Received: 26 May 2022 | Accepted: 22 November 2022

DOI: 10.1111/papt.12442

the british psychological society
promoting excellence in psychology

RESEARCH ARTICLE

Case formulation—A vehicle for change? Exploring the impact of cognitive behavioural therapy formulation in first episode psychosis: A reflexive thematic analysis

Helen M. Spencer[1,2] | **Robert Dudley**[2,3,4] | **Lynne Johnston**[5,6,7,8] | **Mark H. Freeston**[9] | **Douglas Turkington**[2] | **Sarah Tully**[10]

[1]Translational and Clinical Research Institute, Newcastle University, Newcastle upon Tyne, UK

[2]Cumbria, Northumberland, Tyne and Wear NHS Foundation Trust, Newcastle upon Tyne, UK

[3]Population Health Sciences Institute, Newcastle University, Newcastle upon Tyne, UK

[4]Department of Psychology, University of York, York, UK

[5]Halley Johnston Associates Ltd, Newcastle upon Tyne, UK

[6]NHS Golden Jubilee, Glasgow, UK

[7]Clinical Psychology, Glasgow University, Glasgow, UK

[8]School of Psychology, University of Sunderland, Sunderland, UK

[9]School of Psychology, Newcastle University, Newcastle upon Tyne, UK

[10]Greater Manchester Mental Health NHS Foundation Trust, Manchester, UK

Correspondence

Helen M. Spencer, School of Psychology, Newcastle University, Fourth Floor, Dame Margaret Barbour Building, Wallace Street, Newcastle upon Tyne, NE2 4DR, UK.
Email: h.spencer@newcastle.ac.uk

Funding information

British Federation of Women Graduates, Grant/Award Number: 17136

Abstract

Objectives: Formulation is considered a fundamental process of cognitive behavioural therapy for psychosis (CBTp). However, an exploration into the personal impact of different levels of case formulation (CF) from a service user (SU) perspective is lacking, particularly for those experiencing a first episode of psychosis.

Design: This Big Q qualitative design used semi-structured interviews.

Methods: Reflexive thematic analysis (TA) was used to analyse 10 participant interviews. NVivo 12 computer-assisted qualitative data analysis software aided data organisation and analysis.

Results: One overarching theme 'CF – A vehicle for change?' was developed as a pattern of shared meaning across the data set. Three main themes related to the overarching theme: (1) Vicious cycles: 'I never really thought about it being me maintaining the problems' (including one subtheme – Self-empowerment: 'Only you can make the changes for yourself'); (2) Early life experiences: 'My experiences have shaped the person that I am, therefore, it's not my fault' (including one subtheme – Disempowerment: '[My] core beliefs have been damaged'); and (3) Keep it simple: 'Don't push it too far over the top in case it becomes like spaghetti'.

Conclusions: Maintenance formulations may be experienced as self-blaming, but also self-empowering, which may help to facilitate change. Longitudinal formulations may be

experienced as non-blaming, but also disempowering, which may inhibit change. Simple CF diagrams may also facilitate change, whereas overly complex CFs may inhibit change. How CBTp therapists might look to improve the impact of different levels of CF for service users (SUs) in first episode psychosis (FEP) are described.

KEYWORDS
case formulation, CBT, first episode psychosis, reflexive thematic analysis

Practitioner points

- Maintenance formulations are particularly valued by SUs as they increase understanding and outline a route for change.
- Maintenance formulations may increase self-agency and internal locus of control (LoC), potentially leading to self-empowerment, but also self-blame. Longitudinal formulations may decrease self-agency, potentially leading to external LoC and disempowerment, but also non-self-blame.
- Simple and parsimonious formulation diagrams (ideally drawn by the SU) are likely to facilitate a clearer understanding for change.
- Redrawing maintenance formulations mid, and end of therapy, may provide an indication of progress, change, and recovery.

INTRODUCTION

Early intervention in psychosis (EIP) services are committed to ensuring that those experiencing a first episode of psychosis have rapid access to evidence-based interventions for early treatment and prevention (National Institute for Health and Care Excellence, [NICE], 2020; NHS England, 2019).

Cognitive behavioural therapy for psychosis (CBTp) is one such treatment (NICE, 2014), and a case formulation (CF) that synthesises personal experiences with a psychological theory or model, is viewed as *the* fundamental process in CBT that drives the whole treatment approach (Kuyken et al., 2009). Moreover, case formulations (CFs) take centre stage as a daily feature of clinical practice within EIP services, despite being under-researched.

In EIP, the early phase of psychosis is a period where the onset of symptoms is relatively recent, with service users (SUs) often feeling confused or puzzled by the nature of their experiences. A key function of formulation is to help create understanding of these experiences, and direct treatment, with CFs attempting to make sense of the *meaning* and *mechanisms* of psychosis. Consequently, service user (SU) reactions to the experience of CF in first episode psychosis (FEP), seems particularly important/timely to understand. This represents a shift away from viewing individuals with psychosis as 'un-understandable' (Jaspers, 1963/1997), towards listening to the voices of SUs via the use of qualitative enquiry (Hodgetts & Wright, 2007). Nevertheless, the impact of CF from a SU perspective is lacking, especially in relation to psychosis, and this question has not yet been explored in relation to FEP.

SUs have been asked about their experiences of CF in CBT for depression (Kahlon et al., 2014; Thew & Krohnert, 2015), depression/anxiety (Redhead et al., 2015) and other mental health difficulties (Kannis-Dymand et al., 2021). Broadly speaking, CFs were found to be 'a helpful experience overall' (Thew & Krohnert, 2015), leading to an increase in 'understanding and/or acceptance' of their

difficulties (Kannis-Dymand et al., 2021), whilst helping them to 'move forward' (Redhead et al., 2015). Nevertheless, the authors recommended that CFs be undertaken sensitively and collaboratively, to help mitigate potential adverse reactions (Kahlon et al., 2014; Kannis-Dymand et al., 2021; Redhead et al., 2015).

In EIP, studies found that SUs value psychosocial formulations as a way of making sense of the factors that contributed to the onset of their psychosis (Cairns et al., 2015; Dudley et al., 2009; Harris et al., 2012). However, only two qualitative studies have explored the experiences of CF in CBTp (Chadwick et al., 2003; Pain et al., 2008). An additional study explored SU experiences of 'CBT-oriented' formulations in psychosis (although the therapy itself was described as integrative; Gibbs et al., 2020). All three studies noted that SUs had ambivalent emotional reactions to the CF process.

Chadwick et al.'s (2003) study (which used an unspecified qualitative method), explored SUs' experiences in relation to a CF diagram and an accompanying letter. They found that some SUs felt 'reassured' and 'encouraged' by their CF, whilst simultaneously finding it 'saddening', 'upsetting' and 'worrying'. Similarly, Pain et al. (2008), used content analysis to explore SUs' reactions to CF in the form of a written diagram. They reported that the meaning, emotions and behaviour evoked by individual CFs were found to be complex and multifarious. Using grounded theory, Gibbs et al. (2020) found that CF helped make sense of past events, and their impact on the present, whilst providing a route to change. However, SUs also described 'an array of emotions' in relation to seeing their formulation written down, with some feeling 'understood' and 'relieved', whilst others felt 'vulnerable' and 'confused'.

