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# Special issue paper

# A systematic review of service user's experience of cognitive analytic therapy (CAT)

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**Purpose.** It is increasingly acknowledged that understanding of the process and impact of psychotherapy is enhanced by awareness of the experience of service users. Cognitive analytic therapy (CAT) was developed as a time-limited and integrative psychotherapeutic approach. Although reviews have been published on CAT outcome studies, no reviews are currently available on service users' experience of CAT. This paper aims to systematically review and synthesize what is known about service users' experience of CAT.

**Methods.** A systematic search of HDAS, Cochrane, and Ethos databases was conducted. Following this, fourteen papers were selected for review, appraised using CASP tools, and then thematically synthesized.

**Results.** CAT therapy enabled service users to acquire useful knowledge and skills. Most service users found CAT tools helpful in gaining insight into their reciprocal roles and patterns. However, CAT was experienced by some service users as a painful, frightening, and upsetting process, particularly in relation to the sequential diagrammatical reformulation (SDR) and reformulation letter. The importance of the therapeutic relationship was highlighted, as well as difficulties some service users had with trusting their therapist.

**Conclusions.** CAT is helpful in supporting service users to understand their patterns and to identify useful coping skills. However, some service users can experience strong emotions in therapy and struggle to trust their therapist. Greater attention to working within the service users' zone of proximal development (ZPD) and engendering hope during the reformulation stage may attenuate some of these risks. Recommendations are made for future research directions.

# **Practitioner points**

• CAT therapy enables users to develop insight to their reciprocal roles and patterns and helpful coping skills.

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- The service user's ZPD should be worked with when delivering CAT to manage risk of distress and reciprocal role enactments and enhance the working alliance.
- CAT therapists should explore ways to engender hope by attending to any helpful reciprocal roles, patterns, and exits.

Cognitive analytic therapy (CAT) is a time-limited integrative psychotherapy influenced by both cognitive and analytic traditions (Kerr, 2005; Ryle & Kerr, 2002). It typically consists of 16 or 24 sessions with follow-up sessions. The CAT approach is comprised of three stages: *reformulation, recognition, and revision* (Ryle, 1979; Ryle & Kerr, 2002).

Formulation is a central aspect of CAT. In this, a client's 'problem procedures', that is, patterns of relating to others are mapped out either narratively in a reformulation letter or visually in what is referred to as the sequential diagrammatic reformulation (SDR; Kerr, 2005; Ryle & Beard, 1993; Ryle & Kerr, 2002). Thoughtful consideration is given to the historical origins of such patterns, how these may have been necessary and adaptive in the past but how their maintenance in the present is unhelpful. Reformulation tools are used to draw a client's attention to when relational patterns, known in CAT as 'reciprocal roles' are enacted. Monitoring is encouraged during and between therapy sessions by service users to increase their recognition of their patterns. The revision stage uses interventions to support clients to find alternatives to problem procedures, also referred to as 'exits' in the CAT model. A goodbye letter is typically written by the therapist and service user at the end of CAT therapy to reflect on the process (Ryle, 1979; Ryle & Kerr, 2002).

CAT is used widely in routine practice with service users with complex mental health difficulties who are often more difficult to engage in treatment because of underlying relational issues (e.g., poor working alliance, distrust, or feeling coerced; Dixon *et al.*, 2016). Tools and techniques in CAT (e.g., reformulation process) aim to strengthen the working alliance and offer understanding and containment for service users (Ryle & Kerr, 2002). Attention to reciprocal role enactments and issues of transference and counter-transference in CAT aims to attenuate risk of professional collusion in working with clients with complex needs (Kerr & Leighton, 2008) and minimize risk of drop-out or poor outcomes related to unacknowledged transference issues and their relation to the client's reformulation (Ryle & Kerr, 2002). CAT therapists strive to work within the service user's zone of proximal development (ZPD), that is, the space between their actual learning developmental level and their level of potential development (Vygotsky, 1980). Attention to the ZPD should mean the therapy process is appropriately paced and commensurate with the service user's understanding and readiness to process information. This should confer a sense of safety and reduce the potential for reciprocal role enactments.

The evidence base for CAT is currently small. However, studies conducted have been appraised to be of high quality and demonstrated the utility of CAT in the treatment of a diverse range of presenting difficulties, in particular, personality difficulties (Calvert & Kellett, 2014). One study of CAT treatment for borderline personality disorder (BPD) also found high treatment and follow-up compliance rates (Kellett *et al.*, 2013). Calvert and Kellett (2014) reference the current lack of controlled studies in the CAT evidence base and the over-reliance on practice-based designs, meaning firm conclusions about treatment efficacy cannot be made with confidence. However, they also recommend that the future CAT evidence base relies on a balance between practice-based evidence and evidence-based practice approaches.

A vital element of developing practice-based evidence is obtaining the perspectives of those using services. Elliott and James (1989) note understanding of the process and action of psychotherapy can be enhanced through knowledge of the types of experiences

service users have in therapy. Hodgetts and Wright (2007) specify that theoretical and methodological shortcomings of the researcher often mean the service users' perspective is excluded. However, the value of clients' experiences is being increasingly acknowl-edged in establishing *what works for whom*, with policy makers and consumers of reviews increasingly interested in intervention need, whether particular interventions are appropriate, whether they are helpful to those in receipt of an intervention and how they can be improved (Hodgetts & Wright, 2007; Thomas & Harden, 2008). There are currently no reviews of CAT focusing on service user experience. A review of this kind could help address this gap in the literature and enable therapists and services to be informed by service user's experiences.

The first aim of this review was to synthesize the available literature in this area to provide further insight into service users' experience of receiving CAT and to inform clinical practice and service provision. The second aim of this review was to identify any current gaps in the evidence base concerning service users' experience of CAT, prompting recommendations for future research.

## Method

The review was conducted in three stages: a systematic searching of the current literature about CAT, a critical appraisal of the selected studies using an appraisal tool, and a thematic synthesis of the selected studies. The review protocol was not pre-registered. Prisma guidelines were followed for this review (Moher, Altman, & Tetzlaff, 1996).

#### Searching

A comprehensive literature search was conducted by the first author in November 2019 utilizing eleven electronic databases: AMED, BNI, CINAHL, EMBASE, HBE, HMIC, Medline, PsycINFO and PubMed, Cochrane Library, and ETHOS. An open-ended initial search using the term "cognitive analytic" was undertaken, aimed at capturing all relevant articles. The only limiters applied were that the papers were either articles or reviews. This was followed by a two-phase approach to screening and selection of papers (see Figure 1) to optimize identification of relevant papers. This approach was also used in a systematic review of CAT outcome studies (Calvert & Kellett, 2014). The search strategy was replicated by the second author, and articles were independently screened by title and abstract.

Ethos was used to identify relevant thesis projects to reduce the impact of publication bias on the review (Ferguson & Brannick, 2012).

Citation searches using Web of Science and Google Scholar and a hand search of reference lists of all eligible articles were conducted to maximize the scope of the review.

