Predictors of Service User Satisfaction with Cognitive Behavioural Therapy for Psychosis

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

Abstract

Background: Few studies have specifically investigated service user satisfaction with psychological therapies for psychosis. **Aims**: To examine the associations between service user satisfaction with cognitive behavioural therapy for psychosis (CBTp) and therapy outcomes, clinical and demographic factors. **Method**: One-hundred and sixty-five service users completed the Satisfaction with Therapy Questionnaire (STQ; Beck, Wright, Newman and Liese, 1993) at the end of therapy. Clinical outcome measures were also completed before and after therapy. Regression analyses were conducted to identify predictors of (i) overall satisfaction (ii) perceived progress and (iii) CBT skills and knowledge gained. **Results**: High levels of satisfaction with therapy and perceptions of having gained more from therapy were predicted by greater improvements in quality of life and associated with positive pre-therapy expectations, and perceiving homework tasks to have been 'very helpful'. Multivariate analyses indicated that beliefs in homework tasks being helpful and pre-therapy expectations were the strongest correlates of satisfaction with therapy. More severe levels of depression prior to therapy predicted lower satisfaction and the perception of having made less progress and gained less knowledge and fewer CBT skills at the end of therapy. Improvements in symptoms were not significant predictors of overall satisfaction with therapy but, with the exception of voices, better clinical outcomes predicted beliefs about having gained more CBT skills and knowledge. Demographic factors and the number of sessions received were not significant predictors of satisfaction. Qualitative accounts emphasised the importance of the therapeutic relationship and developing new coping strategies. **Conclusions**: Individuals who expected to make a lot of progress in therapy and found homework tasks very helpful were more satisfied with CBTp. Changes in depression, anxiety and

psychotic symptoms were not significantly related to overall satisfaction, indicating that other aspects or outcomes of therapy are also important. However, individuals who were more depressed before therapy reported lower satisfaction and perceived changes from therapy.

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

Introduction

Although cognitive behavioural therapy for psychosis (CBTp) is a collaborative approach that involves seeking regular feedback (Fowler et al., 1995), there have been few studies specifically exploring 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 et al., 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 (Rose et al., 2008). This represents an important area of investigation to ensure that CBTp meets service users' needs and expectations to improve engagement and therapy outcomes.

Research on predictors of service user satisfaction with mental health services has tended to explore satisfaction with inpatient or outpatient services (Berghofer et al., 2011; Gebhardt et al., 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 et al, 2001 Eklund & Hansson, 2001; Gebhardt et al., 2013; Holcomb et al., 1998; Prince, 2006; Smith et al., 2014; Ruggeri et al., 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 et al., 2010; O'Toole et al., 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 3-month follow up, particularly in relation to therapist attributes. 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. 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 Haywood, 2011; Byrne, Davies and Morrison, 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 (Kilbride et al., 2013; Messari and Hallam, 2003).

The aim of the present study was to extend Miles et al.'s (2007) study with a larger sample, and to examine the relationship between satisfaction with CBTp and therapy outcomes. It was hypothesised that greater change in quality of life would be associated with higher levels of overall satisfaction with therapy and perceptions of having gained more from therapy. It was also predicted that demographic characteristics of service users and clinical outcomes would not be significantly associated with satisfaction levels, based on Miles et al (2007) and the lack of consistent associations found in the wider satisfaction literature.

Method

Service setting

PICuP is a national tertiary service which was founded in 1999, based at the Maudsley Hospital, South London and Maudsley NHS Trust. The service offers CBTp to individuals with current distressing hallucinations or delusions, or emotional difficulties in the context of a history of psychotic symptoms. The duration of therapy is six-nine months, delivered weekly or fortnightly. The therapists were all clinical psychologists, trainee clinical psychologists, or CBT therapists, and all received regular individual and/or group supervision.

