

Adapting cognitive behaviour therapy for adults with autism: a lived experience-led consultation with specialist psychological therapists

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Abstract

The aim of this study was to investigate, from a lived experience perspective, specialist psychological therapists' views on therapeutic adaptations to cognitive behaviour therapy (CBT) for autism that are most helpful for service users and enable best practice. Psychological therapist participants took part in semi-structured interviews led by a researcher with lived experience of autism. A thematic analysis was carried out. Participants ($n=8$) reported that challenges for service users were *anxiety* about the therapeutic relationship; *communication* difficulties with understanding and being understood; *emotion recognition* difficulties impeding trust and development of the therapeutic relationship; *relationships* with family interfering with the intervention; *information processing* impairments, necessitating a slower pace to the intervention; and *avoidance* of therapy due to anxiety. Goals were *forming relationships* and *building social confidence and skills*. Demographic differences were *age*, with older service users deemed less open to change and younger service users less mature and more often accompanied by family; and *gender*, with female service users deemed more socially able than males. Therapeutic adaptations were to *increase collaboration*; *support emotional literacy*, to help service users understand their own and others' emotions; *focus on special interests*; *use visual prompts*, to improve communication and understanding; *be consistent*, to build trust and reduce anxiety; *accommodate sensory needs*, to reduce anxiety and build engagement; *avoid metaphors*, to reduce communication difficulties; and *use role-play*, to build and enhance social skills. Therefore, adapting CBT may support clinicians and reduce challenges for people with autism, while lived experience perspectives ensure adaptations meet service users' needs.

Key learning aims

- (1) To use a lived experience perspective to explore expert psychological therapists' views of challenges and adaptations when delivering CBT for adults with autism.
- (2) To investigate the benefits of adapting CBT when working with adults with autism.
- (3) To understand the importance of involving people with lived experience in the development and co-production of psychological interventions.

Keywords: ASD; CBT; Co-production; Experts by experience; Psychological therapy; Psychotherapy

Introduction

Individuals with autism are likely to be affected by challenges with communication, social interactions, empathetic reasoning, flexible thinking styles, and other environmental factors (Best *et al.*, 2015; Müller *et al.*, 2008; Zajenowska *et al.*, 2021); and they can be affected by high rates of comorbid mental health conditions, in particular mood and anxiety disorders (Lugo-Marín *et al.*, 2019). Although research has provided support for the effectiveness of psychological interventions for adults with autism (Blainey *et al.*, 2017), this population often struggles to access treatment (Geurts and Jansen, 2012; Camm-Crosbie *et al.*, 2019). The cognitive differences and clinical characteristics of this population mean that there is a need to adapt the method of delivery of psychological interventions, such as cognitive behaviour therapy (CBT) (Weston *et al.*, 2016).

Modified CBT for people with autism involves placing greater emphasis on changing behaviour (rather than cognitions), making rules explicit and explaining their context, language adaptations, and focus on special interests (National Institute for Health Excellence, 2022). Research has highlighted the need for training to increase therapists' ability to implement appropriate adaptations to CBT for people with autism (Cooper *et al.*, 2018) and to identify which adaptations are a requisite for optimising CBT techniques and outcomes in this population (Spain *et al.*, 2015). There is limited research on adapted CBT for adults with autism, especially research that uses qualitative methods, focuses on clinician perspectives, and involves people with lived experience of autism. Involving people with lived experience in the development and co-production of psychological interventions and mental health provision has been shown to lead to services and research that are better at meeting the needs of service users (Cox and Miller, 2021; Gowen *et al.*, 2019; Jose *et al.*, 2020; Thornicroft and Tansella, 2005).

This study used qualitative methods and a researcher with lived experience of autism was involved in all stages of the study. The aim was to investigate the experience of clinicians with expertise in CBT for people with autism to understand what adaptations to CBT are most helpful for their clinical work and enable best practice.

Method

Participants ($n = 8$) were mostly female ($n = 5$); there were six clinical psychologists, one trainee clinical psychologist, and one cognitive behaviour therapist. Participants were clinicians from the National Adult ADHD and Autism Psychology Service in South London. This is a specialist service offering mostly 20 to 40 sessions of adapted CBT for adults with autism. The service employs practitioner psychologists and psychotherapists. Inclusion criteria were that participants had experience delivering CBT for people with autism and had worked in this service. Clinicians from the service were sent an email explaining the study, and if interested, were sent an information sheet and consent form. Once the consent form had been signed, the researcher booked a time and a room to conduct the interview. All participants took part in a one-hour semi-structured face-to-face interview. Interviews were conducted in the same private room in the hospital. All interviews were facilitated by a researcher with lived experience of autism (M.B.).

