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Service-user Satisfaction with Cognitive Behavioural Therapy for Psychosis: Associations
with Therapy Outcomes and Perceptions of the Therapist

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Abstract

Objectives: Few studies have investigated service-user satisfaction with cognitive behavioural therapy for psychosis (CBTp). This study explored its associations with clinical presentation and outcomes, retrospective expectations of progress, perceptions of the therapist and demographic variables. **Design and Methods:** One-hundred and sixty-five service-users completed self-report questionnaires pre- and post-CBTp in relation to the constructs of interest. Regression analyses explored associations with (i) overall satisfaction with therapy (ii) perceived progress, skills and knowledge gained. **Results:** Ninety-six percent of service-users reported satisfaction with therapy. Higher levels of overall satisfaction with, and perceived benefit from, therapy were associated with positive therapy expectations, positive ratings of therapist's personal qualities, competence and trustworthiness, lower pre-therapy depression and improvements in quality of life. Symptom improvements were not related to overall satisfaction with therapy; however, with the exception of voices, better clinical outcomes were associated with subjective ratings of having made more progress and gained more CBT skills and knowledge. Demographic factors were not associated with satisfaction or perceived progress. In multiple regression analyses, expectations of progress showed the strongest associations with both satisfaction and perceived benefits. Other remaining significant associations consisted of perceptions of the therapist for satisfaction, and both pre-therapy levels of, and changes in, depression for perceived benefits. Qualitative feedback emphasised the importance of the therapeutic relationship and developing new coping strategies. **Conclusions:** The findings provide preliminary evidence that high levels of satisfaction with therapy are not contingent on good clinical outcomes and are instead associated with positive therapy expectations and perceptions of the therapist.

Practitioner Points

- Therapy expectations represent a neglected area of research and may have implications for levels of satisfaction with therapy and perceived benefit.

- The findings reinforce the importance of CBTp therapists demonstrating that they are supportive, competent and trustworthy.
- The findings suggest that positive experiences of therapy do not require changes in psychosis symptoms and are instead related to changes in quality of life
- Depressive symptoms at the start of therapy may adversely influence the extent to which CBT skills and knowledge are gained and levels of perceived progress at the end of therapy.
- The present sample was restricted to service-users who completed therapy.
- Satisfaction levels were high. Further research is needed to explore factors associated with dissatisfaction with therapy

Keywords: service-user satisfaction; cognitive behavioural therapy; psychosis; therapeutic relationship

Introduction

Although cognitive behavioural therapy for psychosis (CBTp) is a collaborative approach that involves seeking regular feedback (Fowler, Garety and Kuipers, 1995), there have been few studies exploring specifically service-users' experiences of and satisfaction with therapy (Haahr et al., 2012; Wood, Burke and Morrison, 2015). Existing research suggests that high levels of overall satisfaction with CBTp are common (Farhall, Freeman, Shawyer and Trauer 2009; Jolley et al., 2015; Kuipers et al., 1997; Sensky et al., 2000), however less is known about what contributes to satisfaction or the extent to which service-users are satisfied with specific aspects or outcomes of therapy (Holding, Gregg and Haddock, 2016; Rose, Wykes, Farrier, Doran, Sporle and Bogner, 2008). This represents an important area of investigation

to ensure that CBTp meets service-users' needs and expectations, and potentially to improve engagement and therapy outcomes.

Research on the factors associated with service-user satisfaction with mental health services has tended to explore satisfaction with inpatient or outpatient services (Berghofer, Castille and Link, 2011; Gebhardt, Wolak and Huber, 2013; Haahr et al., 2012; Richardson, Katsakou and Priebe, 2011), rather than psychological therapy specifically. Conflicting findings have been reported in relation to demographic factors, initial symptom severity, and clinical outcomes, whereas satisfaction is more consistently associated with service-users' ratings of their quality of life and their therapeutic relationship with the treating team (e.g., Berghofer, Lang, Henkel, Schmidl, Rudas and Schmitz, 2001; Eklund and Hansson, 2001; Gebhardt et al., 2013; Holcomb, Parker, Leong, Thiele and Higdon, 1998; Prince, 2006; Smith et al., 2014; Ruggeri, Wykes, Farrier, Doran, Sporle and Bogner 2002). Studies on the treatment and outcome priorities of service-users with psychosis have similarly yielded mixed results, with several studies highlighting the importance of symptom reductions (Byrne, Davies and Morrison, 2010; O'Toole, Ohlsen, Taylor, Purvis, Walters and Pilowsky, 2004; Wood, Price, Morrison and Haddock, 2013) and other studies emphasising outcomes such as quality of life, hope and practical support (Law and Morrison, 2014; Shepherd, Murray and Muijen, 1995). The determinants of satisfaction with psychological therapy are not fully understood, nor the extent to which they differ from predictors of satisfaction with other aspects of treatment (e.g., medication, care coordination).