Participants

Two hundred and ninety six consecutive cases who attended five or more therapy sessions between 2004 and 2012 were included. Of those, 165 service users completed the Satisfaction with Therapy Questionnaire (STQ; Beck et al., 1993) at the end of therapy. Their average age 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. To assess differences between therapy completers who completed the STQ and those who did not, a series of independent samples t-tests (for dimensional measures) and Chi Square (X^2) tests (for dichotomous variables). Service users who completed the STQ were compared to individuals who had engaged in therapy (i.e., attended five or more sessions, according to the service definition) but had not completed the STQ. No significant differences were found in relation to gender, ethnicity or severity of symptoms before therapy but individuals who did not complete the STQ were significantly younger, had reported less improvement in depression and anxiety and attended fewer therapy sessions (see Table 1)

[INSERT TABLE 1 HERE]

Materials

The Satisfaction with Therapy Questionnaire (STQ) is an adaption of Beck et al's (1993) Patient 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, their actual progress made during therapy (3 items); (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 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'). In this study, the STQ was found to have high levels of internal reliability (*Cronbach's Alpha* = 0.89).

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, & 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 et al. 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, & Chambless, 1992).

The Manchester Short Assessment of Quality of Life (MANSA; Priebe et al. 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 (see Peters et al, under review, for a more detailed account of the assessment procedures). 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, and were reassured that their responses would remain confidential (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, a principal components analysis (PCA) was carried out on the STQ to reduce item redundancy and clarify the component structure. The Cronbach's alpha reliability co-efficient for the STQ was 0.894, indicating a high level of internal consistency. Bartlett's test of Sphericity (p< 0000) and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy (0.87) demonstrated that the data were appropriate for the analyses. PCA was carried out using a varimax rotation to facilitate the interpretation of the component loadings. Three components were deemed reasonable based on evaluation of the Eigenvalues (>1.0), scree-plots and the clinical meaningfulness of the solutions generated. Each retained component was also required to consist of at least three items and load at >0.3. Component 1, termed '*Skills and understanding gained'* accounted for 35.7% of the variance. This component comprised the eight items related to skills and understanding gained within the STQ. The second component, termed '*Competence and trustworthiness of the therapist',* accounted for 11.6% of the total variance. This component encompassed three items related to the therapist (trustworthiness, competence and understanding), as well as the overall satisfaction with therapy item. The third component, termed '*Personal qualities of the therapist'* comprised all therapist items related to the interpersonal qualities demonstrated by the therapist. This component accounted for 7.7% of the variance. Together the three components accounted for 55% of the variance. Table 2 depicts all component loadings ≥ 0.3 (absolute value).

[INSERT TABLE 2 HERE]

(ii) Regression analyses: Three dependent variables were identified based on the loading structure of the items from the PCA: (i) overall satisfaction (one STQ item), (ii) perceived progress (two STQ items: perceived progress and expected future progress) and (iii)

beliefs about having gained skills and understanding (eight STQ items). Due to the very low levels of dissatisfied (mean N = 3.43, range 0-10) and neutral or 'unsure' responses (mean N =13.95, range 0-42) endorsed on most items of the STQ, the analyses were restricted to individuals who endorsed positive responses. Therapist-related variables were also excluded from the regression analyses due to most service users being very satisfied. This resulted in two ordinal categorical dependent variables (overall satisfaction: very satisfied vs satisfied and perceived progress: 'a lot of progress vs 'a little progress') and one continuous dependent variable (satisfaction with skills and understanding: 'strongly agree' vs 'agree'). Clinical and demographic factors, the number of therapy sessions attended and two variables from the STQ (pre-therapy expectations and satisfaction with homework tasks) were then entered as predictor variables in a series of ordinal logistic regression analyses (for ordinal categorical dependent variables) and linear regression analyses (for the continuous dependent variable) to identify significant individual predictors of each dependent variable. Ordinal logistic regression is appropriate for ordinal categorical outcome, i.e., where the categories can be ranked or ordered ("a lot of progress" is of higher order than "a little progress"). However, in case of only two categories in an ordinal variable, ordinal logistic regression is equivalent to a binary logistic regression with lower ranked category as the reference. The variables for which the univariate studies showed *p* values under *0.25* (see Bursac et al., 2008) were then added into a multiple regression model to identify the strongest predictors for each dependent variable. For all analyses, an alpha 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'. 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 have skills and understanding that help them to cope with emotions, 'deal with people', problem solve and engage in activities they perceive to be helpful to them. The results of the individual STQ items are shown in Table 3.

