Xanidis, N. and Gumley, A. (2020) Exploring the implementation of cognitive behaviour therapy for psychosis using the Normalization Process Theory framework. *Psychology and Psychotherapy: Theory, Research and Practice*, (doi:10.1111/papt.12217).

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Xanidis, N. and Gumley, A. (2020) Exploring the implementation of cognitive behaviour therapy for psychosis using the Normalization Process Theory framework. *Psychology and Psychotherapy: Theory, Research and Practice*, which has been published in final form at 10.1111/papt.12217. This article may be used for non-commercial purposes in accordance with Wiley Terms and Conditions for Self-Archiving.

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Deposited on: 28 January 2019

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Title: Exploring the implementation of Cognitive Behaviour Therapy for psychosis (CBTp) using the Normalisation Process Theory (NPT) Framework.

Short title: Exploring the implementation of CBTp

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Abstract

Objective: Evidence suggests that only a minority of service users experiencing psychosis have access to Cognitive Behavioural Therapy for psychosis (CBTp). Normalisation Process Theory (NPT) is a theoretical framework which focuses on processes by which interventions are implemented and normalised in clinical practice. This study explored the views and experiences of mental health professionals regarding the implementation of CBTp. Barriers and facilitators to implementation were explored using the NPT framework.

Design: A qualitative methodology was adopted involving semi-structured focus groups and individual interviews.

Methods: A total of 14 members of staff working in the community and crisis mental health teams were recruited. Thematic analysis was used to generate initial themes. The Framework approach was utilised to map initial themes to the NPT framework.

Results: Inductive coding generated five overarching themes consisting of 15 individual subthemes which captured the perceived barriers to engagement; contextual barriers to implementation; optimisation of implementation; positive attitudes towards implementation; and expectations of implementing CBTp. All but two subthemes mapped on to the NPT framework. The deductive analysis suggested that difficulties in making sense of CBTp among professionals were reflected as service level barriers which impeded wider implementation.

Conclusion: The results of this study suggested a mixture of barriers and facilitators to CBTp implementation. Interpreting our findings within an NPT framework indicates the importance of strong clinical leadership to address difficulties in sense-making and service investment in CBTp.

Practitioner Points

- Findings indicate a mixture of barriers and facilitators to CBTp implementation
- NPT analysis indicates difficulties in coherence among stakeholders regarding the purpose and value of CBTp.
- Difficulties making sense of CBTp translates into service level barriers and impede the collective action of stakeholders.
- The role of clinical leadership is crucial in increasing coherence and collective action in services.

Keywords:

CBT; CBTp; Implementation; Cognitive Behaviour Therapy; Psychosis; Barriers; Facilitators; Normalisation Process Theory; NPT; Implementation Framework; Views; Experiences; mental health professionals

Acknowledgements:

We would like to sincerely thank all the NHS professionals who participated and shared their views and experiences.

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Introduction

Cognitive Behavioural Therapy for psychosis (CBTp) is a talking therapy which focuses on reducing distress caused by specific psychotic experiences (e.g. hearing distressing voices) by exploring and modifying the links between associated thoughts, physical sensations, behaviours and emotions (Morrison, 2017). A recent Delphi consensus study reported that the essential aspects of CBTp involve collaboration, formulation, normalization, and change strategies (Morrison & Barratt, 2010). These ingredients and processes were perceived by service users to improve engagement and reduce stigma, as reported in a recent synthesis of qualitative studies (Berry & Hayward, 2011).

Evidence from randomised controlled trials (RCTs) indicates that CBTp results in a reduction of positive symptoms (Wykes, Steel, Everitt, & Tarrier, 2008) and comorbid difficulties (Turner, van der Gaag, Karyotaki, & Cuipers, 2014). Additional evidence suggests that CBTp may also prevent the onset of psychosis in people who were at risk of developing psychosis (Hutton & Taylor, 2014). National Institute of Clinical Excellence (NICE, 2014) guidelines in England and Wales and the Scottish Intercollegiate Guidelines Network guidelines (SIGN (131), 2013) recommended that CBTp should be offered to all individuals who either experience or are at risk of experiencing psychosis over the course of at least 16 sessions.