Overall, research investigating the impact of CF has highlighted that sharing a CF with a SU is powerful and may be experienced as helpful and/or distressing. One reason to account for these mixed reactions may be that CFs have not been enquired about as a process where evolving levels build progressively over the course of therapy, moving from descriptive, to maintenance, then longitudinal (where clinically indicated; Kinderman & Lobban, 2000; Kuyken et al., 2009). Descriptive formulations in CBTp (such as those devised from an A-B-C model (Ellis, 1957) – see Spencer (2019) for examples), offer a basic explanation of how thoughts, feelings and behaviours are linked together. Maintenance formulations focus on the individual in the 'here and now', identifying perpetuating factors that are maintaining the problem(s) to generate a hypothesis for change (Dudley & Kuyken, 2014). In contrast, longitudinal formulations 'look back' over the individuals' timeline, to develop a shared understanding about the origins and development of the psychosis, through identification of precipitating and predisposing factors (Dudley & Kuyken, 2014). These distinct levels of CF therefore raise several important questions concerning their impact on SUs.

Indeed, CFs outlined in studies by Chadwick et al. (2003), and Pain et al. (2008) were described as 'developmental' (longitudinal), which also included the use of maintenance cycles. Enquiring about CF as if it is one and the same, makes it harder for researchers and clinicians to pin-point (and differentiate between) which aspects of the CF evoke adverse emotional reactions, versus which aspects of the CF are experienced positively.

In contrast to previous study samples (Chadwick et al., 2003; Gibbs et al., 2020; Pain et al., 2008), the principle aim of this study was to explore the personal impact of CF for SUs that engaged with CBT for the treatment of FEP. A secondary aim was to explore the impact of different formulations (maintenance and longitudinal), in-keeping with the literature which proposes that CF should be researched as evolving levels (Kinderman & Lobban, 2000; Kuyken et al., 2009).

Research questions

The primary research question is:

What is the personal impact of CF for SUs that engaged with CBT for the treatment of FEP?

A secondary research question is:

What is the personal impact of different levels of formulation for SUs that engaged with CBT for the treatment of FEP?

METHODS

Design

A Big Q qualitative design was adopted (Kidder & Fine, 1987), alongside the use of semi-structured interviews. Big Q qualitative research recognises the strength and value of researcher subjectivity to 'sculpt', 'shape' and 'co-create' meaning (Clarke, 2021a).

Procedure

This study was approved by the NHS Health Research Authority (HRA) Newcastle and North Tyneside 1 Research Ethics Committee (reference: 12/NE/0219).

The interview topic guide (see Appendix S1) was developed in relation to the research questions, existing literature, the researchers' clinical/research expertise in the area and SU consultation. The topic guide was exploratory, whilst being centred around participants' written formulation diagram(s) to help anchor the interview to the CF process. For example, 'Can you talk me through the content of this formulation?'; 'Can you explain to me how your formulation diagram(s) were drawn up and put together?'. Questions were also spontaneous and responsive to the participants developing account, combined with prompts to drill down to richer, deeper levels of meaning (Braun & Clarke, 2013). For example, 'Tell me more about that'; 'In what way(s)?'

The topic guide was piloted with a user-researcher who had personal experience of CF in CBT for an At-Risk Mental State (ARMS). Feedback led to minor amendments (such as the sequencing and wording of some of the questions). Participant information sheets, and consent forms were reviewed by the Manchester Psychosis Research Unit (PRU), SU Reference Group (SURG) and revised in response to their feedback.

Potential participants were invited to take part in the study via their cognitive therapist at the end of therapy (excluding any scheduled booster sessions). Written consent was obtained, and all participants consented to the use of anonymised quotes in the write-up of this study.

Semi-structured interviews were conducted by the lead researcher (H.M.S.) at the participants' home or mental health service. Interviews were audio-recorded using an encrypted Dictaphone and conducted in one session that lasted an average of 42 min (range 23–55 min).

Participants

A criterion-based purposeful sampling strategy was used, to identify participants who had experience of the topic under investigation (Palinkas et al., 2015). The following inclusion criteria provided some level of homogeneity and focus, whilst also being flexible so that heterogeneity could be explored to capture a wide range of experiences: (a) aged 16–65 years; (b) had engaged with CBTp (delivered on a 1:1 basis by a cognitive therapist) for a first episode of psychosis, where therapy was formulation driven and psychosis was addressed on the problem list; (c) had received (or had been offered) a written copy of their CF diagram, and were willing to discuss it; (d) were willing to have their interview audio-recorded; (e) able to provide informed consent; and (f) had sufficient command of the English language.

Exclusion criteria included: (a) moderate-to-severe learning difficulties; (b) organic impairment; (c) primary diagnosis of substance misuse (as the above factors may have impeded understanding of the formulation, and/or the ability to have engaged with the CF process); (d) had dropped out of therapy, *prior* to experiencing the formulation process.

Reflexive thematic analysis

A reflexive form of thematic analysis (TA) was adopted, which uses qualitative techniques underpinned by qualitative research values within a Big Q qualitative paradigm (Kidder & Fine, 1987). An experiential framework was also adopted, underpinned by critical realist ontology (Bhaskar, 2020; Pilgrim, 2020) and contextualist epistemology (focusing on the person-in-context; Clarke, 2021b; Ushioda, 2009). These positions are compatible with one another and with reflexive TA (Braun & Clarke, 2021a; Clarke, 2021c).

Critical realism posits that there is a 'true' reality, but we can only partially access this 'truth' because it is obscured by social context, language, culture, etc. (Clarke, 2021d; Danermark et al., 2019). Therefore, in reflexive TA there is no assumption that 'truth' (in its purest form) resides within the data, owing to researcher subjectivity and interpretation (Clarke, 2021e). Indeed, themes are reported as having been 'generated' or 'developed', to acknowledge the active role of the researcher in theme development (Braun et al., 2022). Consequently, critical realism posits that all knowledge is *'fallible and open to adjustment'* (Danermark et al., 2019, p. 19).

Contextualism argues that whilst no single method can ever get to the 'truth' (in its purest form), some knowledge will be valid in certain contexts (so is context-specific; Clarke, 2021d). Using reflexivity, researchers can share some of the contexts that have shaped their research, and the knowledge that has been produced (Clarke, 2021d).

Braun and Clarke's (2006) six-phases were flexibly used, owing to the recursive nature of the method. This involved H.M.S. immersing herself in the data by transcribing the interviews verbatim. Identifiable information was removed from the interview transcripts, and pseudonyms were assigned.

Semantic and latent coding of the transcripts was a fluid process, which involved assigning pithy labels with linked memos to excerpts, to capture what was of relevance in the data (Clarke, 2021f). Coding was primarily inductive—grounded in participants' accounts; however, it was also deductive—informed by theory and existing literature. Deduction provided an 'interpretative lens' for making sense of (and orientating H.M.S. to) the data (Braun & Clarke, 2006; SAGE Publishing, 2022).

NVivo 12 (QSR International Pty Ltd, 2018) ensured a systematic approach to the analysis via: defining, memoing, searching, visualising and the collation (clustering) of codes (nodes), across the data items. Nodes were organised hierarchically into tree structures to maximise the analysis process. The interactive modelling tool within NVivo was then used to identify patterns and relationships in the data (Bazeley & Jackson, 2013).

In the write-up phase, latent, rich and multifaceted interpretations of meaning and experience were generated, defined and then refined, to capture the 'essence' of each theme (Braun & Clarke, 2006). In reflexive TA, 'overarching themes' tend not to contain codes or data (Braun & Clarke, 2013; Clarke, 2021g). Their purpose is to provide organisation and thematic structure, tying several themes together to form the overall analysis (Braun & Clarke, 2013; Clarke, 2021g). In contrast, individual 'themes' are defined as patterns of shared meaning across the data set, underpinned by a 'central organising concept' (Braun & Clarke, 2019a). However, qualitative research produces many 'stories' in relation to the data, and so reflexive TA requires researchers to make active and deliberate choices, such as reporting the themes of most interest, including those that best answer the research question(s) (Clarke, 2021f). Finally, 'subthemes' may be used to capture (and develop) an important facet of a theme, but this is not a requirement (Clarke, 2021g).

