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Patient Factors that Impact upon Cognitive Behavioural Therapy for Psychosis: Therapists' Perspectives

Siobhan Currell

Newcastle upon Tyne Hospitals NHS Foundation Trust and Newcastle University, UK

Thomas Christodoulides and Jonna Siitarinen

Northumberland, Tyne and Wear NHS Foundation Trust, UK

Robert Dudley

Newcastle University, and Northumberland, Tyne and Wear NHS Foundation Trust, UK

Background: Randomized controlled trials have established that cognitive behavioural therapy (CBT) is effective in helping people with psychosis, though there is enormous variability in outcome. It is not clear what patient factors contribute to good outcomes. In fact, most studies considering client factors have excluded people with psychosis. It is clinicians who are deciding who is likely to benefit from CBT for psychosis (CBTp), though little is understood in terms of their views on who benefits from CBTp. **Aims:** This study investigated clinicians' views on client characteristics that influence outcome in CBTp. **Method:** A Q-set of 61 client characteristics was developed from a literature search and interviews with clinicians experienced in working with CBT and/or psychosis. Twenty-one participants (familiar with psychosis and CBT through education, profession, practice or knowledge) rated the items based on their importance in effecting a positive outcome, on a forced normal distribution. **Results:** 21 completed Q-sorts yielded four factors, named as: acceptance and application of the cognitive model; attending to the present; secure base; meaningful active collaboration. **Conclusions:** Items regarding therapeutic alliance were highly endorsed throughout all factors. Some empirically-based items were not endorsed, although overall, clinician responses were consistent with prior research.

Keywords: CBT, psychosis, Q-methodology, client characteristics, therapist views, suitability

Introduction

Although Cognitive Behavioural Therapy for psychosis (CBTp) is recommended for treating schizophrenia (National Institute for Health and Care Excellence, 2014), recent reviews have

Reprint requests to Robert Dudley, Doctorate of Clinical Psychology, School of Psychology, Ridley Building, Newcastle University, Newcastle upon Tyne NE1 7RU, UK. E-mail: rob.dudley@ncl.ac.uk An extended version is also available online in the table of contents for this issue: http://journals.cambridge.org/jid_BCP

questioned its effectiveness (Laws, Jauhar, McKenna, Fung and Salvador, 2014). Potential factors that may explain variability in outcome can be categorized into three broad domains - therapist, therapy and patient factors (and of course, some combination and interaction of these). It is essential that models of psychosis are continually revised, techniques are improved and therapists continue to gain expertise. However, it is equally important that the patient's impact on outcome is not underestimated. Perhaps the most influential examination of patient factors to date within CBT is the development of the short-term cognitive therapy rating scale (SSCT) (Safran and Segal, 1996). The SSCT comprised nine factors including items such as compatibility with the cognitive model. Collectively these factors predicted 62% of the outcome variance. However, patients with psychosis were excluded.

One recent study (Myhr et al., 2013) investigated the value of the SSCT for clients with psychosis, and found that it did not predict better outcome as it did with CBT for other disorders, suggesting that the same patient factors that predict outcome in anxiety and depression may not necessarily be associated with better outcome when working with psychosis. There have been psychosis-specific studies that have sought to identify patient factors that have been associated with better outcomes. These have included psychological factors (cognitive flexibility, being able to recognize the possibility of being mistaken, lower belief conviction rate) as well as more fixed demographic patient factors (lower number of recent hospital admissions, lower symptom severity, shorter duration of illness, female gender, higher baseline functioning and younger age).

Although some quantitative studies have identified patient factors that are associated with outcome on CBTp, to date no studies have systematically sought CBTp therapists' views. These views are subjective, but important, as it is therapists that make the day to day decisions regarding who is likely to benefit from, and be offered, CBTp. Although NICE recommends that CBT is offered to everyone with schizophrenia, only a small percentage receive a full course of CBT. Clinicians are deciding who is offered therapy whilst experiencing ever increasing pressure on resources, frequently working with a high level of complexity, and within the context of a contentious evidence base. The primary objective of this study was to provide some insight into their decision making by identifying the patient factors they consider most important in effecting the outcome of a course of CBTp. A secondary aim was to identify any areas of discrepancy between clinicians' subjective views and the research literature. Q methodology has been used in comparable studies seeking the views of clinicians and patients alike, and thus was adopted for the present study.

Method

Participants

Twenty-one participants were recruited from the North East ($n = 11$), and North West of England ($n = 10$). Participants were psychologists, psychiatrists and nurses who were familiar with psychosis and CBT through education (post graduate qualification in CBT), profession (nursing, psychology, psychiatry), practice and experience of working with CBT for psychosis (at least 10 cases) and/or experience working with CBT for anxiety/depression (at least 10 cases).