Although national guidelines have increased professionals' awareness (Fadden, 2006) regarding the benefits of CBTp this has not been followed by successful implementation of CBTp into routine care (Rowlands, 2004). A recent national audit in the UK estimates that only one in ten people with psychosis have access to psychological interventions (Schizophrenia Commission, 2012). Ince, Haddock and Tai (2016) reported that the rates of implementation of CBTp varied significantly across studies and this was attributed to differences in the methodological quality of the studies. Berry and Haddock (2008) suggest that barriers can be classified into three main categories, which involve service recipients' factors such as poor engagement and family support. The second set of barriers related to professionals' negative perceptions of CBTp and lack of competence in delivering CBTp (Prytys, Garety, Jolley, Onwumere, & Craig, 2011). The third cluster of barriers was associated with organisational factors reflecting difficulties with access to training, supervision and having protected time to implement CBTp (Ince et al., 2016). Additionally, the findings of a recent meta-analysis indicated limited effectiveness of CBTp (Jauhar et al., 2014), which may have impacted clinicians' expectations of effectiveness (McKenna & Kingdon, 2014). This could pose another factor that might have affected the resource allocation for CBTp in services.

Studies which investigated facilitators to CBTp implementation reported that high intensity training improved the competency of the staff which resulted in increased implementation. However, this depended on whether the staff had protected time to implement CBTp following training (Jolley et al., 2012). Similarly, Gray, Stevens, Motton, and Meddings (2017) highlighted the benefits of the availability of trained staff to participate in team meetings to increase professionals' awareness of CBTp.

The challenges of implementing evidence-based treatments in routine clinical practice gave rise to the development of implementation theories and frameworks, which aimed to

understand the enablers and barriers of a successful implementation. Normalization Process Theory (NPT; May et al., 2009) is one such theoretical framework that focuses on the implementation of interventions, their embedding in routine practice and the processes by which interventions are normalised. NPT consists of four components, which define distinctive processes. The first component, *Coherence* refers to the extent to which stakeholders involved in implementation have a sense of clear and common purpose of the intervention. *Cognitive Participation* refers to the degree to which stakeholders perceive the potential benefits of the intervention and the willingness to support the implementation. *Collective Action* relates to the service level factors, which are involved in successful implementation and to the stakeholders' readiness to change their current practice. The fourth component, *Reflexive Monitoring* refers to an agreed plan of how the implementation would be assessed. NPT predicts that implementation processes need to satisfy these four components to become normalised in routine practice. Additionally, NPT suggests that these components are linked with each other and thus changes in one part can affect the others.

Previous qualitative studies have used NPT framework to explore and formulate the barriers to implementation of evidenced-based psychological interventions for depression (Gunn et al., 2010) and bipolar disorder (Moriss, 2008). These studies suggested that the use of NPT allowed them to assess, formulate and develop an intervention plan based on the components of NPT to facilitate the implementation (McEvoy et al., 2014). Recently, Hazell, Strauss, Hayward and Cavanagh (2017a) explored the views of mental health clinicians about a brief CBTp intervention using an NPT based questionnaire. Exploratory factor analysis of the responses found support for all but one (collective action) construct of the NPT. Although Michie and colleagues (2007) applied a theoretical framework to interpret barriers to implementation of national guidelines for psychosis, this was focused on family interventions and not CBTp. Additionally, previous studies exploring CBTp implementation have used

only one professional group (care coordinators; Prytys et al., 2011) rather than a mixture of diverse professional backgrounds. This may have limited the understanding of the interaction between experiences and perspectives of stakeholders, which subsequently restricted the production of an intervention plan based on the theoretical model used, to overcome such barriers.

Aims

The first aim of this study was to explore the experiences and perspectives of mental health professionals concerning the implementation of CBTp in an NHS Board in Scotland. A second aim was to apply the NPT framework to interpret potential barriers and facilitators to implementation.

Research questions

- How do mental health professionals working with people experiencing psychosis make sense of CBTp implementation?
- Can professionals' perspectives be understood within the NPT framework?

Methods

Design

This study adopted a qualitative design to explore individuals' experience as a phenomenon, within the context and social reality of participants (Holloway, 1997). Focus groups with participants from the same professional background and semi-structured individual interviews were employed. The interview topic guide was developed to reflect the research aim and questions. Additionally, the NPT framework was used to prompt, guide and structure the questions of the topic guide and permit participants to reflect on the NPT

constructs. The epistemological positions behind this study followed the critical realist and post-positivist paradigms, suggesting that the experience of participants and the researcher is influenced by the social, structural and political context in which the study is conducted (Danermark, Ekström, Jakobsen, & Karlsson, 2002).

Ethical considerations

Data were anonymised and stored in a password protected computer in line with the university's ethics guidelines on confidential data. The Research Proposal and proposal amendments for this study were approved by the local NHS Research and Development Department and ethical approval was granted by the university's ethics committee.