#### Selection

Figure 1 displays the criteria that were followed for identifying papers for review. The initial search produced 828 results comprising of 408 duplicates. 186 papers were removed at the title screening stage (Phase 1) and 220 at the abstract screening stage. Research from theses that was subsequently published in peer-reviewed journals was not included in the review. Abstracts for several theses meeting inclusion at title screening stage were not available to determine suitability for inclusion in the review. Other theses

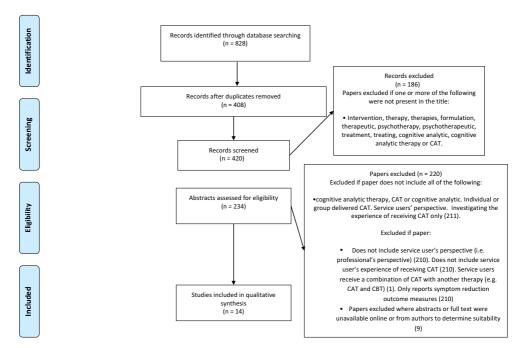


Figure 1. Prisma flow diagram.

could not be included as these were not available online or from authors (i.e., Croft, 2014; Osborne, 2011). Percentage concordance for abstract and full-text screening by first and second authors was undertaken. There was 70% and 90% concordance for abstract screening for papers from HDAS and Ethos thesis searches, respectively. Agreement was 100% for papers or theses following full-text review. Two appropriate papers were not identified by the second author at the abstract stage from HDAS searches, one due to reviewer error and the second due to not being captured in the database output despite use of same search terms. There was disagreement between authors over one paper and one thesis but consensus was reached to include these as it was decided that service user experience was a focus of the research in both cases, albeit a less dominant one than in other papers. Following this, 11 papers and 3 theses were retained for review (Figure 1). Data were extracted regarding the main characteristics of the papers and summarized in Table 1.

#### Appraisal tools

Thirteen of the fourteen studies selected for review were critically appraised using the Critical Appraisal Skills Programme (CASP, 2017a, 2017b) for qualitative research.

Although seven studies used a mixed methods design, the quantitative aspects of six of these studies were not included due to this component not investigating service users' experience of CAT. Components excluded from the synthesis were not appraised to avoid providing the reader with a misleading quality rating.

The single study using a quantitative design (Tzouramanis, *et al.*, 2010) was appraised using the CASP for case–control studies (Critical Appraisal Skills Programme, 2017). One of the mixed methods studies was evaluated using both the qualitative and the case–control CASP (Stockton, 2012).

All studies included in the review were subjected to appraisal using an additional question not included in the CASP appraisal tools, namely 'Was there service user or carer involvement during the design or conduct of the study?' This item was added due to service user and carer involvement being considered important for the production of high-quality research (British Psychological Society, 2008; Health Research Authority, 2016).

#### Data abstraction and synthesis

As the majority of data about service users' experiences was qualitative, thematic synthesis (Thomas & Harden, 2008) was considered the most appropriate method to systematically code the data and for the generation of themes. Data extracted from papers and synthesized included all direct quotes from service users and text from the results section of three studies where no direct quotes were available (Evans & Parry, 1996; Kellett & Hardy, 2014; Stockton, 2012). However, only text that was referring to what service users had reported was coded. This included any text that was preceded or followed by 'reported by the service user/client', 'the service user/client reported', 'the service user/client described', or 'described by the service user/client'.

Quantitative data were converted into qualitative data in order to be included in the thematic synthesis. This was achieved by open coding the quantitative data concerning service users' experience of CAT (Bélanger, Rodríguez & Groleau, 2011). These qualitative codes were then included in the thematic synthesis.

The data were entered verbatim into NVivo 10 software for thematic synthesis (QSR International, Melbourne, Australia). The first author conducted the thematic synthesis; however, the themes were cross-checked and validated by two co-authors, one of whom is a service user and carer consultant with lived experience. The first author used a reflective diary to consider how their views and experiences may be influencing the analysis. The researcher analysed the data through a constructivist lens.

#### Results

The main characteristics of studies included in the review are outlined in Table 1.

#### Overview of the studies

Aims

Four studies investigated service users' experience of the full course of CAT (Kellett, Bennett, Ryle & Thake, 2013; Kellett & Hardy, 2014; Taylor *et al.*, 2019; Tzouramanis *et al.*, 2010). Two of these studies used the Change Interview (Kellett *et al.*, 2013; Kellett & Hardy, 2014), whilst Tzouramanis *et al.* (2010) administered the Post-therapy questionnaire to gather service users' perspectives.

Five studies investigated service users' experience of CAT Tools (Hamill, Ried & Reynolds, 2008; Rayner, Thompson, & Walsh, 2011; Stockton, 2012; Taplin, 2015; Tyrer & Masterson, 2019). One study focused on the experience of CAT tools in general (Rayner *et al.*, 2011), two focused on letters (Hamill *et al.*, 2008; Stockton, 2012), one on sequential diagrammatical reformulations (Taplin, 2015), and one on reformulation tools (Tyrer & Masterson, 2019).

Four studies investigated specific phases in CAT (Evans & Parry, 1996; Fusekova, 2011; Sandhu, Kellett, & Hardy, 2017; Shine & Westacott, 2010); two on the reformulation phase (Evans & Parry, 1996; Shine & Westacott, 2010); and two on the revision phase (Fusekova, 2011; Sandhu *et al.*, 2017).

Finally, a single study investigated the service users' experience of CAT delivered in a group setting (Ruppert, 2013).

## Sample characteristics

Sample sizes ranged from one (Kellett & Hardy, 2014) to 128 (Tzouramanis *et al.*, 2010), with a mean sample size across studies of 18. A breakdown of participants by gender was clearly provided in 12 studies; details of participants' gender were absent in Fusekova (2011), and reporting was less clear in Tzouramanis *et al.* (2010) although the inference was females were in the majority at the follow-up stages of the study. Where information was clearly specified about participants' gender, females were significantly overrepresented in samples, ranging from 43% (Taylor *et al.*, 2019) to 100% (Evans & Parry, 1996) with a mean percentage of female participants across studies of 75%. Information from Kellett and Hardy (2014) was excluded from this calculation as this was a single case study involving a male service user and would have erroneously skewed the data.

Three studies focused on service users with a range of mental health diagnoses and difficulties (Fusekova, 2011; Rayner *et al.*, 2011; Tyrer & Masterson, 2019) and eight on service users with particular diagnoses, including personality disorders (Kellett *et al.*, 2013; Kellett & Hardy, 2014), depression (Sandhu *et al.*, 2017; Stockton, 2012), panic disorder (Tzouramanis *et al.*, 2010), psychosis (Taylor *et al.*, 2019), Axis 1 disorders (Shine & Westacott, 2010), and anxiety and depression (Hamill *et al.*, 2008). Ruppert (2013) and Taplin (2015) included service users defined as having significant mental health problems. Finally, the service users in Evans and Parry (1996) study were described as 'difficult to help' by virtue of at least two previous contacts with mental health services without significant change and meeting one or more further criteria (e.g., 2 or more psychiatric inpatient admissions, meeting DSM III-R criteria for particular disorders (e.g., borderline personality disorder)).

## Data analysis

The analytic approaches used in the studies are set out in Table 1. Evans and Parry (1996) did not describe the method of data analysis used.