The researcher with lived experience had received a diagnosis of autism as an adult and had been in contact with the NHS for reasons related to her autism. At the time of her involvement in this study, she was actively volunteering with an autism charity and was a postgraduate student on a clinical placement in the same specialist service in the NHS hospital. The researcher was particularly interested in people's experiences of autism. These experiences led the researcher to develop a profound understanding of the support that is available for people with autism within the NHS and charities, and to want to explore clinicians' views of what support is needed and how it should be provided. This informed the way the researcher with lived experience developed the structure and content of the interviews, so that when the interviews were conducted, she aimed to follow up with ideas about how NHS support is perceived by

adults with autism. Her perspective was informed by her experience of how the NHS and other services might overlook people with autism and neglect to adequately support them.

In this research, the researcher wanted to speak to clinicians to understand this situation from their point of view, i.e. what support is needed and in what way the support is provided. Her aim was to close the gap between her knowledge and experience and that of clinicians; and to find common ground that would inform future clinical support and policies.

Interview questions were designed to explore clinicians' perspectives on their clinical experience of delivering CBT to individuals with autism and on important clinical adaptations to CBT. A topic guide with open-ended questions was developed by co-authors, who included clinicians, academic researchers, and a researcher with lived experience of autism (M.B.). Interview style followed the interview topic guide closely with follow-up questions that were specific to participants' answers. Co-production involved the researcher with lived experience being involved in every stage of the research, from designing the study, to developing the topic guide, booking, and independently conducting the interviews, and carrying out the analysis. This co-production was an essential part of the methodology so that the clinician perspectives were informed by questions that were relevant to an expert by lived experience, as well as the published research. Example interview questions included 'What are the ways to build a therapeutic relationship with a person with autism?', 'What are the most common concerns of an adult with autism?', and 'What adaptations do you make to accommodate people with autism in therapy?'. Interviews were audio recorded, anonymised, and transcribed.

Intelligent verbatim transcription was carried out whereby elements that did not add meaning to the content were omitted, such as ums, errs, and false starts. Transcripts were cleaned (i.e. errors were removed, and transcripts were checked against original recordings). They were analysed using the qualitative software NVivo12 according to the phases of thematic analysis (Braun and Clarke, 2021). These phases involved familiarity with the data, generating initial codes, and developing, defining, reviewing, and naming themes. This framework was chosen as it offers an interpretation of the data, while acknowledging the subjectivity of the researchers' perspectives (i.e. the combination of lived experiences and academic perspectives). Two researchers independently carried out the analysis. An inductive approach was employed to identify and quantify themes, without attempting to fit data into pre-existing theories. An open coding style was used; codes were not pre-determined but developed and modified throughout the coding process. Analysis was regularly discussed between researchers (S.R., M.B., C.F., J.A.) to examine different interpretations of the data and possible ways of grouping codes into themes until consensus was reached.

Themes were organised by researchers under the over-arching categories of *challenges for service users*, *goals for service users*, *demographic differences*, and *therapeutic adaptations*. Themes were reported if they were endorsed by three or more participants. This was an arbitrary threshold decided by the research team. The quotes selected were guided by the principle of authenticity, which suggests that appropriate quotes are reasonably succinct and representative of the dominant patterns in the data (Lingard, 2019). In this study, the term 'adults with autism' is used as this was the preferred term of the researcher with lived experience.

These interview questions about CBT for autism were one half of a larger interview that also included questions about the concept of social time as it relates to autism and a potential mobile phone app to monitor social time. The qualitative data on social time is reported in other research (Riches *et al.*, n.d.).

Results

Table 1 provides details of themes, explanations, and illustrative quotes. All themes represent clinicians' perspectives on their experience of working with adults with autism.

Table 1. Thematic analysis of specialist psychological therapists' experiences of cognitive behaviour therapy with individuals with autism