Reflexivity and other indicators of quality

Guidance for the conduct of good quality TA and reflexive TA (see Braun & Clarke, 2006, 2021b, respectively) have been followed in our engagement with the method.

Reflexivity is one indicator of 'quality assurance', defined as the rigorous self-reflection, questioning and interrogation of one's role as a researcher (Braun & Clarke, 2021a). As such, Braun and Clarke (2021a) advocate for 'knowing practice'—that researchers should strive to 'own their perspectives' (Elliott et al., 1999). Therefore, H.M.S. kept a reflexive journal, and her positioning, assumptions, and values are stated below in the *first* person, as recommended in the write up of reflexive TA research (Braun & Clarke, 2019b; SAGE Publishing, 2021).

Myself and my co-authors, acknowledge that we think favourably about the use of CF in CBTp. We all work (or have worked) as CBT clinicians and/or researchers in the NHS. Several of us have also worked within EIP services, and so we are positioned as clinicians and researchers that recognise the value that CBTp can bring to individuals experiencing a FEP. Our familiarity with the wider literature leads us to understand that SUs report mixed feelings about the CF process. Therefore, these prior assumptions will have likely permeated the current analysis (Braun & Clarke, 2021a; e.g. we remained open to hearing, both positive and negative experiences).

However, as stated above, researcher subjectivity is embraced as an inevitable part of the analytic process, and a resource that drives the research (Braun & Clarke, 2021a). Indeed, 'accuracy' of interpretation is viewed as a futile process in reflexive TA (Clarke, 2021f), whereas *depth* of interpretation is viewed as a skill that resides within the researcher (Braun & Clarke, 2021b). As such, two interview transcripts were independently coded by one of the supervisors (S.T.) for the purposes of 'analytic enhancement' (see SAGE Publishing, 2021, 2022). This brought different insights/interpretations into the analytic process (e.g. to question some of the assumptions I was making and to highlight data I may have overlooked; Braun & Clarke, 2020).

ANALYSIS

Contextualising the data

In total, 10 participants (gender, $n = 5$, 50% male; $n = 5$, 50% female; age, $M = 28$ years; range 16–41 years) were recruited from EIP services in the North-East of England. Collectively, they were treated by five cognitive therapists—all accredited by the British Association for Behavioural and Cognitive Psychotherapies (BABCP). The CBTp (number of therapy sessions completed, $M = 25$ sessions; range 3–40 sessions) was delivered face-to face. Timing of the CFs was naturalistic, with therapists formulating as and when it felt clinically appropriate to do so. The formulations themselves were based on maintenance focused cognitive models of depression (Beck et al., 1979) and/or longitudinal models of psychosis (Morrison, 2017). All participants were White British. Table 1 outlines the participant characteristics.

Overview of analysis

One overarching theme entitled: 'CF – A vehicle for change?' was developed as a shared pattern of meaning across the data set. Three key themes relating to the overarching theme were generated and reported here. Themes 1 and 2 were associated with the content of the CF, and theme 3 was associated with the CF process.

The first theme related to maintenance formulations and aligned with the concept of *why now?* This theme was entitled: 'vicious circles', which had one subtheme: 'self-empowerment'. The second theme related to longitudinal formulations and aligned with the concept of *why me?* This theme was entitled: 'early life experiences', which had one subtheme: 'disempowerment'. The third theme related to both maintenance and longitudinal formulations and aligned with the concept of *how to?* This theme was entitled: 'keep it simple'. All three themes are outlined below and presented in Figure 1.

TABLE 1 Participant characteristics

Pseudonym	Age	Gender	Clinical presentation	Type of formulation discussed in interview	Hard copy of their written formulation diagram (s) physically referred to in the interview	Presenting issues described in the formulation	Number of therapy sessions received at the time of interview	When did therapy end
Tia	17	Female	First episode of psychosis	Maintenance (pre-, mid- and post-therapy)	Yes	Voices, obsessive–compulsive thoughts/ behaviours	40	Receiving 1 booster session every 2 months
Ciara	34	Female	First episode of psychosis	Maintenance (pre- and post-therapy), and longitudinal	Yes	Rumination, frustration, persecutory beliefs	39	3weeks previously
Katelyn	31	Female	First episode of psychosis	Maintenance and longitudinal	Yes	Auditory hallucinations, childhood trauma, self-criticism, perfectionism, low mood	14	3 months previously
Michael	16	Male	First episode of psychosis	Maintenance and longitudinal	No[a]	Paranoid 'irrational thoughts', anxiety, anger	20	4 months previously
Gary	24	Male	First episode of psychosis	Maintenance and longitudinal	Yes	Persecutory beliefs	16	Due 1 final booster session
Dominic	26	Male	First episode of psychosis	Longitudinal	Yes	Flashbacks, childhood trauma, auditory, visual and olfactory hallucinations, persecutory beliefs, anxiety, depression	38	Due 1 final booster session
Neil	41	Male	First episode of psychosis	Maintenance	No[b]	Persecutory beliefs	3 (drop-out)	1 month previously
Chris	26	Male	First episode of psychosis	Maintenance	Yes	Persecutory beliefs, social anxiety	36	1 week previously
Julie	33	Female	First episode of psychosis	Longitudinal	Yes	Sexual/physical/emotional abuse, auditory hallucinations, persecutory beliefs, panic	17	Due 1 final booster session
Lucy	35	Female	First episode of psychosis	Maintenance and longitudinal	Yes	Auditory and visual hallucinations, persecutory beliefs, anxiety	28	2weeks previously

[a]Did not wish to keep a copy of the diagram (owing to concerns about what his formulation diagram contained, and whether his family might discover it at home).

[b]Reported that the staff on the hospital ward disposed of it whilst cleaning his room.

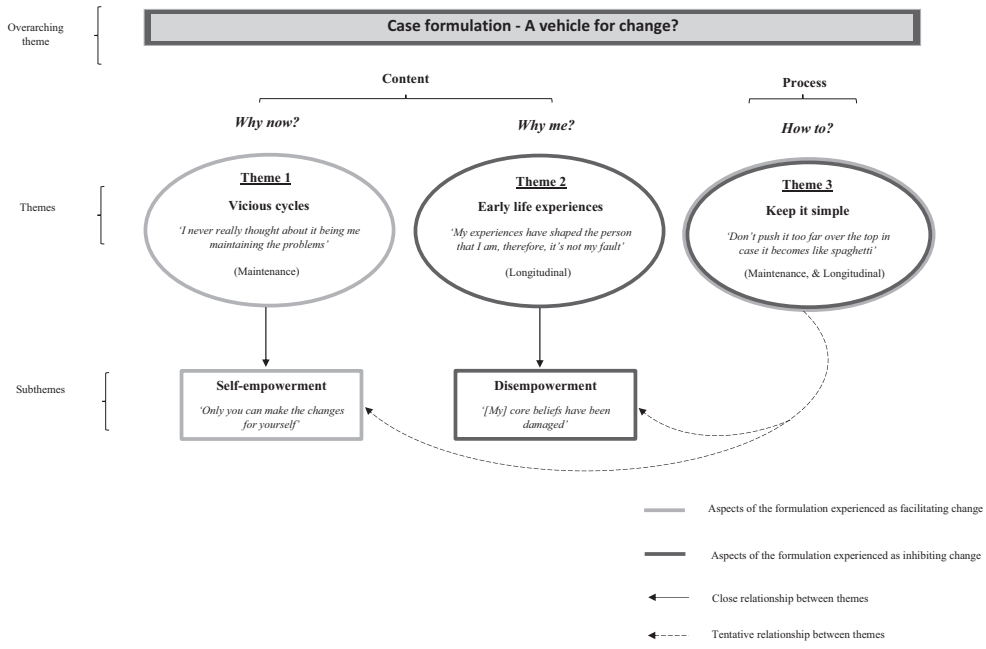

FIGURE 1 Thematic map of the overarching theme, themes and subthemes

Overarching theme – CF – A vehicle for change?