Procedure

Purposive sampling method was selected to recruit participants and ensure representation from all the stakeholders. Study adverts and introductory information were provided to the Community Mental Health Teams (CMHTs) and Crisis Team (CT) leaders to circulate to their team members. The lead researcher attended the team meetings to introduce the study and explore interest. After obtaining verbal consent from participants, participant information sheets were provided. Prior to the interviews, the researcher explained issues of confidentiality, anonymity, and the voluntary nature of participation and participants provided written informed consent. All interviews were conducted by the lead researcher and took place in NHS settings. Field notes were recorded after each interview. The copies of interview transcripts and study's findings were emailed to all the participants; however, researchers did not receive any additional comments.

Participants

The experiences and views of several staff groups were sought as NPT assumes that everyone has a role in successful implementation. The sample consisted of 14 participants, ten of whom were female. Eligible participants have worked with individuals who have experienced psychosis in CMHTs or CTs. The average number of years of clinical experience of participants was 17.2 years. Participants consisted of mental health nurses (*n* =5) consultant psychiatrists (*n* = 2), clinical/counselling psychologists (*n* = 2), CBT therapists (*n* =2), an occupational therapist (*n* =1), a team leader (*n* =1) and a senior adult mental health manager (*n* =1).

None of the participants who initially volunteered to participate dropped out of the study. Two focus groups (a nursing staff and a psychology focus group) and six individual interviews were completed. The interviews lasted between 29 to 65 minutes, whereas the two focus groups lasted for approximately between 70 to 80 minutes. According to Guest, Bunce & Johnson (2006) completing six to twelve interviews should be adequate to reach data saturation. Indeed, after the completion of one focus group and six interviews no new themes were identified, suggesting that data saturation had occurred.

Data Analyses

The first stage of analysis involved inductive thematic analysis (Braun & Clarke, 2006) as our aim was to capture common patterns of experiences of CBTp implementation across a variety of staff groups and to avoid forcing themes to the predetermined constructs of the NPT. This helped us to identify deviant or new themes that might not be adequately captured in the deductive framework. Previous qualitative studies in NPT research have successfully used this approach to analyse data (MacFarlane & O'Reilly de Brun, 2012).

The inductive stage of analysis was conducted in line with Braun & Clarke's (2006) six stages of thematic analysis. The software program QRS Nvivo 11 was used in the

analysis of the data. Interviews were audio-recorded and transcribed verbatim. The lead researcher initially immersed themselves in the data by reading the transcribed interviews and noting down how participants made sense of their experiences. Complete coding by analysing all the meaning units related to the research questions and aims was used. As the coding progressed, codes describing common experiences were translated into themes. Once themes from each interview were identified, a list of overall themes common across the dataset was developed. This phase involved discussing the themes with an independent researcher and reaching a consensus regarding the definition and the composition of each overarching theme by adding and subtracting the subthemes. The final phase of inductive analysis involved selecting participants' quotes to illustrate the identified themes.

The deductive coding was completed using a framework analysis approach (Ritchie & Spencer, 1994). This involved developing a list of all the subthemes that led to the composition of the overarching themes. Following this, the lead researcher and an independent researcher attempted to map these themes to the four constructs of the NPT.

Reflexivity

None of the participants knew the lead researcher prior to the interviews. The lead researcher has a previous experience of working in CMHTs in the NHS and in the past has used CBT with people experiencing psychosis. This provided the researcher with an insight into barriers and facilitators to CBTp implementation. Additionally, the lead researcher completed a systematic review of the literature concerning the implementation of CBTp, which might have influenced their interpretation when generating codes and themes. Potential sources of bias to data interpretation were discussed in research supervision before the data collection and an independent researcher was involved in data synthesis to minimise the risk of bias. A

reflective log was kept during the data collection process to reflect on sources of bias during interviews with participants.

Results

Inductive thematic analysis of participants' experiences of CBTp implementation resulted in five overarching themes. Table 1 illustrates the subthemes that contributed to the development of each of the overarching theme. Participants' quotations, which illustrate each of the themes are presented. [1]

Perceived barriers to engagement

Symptom severity

Participants referred to their experiences of attempting to implement CBTp. Applying a structured treatment to address psychotic experiences which were chronic in nature meant that recovery was difficult to achieve*:* "…you just know there's these particular really fixed beliefs that have been there for years and years and really there's probably limitations in what we can really do" (Nursing staff, p.5, 105-108). Apart from chronicity, professionals also referred to the severity of psychotic symptoms, such as lack of insight that further hindered the implementation of CBTp: *"*Sometimes it is hard, but it's a battle, is a long battle, because it's whether they're accepting it's their acceptance of their illness as well…" (Nursing staff, p.5, 100). Difficulties managing any potential increase in distress of service users when using CBTp further complicated the implementation: "…the last man that I dealt with, we decided to put a hold to it, because he had reached a point where his tolerance of the distress was as much as he could take" (Occupational Therapist, p.16, 352-354).