Only one study has specifically focussed on service-user satisfaction with CBTp (Miles, Peters and Kuipers, 2007). In a sample of 65 service-users, the study found high levels of satisfaction post-therapy and at 3-month follow up, particularly in relation to therapist attributes such as warmth, friendliness and competence. Satisfaction levels were associated with the extent to which service-users felt that they gained skills and knowledge in therapy,

and there was a trend for satisfaction at follow up to be associated with beliefs about the usefulness of homework tasks. No associations were found with demographic factors, expectations and perceptions of progress in therapy or therapist factors. Although the authors did not explore links between clinical outcomes and satisfaction, qualitative accounts suggested that coping strategies for psychotic symptoms were important. There is an emerging qualitative literature on service-users' experiences of CBTp, which may also shed light on the factors that contribute to satisfaction levels (Berry and Hayward, 2011; Byrne et al., 2010; Wood et al., 2015). These accounts have emphasised the helpfulness of a supportive and collaborative therapeutic relationship, gaining understanding and coping strategies in relation to particular experiences, functional changes and developing a more positive sense of self (Wood et al., 2015).

The aim of the present study was to extend Miles et al.'s (2007) study with a larger sample. Specifically, we aimed to (i) investigate the component structure of the Satisfaction with Therapy Questionnaire (STQ; Beck et al., 1993); (ii) examine the associations between satisfaction with, and perceived benefits from, CBTp and expectations of progress, therapy outcomes, therapist factors, and demographic variables.

Method

Service setting

(BLINDED) is a specialist stand-alone psychological therapies service for outpatients with psychosis, which was founded in 2003 following a Randomised Controlled Trial (reported in BLINDED). It is based in the (BLINDED) National Health Service mental health Foundation Trust, which serves (BLINDED) London boroughs, each with high rates of diversity, substance use, crime, socio-economic deprivation and psychosis incidence. The service offers CBTp to individuals with current distressing hallucinations or delusions, or emotional difficulties in the context of a history of psychosis. The duration of therapy is six-nine

months, delivered weekly or fortnightly. The therapists are predominantly clinical psychologists, trainee clinical psychologists, or CBT therapists, and all receive regular individual and/or group supervision. Therapists liaise closely with care-coordinators in recovery multidisciplinary teams but are not part of these teams. The service's population consists of individuals who are generally motivated to attend therapy and tend to have lower levels of risk and chaotic behaviour than do service-users seen by therapists working within teams. Further description of the service can be found in (BLINDED) and (BLINDED).

Participants

Two hundred and ninety six consecutive cases who attended five or more therapy sessions (i.e., engaged in therapy, according to the service's a-priori definition¹) between 2004 and 2012 were included. Of those, 242 service-users attended an end of therapy assessment, of whom 165 (68%) completed the STQ (Beck et al., 1993). The average age of service-users who completed the STQ was 40.2 years (SD=9.6, range 20-62) at referral, and 55% were male. Fifty-five per-cent were White (n=90), 30% were Black (n=50), 7% were Asian (n=11) and the remainder were from other ethnic backgrounds. Eighty-three (50%) presented with hallucinations at referral, and 103 with delusions (62%); their scores on the clinic assessment measures pre- and post-therapy are presented in Table 1. They attended an average of 23.23 sessions (range: 5-63) of individualised, formulation-based CBTp (Fowler et al, 1995). To assess differences between therapy completers who completed the STQ (N=165) and those who did not (N=131²), a series of independent samples t-tests (for dimensional measures) and Chi Square (X^2) tests (for dichotomous variables) were carried out. No significant differences were found in relation to gender, ethnicity or severity of symptoms before therapy; however

¹ Due to time constraints on the service individuals who attend fewer than 5 sessions are not followed up for assessment, however service-users who drop-out after having engaged in therapy (i.e. ≥ 5 sessions) are treated as therapy completers and invited for all follow-up assessments

² Missing data on STQ could originate from service-users having declined the end of therapy assessment, choosing not to complete it at the assessment or due to time constraints at the assessment

individuals who did not complete the STQ were slightly younger, and reported less improvement in depression and anxiety (see Table 1)

[INSERT TABLE 1 HERE]

Materials

The STQ is an adaptation of Beck et al.'s (1993) Patient's Report of Therapy Session and was first used to assess satisfaction with CBTp by Kuipers et al. (1997). It is a 20-item self-completion instrument focusing on four areas: (i) service-users expectations of, and perceptions of, progress made during therapy (3 items; please note that the item on 'expectations of progress' is based on a retrospective rating at the end of therapy: 'Before you started therapy, how much progress did you expect to make in dealing with your problems?'); (ii) their beliefs in the extent to which they gained CBT skills and knowledge (8 items); (iii) their perceptions of the usefulness of homework tasks set (2 items); (iv) ratings of their therapist's attributes (5 items) and an individual item specifically asking how satisfied they are generally with the therapy received. Items are scored on a scale ranging from 1 to 5, with higher scores corresponding to higher satisfaction and a score of 3 reflecting a neutral or uncertain response (e.g., 'unsure', 'no progress' 'indifferent'). The adapted STQ has been used with clients with psychosis in a number of other studies (Kuipers et al., 1997; Miles et al., 2005).