One overarching theme was developed to provide organisation and thematic structure. The title of the overarching theme captures the analysis overall, by suggesting that certain levels of a CF in CBTp led SUs to experience the process as 'a vehicle for change', whereas other levels of the CF did not.

Theme 1 – Vicious circles: 'I never really thought about it being me maintaining the problems' (Gary)

This theme was developed to capture the personal impact of the maintenance formulation which involved taking ownership, affirming self-agency (Etelämäki et al., 2021) and having an internal locus of control (LoC; Rotter, 1966).

Participants realised that certain things they were doing *themselves*, contributed to the perpetuation of their difficulties in an ongoing maintenance cycle. Often this related to behaviours such as avoidance or escape:

> I'll tell myself things [voices/visual hallucinations] are not real, but I would still run away from them, hyperventilate, have panic attacks, and it [maintenance formulation] was showing how it's all just a vicious circle. Everything I do then makes [embarrassed laugh] more things happen
>
> (Lucy).

'Vicious circle' was a CBT phrase often used by participants. It evoked a sense of being caught/trapped in an endless negative feedback loop, with safety behaviours creating new problems that aggravated the original problem. The person-centred language also helps us to contextualise Lucy's embarrassed

laugh, in that participants were guided by the maintenance formulation to position themselves at the centre of the problem.

This was often alluded to as an 'aha!' moment of sudden insight or discovery, an understanding which the maintenance formulation afforded. For example, learning 'to be more polite, more sociable', instead of 'avoiding people' (which perpetuated his suspiciousness), led Michael to state: 'I don't think I would've been able to come to that sort of epiphany by myself'.

However, for the most part, the impact of this revelation reflected an appraisal of self-blame; a sense that the maintenance of their psychosis was *their* fault. This evoked feelings of shame, frustration and sadness in relation to the coping strategies participants had been using: 'I made things distressing for myself (…) I was giving her [female voice] all the power and all the control' (Lucy); 'I know that it is, it's all me (…) what I do [rumination about persecutors] it frustrates me. I know it makes me worse!' (Ciara).

Similarly, perpetuating factors were often described as a 'bad habit'. This language appeared to be self-deprecating, as the definition of 'bad habit' refers to recurrent negative behaviour patterns, often associated with a lack of self-control (Segen's Medical Dictionary, 2012):

> Checking up there [the loft] every time I walk past [to check for intruders], just makes things worse (…). You know, cos you check once and you hear another noise, and you check again. And then that becomes a bad habit, doesn't it?
>
> (Ciara).

Despite this, recognising one's own maintenance factors, was the first step towards implementing change.

Subtheme – Self-empowerment: 'Only you can make the changes for yourself' (Ciara).

This subtheme was generated in response to participants experiencing a cognitive shift from self-blame, towards a re-appraisal of self-empowerment.

Participants talked about the realisation that if they were maintaining their own difficulties, then they could do something about it. This involved affirming self-agency to direct one's actions towards an achievement of goals: 'I have to do it myself' (Katelyn); '…this is what I need to do' (Lucy). Consequently, change involved thinking about things differently, and/or dropping safety behaviours, to put an end to vicious circles:

> I'm in control, and I need to be in control of my own life, and the only way I can do that, is if I stop these [safety] behaviours that I've got myself into…
>
> (Lucy).

As such, there was an overarching pattern of shared meaning across the data set that participants could actively use the maintenance formulation as a vehicle for change; a vehicle *they* were driving:

> It gave me direction, and then I used that to change how things were (…) one example was feeling like people were looking at me. By staying with my head down that was never really challenged, so when I stopped doing that, I realised people *weren't* looking at me
>
> (Gary).

Furthermore, enabling people to make changes via a quick success experience, helped to maximise the impact of the process:

> I've learnt (…) what I can do, which is - get myself out or talk to friends. You know, *do* things. Practical things…I know what I have to do, to put it into practice. Stop it [maintenance cycle] before I get into, you know, going round and round all day
>
> (Ciara).

Nevertheless, when participants realised they could improve things (in order to break 'vicious circles'), they also realised they needed to be ready and willing to make those changes:

> I started trying to actually sort of help myself, instead of trying to get other people to help me (…) and when I did, it worked!
>
> (Michael).

Collaboration also strongly underpinned participants' talk around self-empowerment. Moreover, actively participating in the formulation process, signalled readiness for change:

> It's like a two-way thing, isn't it? You've got to both have your involvement in it to actually make it work (…). You've got to *want* to get involved, and you've got to *want* to understand…
>
> (Ciara).

Theme 2 – Early life experiences: 'My experiences have shaped the person that I am, therefore, it's not my fault' (Katelyn)

This theme was generated to capture the personal impact of the longitudinal formulation, specifically the realisation that participants' earlier life experiences had contributed to the development of their psychosis.

The longitudinal formulation helped participants make links between the past and present:

> …how my past had been, and how that had shaped my future (…) I understand where you get from your early experiences to how you feel now
>
> (Katelyn).

Specifically, participants were able to make links and connections between adverse life events and their presenting psychosis, finding parallels and associations between the two:

> I thought there was people in the walls in the house, cameras watching me, people in the loft (…) we'd had a burglary and I still hadn't kind of recovered from that and that's I think part of it - having people in my house taking things, was maybe a bit related…
>
> (Ciara).

> …things that I feel guilt and shame about from being a child, have affected the way perhaps my voices speak to me
>
> (Lucy).

Furthermore, the impact of the CF enabled participants to understand that an accumulation of predisposing and precipitating factors, had contributed to the development of their psychosis. Such ascriptions brought about perceptions of an external LoC, with the longitudinal formulation often affirming that participants had been victims of external forces. As such, there was a shared narrative of non-blame—a sense that the development of their psychosis was *not* their fault. Nevertheless, these aspects of the CF did not appear to facilitate change.

Subtheme – Disempowerment: '[My] core beliefs have been damaged' (Dominic).

This subtheme was developed in response to the personal impact of the longitudinal formulation, specifically the realisation that historic (often traumatic) life experiences, had shaped, moulded or harmed the individual in some way.

Formulations that focused solely on predisposing and precipitating factors, appeared to reduce one's sense of self-agency, resulting in disempowerment. For example, Dominic's longitudinal formulation led to an understanding that his core beliefs were: 'built…like the main frame of a computer' (Dominic). He

also believed his core beliefs had inherently shaped him as a person: 'a lot of them *become* you, every decision you make' (Dominic). Another computer analogy illustrated Dominic's perception that his earlier life had predetermined his life as an adult. This sounded defeatist, with a strong sense of stuck-ness:

> …all the [traumatic] experiences I've went under (…) and then a kid like me is programmed, and that's locked in, and then it affects everything I will become, or what I am
>
> (Dominic).

As the extract above shows, the statement 'I've went under' appeared to have negative connotations. Dominic didn't describe going 'through' these experiences, or 'rising above' them. Instead, he 'went under'.

Looking back over negative aspects of one's life history also unearthed self-stigmatising thoughts, which discouraged hope of transformative change:

> a normal person – my husband, doesn't have all of this going on in his head. He doesn't have bad experiences from childhood (…) he doesn't have *rules* [for living] like what I have
>
> (Katelyn).

Participants also repeatedly referred to their earlier life experiences as 'damaging'. This evoked a real sense of being broken, and feelings of sadness/hopelessness:

> It's [longitudinal formulation] making me understand that the way other people have treated me like say when they hit me, or I was sexually abused, or drowned (…) that's so bad and that's upset me so much, and damaged me so much. Someone like me, all your history's bad
>
> (Dominic).