Theme	Explanation	n (%)	Illustrative quote
Challenges for service users			
Anxiety	Participants reported that service users are often anxious about how clinicians will perceive them, about not knowing what to say, and about not knowing whether the clinician will be supportive. They reported that this anxiety is a significant barrier to the development of trust between service users and clinicians	6 (86)	<i>'I think anxiety is something that we see quite a lot ... anxiety is something that can really get in the way, that kind of worry about interacting, worry about how they'll be perceived, knowing what to say, knowing sort of what the context is in therapy, especially if they have never been in therapy before.'</i> (#4) <i>'The most common concern about coming to therapy ... it's about trust. Often like "are you going to judge me?". And ... social anxiety like "what are you going to think of me?" and "are you going to be a supportive person?".'</i> (#3)
Communication	Participants reported that service users struggle with communication, particularly understanding and being understood by other people, which makes it challenging to develop a trusting therapeutic relationship. Non-verbal communication was highlighted as a particular barrier	6 (86)	<i>'A lot of them [service users] have spoken about not feeling understood, or not knowing if the sessions will be enough to help them, and so not wanting to trust the therapist if there's not going to be something that is going to be useful.'</i> (#1) <i>'I suppose finding it hard to communicate non-verbally, using facial expressions, eye contact, tone of voice. So, it's often kind of hard for the therapist to know what they're communicating.'</i> (#3)
Emotion recognition	Participants reported that service users' difficulty in recognising emotions or describing their own emotions makes sessions challenging. This was linked to service users' feelings of failure and uncertainty	4 (57)	<i>'One of the common things that ... we see in our clinic is alexithymia, which is a common difficulty in which people have difficulty explaining or describing or labelling particular emotions in themselves. And ... when we're thinking about what emotions you feel in any given situation ... I think that can be really hard for people who have ASD.'</i> (#4) <i>'There might also be some alexithymia ... they might not appear to answer questions that I ask and that might be a trigger for them because they're thinking "I can't answer this person's questions ... I must be doing something wrong" or "I'm failing at this" or "I don't know what to do", and so the session itself can become a bit of a live trigger for them.'</i> (#1)
Relationships	Participants reported service users' relationships can be a challenge to therapeutic engagement. They reported that service users may be coerced by family to engage in psychological therapy and that the service user and their family members may disagree about the goals for the intervention	4 (57)	<i>'Other barriers could include, people may not want to come here, but they're being pushed by the family members.'</i> (#1) <i>'I think sometimes there's ... a kind of a bit of a clash between what the family ... wants and what the person wants, and there's a sort of a struggle to know where I'm positioned if I'm going to have communication from parents or family, and ... from the person I'm working with. And I think that can sometimes get in the way if the person feels I'm not working with them. Yes, so there's maybe a difference in the kind of goals.'</i> (#2)

(Continued)

Table 1. (Continued)

Theme	Explanation	n (%)	Illustrative quote
Information processing	Participants reported that service users find information processing challenging and so they slow the pace of their spoken words and the delivery of session content. These adaptations were intended to support the service user with their information processing needs	3 (43)	<i>'I suppose another thing that can be difficult is the pace because that's one of the things that I've really had to adapt ... my understanding is that my usual speed of talking and providing information is just way too fast. So, I think for some people with autism that is really difficult in therapy, as they're not able to process information ... at the same speed as the therapist.'</i> (#6) <i>'I suppose it can take a bit longer for people to understand concepts than typical adults. So, that can be really challenging, could make therapy harder.'</i> (#3)
Avoidance	Participants reported that service users can be avoidant of therapy as a way of coping with anxieties associated with therapy. This avoidance was identified as a maintenance factor that can exacerbate the anxiety in the long-term	3 (43)	<i>'I think sometimes they may have difficulty in being in a room with someone, difficulty contemplating changing things, and I think often there is a bit of an avoidant/coping style, and I guess going to therapy means you are going against that. I think that [avoidance] is often a barrier.'</i> (#2) <i>'Trying to look at perhaps any of the typical maintenance factors that might be exacerbating some of the anxieties, avoidance behaviours may be making the anxiety worse in the longer term.'</i> (#5)
Goals for service users			
Forming relationships	Participants reported that forming meaningful friendships and romantic relationships are common therapeutic goals for service users	6 (86)	<i>'There are goals around socialising, but in a way that is kind of addressing difficulties in socialising. Or socialising and building relationships that are meaningful, I think that's a common goal.'</i> (#2) <i>'I think people's goals for socialising vary, but typical things would be to form friendships, form romantic relationships ...'</i> (#5)
Building social confidence and skills	Participants reported that service users wanted to become more socially confident and build social skills	3 (43)	<i>'I think some of the goals are things like wanting to be more confident in certain situations in order to get out more and socialise more.'</i> (#4) <i>'To ... feel less socially anxious.'</i> (#3) <i>'Think of where the person is or what it is they want to change, by looking at ... what skills might we need ... from a CBT perspective, do some experiments or do some sort of exposure, some practice, to build up the confidence that people can socialise.'</i> (#2)
Demographic differences			
Age	Participants reported that older service users are less open and able to change; while younger service users, although more open to change, can be less mature for their age and more likely to be accompanied to therapy by family members	4 (57)	<i>'I think with the older guys there is a little bit of a difference in terms of thinking about how ingrained their difficulties are, in terms of having a really long history of not being able to build relationships. And it always feels like that's even worse for the older ones because they may have struggled for a really long time.'</i> (#6) <i>'My experience with much older people is that a lot of the beliefs and a lot of the behaviours and routines are much more deeply entrenched. But conversely with younger people I felt there was perhaps ... greater openness and willingness to change.'</i> (#5) <i>'Younger people often present as much younger [that they are], so 20-year-olds often can come across as teenagers ... so you have to adapt that as well. Also, that means that family members may more often come to therapy and be involved.'</i> (#3)