[INSERT TABLE 3 HERE]

Predictors of Satisfaction

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

[INSERT TABLES 4 AND 5 HERE]

Prediction of Overall Satisfaction with Therapy

Higher levels of overall satisfaction with therapy were predicted by lower levels of depression prior to therapy, greater changes in quality of life, more positive pre-therapy expectations and perceptions that tasks completed between therapy sessions had been more useful. Pre-therapy expectations ($p<0.01$) and beliefs about homework tasks ($p<0.01$) remained significant in the multiple regression model.

Prediction of perceived progress in therapy

More positive ratings of quality of life before therapy predicted the perception of having made more progress at the end of therapy whereas higher levels of depressive symptoms predicted lower ratings of perceived progress. Higher levels of improvements in quality of life and reductions in delusional beliefs were also associated with greater perceived progress in therapy, and Black service users were twice as likely to be satisfied with progress in therapy compared to White and Asian or Other ethnic groups. Including beliefs and voices related variables reduced the sample size to 39 and were therefore also not included. Baseline levels of depression ($p<0.01$) emerged as the only significant predictor of perceived progress in therapy in the multiple regression model

Perceived skills and understanding gained

Linear regression analyses found that higher levels of depression prior to therapy predicted lower ratings of skills and understanding gained during therapy. Higher ratings of having gained skills and knowledge were predicted by better quality of life before therapy and associated with greater improvements in quality of life depression, anxiety and delusional beliefs at the end of therapy. Service users who felt that they had gained more skills and knowledge were also more likely to have found homework tasks more helpful (and reported more positive pre-therapy expectations. A significant final model emerged in which changes in depressive symptoms over the course of therapy ($p <0.05$), pre-therapy expectations ($p<0.001$) and satisfaction with homework tasks ($0<0.001$), explained 53.6% of the variance.

Qualitative information about service user satisfaction

Additional comments were written on the STQ by 68% (n=112) of service users. The most common aspects of therapy reported were positive experiences of feeling supported, cared about and understood by the therapist, which was emphasised by 31% (n=35) of service users. 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%) and a few service users discussed gaining self-confidence (3%), and feeling happier and less affected by negative emotions (3%) . A small number of service users discussed unhelpful aspects of therapy (n=5; 4%), which included a change in therapy room, being interrupted during a therapy session and struggling to retain information discussed in sessions.

Discussion

The aim of the present study was to investigate whether symptom changes or other aspects and outcomes of therapy predict satisfaction with CBTp. 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). The findings are novel in suggesting that pre-therapy expectations and beliefs about the helpfulness of homework tasks are the most important determinant of service-users' satisfaction with therapy, followed by changes in their quality of life. No significant differences were found in relation to demographic factors or the number of therapy sessions attended. 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 skills and understanding gained, with the association with improvements in depression being the most robust.

Pre-therapy expectations emerged as one of the strongest predictors of satisfaction, demonstrating associations with all variables examined, namely overall satisfaction, perceived progress and the extent to which service users felt they had gained CBT skills and knowledge through therapy. Expectations of therapy have been a neglected area of research but there is an emerging literature suggesting that more positive expectations of therapy are linked to the process and outcome of therapy (e.g., Addis and Jacobson, 2000; Constantino, Glass, Arnkoff and Smith., 2011; Freeman et al., 2013; 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 attend CBTp sessions and to experience greater progress (Freeman et al., 2013). 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 and working towards shared goals, (e.g., Fowler et al., 1995). It would also be useful for future research to explore expectations of therapy dynamically over time and in relation to both the process of therapy and outcome. 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 et al., 2006; Lawlor, Hall and Ellett, 2014). 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.