[1] In quotations, material that has been omitted is indicated by ellipsis points (...). Words inserted for clarity are represented by square brackets [ ]. Professional background, transcript page and line number are provided for each quotation

Lack of attendance

Service users' motivation to accept the offered sessions affected professionals' capacity to deliver CBTp. For service users who initially engaged with CBTp the difficulty was the lack of consistency in attendance rates and their ability to prevent possible drop outs: "Well someone with psychosis tends to be less inclined to be seen and that's the worry, that they're going under the radar because to have the time to pursue these patients is really difficult" (Consultant Psychiatrist, p.21, 512-514).

Social environment

Professionals reported that social deprivation can determine service users' preferences regarding treatment: "…don't really either see or feel motivated to engage in work that would require some effort. That's not true for everyone but perhaps is a little bit more true in a deprived area" (Consultant Psychiatrist, p.4, 86-88). Family support in the recovery journey of service users was a crucial element in the successful implementation of CBTp: "I think people who tend to do better, tend to be people who got stable family and that support there as well" (Nursing staff, p.14, 311-313). Furthermore, attitudes of peer groups affected service users' lifestyle choices, which impacted on their engagement with services:

> …but a bit like I was saying some of them have quite kind of chaotic life style, so they come in they get a bit better but they go back out and it's just kind of cycle with them so, again to get them to engage it's a bit trickier (Nursing staff, p.14, 269-271).

Contextual barriers to implementation

Lack of resources

An increase in workload was perceived as an indication of reduced resources. This induced a feeling of pressure which affected professionals' perceptions regarding the service's priorities

when working with people with psychosis: "…I would get ripped over the course of not doing their depot [injection] but nothing would happen to my registration if I didn't offer that particular intervention[CBTp] that we know can be as helpful as well" (Nursing staff, p.26, 582-585). A lack of service investment in CBTp not only translated into a reduction in training opportunities but also a lack of provision for supervision and protected time for staff that were already trained: "…lots of people have been training and they never use it because they weren't supervised, there is no formal mechanism for them to have the confidence to try it" (Consultant Psychiatrist, p.27, 664-666). Limited protected time impacted on professionals' confidence when applying CBTp training into clinical practice, thus maintaining the difficulties with implementation: "…I've got some skills in it, but I don't always feel as confident in using them" (Nursing staff, p.3, 63).

Lack of staff awareness of CBTp

Some participants described difficulties in understanding CBTp processes and how they differentiate from a traditional CBT approach: "I am not entirely sure what it is about to be honest, other than I know what CBT is, and I know what psychosis is" (Senior manager, p.11, 251). This limited staff awareness of the potential benefits of CBTp: "I have only been in the team for a year, I don't know how effective CBT is with psychosis because it is not something I've been involved in" (Nursing staff, p.26, 601). A lack of clarity around CBTp reinforced professionals' reluctance to refer people with psychosis, as illustrated by the following quote: "it's no an intervention that springs to mind when a patient comes up and they are discussed" (Nursing staff, p.25, 570).

Difficulties with referral pathways

Increasing demands for other mental health presentations had an impact on referrers' attitudes towards prioritising other patient groups that also needed psychological interventions: "…I think because our services are so overwhelmed with emotional dysregulation [clinical population], these are the patients that are causing the problems and they are the ones that we tend to refer on" (Consultant Psychiatrist, 11.257-259). Various factors such as demand, service targets and resources shaped the referral suitability criteria for psychological interventions for psychosis:

> …when you get small [financial] resource people want to be targeting the people that are most likely to benefit and that's understandable but our patient population like everywhere it's not like that, you know they are not very many patients who will fulfil all these criteria (Consultant Psychiatrist, p.24, 577-581).

Feelings of frustrations and hopelessness emerged when referrals for psychological intervention for psychosis were not successful: "…they were not considered suitable and I suppose I felt just a whole mixture of negative emotions about that" (Consultant Psychiatrist, p.18, 432). This deterred professionals from continuing to refer other people from their caseload: "The problem is that they're saying we probably wouldn't refer cause you know they wouldn't be accepted" (Nursing staff, p.27, 622). As a result, some professionals reported a gradual decline in referrals for CBTp over the years: "…but the referrals still aren't made, although I am not sure.... maybe just these referrals aren't made to the team at all" (CBT therapist, p.13, 283). Additionally, actively seeking referrals for psychosis was a challenging decision as participants reported the importance of meeting service targets:

…we're trying to meet the HEAT target[2], so we would never be going out to create demand; I think that's something we would never do but what we're saying is that the demand that's coming to us is the demand that we're meeting. (Clinical/Counselling Psychologist, p.20, 467-469)

The dominance of the medical model

Participants reported the difficulties of challenging the perceptions of other professionals' regarding the available treatment options in psychosis:

So I suppose it's more trying to help people not to just focus on the medical model; cause I think quite often in crisis especially that initial kind of referral period and the initial appointment they referred; I think quite often we can; we'll look only the medication for helping the person. (Team Leader, p.5, 122-125).