(Continued)

Table 1. (Continued)

Theme	Explanation	n (%)	Illustrative quote
Gender	Participants reported that female service users were often more able to socialise and had better communication skills compared with male service users	4 (57)	<i>'Women with ASD who come to therapy here are often much better at doing the social stuff, the chitchat or the politeness or the kind of bridging gaps.'</i> (#2) <i>'Some of the women I've seen appear more social and overall more sort of able to communicate with other people ... And some of the men are a bit more withdrawn, have a bit more difficulty actually getting themselves out there and socialising.'</i> (#7)
Therapeutic adaptations			
Increase collaboration	Participants reported that they aimed to prioritise a collaborative approach, in particular identifying shared goals, being transparent, sharing the formulation, asking service users' preference, and cultivating an approach of working together	6 (86)	<i>'Trying to understand together what it is the person brings to therapy, the history, and then trying to understand some joint goals because the relationship is really one that collaborates towards goals that a person has agreed to and that you've kind of set up together.'</i> (#2) <i>'Just kind of being quite clear about what I can offer and being transparent, so trying to be really collaborative, so sharing the formulation and building that together and trying to ask the person for their preferences.'</i> (#3) <i>'So the nice thing about it was that it was very collaborative. It very much sort of extinguished this "us and them" aspect to it [therapy]. And I think it was very good for engagement because it made us feel like we were working together.'</i> (#5)
Support emotional literacy	Participants reported that they aimed to support service users understand their emotions and the emotions of other people. Differences in ways of talking about emotions were identified to develop a shared language and understanding	5 (71)	<i>'We have longer length of sessions, say 20 to 25 sessions. And we ... do a lot of emotional literacy stuff at the beginning. So, try to work out what emotions are and how to ... talk about them.'</i> (#3) <i>'There may be differences in how we speak about emotions. So often it's about finding some joint language where you can make sure we're talking about the same thing because if we're not, that might get in the way.'</i> (#2)
Focus on special interests	Participants reported that they allocate extra time to finding out about service users' special interests and hobbies. Their aim was to facilitate therapeutic engagement, build the therapeutic relationship, and foreground service users' strengths and values as a gateway to identifying a suitable intervention.	5 (71)	<i>'One of the things I found most helpful has been finding out about people's interests and kind of using that as a way to build the relationship.'</i> (#6) <i>'Another thing I found particularly useful is finding out from people what their hobbies and interests are, and associate them to what their strengths are ... That can often be useful to harness in an intervention.'</i> (#5) <i>'I would usually have an assessment that is a bit less structured to allow them time to talk about things that are important to them.'</i> (#1)
Use visual prompts	Participants reported that visual prompts, such as drawings, diagrams and written content, improved communication and understanding	4 (57)	<i>'There's something about using different ways of communicating, like writing things on the board or visual materials.'</i> (#2) <i>'Some people might be more visual so we might be doing more kind of drawings or diagrams. Some people might have difficulty with communication so we might be writing things down more.'</i> (#4)
Be consistent	Participants reported that consistency and reliability was helpful to build trust and reduce anxiety	4 (57)	<i>'I think it takes time. And I think it is about building trust. And so I think it's often about being somebody that's consistent and transparent and clear and reliable. So that's how I feel like I might build safety.'</i> (#3) <i>'Structuring my session a bit better, making a really clear focus and agenda for the session, and sticking with one aim for the session as opposed to trying to pack lots in.'</i> (#6)

(Continued)

Table 1. (Continued)

