, Zimmerman et al. (2005) reported an effect size (g) of .35 for 14 studies that examined the impact of CBT-P on positive symptoms. However, they noted a smaller effect size for studies that used masking procedures ($g = .29$) compared with studies that did not use masking procedures ($g = .54$). Zimmerman et al. (2005) noted that an independent sample t test “revealed that the difference between unbiased ES from blinded and unblinded trials is nonsignificant” (p. 6). Similar to Zimmerman et al. (2005), Wykes et al. (2008) noted differences in magnitude of effect size for studies that were masked ($\delta = .307$) compared with studies that were unmasked ($\delta = .492$). Taking into account the use of blinded or masked assessment, both meta-analyses suggest a mean effect size roughly around .30. Using Cohen’s (1988) benchmarks (.20 is small, .50 is medium, and .80 is large), this estimate is a small effect size.

The second factor that appears to influence the outcome of studies involves the use of a follow-up assessment several months after the active treatment phase is finished. Some studies (e.g., Durham et al., 2003) have reported minimal or no difference between CBT-P and active control conditions at the end of treatment (e.g., $d = -.06$ [Positive and Negative Syndrome Scale (PANSS); Kay, 1991] in Durham et al., 2003) but report a significant benefit for CBT-P at extended follow-up ($d = .32$ favoring CBT-P on the PANSS; Kay, 1991). In contrast, another study (Valmaggia, Van Der Gaag, Tarrier, Pijnenborg, & Sloof, 2005) reported significant benefits of CBT-P at the end of treatment (e.g., physical characteristics of hallucinations, $d = .75$), but not at follow-up (physical characteristics of hallucinations, $d = .26$) relative to supportive counseling.

In an effort to identify more general trends, the Zimmerman et al. (2005) meta-analysis reported on 11 studies that provided an extended follow-up assessment. Their analyses identified effect sizes ranging from .40 for early follow-up (<12 months) to .33 for studies with a later follow-up (>12 months). Similarly, Pfammatter et al. (2006) reported an effect size of $g = .39$ ($n = 9$ studies) for positive symptoms assessed at follow-up favoring CBT-P. Of the more recent meta-analyses, neither Lynch et al. (2010) nor Wykes et al. (2008) included long-term follow-up assessment in

their reviews. However, Lynch et al. (2010) cited the NICE clinical guidelines (National Collaborating Centre for Mental Health, 2009) that found effect sizes for CBT-P versus active controls to be .18 at 12 months (five studies) and .08 at 24 months (three studies).

The third factor that appears to influence the outcome of studies focuses on the inclusion of an active control group (e.g., supportive counseling, Befriending). Ideally, clients enrolled in an active therapy control group would receive a similar dose (i.e., amount of contact with a clinician) as well as supportive therapeutic interactions (e.g., focusing on acceptance, empathy, positive social interaction). Overall, clients received an intervention designed to account for what is often referred to as nonspecific therapeutic factors (see Tarrier & Wykes, 2004 for a discussion). As a result, the control condition is more of an active comparison as opposed to a neutral placebo. Lynch et al. (2010) conducted a meta-analysis that included only studies with an active control group and focused on assessment outcomes at the end of active treatment as defined by the author(s) of the study. Using these criteria, they reported an effect size (g) of $-.19$ (favoring CBT-P) for eight studies that examined the impact of CBT-P on positive symptoms relative to an active control group. When Lynch et al. (2010) removed the two studies that did not include masking procedures, the effect size for the six blinded studies dropped to $-.08$ (favoring CBT-P). Kingdon (2010) criticized the Lynch et al. (2010) findings based on the exclusion of pertinent studies. A case in point, Wykes et al. (2008) reported a mean effect size of (delta) .22 favoring CBT-P for studies ($n = 12$) that included control groups accounting for nonspecific effects of therapy (as well as meeting other qualities of methodological rigor defined by the Clinical Trial Assessment Measure; Tarrier & Wykes, 2004).

In summary, CBT-P for positive symptoms of psychosis demonstrates a modest but significant positive impact (average effect around .35–.40) in controlled studies. When compared with an active therapy control, the benefits of CBT-P are somewhat limited (average effect around .20). This reduced effect may speak to a larger discussion related to the relatively comparable effectiveness of psychological interventions (see Wampold, 2007), with reference to a variety of common factors contributing to the effect. For the purpose of this review, we view the aforementioned data as supporting the position that CBT-P specifically and perhaps psychological therapy in general, provides modest benefit, beyond medication effects, for those who struggle with persistent positive symptoms of psychosis. In this category, CBT-P is the most developed and rigorously tested individual psychological therapy designed to address symptoms of psychosis. See Table 1 for summary of effect sizes (d/g) for CBT-P with positive symptoms.

Table 1
Summary of Benefits of CBT-P on Positive Symptoms (Mean Effect Size d/g)

Individual CBT-p studies ($n = 24$)	.399 ^a
Rigorous studies (high CTAM rating, $n = 12$)	.22 ^a
Active therapy control studies only ($n = 8$)	-.19 (favoring CBT-P) ^b
Long-term follow-up	.40 (<12 months); .33 (>12 months) ^c
Long-term follow-up (active therapy control only)	.18 (12 month); .08 (24 month) ^b

^a = Wykes, et al., (2008). ^b = Lynch et al., (2010). ^c = Zimmerman, et al., (2005).

CBT-P and Relapse Prevention

A number of studies have examined the effects of CBT-P on relapse prevention. Across studies, relapse prevention has been defined somewhat differently. For example, Pilling et al. (2002) examined six studies and found there was variance in the way that relapse was defined between studies, ranging from hospital readmission to a deterioration equivalent of five or more on the Brief Psychiatric Rating Scale (BPRS; Overall & Gorham, 1962). Similarly, Lynch et al. (2010) reviewed studies of CBT-P, in which relapse was defined as either a change in care, hospitalization, or an increase in positive symptoms within a specified time period. Both reviews reported that there was no evidence that CBT-P prevented relapse. Kingdon (2010) challenged the Lynch et al. (2010) results based on inclusion/exclusion of particular studies.