The Psychotic Symptom Rating Scale (PSYRATS; Haddock, McCarron, Tarrier and Faragher, 1999) is a semi-structured interview that assesses psychological dimensions of delusions and hallucinations. The auditory hallucinations subscale has 11 items (including frequency, intensity, duration, perceived control and disruption to functioning) and the delusion subscale has six items (including distress, conviction, preoccupation, and disruption to functioning). All items are rated by the interviewer on a 0-4-point scale, with higher scores indicating greater severity. Total scores can range from 0-44 for the hallucinations subscale

and 0–24 for the delusions subscale. The PSYRATS has demonstrated good inter-rater and test-retest reliability, concurrent validity and sensitivity to change (Drake, Haddock, Tarrier, Bentall, and Lewis, 2007). In the current study the scale showed high internal reliability (*Cronbach's Alpha* = .88 for the voices subscale and .87 for the beliefs subscale).

The Beck Depression Inventory-II (BDI-II; Beck, Steer and Brown, 1996) and Beck Anxiety Inventory (BAI; Beck, Epstein, Brown, & Steer, 1988) are widely used 21 item self-report measures of depressive and anxiety symptoms experienced in the preceding two weeks. Items are rated on a 0-3-point scale and total scores can range from 0-63. Higher scores indicate more severe symptoms. Both scales have high levels of internal consistency and test–retest reliability (Beck and Steer, 1993; Beck et al., 1996; Fydrich, Dowdall, and Chambless, 1992). They are also suitable for people with psychosis (Garety et al. 2005) and have demonstrated good internal consistency with this population (Dudley et al., 2013).

The Manchester Short Assessment of Quality of Life (MANSA; Priebe, Huxley, Knight and Evans, 1999) is a 16-item measure assessing satisfaction with life across 12 subjective and four objective areas, including employment, financial situation, leisure activities, number and quality of friendships, relationship with family, personal safety, accommodation, physical and mental health. Each item is rated on a 7-point satisfaction scale ranging from 1= ‘couldn’t be worse’ to 7= ‘couldn’t be better’, with a range of total scores of 12–84. Higher scores indicate better perceived quality of life. The measure has been found to have satisfactory reliability and validity (Bjorkman and Svensson, 2005) and in the current study the scale showed a good level of internal reliability (*Cronbach's Alpha* = .77).

Procedure

Outcome measures were completed with service-users by an independent assessor (assistant psychologist) at four time-points: at the referral stage, pre-therapy (after 3-4 months on the

waiting list), approximately three months into therapy, and at the end of therapy). The current study included assessment data from the pre-therapy assessment (prior to commencing therapy) and the end of therapy. Service-users were given the STQ at the end of therapy only, and were reassured that their responses would remain confidential (including from the therapist).

Statistical analysis

All analyses were carried out using Stata (Version 11, StataCorp, 2009) and SPSS (Version 20.0, IBM SPSS Statistics, 2011).

- (i) Exploratory analyses: Firstly, an exploratory factor analysis (EFA) was carried out on the STQ (excluding the overall satisfaction item) to reduce item redundancy and clarify the component structure. The Cronbach's alpha reliability co-efficient for the STQ with the overall satisfaction item excluded was 0.887, indicating a high level of internal consistency. Bartlett's test of Sphericity ($p < 0.000$), which tests whether the items are interdependent, and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy (0.87) confirmed that the data were adequate for the analyses. The EFA was carried out using principal component method with a varimax rotation to facilitate the interpretation of the component loadings. Four factors were identified based on evaluation of the Eigenvalues (>1.0), scree tests (Cattell, 1978) and the clinical meaningfulness of the components generated. Each retained component was also required to load with coefficient at >0.3 . Factor 1, termed *progress, skills and understanding gained*, accounted for 35.5% of the variance. This factor comprised the eight items related to skills and understanding gained within the STQ and two items related to progress (perceived progress made and anticipated future progress). The second factor, termed *therapist competence and trustworthiness*, accounted for 12.4% of the total variance. This encompassed three items related to the therapist

(trustworthiness, competence and understanding) and one item assessing the helpfulness of homework tasks. The third factor, termed *personal qualities of the therapist*, comprised all four items related to the interpersonal qualities demonstrated by the therapist. This accounted for 7.8% of the variance. The fourth factor, termed *therapy expectations*, consisted of one item from the STQ ('Before you started therapy, how much progress did you expect to make in dealing with your problems?') and accounted for 5.9% of the variance. Together the four factors accounted for 61% of the variance. Table 2 depicts all component loadings ≥ 0.3 (absolute value).