Participants had been qualified for a mean of 14.84 years ($SD = 10.36$; range = 0.5–30; median = 15), with a mean of 10.73 years ($SD = 6.51$; range = 1–20; median = 11.5) working

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in psychosis having treated a mean of 67.81 cases ($SD = 68.42$; range = 2–200; median = 45) using CBTp.

The Q set

The Q-set was developed from a systematic literature search reviewing evidence regarding patient factors that have been associated with outcome (in therapy in general, CBT in particular, and more specifically, CBT for psychosis). To be as inclusive as possible, we included contextual variables that may impact upon patients' ability to engage in CBTp. Semi-structured interviews of clinicians from different therapeutic backgrounds were also conducted to maximize inclusivity at this stage. A preliminary Q-set of 381 items (265 from interviews/discussion, 116 from literature) was reduced through amalgamating similar items, resulting in a final Q-set of 61 items.

Procedure

Participants were asked to rank-order the Q-set cards on a forced normal distribution grid according to each item's relative significance to the other cards, from -5 least significant to +5 most significant. This was done in response to a "condition of instruction", in this case the stem question "how significant is [item statement] in effecting a positive outcome in CBTp?" Participants were advised to initially sort the cards into three piles – most important, least important and those in between – and then position the cards on the grid.

Participants' data were then analysed using PQ Method 2.11, a specialist software for Q-methodological analysis. Q methodology examines overall configurations produced by participants that are intercorrelated and factor analysed. Each factor captures a different item configuration that is shared by (and characteristic of) a group of participants (Watts and Stenner, 2005). This is referred to as participants "loading" onto a factor. If there is a consensus on a particular item, i.e. all participants strongly agree or disagree with a particular statement, it is referred to as a "consensus item". Thus Q methodology identifies both differences and consensus views within a group of participants.

Results

Twenty-one completed Q-sorts were analysed using PQ Method 2.11. The analysis examined the whole Q-sort for inter-correlations rather than individual items. A Principal Components Analysis (PCA) revealed four un-rotated factors with eigenvalues exceeding 1 and accounting for 67% of the total variance. These factors were rotated using Varimax procedure, which maximizes loadings on only one factor. A level of ± 0.55 indicative of a significant loading ($p < .01$) was set to minimize confounding and maximize significant loadings (Watts and Stenner, 2005).

Table 1 shows that 19/21 participants loaded significantly on at least one factor. Two participants did not load significantly on any factor (P2–1, P2–11) and one participant's loadings (P2–16) were confounding (loading significantly on factors 1 and 4); these three participants were therefore excluded from the analysis. Each factor was named according to its distinguishing items (distinctive to each factor) and characterizing items (rated towards the poles of the distribution). Numbers reported in brackets indicate the position of the statement

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Table 1. Rotated factor matrix showing significant factor loadings

Participant	Factor 1	Factor 2	Factor 3	Factor 4
P2-1	0.3690	0.2919	0.0186	0.4689
P2-2	0.3140	**0.6572***	0.1414	0.1659
P2-3	0.4843	0.3547	0.0650	**0.6076***
P2-4	**0.7082***	0.3452	−0.0104	0.0569
P2-5	**0.6781***	0.0931	0.1746	0.3783
P2-6	0.5423	**0.5905***	0.1031	0.2158
P2-7	0.3675	**0.5658***	0.1900	0.3830
P2-8	0.4828	0.0521	**0.6983***	0.1215
P2-9	**0.6045***	0.3972	0.1668	0.1624
P2-10	0.2828	**0.5562***	0.0183	0.5398
P2-11	0.5107	0.1523	−0.2113	0.4839
P2-12	0.0040	0.1473	**0.8495***	0.0985
P2-13	−0.0176	**0.7944***	0.0299	0.1709
P2-14	0.0007	0.2465	0.3233	**0.7571***
P2-15	**0.7315***	0.3641	0.1114	0.1865
P2-16	**0.6179**	0.1750	0.1697	**0.5680**
P2-17	**0.6411***	0.3508	0.2599	0.1555
P2-18	**0.5880***	0.0741	0.4121	0.4677
P2-19	**0.7099***	0.0245	0.0588	0.3376
P2-20	**0.7837***	0.0178	0.1566	0.3606
P2-21	**0.7430***	0.4778	0.0996	−0.0571
% variance explained	29	15	9	14

Note: Significant loadings in bold. Asterisk denotes loadings that define the factor (NB: not all significant loadings define the factor)

in each factor array (+5 indicating that an item was viewed as very important, -5 indicating least importance).

Consensus items

Items related to therapeutic alliance (TA) were highly endorsed by all participants throughout all factors: “ability to form therapeutic alliance” and “ability to trust therapist”. Furthermore, some consensus items were consistently rated towards the least important end of the distribution across all factors: “little or no family history of mental health problems”; “being female”; “older age of onset” and “being of above average intelligence”.