## Quality appraisal

The papers reviewed were of high quality, with the exception of Evans and Parry (1996) assessed as being of medium quality (see Table 2). A strength of the studies overall was the inclusion of direct quotes from service users to illustrate themes and consideration of the role of the researcher in the analysis of the data. The main limitation of studies was a lack of service user involvement in the development or conduct of studies.

Authors, year and country	Study design	Participants & diagnosis/difficulty	Setting	Purpose/aims	Methodology	Findings
Tzouramanis et al. (2010) Country: Greece	Quantitative (non- randomized)	<ul> <li>128 participants</li> <li>Panic disorder</li> </ul>	Community Mental Health centre	To assess service users' experience of cognitive analytic therapy (CAT)	The Post-therapy Questionnaire (PTQ) was used at two follow-up points after the therapy finished; 2 months and 1 year. This PTQ questionnaire investigated service users' experience of	At the I-year follow-up, service users reported new understanding, self- monitoring, and CAT being time-limited more helpful when compared to the 2-month follow-up. This was a significant difference
Hamill <i>et al.</i> (2008) Country: UK	Qualitative	Eight service users, 5 female and 3 male • Depression • Anxiety	SHN	To explore service users' perspectives on therapeutic letters in CAT	Semi-structured interviewed following the completion of therapy. Thematic analysis was employed with elements of	The following themes emerged; Connecting to Self, Connecting to Therapist, Connecting to the Therapy Process, and Connecting to Others
Evans and Parry (1996) Country: UK	Mixed methods	<ul> <li>Four clients, all women</li> <li>Difficult to help'</li> <li>Participants met criteria including two or more admissions to a psychiatric inpatient unit (n = 2), history of overdoses or self-injury (n = 1), DSM III-R criteria for major depressive disorder</li> </ul>	Information not available	To evaluate the impact of reformulation on clients	grounced uncory Semi-structured interviews were conducted following the completion of therapy	Clients reported that the reformulation had a considerable impact on them, overwhelming and frightening, gave them a better understanding of themselves and showed the therapist had listened and understood them

Table 1. Characteristics of studies included in the review

Continued

Authors, year and country Study design Shine and Westacott Mixed methods (2010) Country: UK					
sstacott	Participants & n diagnosis/difficulty	Setting	Purpose/aims	Methodology	Findings
	<ul> <li>(n = 2), obsessive- compulsive disorder (n = 2) or borderline personality disorder (n = 2) or stated a reluctance to engage in psychotherapy (n = 1) Five clients, 4 female and 1 male</li> <li>Axis I disorder</li> </ul>	NHS NHS	To explore the client's perspective on reformulation	Interviews were conducted post- reformulation. Template analysis was used to analyse the qualitative data	Seven themes were identified: feeling heard, understanding patterns, space to talk, and feeling accepted, having something tangible, working together, and feeling exposed
Kellett et <i>al.</i> (2013) Mixed methods Country: UK	<ul> <li>17 clients, 14 female and 3 male</li> <li>Borderline personality disorder (BPD)</li> </ul>	SHN ×	To examine the effectiveness of CAT for patients with borderline personality disorder (BPD)	The methodology was small N repeated measures design, with patients interviewed at the third follow-up session using the Change Interview. The data from this interview was reported as quantitative data	The quantitative data indicated that patients tended to attribute experience of change to the therapy received
Rayner et al. (2011) Qualitative Country: UK	Nine clients, 8 female and I male • Depression • Anxiety • Low self-esteem	SHN b	To explore client's experience of receiving cognitive analytic therapy	Semi-structured interviews were conducted. Grounded theory was employed to	A core theme of 'doing with' the therapist emerged from the analysis. Within this four subthemes were

Table I. (Continued)

2044841,2021, S1, Downloaded from https://papsychub.onlinelharg.wiley.com/doi/011111/papt.12935 by Saffordshire University, Wiley Online Library on [22032023], See the Terms and Conditions (https://onlinelbarg.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Ceative Common License

Authors, year and country	Study design	Participants & diagnosis/difficulty	Setting	Purpose/aims	Methodology	Findings
		<ul> <li>Reactive depression</li> <li>Psychosis</li> <li>PTSD</li> <li>Memory loss</li> <li>Psychotic depression</li> <li>Depression-distorted</li> <li>self-image</li> </ul>		(CAT), including specific tools in CAT	explore client's experience of CAT	identified; being with the therapist, keeping it real, understanding and feeling, and CAT tools and CAT tools
Kellett and Hardy (2014) Country: UK	Mixed methods	l client, male • Paranold personality disorder (PPD)	A secondary care community mental health team, situated in a mental health NHS Trust	To report the assessment, formulation, and treatment of a client using CAT	Qualitative data was collected via the Change Interview regarding their experience of CAT	The client reported seeing people differently and being able to manage thoughts due to CAT. Also, the active and open therapeutic style of the therapist was helpful and how it was difficult to manage feelings of paranoia during the
Fusekova (2011) Country: UK	Qualitative (Thesis project)	<ul> <li>17 participants: eight therapists and nine clients, gender balance not specified</li> <li>Depression</li> <li>Anxiety</li> <li>Eating problems</li> <li>Low self-esteem</li> <li>Difficulties in interpersonal relationships</li> </ul>	Adult mental health services	To examine the development of exits in sessions of CAT as a way of investigating change	Nine therapist-client dyads were interviewed together about how exits developed during CAT. The qualitative data was analysed using grounded theory	therapy The key findings identify two main types of exits: 'planned exits' and 'one- off exits'. Clients also portrayed exits in CAT as common sense yet novel. Further themes that emerged were; Opening up new perspectives, Discussing and communicating together about unthought-of areas, Developing

Table 1. (Continued)

Continued

Authors, year and country	Study design	Participants & diagnosis/difficulty	Setting	Purpose/aims	Methodology	Findings
						enlightenment and personal understanding, Feeling empowered to make a choice about one's life, Developing a more objective (shared) perspective, Coming up with common sense yet novel ideas about exits, Working hard and persevering, Reaching planned exits, and One- off exits
Ruppert (2013) Country: UK	Qualitative (Thesis project)	<ul> <li>Six service users, 4 female Secondary mental and 2 male</li> <li>Significant mental health problems</li> <li>All met the cut-off score of 1.19 for men and 1.29 for women on the CORE –OM indicating a clinical sample</li> <li>Those with significant intrapersonal difficulties as evidenced by dissociated or fragmented self-states were excluded</li> </ul>	Secondary mental health service	To investigate service users' experience of a CAT group	Client experience was gathered via focus groups which were analysed using Template Analysis	Findings identified that group members appreciated the letters in CAT but there were differences in their feelings about the diagrams. Using each other's' diagrams within the group were reported as helpful. Lack of direction from the facilitators, particularly in recording exits on the diagram was reported as unhelpful

Table 1. (Continued)