Some studies have looked specifically at relapse as defined by readmission to the hospital and reported positive results. For example, in a comparison of CBT-P with treatment as usual, Turkington et al. (2006) looked at relapse risk as defined by readmission to the hospital. At 12-month follow-up, they found a higher (chi-square significant at .05) readmission rate in the TAU group (23%) compared with CBT-P (14%). They also reported that the CBT-P group had a longer time to readmission compared with TAU (odds ratio 1.84), and spent significantly less time in the hospital if they relapsed ($p < .05$). In contrast, other studies found no significant differences in rehospitalization rates comparing CBT-P with standard treatment control group (Kuipers et al., 1998) or supportive counseling (Tarrier et al., 2004) at 18-month follow-up.

There is some indication that receiving CBT-P before a hospital admission may lead to fewer days in the hospital. Reviewing outcomes for clients receiving services 24 months posttreatment, Malik, Kingdon, Pelton, Mehta, and Turkington (2009) analyzed data pertaining to duration of stay for rehospitalization and found significant ($p < .05$) differences favoring CBT-P (mean duration = 32.7 days) compared with TAU (mean duration = 48.9). Kuipers et al. (1998) found a similar, nonsignificant trend in their 18-month follow-up when comparing CBT-P (mean inpatient days = 14.5) to a standard treatment only group (mean inpatient days = 26.1).

Of note, the intervention reviewed in Malik et al. (2009) was a relatively low "dose" (six sessions) trial and delivered by nonexperts in CBT-P. It is also important to note that some family members of clients enrolled in the study met with treatment providers three times during the course of the study in order to assist with issues like case formulation, psychotic symptom management, and preventing relapse. This study increases the possibility that including interventions for family members may provide additional benefits for clients treated with CBT-P.

Overall, CBT-P does not confer an advantage to relapse prevention when defined broadly. When relapse prevention is more narrowly defined as rehospitalization, studies are mixed in outcomes. Therefore, the role of CBT-P in reducing the rate of rehospitalization requires further investigation. If replicated, the finding that clients who have received CBT-P before readmission (compared with those receiving TAU or standard care) may spend less time in the hospital if readmitted, has both clinical and economic implications.

CBT-P and Specific Symptoms

Hallucinations

Overall findings indicate that CBT-P does positively impact hallucinations on several dimensions (e.g., reduces hallucinations, decreases severity) at the end of treatment. However, long-term impact of CBT-P is unclear. For example, Pfammatter et al. (2006) reported that CBT-P leads to a reduction in hallucinations at completion of therapy ($g = .34$, $n = 6$ studies), but reported that the gain is often lost at follow-up (which generally varies between 6 and 12 months across studies). This pattern of results was reported in the following studies: Shawyer et al. (2012); Trower et al. (2004); and Valmaggia et al. (2005).

Tarrier et al. (2001) intensively examined data from the Tarrier et al. (1998) randomized control trial including only patients ($N = 42$) who reported both hallucinations and delusions. The authors reported that change in severity of hallucinations at the end of treatment was significantly greater for CBT-P relative to supportive counseling in post hoc comparisons (using nonparametric tests, $p < .05$). However, the data used to arrive at this conclusion rested on a single item (7-point scale) from the BPRS (Lukoff, Liberman, & Nuechterlein, 1986).

Jenner, Nienhuis, Wiersma, and Van De Willige (2004) added other interventions to CBT-P (i.e., coping training, motivational interviewing techniques, family treatment, rehabilitative efforts, mobile crisis, and medication) to form what they called Hallucination Focused Integrative Treatment. Results from their work, with this approach, suggested significant improvements on Psychotic Symptom Rating Scales (PSYRATS, Haddock, McCarron, Tarrier, & Faragher, 1999) distress ratings for voices ($d = .62$) and total burden ($d = .55$) as well as positive symptom ratings on the PANSS (Kay, 1991; $d = .71$) compared with the routine care condition. Wiersma, Jenner, Nienhuis, and Van De Willige (2004) also reported significant improvements in quality of life and social role functioning ($d = .64$) favoring integrated treatment. Of note, this more comprehensive and integrated approach (of which CBT-P is a strong component) maintained benefits at 18-month follow-up on the PSYRATS (Haddock et al., 1999) distress ($d = .60$), total burden ($d = .51$), and the PANSS (Kay, 1991) positive symptoms ($d = .45$; Jenner, Nienhuis, Van De Willige, & Wiersma, 2006).

The general trend suggests that CBT-P for hallucinations shows benefits at the end of treatment, but benefits tend to be lost at follow-up in many, but not all, studies. The active therapeutic agent that contributes to short-term change during treatment is unclear. However, treatment that incorporates other therapeutic elements (e.g., family involvement, coping skills) may be important to maintenance of gains with regard to hallucinations (see Jenner et al., 2006).

Delusions

Although Pfammatter et al. (2006) reported that the impact of CBT-P on hallucinations was demonstrated at posttreatment and then lost at follow-up, their review of studies, looking at the impact of CBT-P on delusions, did not show an effect until follow-up ($g = .47$ at follow-up, $n = 5$ studies). In one study, Durham et al. (2003) compared the impact of CBT, supportive psychotherapy, and treat-

ment as usual in a routine practice setting. In this study, both CBT-P and supportive therapy failed to show significant change at posttreatment on the PSYRATS (Haddock et al., 1999) delusion scale, but both groups showed significant within-group benefits at 3-month follow-up (CBT-P $d = .83$; SPT $d = .78$). There were no significant changes at either posttreatment or follow-up for clients in the TAU group.

Haddock et al. (2009) compared CBT-P with social activity therapy to determine impact on aggressive behavior. According to the authors, the presence of anger and delusional symptoms appear to be correlated with violence and aggression. Individuals in the CBT-P group had a lower number of total aggressive incidents during treatment and a lower number of physically aggressive incidents at follow-up. The authors noted that “there was a relatively large decrease on the PSYRATS (Haddock et al., 1999) delusions factor of ‘distress’ in the CBT-P group compared to a slight increase in the SAT (social activity therapy) group (p. 156).” They speculated that the impact on delusions may have been a pivotal factor in reducing violence. Of note, significant mean differences between groups in delusions were noted at posttreatment favoring CBT-P ($d = .93$), but, in contrast to the trend noted earlier, no significant differences were found at follow-up (approximately 6 months later, $d = .096$).