Increase in workload, combined with time restraints reinforced the medical model of psychosis as professionals tended to revert to practices they were more confident in: "Again it comes downs to simply when people are under pressure or busy…..they will just stick with what they usually do rather than implementing change" (Occupational Therapist, p.11,240-242).

Outcome driven services

Limited resources combined with pressure to meet targets meant that professionals had to make decisions about what needed to be prioritised in terms of service investment: "…but the

[2] The HEAT target "Deliver faster access to mental health services by delivering 18 weeks referral to treatment for Psychological therapies from December 2014" was approved by the Scottish Government in November 2010 for inclusion in HEAT from April 2011.

reality is that when you then introduce something else, another bit of the service has to go if there is not an additional investment" (Consultant Psychiatrist, p.18, 430-432). This meant that resources were allocated to interventions with the best evidence base for the least required amount of sessions: "I think there has been a shift in emphasis towards well good evidence, we can help people whose illnesses are shorter in duration" (Consultant Psychiatrist, p.10, 235). The need to achieve outcomes meant that CBTp was offered only to service users with the best chances of benefiting from it: "….but what we've seen is perhaps a move certainly in psychology and perhaps even from other colleagues away from a process model to an outcome model…" (Consultant Psychiatrist, p.4, 100).

Optimisation of the intervention

Increasing professionals' awareness

Increasing competence in CBTp assessment was perceived as something that would help participants decide the suitability for the intervention: "and if we get more information [about] how to assess people properly; if they're suitable for CBT for psychosis, you know" (Nursing staff, p.32, 737). Some participants referred to the benefits of integrating awareness of CBTp at the pre-qualification training: "So the psychiatrist should through their exams and by the end of the training be very clear that they can recognise patients and scenarios in which a CBT approach would be helpful…" (Consultant Psychiatrist, p. 23,533-535).

Supporting clinical leadership

Participants referred to the importance of having professionals with specialised training to promote CBTp: "I don't know it made people, it made everybody in the team think about it, be enthusiastic about it" (Nursing staff, p.12, 272). Personal attributes such as enthusiasm and actively seeking referrals for psychological intervention were also perceived as facilitators to

CBTp: "…I think you need a role or somebody in the position that is driving that forward, somebody with enthusiasm for the intervention, for the principles" (Team Leader, p.24, 574). To ensure the continuity of the implementation, it was important that service structures supported clinical leadership by having a professional role in the assessment and overview of the implementation: "so you need them not to sit in the side or the periphery of the line management structure but to be involved in that and be involved in a kind of central level" (Team Leader, p. 25,592-593). Another aspect of clinical leadership that could facilitate the implementation was the development of referral protocols adapted for CBTp: "…but I suppose maybe kind of the education and how, good they need to be how stable, how well would you need to have them before you can ever consider" (Nursing staff, p.28, 628).

Improving communication

Improving communication in teams was an important facilitator to the implementation of CBTp. Increasing inter-professional dialogues could increase trust and help professionals understand different views and approaches:

> I think, the more we have conversations with each other the more we've got good relationships the more we understand what we should do the better can be for patients and I think it doesn't take much to start affect relationships (Consultant Psychiatrist, p.23, 567-569).

Establishing effective inter-professional relationships could further facilitate collaboration and consistency during the transition of service users from other services: "…if you were lucky enough you would be passing over to someone that's done the PSI training or CBT training then that was great that was brilliant" (Team Leader, p.21, 492-494). Another

aspect of communication and consistency was reflected in having clarity in professional roles: “I think the psychology department think the CPNs are doing that but I don’t think the CPNs know what that is or two feel confident in doing these things, so we’ve got this real gap” (Consultant Psychiatrist, p.9, 210-212).

Positive attitudes to implementation

Perceived benefits to service users

Aspects of CBTp such as formulation were viewed as having a crucial role in engaging service users*:* “So I do think that building a therapeutic rapport and the formulation is useful parts of that approach which is definitely helpful…” (Clinical/Counselling Psychologist, p.10, 220). CBTp was perceived as an approach that empowers recipients and increases the sense of shared responsibility between the therapist and the client: “It is about people feeling empowered to manage their own health, I think CBT allows that self-management and it gives people quite concrete strategies” (Occupational Therapist, p.7,140-142).