Beliefs about homework tasks having been useful also appeared to be an important determinant of satisfaction since it was associated with overall satisfaction and more skills and understanding gained from therapy. This may reflect homework tasks contributing to greater application or consideration of CBT skills between sessions, consistent with evidence that the inclusion of homework tasks in therapy is associated with improved outcomes in CBT and CBTp specifically (Dunn, Morrison and Bentall, 2002; Glaser, Kazantzis, Deane, and Oades, 2000; Kazantzis, Whittington and Datillo, 2010). Similar findings were also reported by Miles et al., (2007), who found that positive beliefs about homework post-therapy predicted satisfaction at 3-month follow up.

The current study also explored whether initial severity of and changes in symptoms or functioning (quality of life) were predictive of satisfaction with therapy. Consistent with our hypotheses, only changes in quality of life were associated with overall satisfaction with therapy, and were also associated with perceived progress and skills and understanding gained. Improvements in anxiety, depression and delusional beliefs were associated with perceptions of having gained more skills and understanding from therapy, although only improvements in depression remained significant in the multiple regression. 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 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 et al., 2001; Lincoln et al., 2014; Tarrier 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.

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 satisfied with those who were very satisfied, due to the overall high levels of satisfaction. 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, all satisfaction and clinical data were based on self-report and service users were asked to retrospectively rate their pre-therapy expectations and may thus have been less accurate and perhaps influenced by their experiences of therapy, thereby potentially inflating the associations between expectations and the satisfaction measures used. It would be useful for future research to assess service users' expectations before therapy starts and to specifically investigate the experiences of service users who are dissatisfied with therapy. It was also not possible to explore the predictive role of experiences of the therapeutic relationship, which is very likely to be related to satisfaction given the findings of qualitative studies and recent evidence suggesting links between the therapeutic relationship and outcome in CBTp (Goldsmith et al., 2014). Service users' satisfaction with and confidence in applying specific skills and knowledge gained during therapy also requires further investigation. For example, a significant 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%).

In conclusion, the current study suggests that satisfaction with CBTp is most strongly related to positive expectations before commencing therapy and the active use of CBT skills and principles between sessions. These findings highlight the importance of discussing service users' expectations and collaboratively developing and reviewing homework tasks between sessions to promote the consolidation and extension of CBT principles. The findings also suggest that positive experiences of therapy do not require changes in psychosis symptoms, and that initial levels of depression and changes in quality of life are relevant to satisfaction with therapy,

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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
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) Black (Caribbean/African/mixed/other) Asian or other ethnicity	90 (55%) 50 (30%) 25 (15%)	59 (54%) 38 (35%) 12 (11%)	X^2 (2)=1.43, p=0.488
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**
Number of therapy sessions, mean (SD)	23.23 (10.57, range 5-63)	17.21 (9.35, range 5-59)	**t (293)= -5.12, p<0.001**
Baseline measures: Mean (SD) BDI BAI PSYRATS: Voices PSYRATS : Beliefs MANSA	 25.07 (13.66) 21.33 (13.98) 27.14 (7.42) 16.14 (4.02) 46.12 (10.80)	 24.11 (13.01) 21.26 (12.53) 27.51(6.95) 14.98 (4.59) 45.62 (11.04)	 t (291)=--6.10 p=0.542 t (289)=-0.47, p=0.962 t(1151)=-0.316, p=0.753 t (184)= -1.84, p=0.068 t (283)=- -3.85 p=0.701
End of therapy measures, Mean (SD): BDI BAI PSYRATS: Voices PSYRATS: Beliefs MANSA	 16.74 (14.12) 14.41 (12.27) 22.30 (9.92) 10.32 (6.48) 50.99 (12.53)	 16.80 (13.18) 17.08 (13.54) 23.06 (10.49) 9.71(7.07) 52.81 (12.08)	 t(226)=0.28, p=0.978 t(234)=1.51, p=0.132 t(110)=0.81, p=0.419 t(167)=-0.65, p=0.520 t(213) =0.99, p=0.322