Furthermore, the 'quick' process of the maintenance formulation contrasted with participant descriptions of the longitudinal formulation, which sounded challenging, owing to the length of time taken to construct (and emotionally process) the content of the timeline:

> …it's more of a long-term thing, it takes a bit longer to work that out and work out how you can learn to feel differently about the past
>
> (Gary).

Theme 3 – Keep it simple: 'Don't push it too far over the top in case it becomes like spaghetti' (Dominic)

This theme applied to both longitudinal and maintenance formulations. It was developed to highlight the personal impact of participants engaging in (and seeing) their CF written down in a simple, parsimonious diagram, which inadvertently facilitated change. In contrast, complex formulations, too inclusive of detail/information were seen as inhibiting change.

Change primarily occurred in the context of maintenance diagrams. However, it was also described in the context of longitudinal diagrams if the CF incorporated a small number of perpetuating factors (or a simple maintenance cycle); for example, as seen in the longitudinal model provided by Morrison (2017).

Participants talked about their psychosis feeling complex and confusing in their mind, but clear, simple and organised when formulated on paper. Indeed, the CF diagram helped to simplify, and normalise the complexities of the psychosis:

> ***Interviewer:*** You said that it helped, seeing it [written] down on paper?

Julie: Knowing that I wasn't crazy.

Interviewer: And how did writing it on paper help you to see that you weren't crazy?

Julie: Like, it all came together…why I'm hearing the voices.

Dominic also suggested that CBTp therapists should tailor the complexity of formulation diagrams, so they can be easily understood:

> So, I would say at first start with simple, but making sure you know the individual, and then go up to a level what you think is understandable for them
>
> (Dominic).

Pre-printed formulation diagram templates (with headings to guide formulation content; e.g. see Beck et al., 1979 and Morrison, 2017), helped to provide organisation and structure. This also was particularly powerful in normalising psychosis, as the CF diagram/CBT model was seen as generalisable to others:

> Seeing it on paper…it makes me feel more norm [shy laugh] normal (…). Just not feel like the only one who has this problem (…) because you can design a formulation that people have similar…cos he [therapist] gave me the titles, which means that other people must have had the same sort of titles
>
> (Tia).

Simple diagrams also enabled SUs to make clear comparisons between pre-, mid- and post-therapy maintenance diagrams, with therapists revisiting and revising maintenance cycles over time. This had the impact of visually demonstrating to SUs that changes were occurring, which in turn reinforced self-empowerment (and ongoing motivation/readiness for change):

> [they gave] me a little confidence boost to not let me give up…cos sometimes you can't really tell the difference between whether the voice is getting better or not, but seeing it [formulation diagram] on paper makes you think "oh actually I have made progress" and you want to keep doing it [therapy] to get better, so you don't give up
>
> (Tia).

As such, this theme appeared to have a tentative relationship with the 'self-empowerment' subtheme of theme 1 (see Figure 1).

CF diagrams also made sense (and felt self-empowering) if they were drawn up collaboratively, with the participant playing an active role in the process; for example, if the individual was encouraged to hold the pen and draw it for themselves:

> she'd [therapist] like mention "behaviours", and then I'd write the behaviours down, and then she'd mention "what are the safety measures?" and then we'd just connect it all together
>
> (Chris).

The fact that the maintenance formulation was visually 'connected' with arrows that linked perpetuating factors together in a circular diagram, also helped to provide understanding for the possibility of change:

> It was just like, maybes if you could change one thing, other things would change along with it
>
> (Chris).

Other participants implicitly advocated for keeping things simple. For example, the impact of seeing CF diagrams that were too inclusive of detail/information felt disorganised, chaotic and overwhelming. The implication of this was not conducive to understanding or change:

> There's masses of it (…) I think there's more [of the diagram] on the back [of the page] (…) got lots of little bits scrolled all over the place
>
> (Lucy).

Similarly for Neil:

> ***Interviewer:*** What did you think of doing a diagram like that?
>
> ***Neil:*** I thought it was a bit "I'm confused" at the time (…) I couldn't cope with it. Too much information, you know?
>
> ***Interviewer:*** OK, so would you say you understood the diagrams?
>
> ***Neil:*** Some of them I didn't.

As can be seen in Neil's excerpt above, not understanding the written CF diagram can reduce cognitive confidence. This may be further reinforced by stigmatising messages conveyed by the traditional medical model that those with serious mental illness have a 'broken brain' (Andreasen, 1985). Indeed, if the CF reduces cognitive confidence, then SUs may drop out of therapy (which Neil did, after only 3 sessions). Consequently, this facet of the theme indicated a tentative relationship with the 'disempowerment' subtheme of theme 2 and was associated with the CF inhibiting change (as shown in Figure 1).

DISCUSSION

This is the first study to explore the personal impact of different levels of CF, for SUs that engaged with CBT for the treatment of a first episode of psychosis. In summary, there appeared to be key differences in the ways in which the *content* of maintenance, and longitudinal formulations were experienced. Whereas the written *process* of these different levels were experienced similarly. In addition, certain factors of the CF led SUs to experience the process as 'a vehicle for change', whereas other factors did not.

The impact of CBTp maintenance formulations, appeared to evoke self-agency and an internal LoC. Self-agency (defined within the context of social *cognitive* theory) refers to one's ability to take initiative and responsibility for one's own actions in everyday life (Etelämäki et al., 2021). Similarly, internal LoC (defined within the context of social *learning* theory) refers to the belief that outcomes in life are attributed to one's own behaviour, or personal characteristics. Conversely, external LoC is the belief that outcomes in life are attributed to external forces such as chance, luck or fate (Rotter, 1966).

Enhanced self-agency and internalised LoC have been linked to 'readiness' for treatment (Chambers et al., 2008), therapeutic change, empowerment and progress towards personal goals (Tyler et al., 2020). Indeed, in the context of individualist societies (e.g. the UK), achievement of personal goals is highly valued. Therefore, internalised LoC is considered important (Sullivan et al., 2021).

Diminished self-agency and external LoC, have been documented in relation to psychosis—with one's thoughts and actions misattributed to external agents believed to be controlling and/or communicating with them (Kozáková et al., 2020). Our analysis indicated that maintenance formulations brought about self-agency and an internal LoC, in response to SUs understanding that safety behaviours perpetuated 'vicious cycles'. This could be interpreted as self-blame, but SUs could also feel self-empowered for change. This supports findings from similar research—that the impact of CF in CBTp is experienced in both positive and negative ways (Chadwick et al., 2003; Gibbs et al., 2020; Pain et al., 2008).

One criticism of maintenance formulations is that they are too focused on the individual. Incorporating a small number of *external* perpetuating factors within maintenance cycles (e.g. wider systemic issues) may help to acknowledge that personal agency does not (and cannot) always exist in people's lives (Bakker, 2008). Helping SUs to discern between the things they can change versus the things they cannot change, may help alleviate appraisals of self-blame. Furthermore, strengths-based formulations (Kuyken et al., 2009) and approaches to psychosis (McTiernan et al., 2020) may empower SUs to implement change that feels attainable (e.g. enabling SUs to imagine using adaptive coping strategies in areas of difficulty; Kuyken et al., 2009).

Our findings also indicated that SU collaboration regarding maintenance formulations was linked to self-empowerment and readiness for change. This reflects therapists' perspectives that active collaboration in CBTp is associated with SU 'readiness to change' (Currell et al., 2016).

In the context of longitudinal formulations, making links between earlier adverse life events and the development of psychosis was helpful for SUs, as this evoked a shared narrative of non-blame. This is interesting, as previous research has reported that some individuals feel partly or fully 'responsible' for the onset and early development of their psychosis (seemingly, in the absence of such formulations; Jones et al., 2016).