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Authors, year and country	Study design	Participants & diagnosis/difficulty	Setting	Purpose/aims	Methodology	Findings
Sandhu <i>et al.</i> (2017) Country: UK	Qualitative	Eight service users, 7 female and 1 male • Depression	UK primary care mental health service	To explore service users' experience of the revision stage and explore and define change in CAT	Qualitative content analysis was used to analyse transcripts of sessions 6 and 7 of a protocol delivered 8-session CAT treatment	The findings identified the following experiences: developing an observing self via therapist input or client self-reflection, breaking out of old patterns by creating new roles and procedures, and utilization of a range of methods to support and
Stockton (2012) Country: UK	Mixed methods (Thesis project)	<ul> <li>36 service users deemed to meet inclusion criteria and/or opted in; 27 in the final analysis; 78.6% vs. 69.2% female in each treatment arm</li> <li>Depression</li> </ul>	Improving access to psychological therapies (NHS)	To investigate the efficacy of Narrative reformulation in CAT	Two Self- report measures investigated experiences of CAT; Working Alliance Inventory-Short (WAI-S) and the Helpful Aspects of Therapy (HAT). Content analysis was employed on the	maintain change The findings identified that service users found that the working alliance improved over time but that the earlier sessions more helpful than later sessions. Identified themes were CAT tools, CAT techniques, and non- specific therapeutic elements
Taplin (2015) Country: UK	Qualitative (Thesis Project)	<ul> <li>Seven service users, 4 female and 3 male</li> <li>Significant mental health problems</li> <li>All met the cut-off score of 1.19 for men and 1.29 for women on</li> </ul>	SHZ	To explore service users experience of the sequential diagrammatical reformulation (SDR)	HAI Semi-structured interviews were conducted after completing a course of CAT. The data was analysed using interpretive	The findings identified four subordinate themes regarding Service users' experience of the SDR; 'Chaos to clarity (a process of meaning- making); 'The change process'; Relational

Table 1. (Continued)

Authors, year and						
country	Study design	Participants & diagnosis/difficulty	Setting	Purpose/aims	Methodology	Findings
		<ul> <li>the CORE – OM indi- cating a clinical sample</li> <li>Those with significant intrapersonal difficul- ties as evidenced by dissociated or frag- mented self-states</li> </ul>			phenomenological analysis (IPA)	dynamics'; and 'Focus on treatment context/ options'
Tyrer and Masterson (2019) Country: UK	Mixed methods	Six therapist and client (5 female, 1 male) dyads. Five of the therapists were CAT trained and one training as a CAT therapist Low mood Generalized anxiety Depressed mood Suicidal ideation Panic attacks Anxiety Anger Depression Chronic pain Grief reaction	Clients were presenting in an NHS psychological therapies service	To investigate the effects of CAT reformulation tools on insight and symptom change	Qualitative data was collected via client change interviews which explored their experiences of CAT and attributions of change. This data was analysed using template analysis	Clients reported that they experienced changes due to CAT such as 'accepting feelings', 'less critical of self, and 'less overwhelmed by worry'. Reformulation tools were described as being helpful in 'recognizing patterns', 'breaking the links in patterns', and 'working in partnership'

Table I. (Continued)

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Table I. (Continued)

Authors, year and country	Study design	Participants & diagnosis/difficulty	Setting	Purpose/aims	Methodology	Findings
Taylor et al. (2019) Country: UK	Mixed methods	<ul> <li>Seven service users, 4</li> <li>male and 3 female</li> <li>Meeting ICD-10 criteria for schizophrenia-spectrum disorder (e.g., schizophrenia, schizo-affective disorder, delusional disorder)</li> <li>Or meeting criteria for support from an Early Intervention Service</li> </ul>	Secondary care mental health services in the NHS	To gain an understanding of the experience of receiving CAT for psychosis	Qualitative interviews were conducted with service users 3 weeks after completing CAT. The interviews explored service user's experience of CAT. The interview transcripts were analysed by employing thematic analysis	Service users reported understanding psychosis and the process of sense making. Clients talked about being heard without judgement, building trust, and the possibility of different perspectives. The usefulness of tools was also reported on whereby they were considered as validating tangible objects and pieces of evidence that they were listened to by the therapist. Finally, making positive changes was another theme communicated by clients. This was in relation to being empowered to talk to others, improved

themselves and others, and having more control and confidence

relationships with

Authors, year and country Study desig	Study design	ō	Q2	QI Q2 Q3 Q4 Q5 Q6 Q7 Q8 Q9 QI0	Q4	Q5	Q6	Q7 (	28 (	29 (C	210	QAI 7	Total score/percentage (	Quality rating
Hamill et al. (2008)	Qualitative	≻	≻	≻	≻	≻	۲	` ۲				7	20 points (95%)	High
Evans and Parry (1996)	Mixed methods	≻	≻	≻	≻	≻	z	2	-	_		7	14 points (67%)	Medium
Shine and Westacott (2010)	Mixed methods	≻	≻	≻	≻	≻	~	_ ۲	ĺ	Ć		7	20 points (95%)	High
Kellett et al. (2013)	Mixed methods (small N design)	≻	≻	≻	≻	≻	~	_ ۲			_	7	18 points (86%)	High
Rayner et <i>al.</i> (2011)	Qualitative	≻	≻	≻	≻	≻	≻	_ م	Ś	Ć		7	19 points (90%)	High
Kellett and Hardy (2014)	Mixed methods (small N design)	≻	≻	≻	≻	≻	z	۲ ۲	<u>_</u>	Ć		7	17 points (81%)	High
Fusekova (2011)	Qualitative (Thesis project)	≻	≻	≻	≻	≻	≻	<u>م</u>	Ś	Ĉ		7	19 points (90%)	High
Ruppert (2013)	Qualitative (Thesis project)	≻	≻	≻	≻	≻	~	~	ĺ	Ć		7	20 points (95%)	High
Sandhu <i>et al.</i> (2017)	Qualitative	≻	≻	≻	≻	≻	≻	۰ ۵	~	Ĉ		7	18 points (86%)	High
Tzouramanis et al. (2010)	Non-randomized quantitative	≻	≻	≻	≻	≻	~	۲ ۲		~		7	18 points (86%)	High
Stockton (2012)	Mixed methods (Thesis project)	≻	≻	≻	≻	≻	۔ د	۲ ۲		_		7	17 points (81%)	High
Taplin (2015)	Qualitative (Thesis project)	≻	≻	≻	≻	≻	~	~	ĺ	Ć	ĺ	~	21 points (100%)	High
Tyrer and Masterson (2019)	Mixed methods	≻	≻	≻	≻	≻	۔ م	~	Ć	Ć		7	19 points (90%)	High
Taylor et al. (2019)	Mixed methods	≻	≻	≻	≻	≻	4	۲ ۲			Ś	~	20 points (95%)	High

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## Systematic review of CAT 49

Continued

(a): CASP Qualitative Research Tool Questions

- 1. Was there a clear statement of the aims of the research?
- Is a qualitative methodology appropriate?
- 3. Was the research design appropriate to address the aims of the research?
  - 4. Was the recruitment strategy appropriate to the aims of the research?
- 5. Was the data collected in a way that addressed the research issue?
- 6. Has the relationship between researcher and participants been adequately considered?
  - 7. Have ethical issues been taken into consideration?
    - 8. Was the data analysis sufficiently rigorous?
      - 9. Is there a clear statement of findings?
        - 10. How valuable is the research?
- (b): CASP for case-control design Tool Questions
- Did the study address a clearly focused issue?
- 2. Did the authors use an appropriate method to answer their question?
  - 3. Were the cases recruited in an acceptable way?
- 4. Were the controls selected in an acceptable way?
- 5. Was the exposure accurately measured to minimise bias?
- 6. What confounding factors have the authors accounted for? Have the authors taken account of the potential confounding factors in the design and/or in their analysis?
  - What are the results of the study?
- 8. How precise are the results? Do you believe the results?
- 9. Can the results be applied to the local population?
- 10. Do the results of this study fit with other available evidence?