Perceived benefits of CBTp to professionals

The benefits of CBTp were not limited only to recipients, but they also expanded to team functioning. The structured approach of CBTp, as well as, the simple language encouraged staff to use it in their clinical practice*:* “I think for me when I try to explain CBT and the kinda I try to explain to the individual I think I feel that most people get the principles of it…” (Team Leader, p.11, 262-263). Formulation was one of the processes of CBTp that was perceived as valuable in increasing inter-professional understanding when working with service users: “….even if they’re just not ready or they don’t want to engage in treatment, but

I think a formulation, is really, really valuable in terms of informing all parts of care not just the psychological treatment" (Consultant Psychiatrist, p.6, 139-141).

Expectations around the efficacy of CBTp

Objective outcomes

Participants referred to their expectations as sources of engagement and motivation in delivering CBTp to service users. In order to evaluate these expectations, it was essential to document outcomes of CBTp: "For example it's not something that I see reported on so I am not aware or getting stats on this number of interventions that we have delivered…" (Senior Manager, p.12, 293). Indicators that CBTp was achieving its purpose involved a reduction in psychosis symptoms, relapse and readmission rates: "From my service perspective you're looking at potentially less referrals to crisis team or less admissions for individuals experiencing psychosis, less kinda erm maybe as well less medication…" (Team Leader, p.26, 628-630).

Subjective outcomes

Using quality of life measures was considered an important aspect of CBTp effectiveness: "…but actually how about; how do we look at it a bit closer and say well what's that person's quality of life like in between the relapse" (Nursing staff, p.35, 812-813). Receiving feedback from the wider network of service users was another way to measure aspects of functioning following a CBTp course: "…and the referrers and carers and that type of thing so you've got feedback from outside people, the person itself and outcome measures" (CBT therapist, p. 25, 579-581). For some participants, subjective measures of success were perceived as stronger reinforcers for continuing to use CBTp: "We can look at studies we hear all the evidence but

ultimately is once you start referring and you see people benefiting or engaging better" (Consultant Psychiatrist, p.23, 555-557).

Framework Analysis

Thirteen out of the 15 subthemes were mapped to the four constructs of the NPT. Given that NPT suggests that these constructs are linked with each other, a continuous cycle representation of deductive coding was selected (see Figure 1). The construct of *coherence* consisted of themes related to professionals' views of CBTp. *Cognitive participation* comprised of themes related to professionals' willingness to support the implementation of CBTp. The construct of *collective action* was mapped to the views that professionals had about organisation level structures that were related to the feasibility of the implementation. Professionals' expectations of implementing CBTp were mapped to the *reflexive monitoring* construct. The two themes which emerged from the inductive analysis and did not match the NPT framework were: i) lack of attendance and ii) social environment. The inter-rater reliability of mapping themes to NPT constructs was 86%.

Discussion

The first aim of this study was to explore the experiences and views of mental health professionals regarding the implementation of CBTp. Five overarching themes consisting of 15 subthemes captured a mixture of barriers and facilitators to CBTp implementation. Overall, participants referred to the lack of provision of CBTp in their teams, which confirms reports from a recent systematic review regarding the low rates of CBTp implementation (Ince et al., 2016). Similar to previous studies (Hazell, Strauss, Cavanagh, & Hayward, 2017b; Prytys et al., 2011) our findings indicate the difficulties that clinicians face when implementing CBTp, which include the severity of symptoms and reported lack of insight of

people with psychosis. In addition, challenges with consistent attendance increased the pessimistic attitudes of professionals regarding the feasibility of recovery and reinforced the lack of implementation. In line with a previous study (Kingdon & Kirschen, 2006) this finding indicates that certain clinical groups might not be offered access to psychological therapies due to a disbelief that they would benefit from them.

Another perceived barrier to engagement, reported in previous studies (Naeem et al., 2016) was related to social factors such as peer and family support. In line with Braehler and Harper (2008), our findings suggest that psychological needs are often overlooked or perceived as secondary when professionals are faced with high caseload and a pressure to achieve treatment targets. Consistent with previous systematic reviews (Berry & Haddock, 2008; Ince et al., 2016) our findings suggest that high caseload, lack of protected time and supervision prevent professionals from implementing CBTp even when training has been provided (Jolley et al., 2012).