[INSERT TABLE 2 HERE]

- (ii) Regression analyses: Regression analyses explored the correlates of overall satisfaction with therapy (1 item from the STQ) and perceived progress, skills and understanding gained (based on the loading structure of items from the EFA). There were very high levels of overall satisfaction with therapy with only 3.6% (n=6) rating themselves as less than 'satisfied'. Due to overall satisfaction being measured by a single ordinal scale ('very satisfied'; 'satisfied'; 'neither'; 'dissatisfied'; 'very dissatisfied'), negative and neutral responses were combined with 'satisfied' responses and compared to 'very satisfied' responses. This resulted in one binary dependent variable (overall satisfaction: very satisfied (N=105) vs. less satisfied (N=60), and one continuous dependent variable (perceived progress, skills and understanding gained). Three independent variables were identified based on the loading structure of items from the EFA: (i) therapist competence and trustworthiness (factor 2; 4 STQ items), (ii) therapist personal qualities (factor 3; 4 STQ items) and (iii) therapy expectations (factor 4; 1 STQ item). Total scores of the items loaded on each individual factor were used in the regression (rather than factor scores) to reduce the likelihood of the factors

being correlated with each other. The other independent variables included were: clinical outcomes (baseline and changes in anxiety, depression, quality of life and psychotic symptoms) and demographic factors (age, gender and ethnicity). In the first stage of analysis, a series of logistic regression analyses (for the binary dependent variable; lower ranked category as the reference) and linear regression analyses (for the continuous dependent variable) were conducted to identify significant individual predictors of each dependent variable. Variables with $p < 0.05$ were selected for further analysis in a multiple regression model to identify the strongest predictors for each dependent variable. For all analyses, a significance level of .05 was chosen a priori.

Results

High rates of satisfaction with therapy were reported by service-users. At the end of therapy, 96% of service-users reported that they were satisfied with the therapy, of whom 64% were 'very satisfied'. Satisfaction with therapy was not associated with the number of sessions attended and this was therefore not explored further³. High levels of satisfaction were reported for satisfaction with specific aspects of the therapy, particularly therapist characteristics. Service-users were less satisfied and more uncertain about the extent to which they had gained skills and understanding that help them to cope with emotions, 'deal with people', problem solve and engage in activities they perceived to be helpful to them. The means and standard deviations of the individual STQ items are shown in Table 3.

[INSERT TABLE 3 HERE]

Correlates of Satisfaction

The results of the regression analyses are shown in Tables 4 and 5.

³ These data can be provided by the first author

[INSERT TABLES 4 AND 5 HERE]

Overall Satisfaction with Therapy

Higher overall satisfaction with therapy was associated with lower levels of depression prior to therapy, with greater changes in quality of life, more positive therapy expectations, and higher therapist ratings (both personal qualities and competence/trustworthiness) (all rated post-therapy). Therapy expectations ($p < 0.01$) and perceptions of the therapist's competence and trustworthiness ($p < 0.01$) and personal qualities ($p < 0.05$) remained significant in the multiple regression model.

Progress, Skills and Knowledge Gained

Similarly to overall satisfaction, higher perceived benefit from therapy was associated with positive therapy expectations, lower pre-therapy levels of depressive symptoms, improvements in quality of life, and higher therapist ratings (both personal qualities and competence/trustworthiness). In addition, improvements in depression, anxiety, and delusional beliefs, but not in voices, were also associated with perceptions of having made more progress and gained more CBT skills and knowledge, as was positive ratings of quality of life before therapy. A significant final model emerged in which therapy expectations ($p < 0.001$), pre-therapy depression ($p < 0.05$) and changes in depression over the course of therapy ($p < 0.05$) explained 50.3% of the variance.⁴

Qualitative information about service-user satisfaction

⁴ These analyses were conducted with and without the changes in delusional beliefs and there were no differences between the two models aside from a substantial reduction in sample size (from 141 to 88). The model reported therefore does not include this variable.

Additional comments were written on the STQ by 68% (n=112) of service-users.

Satisfaction with the therapist: The most common aspects of therapy reported were positive experiences of feeling supported, listened to, cared about and understood by the therapist, which was emphasised by 31% (n=35) of service-users:

“(My therapist) had a very apparent desire to help and seemed very concerned which gave me confidence and a feeling that I was worthwhile”

“What I found most helpful in therapy was the fact that (my therapist) understood where I was coming from”.

“Working with the therapist in a collaborative effort was crucial, for example when reports have been written. I felt that what I felt and thought mattered”

Gaining skills and understanding: Gaining useful techniques such as relaxation, problem solving and reframing thoughts were also mentioned by 29% (n=33) of service-users, of whom 18% (n=6) discussed gaining useful strategies specifically for psychotic symptoms. There were also accounts of having gained a helpful understanding of themselves or their experiences (11%) becoming more active (10%) gaining self-confidence (3%), and feeling happier and less affected by negative emotions (3%):

“(My therapist) identified experiences in my past that tampered with my present belief system. This helped alleviate some of my fears and worries”

“It feels amazing how you can change your whole life around with so simple and little tips and tricks and exercises and they really do work against all of your negative beliefs. I am amazed and happy”

“It was helpful to talk through things and learning that other people have similar experiences opened up my eyes”

Unhelpful aspects of therapy: A small number of service-users discussed unhelpful aspects of therapy (n=5; 8%), which included not covering certain things in therapy, a change in therapy room, being interrupted during a therapy session and struggling to understand or retain information discussed in sessions.