Note. The percentage for each paper was calculated based on the total possible points being 21 points. Please see (a) and (b) for details of the appraisal questions. (b) Questions were only used for the Tzouramanis et al. (2010) paper which was a quantitative study.

# Experiences of CAT therapy

## The course of CAT

Service users generally reported a high degree of change following a course of CAT, and change was attributed to receiving this therapy (Kellett *et al.*, 2013). Tzouramanis *et al.* (2010) highlighted that service users found the following helpful: having a new understanding, self-monitoring, CAT being time-limited, and the relationship with the therapist. Kellett and Hardy (2014) reported that CAT helped the service user to see people differently and manage paranoid thoughts. Taylor *et al.* (2019) described service users finding the following helpful: not being judged, CAT tools, and making positive changes (e.g., feeling empowered).

## CAT tools

Tyrer and Masterson (2019) found that service users were able to accept their feelings, they became less self-critical, and less overwhelmed by worry. Reformulation tools were described as being helpful for service users in recognizing patterns.

Hamill *et al.* (2008) found that CAT letters enabled service users to connect to themselves by gaining self-insight and self-awareness (Connecting to self) and connect to their therapist and develop trust (Connecting to therapist). Some reported that the letters helped structure the therapy and were used as a method of communicating with people around them (Connecting to others). In contrast to Hamill *et al.* (2008), Stockton (2012) found that narrative reformulation did not improve the working alliance between the therapist and service user or the helpfulness of the therapy.

In the study by Rayner *et al.* (2011), service users emphasized the importance of the traits of the therapist and how comfortable they felt with the therapist. 'Doing with' emerged as an overarching theme as service users identified doing things with the therapist and actively working together to be very important. Service users described becoming more self-aware and understanding their feelings better. 'CAT tools' were considered as influencing all the themes; however, there were mixed service user experiences related to the tools, with some finding them helpful and others finding them too complex or incompatible with how they thought or made sense of things.

Taplin (2015) found the sequential diagrammatical reformulation (SDR) helped service users to understand themselves and make sense of their experiences (chaos to clarity). SDRs were described as a method for change and as a tool used both inside and outside of the sessions (the change process). There were mixed experiences regarding the impact that the SDR had on the service users' relationship with their therapist (relational dynamics). Similar to findings by Rayner *et al.* (2011), service users reported the importance of feeling comfortable with the therapist.

# Specific phases of CAT

Shine and Westacott (2010) identified seven themes relating to the reformulation stage. Service users reported that they felt listened to and understood. The reformulation session was described as helpful in understanding their patterns of thoughts and behaviours. The process helped service users have the opportunity and time to talk about the difficulties they were experiencing, to be more open with their therapist, and to feel accepted. The SDR and the reformulation letter were described as something tangible to take away but also 'shocking' and exposing experiences, in terms of the need for both self-disclosure by service users, and this being recounted in the reformulation stage. Service users perceived the reformulation sessions were about working with the therapist, and these were experienced as being collaborative.

Fusekova (2011) identified important aspects of developing exits. The main finding was about 'opening up new perspectives'. Service users described developing new ideas for exits and exit strategies with their therapist which were 'common sense' but at the same time, felt different and 'novel'. Service users elaborated on this, stating they did not have the required insight needed to generate the exits independently of their therapist. Service users described how they would experiment with planned exits. In line with other studies, service users again described the emergence of a more in-depth understanding of themselves through this process.

Sandhu *et al.* (2017) identified the following stages within the revision phase: stage 1: 'developing an observing self' whereby service users were able to become more self-reflective and described being more recognizant of their patterns; stage 2: 'change in procedures and roles' whereby service users became able to engage in different roles and procedures; and stage 3: 'support and maintenance of change' whereby service users described how the SDR is helpful to refer back to in terms of the exits.

#### Group CAT

The results highlighted that service users found the diagrams and letters helpful. However, they reported that they needed more direction from those facilitating the group, in particular with regard to recording exits on their diagrams.

#### Thematic synthesis

The analysis aimed to synthesize research on service users' experience of receiving CAT therapy. The synthesis revealed six main themes comprising of additional subthemes: CAT tools, Experienced Change, Knowledge and Skills, Reflecting on the Process, Strong Feelings, and Being in a Group (Table 3). Quotes from the papers reviewed have been included to support the themes identified.

#### Theme 1: CAT tools

This theme was related to the tools that are used in CAT such as the SDR, reformulation letter, and goodbye letter. Ten of the papers reviewed contributed to this theme (Evans & Parry, 1996; Hamill *et al.*, 2008; Kellett & Hardy, 2014; Rayner *et al.*, 2011; Ruppert, 2013; Shine & Westacott, 2010; Stockton, 2012; Taplin, 2015; Taylor *et al.*, 2019; Tyrer & Masterson, 2019).

It was nice to have the summary in paper rather than just being told (Participant 2; extracted from Taylor, Perry, Hutton, Tan, Fisher, Focone, Griffiths & Seddon, 2019).

*The diagram.* This subtheme related to whether service users found the diagram, also known as a sequential diagrammatical reformulation (SDR) helpful or unhelpful and how. Some described that the diagram was very powerful and helpful in understanding themselves and others. However, others reported that they experienced powerful