The role of clinical leadership is perceived as crucial in facilitating changes in service structures responsible for effective implementation of CBTp, which is corroborated by a recent pilot study (Fornells- Ambrojo et al., 2017). Similar to previous studies (Gray et al., 2017; Jolley et al., 2012), the findings highlight the championing nature that clinical leadership can take in order to facilitate CBTp implementation. This would involve training the current workforce, ensuring protected time is defined in job roles for delivery, in addition to increasing other professionals' awareness of the nature and purpose of CBTp. Interestingly, participants' reports regarding the use of quantitative as well as recovery orientated qualitative outcome measures in measuring the effectiveness of CBTp is supported by the recent shift in developing a CBTp adapted outcome measures (Greenwood et al., 2010) which examine the quality of life and subjective sense of control over symptoms.

The second aim of our study involved adopting a deductive approach utilising the NPT framework to interpret the subthemes generated from inductive coding. The subthemes which were mapped to the construct of *Coherence* suggested mixed views and experiences in the sense-making of CBTp. For example, although participants referred to the positive experiences of using CBTp with clients and teams, findings suggested that the awareness of these benefits was limited across different professional roles. Additionally, the challenges of implementing CBTp with individuals experiencing chronic and severe distress gave rise to the medical approach and further complicated the sense-making process.

According to Hazell et al. (2017b), professionals' lack of belief in the efficacy of CBTp reinforces commissioners' lack of investment in CBTp. Similarly, the lack of *Coherence* in this study might have reinforced the service level barriers which reflected the lack of *Collective Action*. Furthermore, participants perceived the lack of CBTp training and supervision as a consequence of limited service investment. Additionally, the pressure to achieve outcomes and difficulties with referring people for psychological interventions hindered the normalization of CBTp. Interestingly, effective clinical leadership was perceived as an important service level facilitator to overcome such barriers. The construct of the *Cognitive Participation* indicated that participants are willing to support CBTp implementation by increasing the inter-professional communication and consistency. Furthermore, the *Reflexive Monitoring* construct suggests that participants considered important to use a variety of outcome measures to examine the efficacy of CBTp, once it is implemented.

Overall, the framework analysis found support for all of the constructs of the NPT. Participants were willing to support the implementation of CBTp. However, the lack of clarity around the purpose of CBTp among professionals and organisational level barriers seem to impede the wider implementation and normalization of CBTp in teams. The two

subthemes which did not map onto the NPT framework were the perceived difficulties of people with psychosis attending consistently and the impact of the social environment. Although these themes might be related to the lack of *Coherence* and *Cognitive Participation* from the service users/carers side, it was decided not to map them to NPT constructs since these were the perceptions of professionals rather than an experience that service users reported themselves.

Methodological strengths and weaknesses

One of the strengths of this study was the inclusion of professionals from different backgrounds across different levels of seniority. This was in line with NPT which intends to capture a systemic view of implementation processes, involving both individual and collective action. The flexibility in data collection methods increased stakeholders' representation by providing an alternative to participants who did not wish to participate in a focus group and vice versa. To our knowledge, using both inductive and deductive coding was unique in CBTp implementation research. Applying NPT analysis to the subthemes improved our understanding of the interactions between themes which were generated from thematic analysis. To minimise the risk of forcing themes to NPT constructs, inductive coding was completed first.

This study recruited clinicians and managers from one Health board. Thus, the experience and views towards CBTp might vary significantly across different Health boards. Additionally, this study recruited only participants from CMHTs and CTs. This might have limited the generalisability of the findings as specialised services for psychosis, such as Early Intervention (EI) teams might have different experiences regarding the implementation of CBTp. Furthermore, the purposive sampling method in this study might have led to further

biases, as the participants who volunteered in this study might hold specific views about the barriers and facilitators to CBTp implementation. Although attempts to minimise researchers' bias were made, it is possible that researchers' previous knowledge and experience have affected the interpretation of themes. Given the critical realist position of this study, it is plausible that other researchers might have interpreted the data differently and identified different themes.

Implications

The findings of this study have implications for both research and clinical practice. Although we recruited a variety of professionals, we did not compare their views based on their role. Thus, future studies could explore the views and experiences of CBTp implementation based on the different role of professionals in teams. Furthermore, future research could examine the validity of the NPT framework across different samples and psychological interventions. Given that no service users and carers were recruited in this study, future studies could analyse the perspectives of these stakeholder groups using NPT.

In terms of clinical implications, our findings could be used by local managers to understand the several factors that impede the normalization of CBTp in their teams. The use of a theoretical framework could potentially be translated into informing training agendas and improving clinical leadership in teams. It is important to highlight that the findings might only reflect the Scottish context of data collection and commissioning. In particular, the NPT model of implementation in this study might need to be refined when examining funding pathways to reflect the key stakeholders responsible for this in other mental health systems. Based on our findings an effective clinical leadership should operate on an individual level by improving professionals' competence and attitudes towards CBTp. On a service level, clinical leadership should be reflected in defined referral pathways and professional roles in

CBTp. Moreover, our findings regarding the perceived barriers to engagement highlight the role that service users and carers have in the successful implementation of CBTp, such as setting research priorities relevant to their needs, shaping research questions and sharing knowledge to other relevant stakeholders (Gray-Burrows et al., 2018).