Theme	Explanation	n (%)	Illustrative quote
Accommodate sensory needs	Participants reported that accommodating service users' sensory needs helped to reduce anxiety, improve engagement, and build a therapeutic relationship	3 (43)	<i>'I would also ask them around their sensory sort of sensitivities. "Is this room okay? You feeling hot?", "what about the lights?". And a lot of them are able to say "actually, the lights are bothering me" (#1) 'It could be about meeting their sensory needs if possible, kind of really exploring with them what works. Sometimes where you position yourself in the room, some people ... really just prefer to sit more sideways and, kind of, look together at something at the table. It helps to bring down their anxiety and then they are more able to engage and build a relationship with me.'</i> (#2)
Avoid metaphors	Participants reported that they avoid metaphors and opt for more literal and explicit language to facilitate information processing and to reduce communication difficulties	3 (43)	<i>'There might be kind of things in the communication that we do differently. Not using metaphors might be something, and being more literal in the way that we communicate.'</i> (#4) <i>'Being more explicit about things, the structure, thinking about the language and joint use of language.'</i> (#2)
Use role-play	Participants reported that role-plays were effective exposure therapy to build and enhance social skills. Role-playing allowed service users to practise different types of conversations and to get feedback on how to improve their skills	3 (43)	<i>'Things like role-playing were very effective as a sort of exposure therapy, getting the person to try out different things. Practice and getting feedback from the role-player that they were with.'</i> (#5) <i>'And you might build social skills with a kind of role-play.'</i> (#3) <i>'So some of the work is involving people having to communicate with other people. So, it's all about the adaptations and also having actual role-plays about how to communicate with other people. It can be so nuanced the way conversations are carried out with different people so actually carrying those out with people in the session can be quite helpful.'</i> (#7)

There were six themes in the over-arching category of *challenges for service users*. There was *anxiety* ($n=6$) about how clinicians will perceive them, about not knowing what to say in CBT sessions, and about not knowing whether clinicians will be supportive to their needs. Participants reported that service users experienced *communication* ($n=6$) difficulties with understanding and being understood, particularly with non-verbal communication. They also reported that there were *emotion recognition* ($n=4$) and description difficulties impeding trust and development of the therapeutic relationship. *Relationships* ($n=4$) with others were also identified as a challenge, with family members of people with autism interfering with the intervention. It was reported that family members may be coercing service users to engage in the intervention or disagree about its goals. Participants reported that *information processing* ($n=3$) impairments necessitated a slower pace to their spoken words and delivery of session content. Finally, *avoidance* ($n=3$) of therapy due to anxiety was also identified. Participants reported that this constituted a dysfunctional coping strategy and a maintenance factor exacerbating the anxiety in the longer term.

There were two themes in the *goals for service users* over-arching category. These were *forming relationships* ($n=6$), both friendships and romantic; and *building social confidence and skills* ($n=3$), which involved socialising more and feeling less socially anxious.

There were two themes in the *demographic differences* over-arching category. These were *age* ($n=4$), as participants deemed older service users less open and able to change and younger service users less mature and more often accompanied by family; and *gender* ($n=4$), as participants deemed female service users more socially able, with better communication skills than male service users.

There were six themes in the *therapeutic adaptations* over-arching category. Participants reported that clinicians should *increase collaboration* ($n=6$) by identifying shared goals, being transparent, sharing the formulation, asking service users' preferences, and cultivating an approach of working together. They also felt that clinicians should *support emotional literacy* ($n=5$) to help service users understand their emotions and the emotions of other people, and by identifying a shared language and understanding. Participants also identified the need to *focus on special interests* ($n=5$) in sessions, in order to facilitate therapeutic engagement, build the therapeutic relationship, and foreground service users' strengths and values as a gateway to identifying a suitable intervention. A theme to *use visual prompts* ($n=4$), such as drawings, diagrams and written content, was also identified as a way to improve communication and understanding in sessions. Participants reported that clinicians need to *be consistent* ($n=4$) and reliable to build trust and reduce anxiety; and that they need to *accommodate sensory needs* ($n=3$) to reduce anxiety, improve engagement, and build a therapeutic relationship. It was also recommended that clinicians *avoid metaphors* ($n=3$) and opt for more literal and explicit language to facilitate information processing and reduce communication difficulties; and that they *use role-play* ($n=3$), as a form of exposure therapy to build and enhance social skills and provide feedback.

Discussion

The aim of this study was to use a lived experience perspective to explore expert clinicians' views of therapeutic adaptations and challenges delivering CBT for adults with autism. Findings are consistent with previous research that recommends that CBT for adults with autism should be adapted to meet their needs (Weston *et al.*, 2016) but substantiates these previous research findings with the rich subjective experience of specialists in CBT for autism and the methodology that integrated lived experience. Such adaptations include meeting needs related to engagement, anxiety, difficulties in communication, emotion recognition and information processing difficulties, and highlight the centrality of the therapeutic relationship when

delivering CBT for people with autism (Cooper *et al.*, 2018; Ramsay *et al.*, 2005). Implementing such adaptations is likely to improve therapeutic relationships; and consequently, service users will be more adept at engaging with the specific CBT techniques that comprise the intervention.