Themes	Subthemes	Papers containing themes	How interpreted by participants
CAT tools	Diagram	<ul> <li>Taplin (2015)</li> <li>Rayner et al. (2011)</li> <li>Tyrer and Masterson (2019)</li> <li>Taylor et al. (2019)</li> <li>Shine and Westacott (2010)</li> <li>Kellett and Hardy (2014)</li> <li>Evans and Parry (1996)</li> <li>Stockton (2012)</li> <li>Ruppert (2013)</li> </ul>	The SDR was considered a powerful experience and enabled them to gain an understanding on themselves and others. Participants described the feelings that they experienced when looking at their diagram and developing it. Some described how they had powerful negative emotions when they looked at their SDR such as feeling sad. Some participants felt that the SDR did not change anything or of any use to them
	Reformulation letter	<ul> <li>Rayner et al. (2011)</li> <li>Hamill et al. (2008)</li> <li>Shine and Westacott (2010)</li> <li>Evans and Parry (1996)</li> <li>Stockton (2012)</li> </ul>	The reformulation letter gave a focus during therapy, enabled service user's to gain an understanding of unhelpful patterns, helped participants trust their therapist, and reassured service users. However, the reformulation letter was also experienced as an overwhelming experience, it being a frightening or that it was not considered as a large component of the therapy
	Goodbye letter	<ul> <li>Rayner <i>et al.</i> (2011)</li> <li>Kellett and Hardy (2014)</li> <li>Ruppert (2013)</li> <li>Hamill <i>et al.</i> (2008)</li> </ul>	The goodbye letter was a tool to encourage the service user to share things with the therapist that they might not have said otherwise. Some also thought of it as an important component of CAT and enjoyable experience
	Letters	<ul> <li>Taylor et al. (2019)</li> <li>Rayner et al. (2011)</li> <li>Hamill et al. (2008)</li> <li>Shine and Westacott (2010)</li> </ul>	The letters in CAT provided service users with a structure for moving forward. They helped them feel heard and showed that the therapist had listened to them. However, they would also cause strong emotions and described as a shocking experience. Some service users would read it but then would not use it again
Experienced change	Learnt to trust	<ul> <li>Hamill et al. (2008)</li> <li>Shine and Westacott (2010)</li> <li>Kellett and Hardy (2014)</li> <li>Rayner et al. (2011)</li> <li>Taplin (2015)</li> </ul>	Some participants were able to trust others more during CAT and after therapy. However, not all service users felt that they couldn't trust their therapist
	Personal changes	<ul> <li>Taylor et al. (2019)</li> <li>Rayner et al. (2011)</li> <li>Fusekova (2011)</li> <li>Kellett and Hardy (2014)</li> <li>Sandhu et al. (2017)</li> <li>Kellett et al. (2013)</li> </ul>	Participants experienced personal changes during the course of CAT and afterwards. Personal changes included becoming more self-aware and being more compassionate to themselves
Gaining knowledge and skills	Learnt about patterns	<ul> <li>Tyrer and Masterson (2019)</li> <li>Taylor et al. (2019)</li> <li>Hamill et al. (2008)</li> <li>Shine and Westacott (2010)</li> <li>Sandhu et al. (2017)</li> </ul>	It was helpful to learn about unhelpful patterns and recognize where they were on the diagram and whether they were in an unhelpful pattern again

## Table 3. Summary table of themes

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Table 3. (Continued)

Themes	Subthemes	Papers containing themes	How interpreted by participants
	Learnt to do things differently	<ul> <li>Tyrer and Masterson (2019)</li> <li>Taylor <i>et al.</i> (2019)</li> <li>Rayner <i>et al.</i> (2011)</li> <li>Kellett and Hardy (2014)</li> <li>Sandhu <i>et al.</i> (2017)</li> </ul>	Participants learnt new strategies and ways of approaching situations and relationships. They described having a model of how to cope
Reflecting on the process	Endings	<ul> <li>Ruppert (2013)</li> <li>Rayner et al. (2011)</li> </ul>	Some participants reported that they did not want the therapy to come to an end as they were worried that they would not be able to cope again
	Exits	<ul> <li>Sandhu et al. (2017)</li> <li>Fusekova (2011)</li> <li>Ruppert (2013)</li> </ul>	Participants described how exits where new decisions that the service user could make to enable change and to move out of an unhelpful pattern
	Expectations	<ul> <li>Tyrer and Masterson (2019)</li> <li>Ruppert (2013)</li> <li>Rayner <i>et al.</i> (2011)</li> </ul>	Participants had expectations about what they therapy was going to be like. Some were surprised at how much they were able to talk. Expectations of the therapy changed over the course of CAT
	Therapeutic relationship	<ul> <li>Taylor et al. (2019)</li> <li>Kellett and Hardy (2014)</li> <li>Rayner et al. (2011)</li> <li>Hamill et al. (2008)</li> <li>Stockton (2012)</li> </ul>	The therapeutic relationship was considered as important to service users. The therapist's style and approach to the sessions was considered important such as a therapist having an open style whilst stil providing direction when needed
	The process	<ul> <li>Taylor et al. (2019)</li> <li>Hamill et al. (2008)</li> <li>Taplin (2015)</li> <li>Rayner et al. (2011)</li> </ul>	Having the space to talk to someone without being judged was and key process that was considered helpful. The therapy felt real in terms of day-to- day life and it being limited in terms of time was helpful.
Strong emotions	No subthemes	<ul> <li>Tyrer and Masterson (2019)</li> <li>Rayner et al. (2011)</li> <li>Taplin (2015)</li> <li>Hamill et al. (2008)</li> <li>Evans and Parry (1996)</li> </ul>	Service users experienced strong feelings during the course of therapy, particularly in response to the SDR and reformulation letter. Participants reported feeling scared, worried, it being tough, painful and upsetting. However, some service users reported that experiencing it was worthwhile to experience these emotions despite them being strong and difficult
Being in a group	No subthemes	• Ruppert (2013)	Being in a group setting was noticeably different from other experiences of CAT. These experiences were very specific to CAT being delivered in a group context. Participants found meeting new people, learning from others and helping each other as enjoyable. Some described how one-to- one sessions could have been helpful in addition to the group

negative emotions when they looked at their SDR or that they felt it did not change anything. Nine of the reviewed papers contributed to this subtheme (Evans & Parry, 1996; Kellett & Hardy, 2014; Rayner *et al.*, 2011; Ruppert, 2013; Shine & Westacott, 2010; Stockton, 2012; Taplin, 2015; Taylor *et al.*, 2019; Tyrer & Masterson, 2019).

I just couldn't get my head around it (SDR). At the time I was just like hazy with all the stuff that was going on. I was worried that I just couldn't take what he was saying. (Sally; extracted from Tyrer & Masterson, 2019).

...like reading a very sad book. You have empathy for that person even though that person is actually you. (Clare; extracted from Rayner, Thompson & Walsh, 2011).

...something to refer back to because how you feel one month can be totally different to a couple of months down the line. So it's good to look back on it and think 'oh yeah' maybe I was feeling that way at that time and I can relate to that now and maybe what's happening now is similar to then... (Sally; extracted from Tyrer & Masterson, 2019).

*Reformulation letter.* Overall, the reformulation letter was perceived to provide a focus during therapy, increased service users' understanding, helped in forming trust between service users and therapists, and provided reassurance. However, service users also described feeling overwhelmed and experienced the sharing of the reformulation as frightening and shocking. In some cases, the reformulation appeared to be a marginal aspect of the therapy. Five of the reviewed papers contributed to this subtheme (Evans & Parry, 1996; Hamill *et al.* 2008; Rayner *et al.*, 2011; Shine & Westacott, 2010; Stockton, 2012).

The other doctors listened, but I thought are they taking it all in? Do they care? I couldn't trust them but it is different now. At first I felt the same with my therapist but since I have had the reformulation I have had a hundred percent trust in her and don't hold anything back now. (KI; extracted from Evans & Parry, 1996).

Hearing the reformulation was frightening. (unknown; extracted from Evans & Parry, 1996).

*The goodbye letter.* The goodbye letter was a tool to enable the service user to communicate things that they might not have otherwise said. It was considered to be an important and enjoyable experience. Four of the reviewed papers contributed to this subtheme (Hamill *et al.*, 2008; Kellett & Hardy, 2014; Rayner *et al.*, 2011; Ruppert, 2013).

Our goodbye letter is obviously something I will keep for many years so it is very significant and important to me. (S; extracted from Ruppert, 2013).