There are a variety of studies that were conducted in routine clinical practice settings that offer additional perspectives on CBT-P and delusions. Jakes, Rhodes, and Turner (1999) offered a combination of solution-focused therapy and CBT-P for delusions (mainly persecutory) in routine clinical practice to 18 clients. In this small study, approximately one-third of clients improved (i.e., significant decrease in conviction, preoccupation, and anxiety), one-third showed no change, and one-third were somewhere between the other groups. The overall change in median conviction rating over time was significant at $p < .01$. The authors offered a practical suggestion, stating that if the client shows no change in conviction within three sessions, the therapist may need to consider focusing on another treatment area. Morrison et al. (2004) similarly evaluated the use of CBT-P in routine practice (i.e., community mental health center). Clients were allocated to wait-list/TAU control or CBT-P based on the availability of the relevant clinician (i.e., not randomized, but naturalistic allocation). They reported significant improvements in the PSYRATS (Haddock et al., 1999) delusions total score at posttreatment ($d = .54$) favoring CBT-P compared with Wait-list/TAU.

Negative Symptoms

The negative symptoms of schizophrenia include flat affect (reflected in an expressionless face and monotone voice), alogia (slowed responses to questions, “poverty of speech”), and avolition (inability to initiate and sustain goal-directed activities). A cognitive-behavioral model of interventions has been developed for negative symptoms (Rector, Beck, & Stolar, 2005). Although negative symptoms have been linked to biological factors contributing to neurocognitive deficits, the cognitive-behavioral perspective focuses on the role that negative beliefs/assumptions have on the resulting withdrawal and disengagement behaviors. The basic premise is that individuals with schizophrenia disengage from activities for two primary reasons: (a) in response to positive symptoms (so called secondary negative symptoms, also referred

to as safety and avoidance behaviors) to cope with distressing delusional beliefs, perceived threats, voices, and so forth, and (b) as a self-protective, compensatory response to negative expectations about performance (e.g., anticipating repeated failures in tasks) and lack of anticipated pleasure in activities (Rector et al., 2005). Consistent with this view, Deegan (1997) provides a personal and stirring depiction of negative symptoms as a “hardened heart” that serves to protect the person from repeated failings by not trying. She writes:

Giving up was not a problem, it was a solution. It was a solution because it protected me from wanting anything. If I didn't want anything, then it couldn't be taken away. If I didn't try, then I wouldn't have to undergo another failure. If I didn't care, then nothing could hurt me again. My heart became hardened (p. 77).

Grant and Beck (2009) empirically investigated the relationship between a constellation of negative expectancies they termed “defeatist beliefs,” cognitive impairment, and negative symptoms. They reported that defeatist belief endorsement mediated the relationship between cognitive impairment and both negative symptoms and functioning. In other words, the presence and severity of defeatist beliefs helps to explain the relative expression of negative symptoms. The resulting model also provides a potential target for cognitive therapy, holding some promise of exerting a positive influence on the impact of negative symptoms.

Drawing from this model, Perivoliotis and Cather (2009) provided an extensive case illustration of using a cognitive model and interventions to treat negative symptoms. In their model, CBT-P of negative symptoms emphasizes setting realistic goals, employing exercises designed to disconfirm dysfunctional beliefs, and identifying ways to work with low energy and engagement difficulties.

Preliminary reports showed promising results for the use of CBT-P with negative symptoms compared mainly to routine care. For example, in their review, Wykes et al. (2008) reported a mean weighted effect size = .437 ($n = 23$ studies). A recent study by Grant, Huh, Perivoliotis, Stolar, and Beck (2012) confirmed this finding, showing that CBT-P for negative symptoms was associated with significantly greater improvement (relative to standard care) on the avolition-apathy scale of the SANS (Andreasen, 1981) after 18 months of treatment (between group $d = -.66$ favoring CBT-P). However, the advantage of CBT-P over active control therapies has not been demonstrated across the majority of studies (see Lynch et al., 2010, $n = 7$ studies, with comments from Kingdon, 2010). Considering long-term effects of CBT-P on negative symptoms, Turkington et al. (2008) reported significantly fewer negative symptoms (SANS, Andreasen, 1981) within the CBT-P cohort at 5-year follow-up compared with the Befriending condition cohort ($d = .55$).

CBT-P: Acute Phase of Psychosis

The benefits of CBT-P during an acute psychotic episode are difficult to study for a number of reasons. During an acute psychotic episode, medication is the typical front-line treatment for helping to alleviate psychotic symptoms, and most patients admitted to the hospital are given antipsychotic medication. As such, studies of CBT-P versus TAU likely reflect the benefits of CBT-P plus medication relative to medication alone. In their meta-analysis, Zimmerman et al. (2005) reported a medium effect size

(mean ES $g = .57$) from studies examining the impact of using CBT-P during an acute psychotic episode. However, the authors noted that methodological limitations (e.g., lack of raters who were blinded to group assignment) may have inflated the level of impact.

As an example, in one study reviewed by Zimmerman et al. (2005), Drury et al. (1996a) randomly allocated psychiatric inpatients to either CBT-P (individual and group, as well as family engagement) or control group (informal support and recreational activities). Both groups showed a significant reduction in positive symptoms at 12 weeks following admission, with the CBT-P group showing a significantly greater decline in symptoms in a shorter amount of time compared with the control condition (between groups effect size was 1.49 at week 7 and 1.23 at week 12). Both groups also showed declines in disorganized thinking and negative symptoms at 12 weeks with no significant differences between groups ($d = -.002$, $d = .18$, respectively). At 9-month follow-up, the CBT-P group continued to show significantly fewer positive symptoms ($d = .71$). No significant differences were found between groups at 9-month follow-up for negative symptoms or disorganization.

In a follow-up analysis, Drury et al. (1996b) found a more rapid resolution of psychotic symptoms at 6-months based on various definitions of recovery (see also Lewis et al., 2002). Recovery time was reduced by 25% to 50% depending on the definition of recovery. A survival function using the clinical recovery criteria found the cumulative proportion failing to recover to be .4 for CBT-P and .75 for the control group. Factors that complicated the results of this study included (a) raters not completely blinded to group assignment and (b) patients who also received a family engagement component, which is different from most trials involving CBT-P.

Startup, Jackson, and Bendix (2004) compared CBT-P to TAU for treatment during the acute phase. They found significant multivariate differences between groups at 12-month follow-up favoring CBT-P (no difference at 6-month follow-up). They reported that a significantly larger proportion of clients in the CBT-P group (60%) showed reliable and clinically significant improvement compared with TAU (40%). However, the study was also limited by the lack of raters who were blinded to group assignment.