Therapeutic relationship building is a key aspect when working with adults with autism. The finding that the therapeutic relationship is likely to be improved by greater accommodation of social skills impairments and associated social anxiety is consistent with previous research that indicates that social skills impairments, such as limited understanding of verbal and non-verbal communication, dramatically increase social anxiety in people with autism, which can impact the development of a therapeutic relationship (Spain *et al.*, 2018). In a similar way, facilitating emotion recognition techniques in adapted CBT for people with autism is likely to benefit both social interactions outside the clinic but also the therapeutic relationship, as service users can gain a better understanding of the topics and questions presented in CBT (Huggins *et al.*, 2020; Müller *et al.*, 2008). Findings indicate that novel therapeutic adaptations, such as supporting emotional literacy, the use of role-play and the use of an idiosyncratic language, may improve communication and social skills and be beneficial in the treatment of challenging behaviours and co-occurring anxiety in both adults and children with autism (Spain and Happé, 2020; Wood *et al.*, 2020).

The CBT adaptations reported are largely consistent with the NICE guidance (National Institute for Health Excellence, 2022) and the diagnostic criteria for autism, such as difficulties with social skills, communication, and labelling emotions (American Psychiatric Association, 2013); so although diagnostic criteria can be controversial (Wakefield, 2016), these findings show that they can represent a useful guide for CBT practitioners who are less experienced in working with people with autism. While findings support the need for adaptations in CBT, it is important to highlight the commonalities of therapy experience and delivery for people with and without autism. Examples of this include worrying about being judged and treated by therapists; the importance of collaboration and tensions with family when people are accompanied to therapy by loved ones; and the vital role played by the therapeutic relationship. Most of these commonalities are consistent with the key elements of CBT for mild to moderate conditions (Fenn and Byrne, 2013), but the findings of this study highlight the need to focus more on certain aspects of CBT.

Strengths of this study are the involvement of a researcher with lived experience of autism, recruitment of expert clinicians in CBT for autism, and the qualitative data on their subjective experience and views on this specialist work. The involvement of a researcher with lived experience ensured that the adaptations identified are more meaningful and better meet the needs of service users. Limitations include the small sample size, limited participant demographic data, and data collection from only one service, which may impact on generalisability of the findings. Both the small sample size and the data collection from a single service reflect the lack of clinicians working in specialist services of CBT for autism. Further demographic information, including previous training and clinical experience, could have been useful to investigate possible differences in clinicians' approaches with service users. It is also important to note that some participants were very experienced therapists with specialist training, which may have influenced the findings and contrast with how psychologists and psychotherapists from other services might approach such adaptations (Cooper *et al.*, 2018).

Clinicians who offer CBT for autism should pay particular attention to the difficulties and goals of each service user and tailor sessions accordingly, while being mindful of demographic factors and associated needs. The findings regarding the role of age and gender in this study highlight the importance of diversity and intersectionality. People's experience and delivery of therapy is shaped by not only the service user having autism, but also by other characteristics of their identity. It is, therefore, important that interventions meet the individual needs of people with autism (Tincani *et al.*, 2009). The researcher with lived experience was particularly interested in these

characteristics; as a woman with autism, the researcher has felt overlooked and excluded, which informed her approach to the study.

Findings of this study indicate that it may be beneficial for clinicians to implement novel therapeutic adaptations, such as supporting emotional literacy and using visual prompts and role-play, to accommodate any service user impairments. These applications should always incorporate consultation with service users and people with lived experience to ensure interventions meet their needs. Virtual reality or immersive environments have been created that help clinicians to understand service user experience (Riches *et al.*, 2019). Such virtual environments could be co-produced with service users to show how some sensory sensitivities, ambiguous social cues, and enjoyment in specific interests can combine in a way that helps people with autism to be different and equal to those around them. These experiences could help train larger groups of clinicians more sustainably as well as increase understanding and validation of service users' experiences.

Research has looked at adapted CBT versus standard CBT for anxiety in autistic children and young people (Wood *et al.*, 2020). Similar studies in adults are needed. The results of this study could provide a basis for a larger, more in-depth qualitative study, that investigates further themes and factors associated with demographics. Outcomes of this study could lead to new approaches for adapted CBT. The current study could also provide a basis for a quantitative study to determine if adapted CBT is associated with better treatment outcomes. As this study highlights that the therapeutic relationship is a key vehicle for engagement and change, and that this is potentially an important factor in any clinical work in autism, a future study might measure relational styles in therapists.

In conclusion, these findings have the potential to support clinicians who work with people with autism and, in turn, improve therapeutic interventions and quality of life for people with autism. They can do so by creating an improved understanding of the therapeutic relationships in the context of autism that is informed by input from those with lived experience.