*The letter.* Service users reported that letters in CAT helped provide a structure for moving forward and enabling them to feel heard and listened to by their therapist. However, letters could elicit strong emotions and they were described as shocking. Some service users also reported reading their letter but never using it. Four of the reviewed papers contributed to this subtheme (Hamill *et al.*, 2008; Rayner *et al.*, 2011; Shine & Westacott, 2010; Taylor *et al.*, 2019).

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Yeah, in a good way, because it made you feel heard, and that was nice. (Sarah; extracted from Shine & Westacott, 2010).

A bit shocking really, because it was all problems. . ..It didn't mention the good parts of my life. It was a summary of the bad parts, and it was a bit shocking. A bit of a jolt really. (Mary; extracted from Shine & Westacott, 2010).

#### Theme 2: Experienced change

This theme is concerned with how service users perceived CAT had brought about change for them. Ten of the reviewed papers contributed to this theme (Fusekova, 2011; Hamill *et al.*, 2008; Kellett *et al.*, 2013; Kellett & Hardy, 2014; Rayner *et al.*, 2011; Sandhu *et al.*, 2017; Shine & Westacott, 2010; Taplin, 2015; Taylor *et al.*, 2019).

It's about developing that trust. (Elaine; extracted from Rayner, Thompson & Walsh, 2011).

*Learning to trust.* Some service users described how they became more trusting during and after therapy. However, not all service users felt like they could trust their therapist. Five of the reviewed papers contributed to this subtheme (Hamill *et al.*, 2008; Kellett & Hardy, 2014; Rayner *et al.*, 2011; Shine & Westacott, 2010; Taplin, 2015).

Other treatment I've had in the past I've kind of built up a trust relationship you know... where I can, I feel as if I can tell you these things what are going on in my mind... and I didn't feel that with my therapist, I didn't feel it at all... I felt as if he was the enemy and I was fighting that enemy. (Ben; extracted from Taplin, 2015).

*Personal changes.* Service users talked about how they experienced personal changes during the course of CAT such as becoming more self-aware and having more self-compassion. Six of the reviewed papers contributed to this subtheme (Fusekova, 2011; Kellett *et al.*, 2013; Kellett & Hardy, 2014; Rayner *et al.*, 2011; Sandhu *et al.*, 2017; Taylor *et al.*, 2019).

The only reason I demand perfection from myself is because my father always did. . .it gives me the chance to say, well, other people aren't perfect. Nobody is perfect, in fact. So why should I be? (Client 8; extracted from Fusekova, 2011)

#### Theme 3: Knowledge and skills

Service users described how they had gained new knowledge and skills during CAT. Seven of the reviewed papers contributed to this theme (Hamill *et al.*, 2008; Kellett & Hardy, 2014; Rayner *et al.*, 2011; Sandhu *et al.*, 2017; Shine & Westacott, 2010; Taylor *et al.*, 2019; Tyrer & Masterson, 2019).

I think I'd probably be more inclined to talk to others....a bit more empowered to talk to them about it maybe. (Participant 5; extracted from Taylor, Perry, Hutton, Tan, Fisher, Focone, Griffiths & Seddon, 2019).

*Learning about patterns.* It was reported that learning about patterns was helpful. Five of the reviewed papers contributed to this subtheme (Hamill *et al.*, 2008; Sandhu *et al.*, 2017; Shine & Westacott, 2010; Taylor *et al.*, 2019; Tyrer & Masterson, 2019).

And you know it made me want to get in there and get it sorted because it would . . . . recognize what the problems were. It was on a bit of paper. You could break it down and sort it out. (Maggie; extracted from Hamill, Ried & Reynolds, 2008).

*Doing things differently.* It was described that learning new strategies and ways of approaching things was helpful. Five of the reviewed papers contributed to this subtheme (Kellett & Hardy, 2014; Rayner *et al.*, 2011; Sandhu *et al.*, 2017; Taylor *et al.*, 2019; Tyrer & Masterson, 2019).

....a door is open to give you a model of trying to manage your life if you like. (Elaine; extracted from Rayner, Thompson & Walsh, 2011)

### Theme 4: Reflecting on the process

Service users reflected on the therapy process itself and how they experienced this. Eleven of the reviewed papers contributed to this theme (Fusekova, 2011; Hamill *et al.*, 2008; Kellett & Hardy, 2014; Rayner *et al.*, 2011; Ruppert, 2013; Sandhu *et al.*, 2017; Stockton, 2012; Taplin, 2015; Taylor *et al.*, 2019; Tyrer & Masterson, 2019).

It made sense, it was good to have someone not family, not friends and that were neutral, impartial and didn't judge. (Participant 5; extracted from Taylor, Perry, Hutton, Tan, Fisher, Focone, Griffiths & Seddon, 2019).

*Endings.* Service users described not wanting the therapy to end and uncertainty about how they might cope afterwards. Two of the reviewed papers contributed to this subtheme (Rayner *et al.*, 2011; Ruppert, 2013).

I did get to rely on the people too much. I wanted it to go on forever (pause) it's not realistic (pause). (D; extracted from Ruppert, 2013).

*Exits.* Service users talked about their knowledge and experience of exits in CAT which are new decisions that the service user can make to enable change. Three of the reviewed papers contributed to this subtheme (Fusekova, 2011; Ruppert, 2013; Sandhu *et al.*, 2017).

The will to change, in whichever way you decide to change your life, in work, and how you respond to people and communicate is in effect an exit. (Client 2; extracted from Fusekova, 2011).

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*Expectations.* Service users described how they had expectations before the therapy began and how these changed over the course of CAT. Three of the reviewed papers contributed to this subtheme (Rayner *et al.*, 2011; Ruppert, 2013; Tyrer & Masterson, 2019).

I wasn't expecting to be able to talk about things, bring things up. And realising and getting to sort of the root of the problem in a sense. (Lana; extracted from Tyrer & Masterson, 2019).

*Relationship with the therapist.* Service users talked about the experience of the therapeutic relationship including therapist style and approach to the sessions. Five of the reviewed papers contributed to this subtheme (Hamill *et al.*, 2008; Kellett & Hardy, 2014; Rayner *et al.*, 2011; Stockton, 2012; Taylor *et al.*, 2019).

Open therapeutic style of the therapist and that some direction was provided when requested was helpful. (open coded from Kellett & Hardy, 2014).

*General experience of the process.* Being able to just talk to someone and not be judged was a key experience that was communicated. It was reported that the therapy felt real in terms of day-to-day life, and the time-limited nature of CAT was reported to be helpful. Four of the reviewed papers contributed to this subtheme (Hamill *et al.*, 2008; Rayner *et al.*, 2011; Taplin, 2015; Taylor *et al.*, 2019).

... and that's what I liked about the therapy it wasn't sort of up in the clouds you know. It was real in terms of your day to day activities. (Sheila; extracted from Rayner, Thompson & Walsh, 2011).