Looking at first episode psychosis, Jackson et al. (2008) compared CBT-P to Befriending during an acute psychotic episode. They reported potential significant benefits for CBT-P over Befriending early in the treatment process (standardized mean difference effect sizes were calculated as follows: .23 for positive symptoms and .28 for negative symptoms), but no significant differences between groups at follow-up.

At present, findings on the benefits of CBT-P during an acute psychotic episode are generally positive with modest effect sizes. Some studies show stronger effects on positive symptoms (Drury et al., 1996a) and others show more limited results (Jackson et al., 2008). Additional rigorously controlled trials of CBT-P delivered during an acute psychotic episode are necessary to help determine if this approach expedites the process of recovery (Drury et al., 1996a and 1996b; Jackson et al., 2008; Lewis et al., 2002) and/or assists with the maintenance of gains to slow the process of readmission (Turkington et al., 2006; Malik et al., 2009). Although the duration of hospitalization was not significantly less for CBT-P compared with supportive counseling during an acute psychotic episode, (Haddock, Tarrier, Morrison, et al., 1999; Lewis et al.,

2002) further investigation into the duration of hospitalization for those who receive CBT-P interventions before readmission may be warranted (Malik et al., 2009).

Perception of CBT-P by Individuals With Persistent Psychotic Symptoms

Several authors have reported that CBT-P is well-received by clients. Positive findings regarding satisfaction with CBT-P were reported in controlled trials by Kuipers et al. (1997) and Turkington et al. (2002). Two studies (Durham et al., 2003; Farhall, Freeman, Shawyer, & Trauer, 2009) conducted in routine clinical practice also reported high levels of patient satisfaction with CBT-P. According to Durham et al. (2003), when asked to rate if treatment was positive and helpful, 70% in the CBT-P group rated "yes, definitely" compared with 37% in the supportive therapy group and 30% in the treatment as usual condition (significant at $p < .05$). The specific reasons for high satisfaction ratings for CBT-P are unclear; however, according to Durham et al. (2003), patient perception of suitability of treatment may have influenced satisfaction.

Predictors of Good Response to CBT-P: Client Variables

Although there are limited data, some factors appear to predict a better response to CBT-P. For example, Naeem, Kingdon, and Turkington (2008) reviewed data from two separate randomized controlled trials (i.e., Sensky et al., 2000 and Turkington et al., 2002) and examined a variety of potential predictors of good outcome with CBT-P. They found that higher levels of insight (David, Buchanan, Rees, & Almeida, 1992) and a high CPRS global impression (higher distress/symptoms) score predicted good outcome in the study group that received brief CBT-P. Looking only at the data from the Turkington et al. (2002) study, Brabban, Tai, and Turkington (2009) found that positive response (operationally defined as 25% or greater improvement in overall symptoms and insight) to a brief form of CBT-P treatment was associated with gender (female) and lower levels of delusional conviction. The latter finding is consistent with results reported by Garety et al. (1997) in which clients who endorsed that they could "possibly be mistaken about their beliefs" (on the BPRS assessment measure) proved to be a predictor of improvement for those who expressed delusions.

In sum, distress (defined as higher number of symptoms), some awareness of deficits (insight), and lower conviction in beliefs (as demonstrated by more flexibility in thinking to allow for alternative explanations) are associated with a good response to CBT-P. In addition, women appear to show a better response to briefer forms of CBT-P, but the mechanism of action is unclear.

Strategies Used in CBT-P

Rector and Beck (2001) provide a concise summary of the shared goals and subtle variations of the different CBT-P approaches described in the literature (see Table 2). There are currently several textbooks available that partially serve as treatment manuals for delivering CBT-P. The manuals are quite similar; however, some authors emphasize different points such as a nor-

Table 2
Shared Goals and Subtle Variations of The Different CBT-P Approaches

	Definition	Possible example
Establishing a strong therapeutic alliance	Support, collaboration and acceptance are the hallmarks of a strong therapeutic alliance. With psychosis (specifically paranoia), developing trust may take time but is pivotal to engagement. Check understanding regularly during sessions, ask the client for clarification if needed.	“I understand that you feel that it is difficult to trust. Please tell me how our work together can be the most helpful to you.” Or, if the clinician believes that the client is suspicious of him or her: “It seems like you may not trust me. Can we talk about it?”
Education about the illness	Education would include information based on the biopsychosocial (i.e., biological, psychological, and sociological) model with a goal of normalizing the experience and reducing stress. It is also important to discuss the roles of vulnerability and stress.	“Many times, when people are under stress, symptoms get worse and coping strategies just don’t seem to work. They may feel like other people are talking about them or watching them.”
Cognitive and behavioral strategies for reducing stress directly related to hallucinations and delusions	Identify thoughts and behaviors that maintain distress and offer alternative explanations. Teach specific distraction or focusing strategies (see Table 3).	“You have talked about how when you start thinking about the evil spirits, you get upset. Have you had the chance to practice the other thoughts that we have discussed? If not, let’s think of ways you can start using them.”
Suggesting reality testing experiments	Have the client practice an experiment with a case manager, a trusted friend or family member, and ask the client to report findings at the next session. Note: it is important to have a good understanding of the client’s beliefs before proposing a reality check.	For a client who believes everyone looks at him when he enters a store, ask the client to briefly enter a store, look directly at others in the store, and leave- record the experience and review in session.
Reducing relapse	Develop a relapse plan that builds on client strengths. The goal of the plan is to create a written document that the client can refer to when feeling vulnerable or when symptoms begin to feel unmanageable. This type of plan is common in the field of addiction and is not unique to CBT-P.	“You have made so much progress. Maybe we could write down some of the things that really helped you, like the best coping strategies and people who supported you. Maybe we could also identify the ways to tell if you are beginning to have problems again.”