Nevertheless, too much time spent formulating predisposing and precipitating factors (i.e. participants in the current study experienced longitudinal formulation as a lengthy process), may lead to perceptions of external LoC and victimhood, and feelings of disempowerment. Indeed, some authors have argued that models and therapies that emphasise historical precipitants have consistently delivered underwhelming results (Nathan & Gorman, 2002; Roth & Fonagy, 2005). For example, SUs reported dissatisfaction with psychodynamic psychotherapy owing to its preoccupation 'with the past' (Nilsson et al., 2007); and elsewhere we have demonstrated that longitudinal formulations in the earlier stages of CBTp may lead to poorer treatment effects (Spencer et al., 2018).

Whilst we are not suggesting that CFs should exclude longitudinal/developmental factors, we concur with other authors that advocate for a primary focus on maintenance processes, to bring about change in the 'here and now' (Kennerley et al., 2016). Indeed, our research supports these clinical assumptions, by suggesting that a focus on perpetuating factors is also a preference for SUs.

Formulating a SU's early childhood to uncover core schema/beliefs within the context of a CBT longitudinal formulation, should be handled sensitively, and with caution (James, 2001). This may evoke an external LOC which may be disempowering.

Shaped by early life experiences, core beliefs are believed to be deeply entrenched (Morrison, 2007). Nevertheless, it *is* possible to target these beliefs in CBTp via use of schema change strategies (see Morrison, 2007). This message should be clearly communicated to SUs to mitigate possible appraisals of being 'damaged' or 'broken', as these appraisals are likely to discourage self-agency, internal LoC, and any hopes of transformative change. Furthermore, it must be noted that an international sample of CBTp experts endorsed core beliefs as 'important' components in the CF of voices and delusions, but not 'essential' (Spencer et al., 2020).

Finally, for SUs, clear, simple and parsimonious formulation diagrams facilitated greater understanding of their psychosis and any associated perpetuating factors. If SUs can understand (and visually 'see') how vicious cycles are being maintained, then this may self-empower them for change. Conversely the opposite is true—diagrams that are overly complex, confusing, and too detailed, may be disempowering. Indeed, we have argued elsewhere that the CF process in CBT should be parsimonious and simple as possible (Dudley et al., 2015; Spencer et al., 2020). This would seem crucial for SUs with psychosis in the early stages that experience visual memory impairments (Smucny et al., 2020).

The findings have several clinical implications. Table 2 provides an outline of recommendations for therapists.

Strengths of the study include the real-world representativeness of the sample and the naturalistic timing of the CFs. That five cognitive therapists were involved, suggests that our findings may extend beyond the practice of an individual therapist.

TABLE 2 Clinical implications and recommendations for therapists in relation to the overarching theme, themes and subthemes

Theme	Clinical implications and recommendations for therapists
Overarching theme—Case formulation—A vehicle for change?	• In the early stages of formulation, provide normalising information about psychosis to introduce the idea that change/recovery is possible • Ensure adequate time in the pace and development of CFs, for SUs to consider the possibility of change
Theme 1—Vicious circles	• Closely attend to affect shifts (e.g. shame, sadness) to address appraisals of self-blame in relation to the use of safety behaviours • Avoid using loaded language (e.g. 'bad habits') which may elicit self-blame. Consider alternative language such as 'coping strategies' or 'ways of coping' that may have initially helped, but which no longer serve a purpose (and appear to be keeping the difficulties going) • Include a small number of perpetuating factors that consider the wider social context, to mitigate self-blame
Subtheme—Self-empowerment	• Highlight ways in which SUs can make changes for themselves to promote self-agency, internal LoC and self-empowerment • Start with a maintenance formulation to enable SUs to make changes via an early success experience • Explain to SUs from the outset that CBTp will require them to make changes for themselves • Offer a small number of CBTp sessions initially to review the acceptability of the CF and to see whether the SU is ready and willing to make changes
Theme 2—Early life experiences	• Starting with a maintenance formulation is regarded as best practice. However, a longitudinal formulation may help the SU to tell their story • Support SUs to make links between the past and present—finding parallels and associations between earlier life events and their current psychotic symptoms • Emphasise that bad things in life are not necessarily under one's control/are not necessarily the persons fault, but that it does not mean they are destined to be a victim
Subtheme—Disempowerment	• Predisposing and precipitating factors may be beyond the SU's control, which can reduce self-agency, and increase the sense of an external LoC • 'Core beliefs' may be interpreted as something fundamental about the individual that may be flawed, broken, or unchangeable. Consider whether 'old rules for living' (which made sense then), verses 'new rules for living' (that make sense now), would be a more empowering message • 'Balance' the timeline by eliciting positive aspects of one's life history (alongside adverse life events) to reduce feelings of brokenness, shame and disempowerment
Theme 3—Keep it simple	• Ensure that CF diagrams are simple and parsimonious, so they can be easily understood • Use formulation diagram templates (e.g. see Beck et al., 1979 and Morrison, 2017) to aid simplicity, organisation, and structure • Revisit and revise maintenance diagrams over time (e.g. pre-, mid- and post-therapy) to highlight changes • Encourage SUs to write their own CF diagrams to facilitate understanding, and self-empowerment

However, we acknowledge that the findings reported here, are partial, situated and contextual (Clarke, 2021f). Our design choices inevitably shaped (and delimited) the knowledge produced (Braun & Clarke, 2022). For example, SUs with a longer duration of psychosis that engage with CBTp delivered by community teams, or inpatient services, may experience the CF process differently. We therefore invite the reader to consider the transferability of these findings, beyond the context in which they were studied (Smith, 2018).

An obvious limitation is that only one participant who 'dropped out' of therapy was recruited. Therefore, our research is limited in its exploration of the impact of CF for those that experience the formulation process, then choose to discontinue therapy. Most participants engaged with many CBTp sessions (see Table 1), delivered by highly qualified therapists. However, this may not reflect the provision of CBTp that is available to other SUs. Consequently, the impact of CF for SUs may vary depending upon the quality of the therapy provided, and the pace at which CFs are co-constructed (within the constraints of the number of therapy sessions offered).

Furthermore, we cannot report anything about treatment outcomes, and the interview surrounding the impact of CF may have been influenced by SUs' personal perceptions of recovery. In addition, we acknowledge the limitation of a wholly White British sample of participants, which does not permit broader inferences for the experiences of SUs from minority ethnic groups. This is a recommendation for future research. Future research could also look to assess self-agency and LoC, before and after the co-development of maintenance and/or longitudinal formulations, to test out the theories proposed here.

AUTHOR CONTRIBUTIONS

Robert Dudley: Conceptualization; methodology; resources; supervision; validation; visualization; writing – original draft; writing – review and editing. **Lynne Johnston:** Conceptualization; formal analysis; methodology; resources; supervision; validation; writing – review and editing. **Mark H. Freeston:** Conceptualization; supervision; validation; writing – review and editing. **Douglas Turkington:** Conceptualization; supervision; writing – review and editing. **Sarah Tully:** Formal analysis; methodology; supervision; validation; writing – review and editing. **Helen M. Spencer:** Conceptualization; data curation; formal analysis; investigation; methodology; project administration; resources; visualization; writing – original draft; writing – review and editing.

ACKNOWLEDGEMENTS

The authors would like to thank the SUs that kindly participated in this study, as well as the CBTp therapists. Special thanks are given to Ron (pseudonym) who co-developed and piloted the interview topic guide. We would also like to thank the Manchester PRU, SU Reference Group (SURG), who provided consultation and feedback on the study materials. Finally, we would like to thank Andrew Gumley for his methodological guidance in the earlier phases of this study and Gordon Turkington for proofreading the interview transcripts.

FUNDING INFORMATION

The lead author Helen M. Spencer was supported by an award from Funds for Women Graduates (FfWG) in the United Kingdom (grant number: 17136). This is the trading name of the British Federation of Women Graduates (BFWG) Charitable Foundation.