Change in symptoms/functioning: Mean (SD)			
BDI	-8.31 (11.39)	-4.92 (10.35)	**t(223)=2.10, p=0.037**
BAI	-8.31 (11.39)	-1.97 (8.83)	**t (230)=3.13, p=0.002**
PSYRATS: Voices	-5.41 (9.02)	-5.71 (9.10)	t(108)=-0.16, p=0.874
PSYRATS: Beliefs	-.5.70 (6.65)	-4.05 (7.23)	t(157)=1.44, p=0.150
MANSA	4.99 (11.14)	3.61 (11.18)	t)209)=-0.83. p=0.406

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

	Mean (SD, range 1-5) (n=165)
Service-users' expectations of and their perception of their actual progress in dealing with their problems in therapy	
- Part 1: Q1 - Before therapy, how much progress did you expect to make?	4.1 (0.8, 1-5)
- Part 1: Q2 – During therapy, how much progress did you feel you actually made?	4.7 (0.5, 2-5)
- Part 1: Q3 – In the future, how much progress do you think you will make?	4.4 (0.7, 1-5)
Service-users' beliefs in the extent to which they gained CBT skills/knowledge	
- Part 2: Q1 – A better understanding of how my problems developed	4.1 (0.8, 1-5)
- Part 2: Q2 – A better understanding of my experiences	4.2 (0.7, 1-5)
- Part 2: Q3 – Techniques or methods to cope with my main problems	4.2 (0.8, 1-5)
- Part 2: Q4 – Better control over my actions	4.0 (0.7, 1-5)
- Part 2: Q5 – A greater ability to cope with my moods	4.0 (0.8, 1-5)
- 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	4.6 (0.7, 2-5)
- 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)

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

Items	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Component 1: Skills and Understanding Gained					
Better understanding of how my problems developed	**0.648**	0.372			
Better understanding of my experiences	**0.711**	0.318			
Techniques/methods to cope with my main problems	**0.716**				
Better control over my actions	**0.800**				
Greater ability to cope with my moods	**0.783**				
Techniques in defining/solving everyday problems	**0.732**				
Methods/techniques for dealing with people	**0.708**				
Confidence in undertaking activity to help myself	**0.613**	0.346			
Component 2: Therapist Competence and Trustworthiness					
How satisfied are you with therapy?		**0.704**			
How well do you think your therapist understood your problems?		**0.829**			
How much could you trust your therapist?		**0.599**			
How helpful were tasks you did between sessions?		**0.666**			
Therapist competence		**0.751**			
Component 3: Personal Qualities of Therapist					
Sympathetic and caring			**0.813**		
Warm and friendly			**0.823**		
Supportive and encouraging			**0.742**	0.311	

Component 4: Perceived Progress					
During therapy, how much progress did you feel you actually made?	0.449			**0.536**	
In the future, how much progress do you think you will be able to make in dealing with your problems?	0.477			**0.570**	
(Therapist was) not possible to get on with			0.340	0.766	
Before you started therapy, how much progress did you expect to make in dealing with your problems					0.923
Eigenvalues	7.131	2.318	1.550	1.121	1.004
Variance explained	35.656	11.591	7.749	5.604	5.019