“Sometimes... it was too intellectual somewhat like being in a psychology lecture and I struggle to follow it all so I think making things very simple would help”.

“Sometimes different rooms were used (which was) slightly unsettling”

“Sometimes there were too many problems and it was not possible to discuss them all due to the limited time (which made) things more difficult to cope with and affected my mood”

Discussion

The aims of the present study were to investigate the different components of satisfaction with CBTp and their associations with outcomes of therapy, pre-therapy functioning and therapist and demographic factors. The results concur with previous reports of very high levels of satisfaction with CBTp, particularly in relation to characteristics of the therapist and the quality of the therapeutic relationship (e.g., Kuipers et al., 1997; Miles et al., 2007, NHS England, 2015). Several components of the STQ (Beck et al. 1993) were identified: (i) progress and skills and understanding gained, (ii) the therapist’s personal qualities (iii) the therapist’s competence and trustworthiness and (iv) therapy expectations. The findings are novel in suggesting that therapy expectations are the strongest correlate of service-users’ satisfaction with therapy, followed by perceptions of therapist personal qualities and competence/trustworthiness. Changes in quality of life and lower levels of depression pre-

therapy were also related to higher satisfaction, but were no longer significant in the multiple regression. No significant relationships were found in relation to demographic factors.

Importantly, neither initial severity of, nor changes in, psychosis symptoms were related to overall satisfaction with therapy, in line with service-users' reports that subjective recovery does not necessarily equate to symptomatic change. Emotional and delusion symptom changes were, instead, related to perceptions of progress and CBT skills and understanding gained, with the association with improvements in depression being the most robust.

Therapy expectations emerged as the strongest correlates of satisfaction, demonstrating associations with both overall satisfaction and perceptions of progress, skills and understanding gained from therapy. Expectations of therapy have been a neglected area of research but there is an emerging literature suggesting that expectations of therapy may be linked to the process and outcome of therapy in CBTp (e.g., Freeman et al., 2013; Holding et al., 2016; Marcus et al., 2014). For example, individuals with psychosis who perceive that their problems can change, and that their own efforts or therapy may contribute to this, have been found to be more likely to engage with CBTp sessions and to experience greater progress (Freeman et al., 2013). However, one limitation of the current findings is that participants' reports of their expectations were elicited retrospectively. It is possible that current satisfaction with therapy may have influenced service users' recollection of their expectations of therapy, thereby inflating the size of the association. Nevertheless, taken together with the existing literature, the current findings highlight the importance of eliciting and discussing a patient's expectations of CBTp at the start of therapy in clinical practice and working towards shared goals (e.g., Fowler et al., 1995).

In contrast to Miles et al. (2007)'s results, more positive perceptions of the therapist were associated with higher levels of satisfaction. They were also associated with perceptions of having gained more from therapy, although this association did not survive the multiple

regression analysis. Qualitative accounts also particularly emphasised positive experiences of feeling supported and understood by the therapist. The current findings are novel in suggesting that endorsements of the therapist's personal qualities (e.g., warmth, supportiveness) and their perceived competence and trustworthiness are both important to service-users and may be associated with better therapy outcomes. The current findings are in accordance with qualitative accounts emphasising the importance of the therapeutic relationship, and recent preliminary evidence that its quality may predict therapy outcomes (Goldsmith, Lewis, Dunn and Bentall, 2015; Wood et al., 2015). Service-users' views about their therapists represent a neglected area of research but are likely to be highly relevant to the uptake and process of therapy. For example, service-users may anticipate that the therapist will be judgemental, controlling or untrustworthy, or that they will need to disclose more information or experience more emotion than they feel comfortable to do in order for the therapy to be helpful (e.g., Chadwick, 2006; Greenberg, Constantino and Bruce, 2006; Holding et al., 2016; Lawlor, Hall and Ellett, 2015). The confirmation or disconfirmation of such expectations about the process of therapy may also be anticipated to relate to levels of satisfaction with therapy and whether service-users remain in therapy.