Conclusion

To our knowledge, this is the first study, which explores the implementation of CBTp by applying an existing implementation framework. Participants had clarity over their expectations from using CBTp and willingness to support the wider implementation. However, mixed views concerning the benefits and the purpose of CBTp amongst staff hindered the implementation on an individual level. Difficulties of making sense of using CBTp routinely were reflected on a service level by a lack of investment into CBTp, thus maintaining the low rates of implementation. The findings further highlight the importance of strong clinical leadership to address difficulties in sense-making and service investment in CBTp.

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Table 1

Overarching themes and subthemes of thematic analysis

Overarching themes	**Subthemes**
Perceived barriers to engagement	Symptom severity
	Lack of attendance
	Social environment
Contextual barriers to implementation	Lack of resources
	Lack of staff awareness of CBTp
	Difficulties with referral pathways
	The dominance of the medical model
	Outcome driven services
Optimisation of the implementation	Increasing professionals' awareness
	Supporting clinical leadership
	Improving professionals' communication
Positive attitudes to implementation	Perceived benefits to service users
	Perceived benefits to the professionals'
Expectations of implementing CBTp	Objective outcomes
	Subjective outcomes

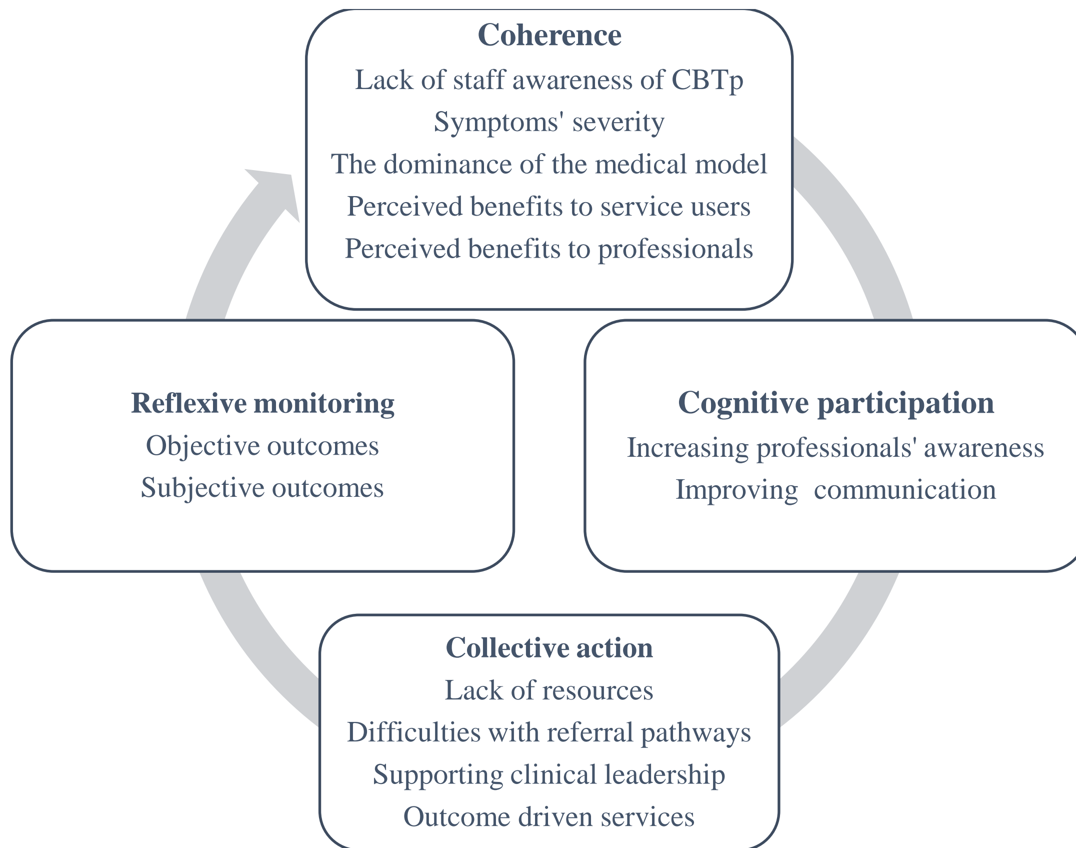

Figure 1. Deductive coding of subthemes using the NPT framework