CONFLICT OF INTEREST

H.M.S., R.D. and D.T. declare royalties received for books, book chapters and workshops on the topic of formulation in CBT and CBTp. M.H.F. declares royalties received for books and workshops on CBT for anxiety disorders. L.J. and S.T. have no conflicts of interest.

DATA AVAILABILITY STATEMENT

The authors do not intend to make the data publicly available in a data repository to ensure the privacy and confidentiality of all participants.

ORCID

Helen M. Spencer https://orcid.org/0000-0003-3508-3398

REFERENCES

Andreasen, N. (1985). *The broken brain: The biological revolution in psychiatry*. HarperCollins INC International Concepts.

Bakker, G. M. (2008). Problem-maintaining circles: Case illustrations of formulations that truly guide therapy. *Clinical Psychologist*, *12*(1), 30–39.

Bazeley, P., & Jackson, K. (2013). *Qualitative data analysis with NVivo* (2nd ed.). SAGE Publications Ltd.

Beck, A. T., Rush, A. J., Shaw, B. F., & Emery, G. (1979). *Cognitive therapy of depression*. Guilford Press.

Bhaskar, R. (2020). Critical realism and the ontology of persons. *Journal of Critical Realism*, *19*(2), 113–120.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101.

Braun, V., & Clarke, V. (2013). *Successful qualitative research: A practical guide for beginners*. SAGE Publications Ltd.

Braun, V., & Clarke, V. (2019a). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, *11*(4), 589–597.

Braun, V., & Clarke, V. (2019b). Novel insights into patients' life-worlds: The value of qualitative research. *The Lancet Psychiatry*, *6*(9), 720–721.

Braun, V., & Clarke, V. (2020). Can I use TA? Should I use TA? Should I *not* use TA? Comparing reflexive thematic analysis and other pattern-based qualitative analytic approaches. *Counselling and Psychotherapy Research*, *21*(1), 37–47.

Braun, V., & Clarke, V. (2021a). *Thematic analysis: A practical guide*. SAGE Publications Ltd.

Braun, V., & Clarke, V. (2021b). One size fits all? What counts as quality practice in (reflexive) thematic analysis? *Qualitative Research in Psychology*, *18*(3), 328–352.

Braun, V., & Clarke, V. (2022). Conceptual and design thinking for thematic analysis. *Qualitative Psychology*, *9*(1), 3–26.

Braun, V., Clarke, V., & Hayfield, N. (2022). 'A starting point for your journey, not a map': Nikki Hayfield in conversation with Virginia Braun and Victoria Clarke about thematic analysis. *Qualitative Research in Psychology*, *19*(2), 424–445.

Cairns, D. V. A., Reid, D. G. S., & Murray, D. C. D. (2015). Experience of psychosocial formulation within a biopsychosocial model of care for first- episode psychosis. *International Journal of Psychosocial Rehabilitation*, *19*(2), 47–62.

Chadwick, P., Williams, C., & Mackenzie, J. (2003). Impact of case formulation in cognitive behaviour therapy for psychosis. *Behaviour Research and Therapy*, *41*(6), 671–680.

Chambers, J. C., Eccleston, L., Day, A., Ward, T., & Howells, K. (2008). Treatment readiness in violent offenders: The influence of cognitive factors on engagement in violence programs. *Aggression and Violent Behavior*, *13*(4), 276–284.

Clarke, V. (2021a). Foundations of qualitative research 2. Part 1: Key characteristics of qualitative research [Webinar]. YouTube. https://www.youtube.com/watch?v=-XWrpqPrHPk&t=144s

Clarke, V. (2021b). *Foundations of qualitative research 1. Part 3: Orientations to meaning in Big Q qualitative* [Webinar]. YouTube. https://www.youtube.com/watch?v=_fG6-I-c_Oc&t=206s

Clarke, V. (2021c). *Foundations of qualitative research 2. Part 2: Experiential and critical qualitative research* [Webinar]. YouTube. https://www.youtube.com/watch?v=OfwtzhE4HtQ&t=5s

Clarke, V. (2021d). *Foundations of qualitative research 2. Part 3: Key (theoretical and philosophical) concepts in qualitative research* [Webinar]. YouTube. https://www.youtube.com/watch?v=bgZuPmO9130&t=5s

Clarke, V. (2021e). *Thematic analysis. Part 4: Avoiding common problems* [Webinar]. YouTube. https://www.youtube.com/watch?v=tHeLh1XrWS0

Clarke, V. (2021f). *Foundations of qualitative research 1. Part 1: What is qualitative research?* [Webinar]. YouTube. https://www.youtube.com/watch?v=qH0XvEe6DzI&t=1s

Clarke, V. (2021g). *Thematic analysis. Part 3: Six phases of reflexive thematic analysis* [Webinar]. YouTube. https://www.youtube.com/watch?v=BhL113ye9Ss

Currell, S., Christodoulides, T., Siitarinen, J., & Dudley, R. (2016). Patient factors that impact upon cognitive behavioural therapy for psychosis: Therapists' perspectives. *Behavioural and Cognitive Psychotherapy*, *44*(4), 493–498.

Danermark, B., Ekström, M., & Karlsson, J. C. (2019). *Explaining society: Critical realism in the social sciences* (2nd ed.). Routledge.

Dudley, R., Ingham, B., Sowerby, K., & Freeston, M. (2015). The utility of case formulation in treatment decision making; the effect of experience and expertise. *Journal of Behavior Therapy and Experimental Psychiatry*, *48*, 66–74.

Dudley, R., & Kuyken, W. (2014). Case formulation in cognitive behavioural therapy: A principle-driven approach. In L. Johnstone & R. Dallos (Eds.), *Formulation in psychology and psychotherapy: Making sense of people's problems* (pp. 18–44). Routledge.

Dudley, R., Siitarinen, J., James, I., & Dodgson, G. (2009). What do people with psychosis think caused their psychosis? A Q methodology study. *Behavioural and Cognitive Psychotherapy*, *37*(1), 11–24.

Elliott, R., Fischer, C. T., & Rennie, D. L. (1999). Evolving guidelines for publication of qualitative research studies in psychology and related fields. *British Journal of Clinical Psychology*, *38*, 215–229.

Ellis, A. (1957). Rational psychotherapy and individual psychology. *Journal of Individual Psychology*, *13*, 38–44.

Etelämäki, M., Voutilainen, L., & Weiste, E. (2021). Distributing agency and experience in therapeutic interaction: Person references in therapists' responses to complaints. *Frontiers in Psychology*, *12*, 585321.

Gibbs, M., Griffiths, M., & Dilks, S. (2020). A grounded theory of how service users experience and make use of formulation in therapy for psychosis. *Psychosis: Psychological, Social and Integrative Approaches*, *12*(3), 245–256.

Harris, K., Collinson, C., & das Nair, R. (2012). Service-users' experiences of an early intervention in psychosis service: An interpretative phenomenological analysis. *Psychology and Psychotherapy*, *85*(4), 456–469.