The current study also explored whether initial severity of, and changes in, psychotic and emotional symptoms or functioning (quality of life) were associated with satisfaction with therapy. Consistent with previous research, only changes in quality of life were associated with overall satisfaction with therapy, and this association was weaker than that for therapy expectations and perceived therapist factors. The findings are novel in suggesting that satisfaction with therapy is not significantly associated with changes in psychotic symptoms or anxiety and depression. In contrast, improvements in quality of life, anxiety, depression and delusional beliefs - but not voices - were associated with perceptions of having gained more from therapy, although only improvements in depression remained significant in the final model. Qualitative accounts similarly emphasised improvements in mood, understanding

symptoms and also the helpfulness of skills to cope with anxiety, depression and psychotic symptoms. These findings concur with the literature on the recovery priorities of service-users with psychosis and qualitative explorations of CBTp in suggesting that positive outcomes from therapy may be experienced in the absence of reductions or eliminations in psychotic symptoms, and that the impact and meaning of symptoms may be more important to consider (e.g., Berry and Hayward, 2011; Greenwood et al., 2010; Wood et al., 2015). For example, Berry and Hayward (2011) conducted a review of the qualitative literature and found that understanding and coping with psychosis and normalisation were key ingredients of CBTp, and service-users emphasised the helpfulness of feeling less defined by experiences of psychotic symptoms. The current study also found that clients with more severe pre-therapy depression were less satisfied with therapy (although the odds ratio for this is small) and perceived themselves to have gained less from therapy, while better quality of life before therapy was associated with the perception of having gained more from therapy. More severe depressive symptoms and lower levels of quality of life before therapy may be related to lower levels of perceived improvements in these domains, as has previously been reported in CBTp (e.g., Allott, Alvarez-Jimenez, Killackey, Bendall, McGorry and Jackson, 2001; Lincoln, Rief, Westermann, Ziegler, Kesting, Heibach, and Mehl, 2014; Tarrrier et al., 1998) and might also be anticipated to influence expectations of therapy and service-users' abilities to develop and apply CBT skills and understanding.

Strengths and limitations

The strengths of this study include the use of a large sample of service-users and a wide range of outcome measures completed before and after therapy. There are also a number of limitations that should be considered in interpreting the findings. Firstly, it was only possible to compare those who were very satisfied with those who were less satisfied with therapy (with only 4% of this sample not reporting some level of satisfaction with therapy), due to the

overall high levels of satisfaction. The reduced range of scores may have hindered our ability to detect significant associations. Secondly, the sample is limited to individuals who attended the end of therapy assessment and completed the STQ. It is possible that those who dropped out of therapy or declined to attend their end of therapy assessment were more dissatisfied with therapy, leading to an unrepresentative sample. For example, a recent evaluation of psychological therapies for people with severe mental illness found that 78% of service-users who stopped therapy part way through reported that they were helped only a little or not at all (NHS England, 2015). Service-users who did not complete the STQ at the end of therapy assessment reported less improvement in depression and anxiety, resulting in a more clinically well – and potentially more satisfied – sample of individuals included in the analyses. Thirdly, as mentioned above, service-users were asked to rate their therapy expectations retrospectively, meaning they may have been influenced by their experiences of therapy, thereby potentially inflating the associations between expectations and the satisfaction measures used. Finally, although the EFA generated a clinically meaningful component structure of satisfaction with therapy, these findings require replication and are also based on the retention of a factor with a single item which may have resulted in a less reliable fit to the data (Osborne and Costello, 2009).

Future directions

There are a number of important areas for future research. Three particularly useful areas include:

1. *Service-user expectations*: Expectations of therapy are intrinsically related to service-users' engagement in and satisfaction with therapy. It would be useful for future research to assess service-users' expectations before therapy starts and dynamically over time and to consider the impact of different typographies of expectations (e.g., of therapy, the self and the future) on the process of therapy and a range of therapy

outcomes. The impact of efforts to improve therapy expectations could also be evaluated.

2. *Experiences of dissatisfied service-users and service users who do not complete therapy:* There are important gaps in our understanding of the experiences of service-users who are dissatisfied with therapy or have dropped out of therapy early (Holding et al., 2016).
3. *Satisfaction with different aspects of therapy and therapy outcomes:* Service-users' satisfaction with, and confidence in, applying specific skills and knowledge gained during therapy also requires further investigation. For example, a number of service-users expressed uncertainty or negative views about the extent to which they had gained skills for interpersonal situations (30%) or coping with emotions (25%). Future research could also benefit from exploring associations between satisfaction and a range of outcomes including specific dimension of psychotic symptoms (see Woodward et al., 2014) and outcomes valued by service-users themselves (e.g., Choice of Outcome In Cbt for psychoses; Greenwood et al., 2010).

Conclusion

The current study suggests that higher levels of satisfaction with CBTp are most strongly related to positive expectations and positive perceptions of the therapist's personal qualities, competence and trustworthiness. The findings also suggest that positive experiences of therapy do not require changes in psychosis symptoms, nor are they related to psychosis symptom presentation pre-therapy, and that initial levels of depression and changes in quality of life may be more relevant to satisfaction with therapy. Perceptions of having gained more from therapy were, however, associated with symptom changes but only changes in depression remained significant in the final model. Further research is needed to elucidate

what service-users expect from CBTp and what contributes to better outcomes from the perspective of the service-user.