Note. Sources: Rector and Beck (2001); Kingdon and Turkington (2005).

malizing rationale (Kingdon & Turkington, 1994, 2005); coping skills (Tarrier, Harwood, Yusopoff, Beckett, & Baker, 1990), self–other evaluative beliefs (Chadwick, Birchwood, & Trower, 1996), and the use of formulation and a combination of techniques (Beck, Rector, Stolar, & Grant, 2009; Fowler, Garety, & Kuipers, 1995; Nelson, 2005). As a result of these foundational techniques, new approaches have been proposed for treating psychosis, including Mindfulness and Meta-Cognitive approaches, Compassionate Mind Training, and Acceptance and Commitment Therapy (see Tai & Turkington, 2009, for a review). What follows below is a brief and somewhat subjective review of elements of CBT-P that we believe differ from standard CBT. We draw from our clinical experiences as treatment providers who are familiar with standard CBT and have worked with individuals who are experiencing psychotic symptoms for years before learning this particular approach. We provide examples of ways to use some of the techniques that are discussed in an effort to convey the general characteristics of this approach. The following discussion is not meant to be an exhaustive review.

Engagement/Forming a Therapeutic Alliance

One feature that is common to all CBT-P textbooks is the special attention paid to developing a therapeutic relationship with

individuals who experience symptoms of psychosis. This is not surprising given the widely acknowledged challenges to engaging clients who struggle with positive and negative symptoms of psychosis. For individuals diagnosed with schizophrenia, relationships with others can be experienced as difficult for a variety of reasons (e.g., paranoia, cognitive difficulties, intrusive voices). Chadwick et al. (1996) offer recommendations that focus on minimizing difficulties in the therapeutic relationship that include scheduling shorter, more frequent sessions, creating a less formal atmosphere at the start of therapy, structuring sessions to avoid extended silence, and refraining from pushing the client to challenge delusional ideas before he or she is ready.

Stepping away from the research, we reflected on our experiences with providing therapy to individuals diagnosed with schizophrenia before learning the modified form of CBT. The primary differences seemed to revolve around the perspective of the clinician toward psychotic symptoms and the approach to working with the client. By definition, psychotic experiences and beliefs are outside of what most people believe or experience. In addition, the connection between psychotic symptoms (e.g., content) and life experiences often do not make sense. Kingdon and Turkington (2005) define this as “Coping with incomprehensibility” (p. 50).

Where the psychotic symptoms were often thought of as categories (normal vs. abnormal), the CBT-P clinician begins with the viewpoint that all beliefs/experiences fall on a continuum (Garety & Freeman, 1999). This perspective on symptoms places them in a less stigmatizing context and allows for movement on a continuum. The approach to working with the client involves a willingness to listen to the client's concerns/symptoms without prejudgments. For example, the client who reports a bizarre delusion or hallucination may be reluctant to talk at all about their concerns for various reasons (e.g., fearing hospitalization or rejection). If they do talk, they may perceive questions about their concerns or efforts by others to point out the "reality" of the situation as threatening or invalidating their experience.

The CBT-P approach also involves openness to modifying session time, place, and format to allow the client a sense of safety, support, and freedom to begin to talk about and then to eventually think differently about their experience. In this sense, the strategies used in CBT and CBT-P are quite similar, but the perspective toward symptoms and the manner in which the clinician works with the client is unique.

From the standpoint of the clinician, a reasonable question may be, "How do I respond to a client who adamantly believes a patently bizarre experience?" or "If I explore this experience, will this reinforce the symptom?" Clearly, the therapist needs to avoid collusion (i.e., completely agreeing with the client) and use techniques that focus solely on the client. The therapist can use Socratic questions to explore aspects of the belief or experience that the client may not have considered. For example, if a client states that voices tell him/her that neighbors are evil and want to harm him or her, the clinician may ask peripheral questions that start with what (e.g., "What does the neighbor do that leads you to believe he is evil?"), how (e.g., "How does this neighbor act that concerns you?"), when (e.g., "When you see the neighbor, what does he do, what else is going on at that time?"), or where (e.g., "Where do you typically see this neighbor?"). The use of peripheral questions shows interest and concern and provides the client with ways to identify inconsistency in their beliefs. From our clinical experience, many treatment providers inquire about these experiences in order to make a diagnosis (i.e., are the beliefs logical and based in reality). It appears that far fewer engage in open discussion about the client's experience of voices or delusions after the diagnosis has been made. In fact, it is not uncommon for practitioners to guide their clients to wait for the medication to work and to ignore voices rather than talk about them (Corstens, Escher, & Romme, 2008).

If we agree that it is both important and worthwhile to discuss a client's perceptions and beliefs (however distorted), shouldn't the goal and approach be to try and introduce more reality based thinking? The answer is a qualified "yes," but the approach is not predictable and often calls for creativity and the ability to manage a great deal of uncertainty. The CBT-P approach generally begins with the client's concerns and trying to understand their world as they experience it. This can be highly anxiety provoking as we temporarily suspend our reality monitors and try to understand a very frightening experience. With psychosis, the links between thoughts, voices, delusions, and external events are often obscured by cognitive processing deficits (e.g., attention and memory), safety and avoidance behaviors, and the cumulative effects of social isolation. These factors and others (e.g., discomfort with the

psychotic content, worries about personal safety) may lead therapists to move quickly to reality-based conclusions for the client and perhaps inadvertently move at a faster pace than the client.

Although the therapeutic alliance is a core component in all therapies, gaining trust from an individual diagnosed with schizophrenia is often a gift to the clinician, not an entitlement. In an effort to deal with these challenges, engagement strategies have been proposed by a variety of authors to facilitate the therapeutic alliance with a person who is experiencing psychotic symptoms. See Table 3 for a summary list of suggestions and examples.

Normalizing Rationale

One approach used during the early stages of engaging clients is to normalize the symptoms of psychosis. For example, telling the client that psychotic symptoms are not uncommon (Van Os, Hansen, Bijl, & Vollebergh, 2001) or talking about famous people who have publicly disclosed that they hear voices (e.g., the actor Anthony Hopkins or Brian Wilson from the musical group The Beach Boys) and have learned how to cope with them. The strategy was first described by Kingdon and Turkington (1991) and involves a dialogue with clients around the relative commonness of unusual experiences like hearing voices or paranoid thoughts (e.g., during sleep deprived states, bereavement) and a rationale for understanding the onset of symptoms (e.g., provide an example of the stress-vulnerability model; Zubin & Spring, 1979).