Factor interpretation

*Factor 1: Acceptance and application of the cognitive model***.** Nine participants loaded positively on this factor, explaining 29% of the total variance. Key distinguishing statements included: “ability to think about and reflect upon episodes of psychosis” and “ability to recognize and report thoughts”. Examples of key characterizing statements included: “ability to meaningfully identify problems and engage with realistic goals” and “attribution of psychosis to a psychological cause”.

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Factor 2: Attending to the present. Five participants loaded on this factor, explaining 15% of the variance. This factor was defined by one distinguishing factor: "adequate concentration and memory". Key characterizing statements included: "having enough sleep" and "having adequate cognitive functioning to engage with the key tasks".

Factor 3: Secure base. Two participants loaded on this factor, explaining 9% of the variance. Distinguishing items in this factor included: "shorter duration of untreated illness" and "history of secure attachment" (within the CBT model, we conceptualize the latter as early life experiences that shape core beliefs). Characterizing statements included "ability to trust therapist" and "ability to form therapeutic alliance".

Factor 4: Meaningful active collaboration. Two participants loaded on this factor, explaining 14% of the variance. Distinguishing statements in this factor included: "ability to tolerate new experiences/information/change" and "ability to collaborate to produce the formulation". Characterizing statements that further defined the factor included: "optimism about the potential success of therapy" and "client endorsing the formulation".

Discussion

This study employed Q-methodology to investigate what clinicians' views on patient factors affect a positive outcome in CBTp. The analysis revealed a consistent theme across the sample, namely that all participants strongly endorsed items relating to alliance formation. Four factors emerged that distinguished participants. These were named as: acceptance of the cognitive model and capacity to do CBTp; attending to the present; secure base; and meaningful active collaboration.

A major finding is that the items related to alliance formation were consistently rated towards the "most important" end of the distribution throughout all factors. This indicates that CBT therapists highly value the therapeutic relationship. On the flipside, clinicians consistently rated historical and demographic factors the least. This is of particular note in regard to "gender", which has been found to be predictive of outcome. It may be that this does not reflect the clinicians' experiences, or it may be that the therapists are exhibiting a bias towards factors that they can influence.

It is unsurprising that cognitive therapists load so heavily onto factor one (Acceptance and Application of the Cognitive Model). It is self-evident that patients with psychosis, who do not accept the cognitive rationale and struggle with the methods employed in CBTp, will prove a challenge to help. It is also consistent with the established literature that highlights cognitive flexibility and lower delusional conviction levels as helpful foundations for CBTp. Factor two was characterized by cognitive functioning – patients' ability to concentrate, understand and retain information between sessions. This factor is consistent with the cognitive features associated with psychosis, such as thought disorder, cognitive biases, and the cognitive impact of sleep deprivation. These form part of wider factors such as baseline functioning and symptom severity that have been found to impact upon the likelihood of benefiting from CBTp. The items in factor three do overlap with therapeutic alliance, but also relate to patients' stability outside of the therapy setting and risk. Again this is consistent with existing research: both lower number of recent admissions and lower symptom severity have been linked to better outcomes. The final factor encompasses patients' ability to actively collaborate, overlapping somewhat with factor one, but also included "readiness to change".

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The biases of investigating subjective opinion are a general limitation of this work. Clinicians' views remain just that, and do not inform the actual predictive ability of each factor. Of course it is also important to acknowledge that wider factors impact on outcome. A further limitation lies in the weighting of the Q-set items and striking a balance between specificity and over-inclusiveness. Consequently, some categories may be over- or under-represented, with some ideas overly amalgamated and others too specific. This may go some way to explain why the clinicians' views are mostly consistent with the existing literature, although they do not entirely overlap, as the specificity of concepts varies between this study and others.

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Supplementary materials

To view supplementary material for this article, please visit http://dx.doi.org/10.1017/S1352465815000260

References

Laws, K. R., Jauhar, S., McKenna, P. J., Fung, E. and Salvador, R. (2014). Cognitive-behavioural therapy for the symptoms of schizophrenia: systematic review psychiatry and meta-analysis with examination of potential bias. *The British Journal of Psychiatry*, *204*, 20–29.

Myhr, G., Russell, J. J., Saint-Laurent, M., Tagalakis, V., Belisle, D., Khodary, F., et al. (2013). Assessing suitability for short-term cognitive-behavioral therapy in psychiatric outpatients with psychosis: a comparison with depressed and anxious outpatients. *Journal of Psychiatric Practice*, *19*, 29–41.

National Institute for Health and Care Excellence (2014). *Psychosis and Schizophrenia in Adults: treatment and managemen* (CG178). London: National Institute for Health and Care Excellence.

Safran, J. D. and Segal, Z. V. (1996). *Interpersonal Process in Cognitive Therapy*. Northvale, NJ: Jason Aronson.

Watts, S. and Stenner, P. (2005). Doing Q methodology: theory, method and interpretation. *Qualitative Research in Psychology*, *2*, 67–91.