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Table 1: Clinical and Demographic Information

	Current sample (STQ completers) (N=165)	Individuals who had 5+ sessions but did not complete the STQ (N=131)	Statistical significance :t/X ² (df), p value
Gender, n (%)	Male = 90 (55%), Female= 75 (45%)	Male=86 (65%), Female=46 (35%)	X ² (1)=3.42, p=0.065
Ethnicity, n (%)			
White(White British/Irish/Other)	90 (55%)	59 (54%)	X ² (2)=1.43, p=0.488
Black(Caribbean/African/mixed/other)	50 (30%)	38 (35%)	
Asian or other ethnicity	25 (15%)	12 (11%)	
Age, mean (SD)	40.19 years (9.5, range 20-62)	37.38(9.19, range 17-65)	t (294)=-2.56 p=0.011
Baseline measures: Mean (SD)			
Depression	25.07 (13.66)	24.11 (13.01)	t (291)=-6.10 p=0.542
Anxiety	21.33 (13.98)	21.26 (12.53)	t (289)=-0.47, p=0.962
Voices	27.14 (7.42)	27.51 (6.95)	t (151)=-0.316, p=0.753
Delusional beliefs	16.14 (4.02)	14.98 (4.59)	t (184)= -1.84, p=0.068
Quality of life	46.12 (10.80)	45.62 (11.04)	t (283)=-3.85 p=0.701
End of therapy measures, Mean (SD):			
Depression	16.74 (14.12)	16.80 (13.18)	t(226)=0.28, p=0.978
Anxiety	14.41 (12.27)	17.08 (13.54)	t(234)=1.51, p=0.132
Voices	22.30 (9.92)	23.06 (10.49)	t(110)=0.81, p=0.419
Delusional beliefs	10.32 (6.48)	9.71(7.07)	t(167)=-0.65, p=0.520

Running Head: Satisfaction with CBT for Psychosis

Quality of life	50.99 (12.53)	52.81 (12.08)	t(213) =0.99, p=0.322
Change in symptoms /functioning:			
Mean (SD)			
Depression	-8.31 (11.39)	-4.92 (10.35)	t(223)=2.10, p=0.037
Anxiety	-8.31 (11.39)	-1.97 (8.83)	t (230)=3.13, p=0.002
Voices	-5.41 (9.02)	-5.71 (9.10)	t(108)=-0.16, p=0.874
Delusional beliefs	-.5.70 (6.65)	-4.05 (7.23)	t(157)=1.44, p=0.150
Quality of life	4.99 (11.14)	3.61 (11.18)	t)209)=-0.83. p=0.406

Significant results shown in bold

Table 2: Rotated Component Loadings for Satisfaction with Therapy Questionnaire (STQ)

Items	Factor 1	Factor 2	Factor 3	Factor 4
Component 1: Progress, Skills and Understanding Gained				
Better control over my actions	.804			
Greater ability to cope with my moods	.797			
Techniques/methods to cope with my main problems	.738			
Methods/techniques for dealing with people	.731			
Techniques in defining and solving everyday problems	.706			
Better understanding of my experiences	.676	.344		
Confidence in undertaking activity to help myself	.648	.319		
Better understanding of how my problems developed	.635	.384		
Future progress expected to make in dealing with your problems	.597		.304	
Progressed perceived at the end of therapy	.583			
Component 2: Therapist Competence and Trustworthiness				
How well do you think your therapist understood your problems?		.856		
Therapist competence		.748		

How helpful were tasks you did between sessions?		.632		
How much could you trust your therapist?		.607	.378	
Component 3: Personal Qualities of Therapist				
Sympathetic and caring			.838	
Supportive and encouraging			.819	
Warm and friendly			.689	
(Therapist was) not possible to get on with *			.657	
Component 4: Therapy expectations				
Before therapy, how much progress did you expect to make in dealing with your problems?				0.914
Eigenvalues	6.742	2.348	1.479	1.122
Variance explained	35.49%	12.36%	7.78%	5.91%

Key: coefficients < 0.3 are suppressed; bold text denotes item considered part of this factor

* Item was reverse scored

Table 3: Individual Item Results of Satisfaction with Therapy Questionnaire (STQ)

STQ Item	Mean (SD, range 1-5) (n=165)
<p>Service-users’ expectations of and their perception of their actual progress in dealing with their problems in therapy</p> <ul style="list-style-type: none"> - Part 1: Q1 – Before you started therapy, how much progress did you expect to make in dealing with your problems? - Part 1: Q2 – During therapy, how much progress do you feel you actually made? - Part 1: Q3 – In the future, how much progress do you think you will make in dealing with your problems? 	<p>4.1 (0.8, 1-5)</p> <p>4.7 (0.5, 2-5)</p> <p>4.4 (0.7, 1-5)</p>
<p>Service-users’ beliefs in the extent to which they gained CBT skills/knowledge</p> <ul style="list-style-type: none"> - Part 2: Q1 – A better understanding of how my problems developed - Part 2: Q2 – A better understanding of my experiences - Part 2: Q3 – Techniques or methods to cope with my main problems - Part 2: Q4 – Better control over my actions - Part 2: Q5 – A greater ability to cope with my moods 	<p>4.1 (0.8, 1-5)</p> <p>4.2 (0.7, 1-5)</p> <p>4.2 (0.8, 1-5)</p> <p>4.0 (0.7, 1-5)</p> <p>4.0 (0.8, 1-5)</p>