Hodgetts, A., & Wright, J. (2007). Researching clients' experiences: A review of qualitative studies. *Clinical Psychology & Psychotherapy*, *14*(3), 157–163.
James, I. A. (2001). Schema therapy: The next generation, but should it carry a health warning? *Behavioural and Cognitive Psychotherapy*, *29*(4), 401–407.
Jaspers, K. (1997). *General psychopathology*. (J. Hoenig & M. W. Hamilton, Trans.). The Johns Hopkins University Press. (Original work published 1963).
Jones, N., Shattell, M., Kelly, T., Brown, R., Robinson, L., Renfro, R., Harris, B., & Luhrmann, T. M. (2016). "Did I push myself over the edge?": Complications of agency in psychosis onset and development. *Psychosis: Psychological, Social and Integrative Approaches*, *8*(4), 324–335.
Kahlon, S., Neal, A., & Patterson, T. (2014). Experiences of cognitive behavioural therapy formulation in clients with depression. *The Cognitive Behaviour Therapist*, *7*, E8.
Kannis-Dymand, L., Myers, A., Human, B., Love, S., & Lovell, G. P. (2021). Evaluation of collaborative cognitive-behavioural case formulations in a clinical psychology program: A client perspective. *Clinical Psychologist*, *25*(3), 339–349.
Kennerley, H., Kirk, J., & Westbrook, D. (2016). *An introduction to cognitive behaviour therapy: Skills and applications*. SAGE Publications Ltd.
Kidder, L. H., & Fine, M. (1987). Qualitative and quantitative methods. When stories converge. In M. M. Mark & L. Shotland (Eds.), *New directions for program evaluation* (pp. 57–75). Jossey-Bass.
Kinderman, P., & Lobban, F. (2000). Evolving formulations: Sharing complex information with clients. *Behavioural and Cognitive Psychotherapy*, *28*(3), 307–310.
Kozáková, E., Bakštein, E., Havlíček, O., Bečev, O., Knytl, P., Zaytseva, Y., & Španiel, F. (2020). Disrupted sense of agency as a state marker of first-episode schizophrenia: A large-scale follow-up study. *Frontiers in Psychiatry*, *11*, 570570.
Kuyken, W., Padesky, C. A., & Dudley, R. (2009). *Collaborative case conceptualization: Working effectively with clients in cognitive-behavioral therapy*. The Guilford Press.
McTiernan, K., Gullon-Scott, F., & Dudley, R. (2020). An exploration of strength use and its relationship with life satisfaction, positive self-beliefs and paranoia. *The International Journal of Wellbeing*, *10*(2), 53–70.
Morrison, A. P. (2007). Case formulation and cognitive schemas in cognitive therapy for psychosis. In L. P. Riso, P. L. du Toit, D. J. Stein, & J. E. Young (Eds.), *Cognitive schemas and core beliefs in psychological problems: A scientist-practitioner guide* (pp. 177–197). American Psychological Association.
Morrison, A. P. (2017). A manualised treatment protocol to guide delivery of evidence-based cognitive therapy for people with distressing psychosis: Learning from clinical trials. *Psychosis: Psychological, Social and Integrative Approaches*, *9*(3), 271–281.
Nathan, P. E., & Gorman, J. M. (2002). *A guide to treatments that work*. Oxford University Press.
National Institute for Health and Care Excellence (NICE). (2020). *Implementing the early intervention in psychosis access and waiting time standard: Updated commissioning guidance*. NHS England Publications. http://iris-initiative.org.uk/wordpress/wp-content/uploads/2020/12/EIP-Guidance-2020_Final_2_KE.pdf
National Institute for Health and Clinical Excellence (NICE). (2014). *Psychosis and schizophrenia in adults: Prevention and management*. (Clinical Guideline 178). https://www.nice.org.uk/guidance/cg178/resources/psychosis-and-schizophrenia-in-adults-prevention-and-management-pdf-35109758952133
NHS England. (2019). *The NHS long term plan*. NHS England Publications. https://www.longtermplan.nhs.uk/wp-content/uploads/2019/01/nhs-long-term-plan-june-2019.pdf
Nilsson, T., Svensson, M., Sandell, R., & Clinton, D. (2007). Patients' experiences of change in cognitive-behavioral therapy and psychodynamic therapy: A qualitative comparative study. *Psychotherapy Research*, *17*(5), 553–566.
Pain, C. M., Chadwick, P., & Abba, N. (2008). Clients' experience of case formulation in cognitive behaviour therapy for psychosis. *British Journal of Clinical Psychology*, *47*(2), 127–138.
Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health*, *42*(5), 533–544.
Pilgrim, D. (2020). *Critical realism for psychologists*. Routledge.
QSR International Pty Ltd. (2018). NVivo (Version 12). https://www.qsrinternational.com/nvivo-qualitative-data-analysis-software/home
Redhead, S., Johnstone, L., & Nightingale, J. (2015). Clients' experiences of formulation in cognitive behaviour therapy. *Psychology and Psychotherapy*, *88*(4), 453–467.
Roth, A., & Fonagy, P. (2005). *What works for whom?* Guilford Press.
Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs: General and Applied*, *80*(1), 1–28.
SAGE Publishing. (2021). Thematic analysis: In conversation with Virginia Braun and Victoria Clarke [Webinar]. YouTube. https://www.youtube.com/watch?v=hns-tlUx1_Q
SAGE Publishing. (2022). *Common challenges in thematic analysis and how to avoid them with Virginia Braun and Victoria Clarke* [Webinar]. YouTube. https://www.youtube.com/watch?v=tpWLsckpM78
Segen's Medical Dictionary. (2012). *Bad habit*. https://medical-dictionary.thefreedictionary.com/bad+habit
Smith, B. (2018). Generalizability in qualitative research: Misunderstandings, opportunities and recommendations for the sport and exercise sciences. *Qualitative Research in Sport, Exercise and Health*, *10*(1), 137–149.
Smucny, J., Zarubin, V. C., Ragland, J. D., & Carter, C. S. (2020). Are visual memory deficits in recent-onset psychosis degenerative? *The American Journal of Psychiatry*, *177*(4), 355–356.

Spencer, H. M. (2019). Making sense of psychosis. In D. Turkington & H. M. Spencer (Eds.), *Back to life, back to normality: CBT informed recovery for families with relatives with schizophrenia and other psychoses* (Vol. 2, pp. 27–32). Cambridge University Press.

Spencer, H. M., Dudley, R., Freeston, M. H., & Turkington, D. (2020). What are the essential ingredients of a CBT case conceptualization for voices and delusions in schizophrenia spectrum disorders? A study of expert consensus. *Schizophrenia Research*, *224*, 74–81.

Spencer, H. M., McMenamin, M., Emsley, R., Turkington, D., Dunn, G., Morrison, A. P., Brabban, A., Hutton, P., & Dudley, R. (2018). Cognitive behavioural therapy for antipsychotic free schizophrenia spectrum disorders: Does therapy dose influence outcome? *Schizophrenia Research*, *202*, 385–386.

Sullivan, S., Yamasaki, S., Ando, S., Endo, K., Kasai, K., Culpin, I., Dardani, C., Zammit, S., & Nishida, A. (2021). The association between locus of control and psychopathology: A cross-cohort comparison between a UK (Avon longitudinal study of parents and children) and a Japanese (Tokyo teen cohort) cohort. *Frontiers in Psychology*, *12*, 600941.

Thew, G., & Krohnert, N. (2015). Formulation as intervention: Case report and client experience of formulating in therapy. *The Cognitive Behaviour Therapist*, *8*, E25.

Tyler, N., Heffernan, R., & Fortune, C. A. (2020). Reorienting locus of control in individuals who have offended through strengths-based interventions: Personal agency and the good lives model. *Frontiers in Psychology*, *11*, 553240.

Ushioda, E. (2009). A person-in-context relational view of emergent motivation, self and identity. In Z. Dörnyei & E. Ushioda (Eds.), *Motivation, language identity and the L2 self* (pp. 215–228). Multilingual Matters.

SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

How to cite this article: Spencer, H. M., Dudley, R., Johnston, L., Freeston, M. H., Turkington, D., & Tully, S. (2023). Case formulation—A vehicle for change? Exploring the impact of cognitive behavioural therapy formulation in first episode psychosis: A reflexive thematic analysis. *Psychology and Psychotherapy: Theory, Research and Practice*, *96*, 328–346. https://doi.org/10.1111/papt.12442