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

Table 4: Predictors of Overall Satisfaction and Perceived Progress

Predictor Variables	Dependent Variable									
	Overall satisfaction with therapy			Perceived progress			Skills and understanding gained			
	OR	95% CIs	P value	OR	95% CIs	P value	B	SE (B)	t	p-value
Pre-therapy expectations (N=154)	**8.8**	**4.00-19.33**	**<0.001**	**0.94**	**0.93-0.97**	**<0.001**	**5.39**	**0.63**	**8.6**	**<0.001**
Baseline depression (N=163)	**0.97**	**0.95-0.99**	**0.04**	0.98	0.95-1.00	0.074	**-0.64**	**0.27**	**-2.36**	**0.020**
Baseline anxiety (N=162)	1.00	0.97-1.02	0.832	0.98	0.97-1.03	0.346	-0.00	0.29	0.16	0.872
Baseline voices(N=84)	1.02	0.97-1.09	0.367	1.00	0.91-1.09	0.960	-0.39	0.26	-1.51	0.134
Baseline beliefs (N=103)	0.97	0.87-1.08	0.533	**1.03**	**1.01-1.06**	**0.006**	-0.20	0.11	-1.80	0.076
Baseline quality of life (N=159)	1.01	0.99-1.04	0.152	0.98	0.95-1.01	0.130	**0.52**	**0.26**	**2.00**	**0.048**
Change in depression (N=156)	0.98	0.95-1.01	0.130	0.98	0.96-1.00	0.120	**-0.13**	**0.32**	**-3.24**	**0.000**
Change in anxiety (N=156)	0.98	0.96-1.00	0.120	0.97	0.93-1.02	0.206	**-0.69**	**0.29**	**-2.39**	**0.018**
Change in voices (N=78)	0.99	0.94-1.05	0.713	**0.92**	**0.86-0.99**	**0.018**	-0.06	0.57	-1.07	0.287
Change in beliefs (N=97)	1.01	0.94-1.08	0.812	**1.03**	**1.00-1.74**	**0.034**	**-1.73**	**0.69**	**-2.51**	**0.014**
Change in quality of life (N=145)	**1.06**	**1.02-1.10**	**0.003**	**3.12**	**1.00-9.70**	**0.048**	**0.14**	**0.35**	**4.02**	**0.000**
Helpfulness of homework tasks (N=154)	**8.75**	**2.30-33.23**	**0.001**				**4.57**	**1.29**	**4.57**	**0.001**
White ethnic group (N=83)	0.51	0.14-1.90	0.315	1.47	0.43-5.03	0.544	0.33	1.54	0.02	0.983
Black ethnic group (N=46)	1.27	0.59-2.73	0.537	**2.00**	**1.00-4.00**	**0.05**	1.47	0.85	1.73	0.086
Asian or other ethnic group (N=31)	0.68	0.22-2.14	0.508	1.33	0.42-4.23	0.622	-1.04	1.39	-0.75	0.455
Age (N=165)	1.01	0.97-1.04	0.658	1.02	0.99-1.05	0.222	0.35	0.40	0.88	0.381
Gender (N=165)	1.81	0.92-3.56	0.087	1.23	0.67-2.23	0.505	1.00	0.76	1.31	0.191
Number of therapy sessions (N= 165)	0.99	0.97-1.02	0.595	0.99	0.97-1.01	0.413	-0.01	0.29	-0.29	0.769

Significant results shown in bold

Table 5 Significant Independent Predictors of Service User Satisfaction

Dependent Variable	Significant Predictor Variables	Significance			
Overall Satisfaction with therapy (N=135)		OR	95% CIs		p-value
	Pretherapy expectations	4.67	1.94-57.43		0.002
	Beliefs homework tasks were very helpful	10.56	1.75-12.42		0.006
Perceived progress in therapy (N=131)	Baseline MANSA	1.04	0.99-1.10		0.080
	Pretherapy depression	0.95	0.91-9.99		0.020
Satisfaction with understanding and skills gained through therapy (N=142)*		B	SE B	t	p>t
	Changes in depression	-0.70	0.32	-2.16	0.032
	Beliefs homework tasks were very helpful	3.93	1.03	3.83	0.000
	Pretherapy expectations	3.75	0.65	5.82	0.000

*Note: Model: F (8, 131) =13.76 p< 0.001. Model R^2 = 0.536, Adjusted R^2 = 0.497