For example, it might be helpful to let the client know that experiences like hearing voices or feeling oversensitive and irritable are not uncommon in relation to certain stressors like sleep deprivation, the loss of someone close, or in response to trauma. This can lead to a discussion of how stress can contribute to both physical (e.g., headaches) and emotional/psychological (e.g., anxiety, paranoia) consequences. This conversation can then naturally transition to looking at current stressors and methods for coping. Discussing symptoms in this way is presumably less stigmatizing (i.e., helping the client to not equate voices with automatic thoughts like "madness" or being "institutionalized") and begins to introduce the idea of alternative explanations of symptoms that are grounded in more common experiences.

This strategy is not unlike information/education provided to those who experience panic attacks in an effort to help "de-catastrophize" a client's misinterpretation of physical sensations/cues (Barlow & Craske, 2007). Using this analogy places some symptoms of psychosis in the same context as anxiety disorders, which also serves to reduce stigma and normalize symptoms.

Dudley et al. (2007) reviewed summary information (session ratings) pertaining to CBT-P techniques used by therapists in the Sensky et al. (2000) study. They divided participants into responders and nonresponders to CBT-P interventions. They found that the individual techniques (based on individual item analyses and corrected for multiple comparisons) that significantly differentiated responders from nonresponders included education about schizophrenia and clinician self-disclosure (e.g., the therapist might tell the client that when he only gets 2 hours of sleep, he is irritable and quick to read into what others say about him). When sets of items were combined into categories, the authors reported significantly more items for responders in the "relationship" category (e.g., the therapist is able to engage the client and form a therapeutic alliance which leads to a collaborative approach, $d = 1.18$) and the "for-

Table 3
Suggestions to Improve Alliance/Engagement

Suggestion	Example
Use simple, honest, and accurate communication.	“When you have a lot of stress and you don’t sleep, it seems like the voices get worse” vs. “the voices are due to a bio-chemical imbalance in your neurotransmitters.”
When asking about symptoms, be guided by a healthy curiosity. Do not collude with the delusion.	If a client believes that he or she is being followed, ask for details: “Do you know who is following you? What do you think the person wants? Does this person follow you all of the time?”
Restrict the use of silence because it may lead to discomfort for the client.	“I noticed that you have been quiet. Is there anything on your mind that you would like to talk about? If not, how would you like to talk about other things in your life?” (at this point, draw on information about client that you have obtained – hobbies, interests, more neutral topics).
Depending on the client, the clinician may need to be flexible about the location of therapy. Instead of a face-to-face session, use creativity. If a session is held outside of the office, the clinician must ensure that privacy and confidentiality are maintained.	Be flexible and open to walking with the client, getting coffee, go where the client is comfortable. Consider providing sessions in a client’s group home or residence.
If the client becomes upset during the discussion, it is advisable to change to a more neutral topic and allow the client time to calm self (“tactical withdrawal”).	“It looks like this topic is upsetting. What if we save this discussion for another time and talk about something else for a little bit?” As above, change the topic of conversation to hobbies, current affairs, or interests.
Use shorter session times. The client may not be able to tolerate a traditional 50-minute session. During the first meeting, the client and clinician discuss both the length and frequency of sessions.	Monitor the client’s ability to remain engaged: is the client able to sit still, does the client appear to be internally stimulated, does the client respond to questions? The clinician could ask, “I notice that it can be harder to stay focused if we sit too long. As far as how long we will meet, what would you recommend?”
Be reliable, predictable, and dependable.	Be consistent in interactions with clients, and keep regularly scheduled appointments.

Note. Sources: Chadwick et al., 1996; Garfield and Mackler, 2009; Kingdon and Turkington, 2005; Nelson, 2005.

mulation” category (e.g., the therapist and the client explore the onset of symptoms and the surrounding events, discuss current beliefs and ways that they are maintained to develop a shared understanding of the problem, $d = 1.40$). The authors interpreted the results to support the notion that normalizing symptoms as part of the engagement and formulation process is beneficial for individuals who experience psychotic symptoms. However, due to the small sample size, their results are speculative and await further investigation.

Formulation

The goal of collaboratively developing a shared understanding of the client’s concerns is fundamental to all forms of CBT. To reiterate the discussion from the engagement section, the shared model can include unusual content, expectations, and so forth. It is important to fully hear the client’s rationale before moving to action. Otherwise, the client may perceive their concerns to be invalidated. Taking it one step further, CBT-P emphasizes the importance of the client arriving at their own conclusions about beliefs and perceptions (through Socratic dialogue, guided discovery and checking). This lays the groundwork for a transition to schema work, which is also common to traditional CBT.

The concept of schema work in CBT-P is similar to traditional CBT; however, there are some areas of difference. One issue involves the pace and degree of affect that can be generated when attempting to identify a core belief (e.g., by way of downward arrow technique). Kingdon and Turkington (2005) advise that

work on schemas may be helpful, but to be careful not to activate too much distress. If a client becomes visibly distressed, it is often advisable to refocus the discussion to other topics.

A second issue involves determining the basis of a core belief (i.e., on a continuum from purely psychotic content to beliefs that are rooted in experience). For example, a client may have experienced a pleasant childhood with supportive family and friends before the first psychotic break but contends with voices that are critical and unrelenting, telling the client that he is evil and no one loves him. From a formulation and schema standpoint, the clinician may work with the client to examine the voice content (e.g., “do you believe what the voices say?”) and explore client’s automatic thoughts and assumptions in relation to the voice content (e.g., “can we look at the reasons you believe that?”). This can include developing a list of reasons for and against the voice content. This process may also reveal a client’s core belief about how lovable/unlovable they believe they are and what factors influence this belief (e.g., past experiences of rejection vs. voice content unrelated to past experience or influenced by actual events that are misinterpreted). If the voice content and core belief are related to past experience, then the work with the client may focus on continuums (loveable to unlovable) and techniques such as positive data logs as in standard CBT (keeping in mind the issue related to distress). If the voice content/beliefs are based on inaccurate information (e.g., the voice is calling the client the devil), the direction of the therapy may be to help the client to gather evidence to disprove the voice content (see Nelson, 2005 for a

more complete discussion of ways to modify beliefs that influence or underlie voices or delusions).