- Part 2: Q6 – Techniques in defining and solving my everyday problems	4.0 (0.9, 1-5)
- Part 2: Q7 – Methods or techniques for better ways of dealing with people	3.9 (0.8, 1-5)
- Part 2: Q8 – Confidence in undertaking an activity to help myself	4.0 (0.9, 1-5)
Service-users’ ratings of therapist attributes	
- Part 1: Q5 – How well do you think your therapist understood your problems?	4.6 (0.7, 2-5)
- Part 1: Q6 – How much could you trust your therapist?	4.8 (0.5, 2-5)
- Part 3: Q1 – Sympathetic and caring therapist?	4.8 (0.4, 3-5)
- Part 3: Q2 – Competent therapist?	4.8 (0.4, 2-5)
- Part 3: Q3 – Warm and friendly therapist?	4.9 (0.4, 1-5)
- Part 4: Q4 – Supportive and encouraging therapist?	4.9 (0.3, 3-5)
- Part 5: Q5 – Not possible to get on with therapist?*	4.8 (0.6, 1-5)
Service-users’ overall satisfaction with therapy	
Part 1: Q4 – How satisfied were you with therapy?	4.6 (0.6, 2-5)

* Item was reverse scored

Table 4: Simple Linear and Logistic Regressions for Overall Satisfaction and Perceived Benefit from Therapy

Predictor Variables	Dependent Variable						
	Overall satisfaction with therapy			Skills and understanding gained and perceived progress			
	OR	95% CIs	P value	B	SE (B)	t	p>t
Therapy expectations (N=154)	10.35	4.91-21.85	<0.001	7.40	0.72	10.30	<0.001
Baseline depression (N=161)	0.97	0.95-0.99	0.040	-0.09	0.32	-2.76	0.006
Baseline anxiety (N=160)	1.00	0.97-1.02	0.832	-0.20	0.33	-0.58	0.563
Baseline voices(N=83)	1.02	0.97-1.09	0.367	-1.00	0.77	-1.30	0.196
Baseline beliefs (N=103)	0.97	0.87-1.08	0.533	-0.21	0.13	-1.68	0.096
Baseline quality of life (N=159)	1.01	0.99-1.04	0.152	0.11	0.41	2.66	0.009
Change in depression (N=156)	0.98	0.95-1.01	0.130	-1.54	0.04	-4.05	<0.001
Change in anxiety (N=156)	0.98	0.96-1.00	0.120	-0.08	0.03	-2.39	0.018
Change in voices (N=83)	0.99	0.94-1.05	0.713	-0.94	0.63	-1.50	0.138
Change in beliefs (N=98)	1.01	0.94-1.08	0.812	-0.19	0.07	-2.60	0.011
Change in quality of life (N=154)	1.06	1.02-1.10	0.003	0.77	0.28	2.72	0.007

Running Head: Satisfaction with CBT for Psychosis

Perceptions of therapist personal qualities (N=162)	2.14	1.47-3.10	<0.001	1.23	0.37	3.37	0.001
Perceived therapist competence and trustworthiness (N=159)	2.26	1.64-3.10	<0.001	1.56	0.24	6.41	<0.001
Ethnicity (White vs Nonwhite (N=159))	1.05	-0.55-2.04	0.874	1.13	0.87	1.30	0.196
Age (N=165)	1.01	0.97-1.04	0.658	0.33	0.46	0.71	0.477
Gender (N=165)	1.81	0.92-3.56	0.087	1.20	0.88	1.37	0.172

Significant results shown in bold

Table 5: Multiple Regression Results for Overall Satisfaction and Perceived Benefit from Therapy

Dependent Variable	Significant Predictor Variables	Significance			
		OR	95% CIs	p-value	
Overall Satisfaction with therapy ^a (N=147)	Therapy expectations	4.59	1.85-11.37	0.001	
	Perception of therapist personal qualities	1.86	1.04-3.33	0.036	
	Perceived therapist competence and trustworthiness	1.57	1.10-2.26	0.013	
Perceived progress, skills and understanding gained ^b (N=141)	Therapy expectations	5.59	0.82	6.81	<0.001
	Changes in depression	-0.10	0.04	-2.48	0.014
	Baseline depression	-0.07	0.03	-2.00	0.048

^a Adjusted for baseline depression and changes in quality of life

^b Adjusted for baseline quality of life, changes in anxiety, changes in beliefs, perceptions of therapist personal qualities and perceived therapist competence and trustworthiness