Key practice points

- (1) Adaptations to CBT have potential to support psychologists and psychotherapists and accommodate service users' impairments, promote therapeutic engagement, and improve the therapeutic relationship.
- (2) Psychologists and psychotherapists who offer CBT for people with autism should pay special attention to the challenges, goals, demographic factors and associated needs of service users.
- (3) Adapting CBT should always include consultation with people with lived experience to ensure the intervention is meaningful and meets their needs.

Further reading

Blainey, S. H., Rumball, F., Mercer, L., Evans, L. J., & Beck, A. (2017). An evaluation of the effectiveness of psychological therapy in reducing general psychological distress for adults with autism spectrum conditions and comorbid mental health problems. *Clinical Psychology and Psychotherapy*, 24, O1474–O1484. <https://doi.org/10.1002/cpp.2108>

Spain, D., Sin, J., Chalder, T., Murphy, D., & Happé, F. (2015). Cognitive behaviour therapy for adults with autism spectrum disorders and psychiatric co-morbidity: a review. *Research in Autism Spectrum Disorders*, 9, 151–162. <https://doi.org/10.1016/j.rasd.2014.10.019>

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References

- American Psychiatric Association** (2013). *Diagnostic and Statistical Manual of Mental Disorders* (5th edn). American Psychiatric Association. <https://doi.org/10.1016/B978-0-12-809324-5.05530-9>
- Best, C., Arora, S., Porter, F., & Doherty, M.** (2015). The relationship between subthreshold autistic traits, ambiguous figure perception and divergent thinking. *Journal of Autism and Developmental Disorders*, 45, 4064–4073. <https://doi.org/10.1007/s10803-015-2518-2>
- Blainey, S. H., Rumball, F., Mercer, L., Evans, L. J., & Beck, A.** (2017). An evaluation of the effectiveness of psychological therapy in reducing general psychological distress for adults with autism spectrum conditions and comorbid mental health problems. *Clinical Psychology and Psychotherapy*, 24, O1474–O1484. <https://doi.org/10.1002/cpp.2108>
- Braun, V., & Clarke, V.** (2021). 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, 37–47. <https://doi.org/10.1002/capr.12360>
- Camm-Crosbie, L., Bradley, L., Shaw, R., Baron-Cohen, S., & Cassidy, S.** (2019). ‘People like me don’t get support’: autistic adults’ experiences of support and treatment for mental health difficulties, self-injury and suicidality. *Autism*, 23, 1431–1441. <https://doi.org/10.1177/1362361318816053>
- Cooper, K., Loades, M. E., & Russell, A.** (2018). Adapting psychological therapies for autism. *Research in Autism Spectrum Disorders*, 45, 43–50. <https://doi.org/10.1016/j.rasd.2017.11.002>
- Cox, L., & Miller, C.** (2021). A qualitative systematic review of Early Intervention in Psychosis service user perspectives regarding valued aspects of treatment with a focus on cognitive behavioural therapy. *the Cognitive Behaviour Therapist*, 14.
- Fenn, K., & Byrne, M.** (2013). The key principles of cognitive behavioural therapy. *InnovAiT: Education and Inspiration for General Practice*, 6, 579–585. <https://doi.org/10.1177/1755738012471029>
- Geurts, H. M., & Jansen, M. D.** (2012). A retrospective chart study: the pathway to a diagnosis for adults referred for ASD assessment. *Autism*, 16, 299–305. <https://doi.org/10.1177/1362361311421775>
- Gowen, E., Poole, D., Baimbridge, P., Taylor, R., Bleazard, T., & Greenstein, A.** (2019). Guidelines for conducting research studies with the autism community. *Autism Policy & Practice*, 2, 29–45. <https://www.openaccessautism.org/index.php/app/article/view/14>
- Huggins, C. F., Donnan, G., Cameron, I. M., & Williams, J. H. G.** (2020). Emotional self-awareness in autism: a meta-analysis of group differences and developmental effects. *Autism*. <https://doi.org/10.1177/1362361320964306>
- Jose, C., George-Zwicker, P., Tardif, L., Bouma, A., Pugsley, D., Pugsley, L., Bélanger, M., Gaudet, J., & Robichaud, M.** (2020). ‘We are the stakeholders with the most at stake’: scientific and autism community co-researchers reflect on their collaborative experience in the CONNECT project. *Research Involvement and Engagement*, 6, 1–15. <https://doi.org/10.1186/s40900-020-00233-2>
- Lingard, L.** (2019). Beyond the default colon: effective use of quotes in qualitative research. *Perspectives on Medical Education*, 8, 360–364. <https://doi.org/10.1007/s40037-019-00550-7>
- Lugo-Marín, J., Magán-Maganto, M., Rivero-Santana, A., Cuellar-Pompa, L., Alviani, M., Jenaro-Rio, C., Díez, E., & Canal-Bedia, R.** (2019). Prevalence of psychiatric disorders in adults with autism spectrum disorder: a systematic review and meta-analysis. *Research in Autism Spectrum Disorders*, 59, 22–33. <https://doi.org/https://doi.org/10.1016/j.rasd.2018.12.004>
- Müller, E., Schuler, A., & Yates, G. B.** (2008). Social challenges and supports from the perspective of individuals with Asperger syndrome and other autism spectrum disabilities. *Autism*, 12, 173–190. <https://doi.org/10.1177/1362361307086664>