#### Theme 5: Strong feelings

Service users described how they experienced strong feelings during therapy, including feeling scared and worried. Aspects of the process were also reported as being tough, painful, and upsetting. However, despite experiencing strong and at times difficult emotions, some service users perceived the gains outweighed the potential emotional costs. Five of the reviewed papers contributed to this theme (Evans & Parry, 1996; Hamill *et al.*, 2008; Rayner *et al.*, 2011; Taplin, 2015; Tyrer & Masterson, 2019).

I was frightened that I couldn't do it myself. (Elaine; extracted from Rayner, Thompson & Walsh, 2011).

It was a range of emotions (pause) it was upsetting, it was (pause) as I said it was daunting, it was scary. (Scott; extracted from Taplin, 2015).

#### Theme 6: Being in a group

Being in a group became a theme in itself, due to the experience of group CAT being clearly distinct from experiences of CAT delivered as an individual therapy. Service users described enjoying meeting new people, learning about themselves and others, helping

each other but stated that one-to-one sessions could have been helpful alongside the group. One paper contributed to this theme (Ruppert, 2013).

I umm I enjoyed the people that I've met here very much and they put my issues in focus for me. (B; extracted from Ruppert, 2013).

## Discussion

The aim of this review was to synthesize research on service users' experience of receiving CAT therapy. Fourteen papers were reviewed resulting in six main themes and further subthemes: *CAT tools, experienced change, knowledge and skills, reflecting on the process, strong feelings,* and *being in a group.* The main findings of this review will now be considered, and their implications for clinical practice and future research discussed.

Service users described developing new knowledge, skills, and strategies to use through CAT. They reported increased personal insight and awareness of their 'patterns' and in most cases a sense of increased trust. These hopeful accounts of lived experience of CAT are encouraging in suggesting that CAT can enable positive change in people's lives. This finding is particularly encouraging given the diversity of mental health diagnoses and difficulties experienced by service users in the studies included in the synthesis.

The experience of CAT tools was consistently referenced by service users which is understandable given that tools, such as the sequential diagrammatic reformulation (SDR) and reformulation letter, are described as central aspects of CAT (Ryle & Beard, 1993). On the one hand, the SDR and reformulation letter were described by some service users as being helpful. Reformulation tools could enable the development of trust in the therapist, offer reassurance, and make service users feel 'heard'. This finding is consistent with the aims of reformulation in CAT which should enable the service user to feel understood and contained and facilitate the development of a strong working alliance (Ryle & Kerr, 2002).

However, the review suggests that for some service users, CAT Tools, such as the SDR and reformulation letter, can evoke powerful negative emotions. The potentially distressing experience of looking at the SDR in CAT has been previously highlighted (Bradley, 2012). Despite this, some service users perceived the emotional costs to be worth the potential therapeutic gains. For others, an important consideration is their readiness to take onboard their patterns and procedures. CAT places a strong emphasis on collaboration, offering scaffolding and being mindful of not working beyond a client's ZPD (Frain, 2011). Some of the findings from this review suggest that the overwhelming experience for some clients of the reformulation stage in CAT may mean that this element is not being given sufficient attention in the therapy process.

An option for managing the risk of service users becoming overwhelmed by the SDR is the use of a hopeful SDR which is strengths rather than deficit-based, mapping out healthy relationships rather than pathologizing them (Bradley, Cox & Scott, 2016). This approach draws on ideas from compassion-focused therapy, such as attempting to activate a more compassionate emotional regulation system.

Therapists may need to consider more carefully the risk of strong emotions being elicited, especially during the reformulation stage in CAT, and discuss this issue in consent processes and when considering treatment options with service users. Service users may need to be supported with strategies to regulate emotional responses during therapy. CAT is often applied to service users with complex mental health difficulties where

engagement issues may be underpinned in part by experiences of childhood trauma (Dixon *et al.*, 2016). For such service users, considerations of safety and containment are particularly paramount. Some of the negative effects of therapy may be counteracted by more attention to normalizing service users' feelings whilst also adopting a hopeful position in terms of the delivery of the SDR and the potential for achievable change.

The relationship with the therapist was considered important by service users. However, some service users described difficulties trusting their therapist and one participant in Taplin (2015) went so far as to describe the therapist as 'the enemy'. This finding reconfirms the importance of therapists delivering CAT attending to the client's ZPD, where going outside of this may result in reciprocal role enactments. Where role enactments occur, therapists also need to recognize these and focus attention to them in the therapy process to enable good clinical outcomes (Bennett, Party, & Rule, 2006).

The present review was the first to synthesize service users' experience of CAT therapy. It seemed appropriate for the review to be inclusive of all accounts of lived experience, and it attempted to do so by including both peer-reviewed research and unpublished theses. Unfortunately, some relevant theses could not be included due to access issues.

The majority of studies included in the review were of good quality, and the findings are encouraging in terms of the utility of CAT to service users with diverse mental health difficulties and diagnoses. However, a limitation of including studies with heterogeneous samples is more nuanced interpretations are more difficult to make, including considering how particular diagnoses influence therapy experience. The studies reviewed also had diverse aims, and studies did not solely focus on the experience of CAT but on CAT tools, phases of CAT or CAT group therapy which is likely to have influenced the themes to emerge from the synthesis.

A percentage calculation was reported for inter-rater agreement on output at abstract and full-text stages of screening papers. A more rigorous approach would have included inter-rater reliability (IRR) calculations at each stage of the process, referencing both included and excluded papers and using more advanced methods of calculating IRR that account for chance agreement (see Belur *et al.*, 2018).

The majority of participants in the studies reviewed were female. Further research attending more to gender balance in recruitment or purposive sampling of males is important. Gender may affect rates of particular mental health diagnoses, diagnostic expression (Barajas *et al.*, 2015), help-seeking behaviours (Oliver *et al.*, 2005), and treatment history, including prior therapy exposure (Sansone & Sansone, 2011) which may influence how interventions are experienced by service users and approaches to assessment and intervention.

Further research is also needed to explore the perspectives of those service users who have more negative experiences of CAT therapy. Process research examining how attention to the client's ZPD and use of a hopeful SDR may alleviate distress and enhance the therapeutic relationship is also indicated.

Finally, none of the papers reviewed included service user involvement at any stage in the research process. Service user and carer involvement in research are now considered vital (British Psychological Society, 2008; Health Research Authority, 2016), and coproduced studies are particularly salient in investigations of lived experience of therapy.

The findings from this review suggest that CAT enables service users to develop insight to their unhelpful patterns and useful coping strategies and skills. However, more attention to working within the service users' ZPD and engendering hope is indicated to attenuate risk of service users becoming overwhelmed during therapy and to enhance the working alliance.

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# **Conflicts of interest**

All authors declare no conflict of interest.

# **Author contributions**

Nadia Balmain, BSc, MSc (Conceptualization; Data curation; Formal analysis; Investigation; Methodology; Project administration; Resources; Validation; Writing – original draft; Writing – review & editing) Yvonne Melia (Conceptualization; Methodology; Project administration; Supervision; Validation; Writing – review & editing) Helen Dent (Conceptualization; Methodology; Supervision; Validation; Writing – original draft) Karen Smith (Conceptualization; Data curation; Formal analysis; Investigation; Methodology; Project administration; Validation; Writing – original draft).

# Data availability statement

Data have not been made available for this study.

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