Coping Strategies

As with all individuals who experience symptoms of mental illness, people who experience symptoms of psychosis find ways to cope with their symptoms. Carr (1988) surveyed a wide range of individuals with schizophrenia in order to identify how they coped with symptoms. The results identified a variety of techniques that were often linked to the role of attention. More specially, the majority of techniques included redirection of attention in some fashion, with or without using external aids. For example, clients chose to listen to music, play with pets, or simply leave the immediate environment to engage in an activity like window shopping. Tarrrier et al. (1990) developed Coping Strategy Enhancement from clinical and research experience. Similar to Carr's work, some techniques use distraction or redirection of attention (e.g., increasing activity or listening to music), while others focused on coping with positive (i.e., hallucinations and paranoia) symptoms (e.g., using a diary to track when voices occur and what they are saying).

The process is generally collaborative, often involving self-monitoring and selection of targets based on potential for success or reduction of symptoms (see Tarrrier, Beckett, Harwood, Baker, Yusupoff, & Ugarteburu, 1993; Tarrrier, Sharpe, Beckett, et al., 1993). For example, if the client reports that she would like to cope better with voices, she may be encouraged to record the voices (e.g., time of day, intensity, content, what the client is doing) for a period of time and bring the record to session. The therapist and client then work together to identify patterns that may exacerbate symptoms (e.g., the voices get louder when the client is alone) and coping strategies that may minimize distress (e.g., go to a friend's house or phone a friend when the client feels lonely). Information from the self-monitoring form (voice diary) may also point out potential coping ideas. For example, based on this information, the therapist may say, "it seems like the voices were less loud and bothersome when listening to different kinds of music; would it be helpful to check this out during the next week or two?" Between session work, or homework, can then be suggested as a way to test out a coping idea. Successful strategies can then be recorded (e.g., on a card) to facilitate recall and regular application.

Working from a coping skills framework allows the clinician the flexibility to either draw from a variety of coping ideas that others have found effective and offer them to clients for their review or collaborate with clients to develop more individualized coping ideas. If, after reviewing a list of coping strategies that other clients have found effective, the client is unable to identify a specific strategy, the clinician works with the client to find strategies that have worked for the client in the past or explore strategies that the client is willing to test out. For example, if the client enjoyed riding a bike before the first episode of psychosis, the clinician would encourage the client to engage in this activity between sessions. The goal of this activity is to elicit hope and move the client's focus away from psychosis. This dimension of CBT-P aims to help the client feel more empowered by gaining some control over distressing symptoms. Overall, there appears to be no clear advantage to using distraction-based coping strategies compared to focusing-based coping strategies (Haddock, Slade, Ben-

tall, Reid, & Faragher, 1998; see Table 4 for examples of each type of strategy).

Behavioral Experiments

Behavioral experiments are a common practice in traditional CBT. Experiments or tests are developed to investigate the accuracy of certain attitudes and beliefs. In contrast to considering alternative explanations for events (typically done during session), this approach asks the client and therapist to collectively identify some action that would provide evidence for and against certain beliefs. For example, if the client believes that the voices keep him or her up at all hours of the night, the client may be encouraged to use a voice-activated recorder that can be left on all night and brought to the next session for review.

Overall, clients are asked to concretely test out certain ideas with actions that can be processed during the next session. Each test is tailored to client need. For example, consider a client who experiences paranoia when entering a crowded room (e.g., "everyone looks at me and criticizes me") and therefore avoids going places (increasing social isolation). After laying the groundwork about normalizing anxiety and considering alternative reasons others may have for looking at people in public, the clinician can ask the client to check out her thoughts. The client may be asked to step into a crowded room (with a trusted friend by her side) for a short period of time, intentionally look around the room at each person, leave the room, and record findings in a diary (e.g., what was observed, how many people looked at her, their response, different reasons for people's actions) to process at the next session.

A great deal of creativity and finesse is required to help the client devise an adequate test of a belief that is meaningful, corrective, and not overwhelming. The challenge with cases involving psychosis is to introduce the "test" only when the client is ready. Although there are no clear guidelines here, it is important to listen for subtle areas of doubt voiced by the client and to move slowly. Therapists can be lured into pouncing on early signs of doubt and devising the one test that will "prove" to the client they are incorrect in their beliefs, and this failure in "timing" is seen as unhelpful to the treatment process. It is often more helpful to think in terms of a progression of tests that are developed with the client. It may be helpful to first develop a test that challenges peripheral elements of a delusion and then slowly progress to more persuasive experiments. For example, if the client believes they are controlled by a device, it may be useful to first ask the client to look for information (via Internet or book) on how a device like this works and to bring the information to the next session for review.

Summary

In summary, our review of CBT-P for positive symptoms of psychosis demonstrates a modest, but significant positive impact (average effect around .35-.40) in controlled studies. When compared with an active therapy control, the benefits of CBT-P are limited (average effect around .20). There is no clear evidence that CBT-P provides a significant advantage in preventing relapse when this term is broadly defined. When relapse prevention is defined strictly by rate of rehospitalization, studies have been mixed in outcomes. However, there are some promising results that clients who have engaged in CBT-P

Table 4
Types of Coping Strategies for Hallucinations

Distraction	Example
Listening to music or radio talk shows	"Let's talk about different types of radio stations that you listen to. Is there a certain type of music or talk show that makes you feel calm? After looking at the voice diary that you completed, it looks like 5:00 PM is when the voices start getting bad. Do you think you could turn on the radio at that time to help you stay calmer?"
Meditation Technique: Teach the client a technique like guided imagery where they can create a "safe place."	"Close your eyes and imagine a place where you have been where you have felt peaceful, or think of a vacation spot that you would like to visit. Imagine that you are there. What do you see? What do you hear? What do you smell . . ."
Have the client choose an activity (e.g., playing a game, painting, working on a computer).	"I noticed that you have mentioned a few times that you enjoy painting. Do you think that when the voices act up, you could pick up a paint brush and start painting?"
Phoning a friend: Ask the client to set up a support network (e.g., family member or friend) to call when the voices occur.	"You have said that when you talk to people, the voices go away. The next time the voices bother you, would you be willing to call your mom?"
Exercise: Set a reasonable exercise routine with the client. For example, if the client has not exercised for years, ask him or her to take a brief walk and slowly increase time increments.	"It seems like the voices don't bother you when you are walking. Do you think it would help to put on your shoes and take a walk the next time they act up?"
Focusing	Example
Subvocalization: Go through the mental process of generating speech but not actually saying it aloud; read quietly to self; talk on cell-phone.	"The next time you are in public and the voices start bothering you, would it be possible to pick up your cell phone, pretend that someone is on the other end, and just talk quietly to yourself about the weather?"
Respond rationally to the voice.	Work with the client to minimize the emotional impact of the voice first and assist the client in developing a calm response. (e.g., "That is not true," "You have no power over me").
Ask the client to set aside a specified time each day to listen to the voices. The amount of time (e.g., 20 or 30 minutes) is determined by the client.	"You have noticed that the voices are pretty bad during the late morning. Would you be willing to set aside one time each day (for about 20 minutes) when you will listen to the voices? That way, when they bother you at different times of the day, you can tell them to come back at a certain time and not feel that you have to focus on them throughout the day."
Use normalizing explanation.	"When the voices are acting up can you remind yourself that other people also hear voices, especially under stress, and that they are a symptom of the illness and do not have power over you?"
Use voice diary to identify patterns.	Ask the client to record when the voices occur, voice content, what the client is physically doing at the specified time(s), ratings of distress and coping ideas. The client would bring the diary into session for review.