- National Institute for Health Excellence** (2022). Autism spectrum disorder in adults : diagnosis and management. NICE Clinical Guidelines, June 2021, 2–44. <https://www.nice.org.uk/guidance/cg142>
- Ramsay, J. R., Brodtkin, E. S., Cohen, M. R., Listerud, J., Rostain, A. L., & Ekman, E.** (2005). ‘Better strangers’: using the relationship in psychotherapy for adult patients with Asperger syndrome. *Psychotherapy*, 42, 483–493. <https://doi.org/10.1037/0033-3204.42.4.483>
- Riches, S., Hammond, N., Bianco, M., Fialho, C., Nicholson, S., & Acland, J.** (n.d.). *Investigating ‘Social Time’ in Autism to Develop a Smartphone App: A Consultation with Specialist Clinicians from a Lived Experience Perspective.*
- Riches, S., Khan, F., Kwieder, S., & Fisher, H. L.** (2019). Impact of an auditory hallucinations simulation on trainee and newly qualified clinical psychologists: a mixed-methods cross-sectional study. *Clinical Psychology and Psychotherapy*, 26, 277–290. <https://doi.org/10.1002/cpp.2349>
- Spain, D., & Happé, F.** (2020). How to optimise cognitive behaviour therapy (cbt) for people with autism spectrum disorders (ASD): a Delphi study. *Journal of Rational-Emotive and Cognitive-Behavior Therapy*, 38, 184–208. <https://doi.org/10.1007/s10942-019-00335-1>
- Spain, D., Sin, J., Chalder, T., Murphy, D., & Happé, F.** (2015). Cognitive behaviour therapy for adults with autism spectrum disorders and psychiatric co-morbidity: a review. *Research in Autism Spectrum Disorders*, 9, 151–162. <https://doi.org/10.1016/j.rasd.2014.10.019>
- Spain, D., Sin, J., Linder, K. B., McMahon, J., & Happé, F.** (2018). Social anxiety in autism spectrum disorder: a systematic review. *Research in Autism Spectrum Disorders*, 52, 51–68. <https://doi.org/10.1016/j.rasd.2018.04.007>
- Thornicroft, G., & Tansella, M.** (2005). Growing recognition of the importance of service user involvement in mental health service planning and evaluation. *Epidemiologia e Psichiatria Sociale*, 14, 1–3.
- Tincani, M., Travers, J., & Boutot, A.** (2009). Race, culture, and autism spectrum disorder: understanding the role of diversity in successful educational interventions. *Research and Practice for Persons with Severe Disabilities*, 34, 81–90. <https://doi.org/10.2511/rpsd.34.3-4.81>
- Wakefield, J. C.** (2016). Diagnostic issues and controversies in DSM-5: return of the false positives problem. *Annual Review of Clinical Psychology*, 12, 105–132. <https://doi.org/10.1146/annurev-clinpsy-032814-112800>
- Weston, L., Hodgekins, J., & Langdon, P. E.** (2016). Effectiveness of cognitive behavioural therapy with people who have autistic spectrum disorders: a systematic review and meta-analysis. *Clinical Psychology Review*, 49, 41–54. <https://doi.org/10.1016/j.cpr.2016.08.001>
- Wood, J. J., Kendall, P. C., Wood, K. S., Kerns, C. M., Seltzer, M., Small, B. J., Lewin, A. B., & Storch, E. A.** (2020). Cognitive behavioral treatments for anxiety in children with autism spectrum disorder: a randomized clinical trial. *JAMA Psychiatry*, 77, 473–484. <https://doi.org/10.1001/jamapsychiatry.2019.4160>
- Zajenowska, A., Rogoza, R., Sasson, N. J., Harvey, P. D., Penn, D. L., & Pinkham, A. E.** (2021). Situational context influences the degree of hostile attributions made by individuals with schizophrenia or autism spectrum disorder. *British Journal of Clinical Psychology*, 60, 160–176. <https://doi.org/10.1111/bjc.12283>

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