Note. Sources: Haddock et al. (1998); Kingdon and Turkington (2005).

interventions may spend less time in the hospital relative to clients who receive only standard care (Malik et al., 2009).

Looking at specific symptoms, CBT-P for hallucinations appears to provide some benefits during the treatment phase that may be lost at extended follow-up (i.e., when no longer in active treatment) in many but not all studies. However, CBT-P combined with other interventions (e.g., including family in treatment, motivational interviewing, assertive crisis intervention) for hallucinations shows promise for maintaining gains over time (Jenner et al., 2006). For delusions, the Pfammatter et al. (2006) review suggested that the benefits of CBT-P for delusions take longer to emerge (i.e., often do not see significant changes until several months after treatment at a follow-up assessment). CBT-P for negative symptoms showed modest benefits across studies using TAU and active control groups (Wykes et al., 2008) and no benefit when compared with studies only using active therapy controls (see Lynch et al., 2010). Some studies also suggest potential long-term benefits of CBT-P with regard to negative symptoms (see Turkington et al., 2008).

This review also suggested modest benefits of CBT-P during the acute phase. Although there is some potential for CBT-P to facilitate the speed of recovery during an acute episode, this finding has not been adequately established. Also of note, clients who receive CBT-P consistently report high levels of satisfaction with this approach. Overall, based on this review of the literature, the use of CBT-P in clinical practice appears to hold promise as an effective treatment for individuals who experience persistent psychotic symptoms, but further evaluation in the key areas identified above is recommended.

Recommendations for Theory and Research

We believe that future research focused on understanding the impact of engagement strategies on early treatment gains is warranted, more precisely, the specific impact of therapeutic alliance. In highly controlled studies, those who provided therapy to control groups were often the same individuals who delivered CBT-P. Although the therapists in the control condition could not use

specific CBT-P techniques, they were encouraged and trained to engage clients in a supportive and accepting way. Therapeutic engagement tailored for psychosis, plus some shared activity, may contribute to initial benefits for both conditions. Beyond general therapeutic factors, it will be important to clarify the specific elements of CBT-P which may influence positive change. For example, Wykes et al. (2008) point to “a trend for CBT-P models to emphasize more behavior aspects of treatment to promote larger effective sizes” (p. 534). It will be important to further investigate which models and techniques most influence improvements. From a methodological standpoint, future studies of CBT-P should also attend to issues that could impact outcomes such as blinding raters to treatment condition, the use of active therapy controls, and follow-up assessments several months posttreatment.

Based on research evidence conducted in routine practice settings and the cost of training individuals in CBT-P, several authors (Farhall et al., 2009; Garety et al., 2008; Peters et al., 2010) suggested that CBT-P be recommended for selected patients (e.g., help-seekers) rather than offered to all clients with persistent symptoms. Unfortunately, there are no clear guidelines for allocating clients to CBT-P. Based on evidence from this review, clients who report distress related to symptoms, show some degree of insight or flexibility in thinking, and express desire for treatment will likely be good choices for CBT-P. More work is needed in this area.

One issue that we also believe deserves further discussion is how we define significant change (see also TARRIER et al., 1993). Given the wide range of distress and impairment in functioning that can occur with a psychotic illness, it may make sense to extend the view of change to go beyond symptom improvement. Many times, a common assessment protocol (e.g., PSYRATS, PANSS) does not capture the smaller, idiosyncratic changes that can move a client toward recovery. A closer look at qualitative differences (e.g., trusting a clinician, talking about symptoms, coming to the agency regularly, taking medication) may provide insight into changes that seem to occur after treatment has been completed for some clients receiving CBT-P. Furthermore, looking closer at how we define positive change may reveal other areas or processes that are important to promoting recovery from a psychotic illness.

The question of who can deliver this type of intervention opens up numerous possibilities. In the majority of studies, CBT-P is delivered by expert psychologists, advanced practice nurse/therapists, and in some cases psychiatrists. The role of nonexperts in delivering CBT-P is not clear. Although some authors indicated that CBT-P given by nonexperts did not show a positive effect in routine practice (Farhall et al., 2009), others reported positive findings in practice settings when nonexperts provided CBT-P (Morrison et al., 2004; Peters et al., 2010). For example, one study (Turkington et al., 2002) demonstrated that various techniques within CBT-P can also be provided by individuals without advanced training with positive results. Other studies (Rollinson et al., 2007; Pinniti, Fisher, Thompson, & Steer, 2010) also describe a broad range of mental health workers using CBT-P techniques in different settings. The role of nonexperts in providing CBT-P requires further investigation.

In conclusion, both the PORT and NICE guidelines recommend that CBT-P be considered for individuals who experience schizophrenia. How do we make this type of service more available in the United States, and who can provide this type of service? Some of the challenges faced by community mental health systems in the United

States include the way services are reimbursed, ways to reach out and engage individuals diagnosed with schizophrenia in treatment services, and workforce development issues. Innovation may be required to reach this population through personnel and methods that are not currently in place. Finally, at the present time, there are very few options for training and supervision in CBT-P, and most options are available only outside the United States. Clearly, it is important to continue to think about how to implement effective therapeutic adjuncts to medication interventions in order to promote recovery for those who are faced with this challenging illness.

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