Doctoral Thesis

Submitted in partial fulfilment of the Lancaster University Doctorate in Clinical Psychology

Self-Attacking Thoughts, Critical Voices and Suicide in People who Hear Voices

Myles Sammon

August 2024

Doctorate in Clinical Psychology

Division of Health Research

Lancaster University

Word Count

Thesis Section	Main Text	Appendices (including tables, figures, and references)	Total
Thesis Abstract	273	-	273
Systematic Literature Review	7904	13801	15705
Empirical Research Paper	7991	4973	12964
Critical Appraisal	3908	1572	5480
Ethics Documentation	3809	4048	7857
Total	23900	24394	42279

Thesis Abstract

Negative voice content is a key predictor of distress for voice hearers. Understanding how voice hearers experience and cope with negative voice content is key to furthering clinical research and practice. Hearing voices is associated with increased risk of suicidal ideation (SI) and suicidal behaviour (SB). Further work is needed to understand the relationship between negative self-talk, negative voice content, SI and SB in people who hear voices

Section one of this thesis reports a systematic literature review exploring how voice hearers experience and cope with negative voice content. A meta-ethnography synthesised 24 qualtative studies to produce four over-arching themes. The results show that negative voice content often relates to traumatic experiences, negative evaluations from self and others and current fears. This appears to mobilise social rank mentalities and voice hearers often cope through fight or flight mechanisms. Clinical and research implications are discussed.

Section two reports an empirical study that explored the relationships between self-attacking thoughts and SI, and critical voices and SI, in people who hear voices. Additionally, the moderating role of self-compassion in these two relationships and the relationship between predictor variables and SB is explored. Self-attacking thoughts significantly predicted SI severity. Critical voices also significantly predicted SI severity. No significant moderating role of self-compassion was found and self-attacking thoughts or critical voices did not predict SB. Minoritsed gender and entrapment predicted SB. Findings suggest critical voices may be a key factor alongside entrapment in SI for people who hear voices. Clinical and research implications are discussed.

Section three reports a critical appraisal including reflections on key challenges and the rationale for decisions made throughout the research process.

Declaration

This thesis documents research conducted for the Doctorate of Clinical Psychology at the Division for Health Research, Lancaster University. The work presented here is the author's own, except where due reference is made. The work has not been submitted for the award of a higher degree elsewhere.

Name: Myles Sammon

Date: 08.08.2024

Acknowledgments

Thank you to everyone who took the time to take part in my study, and to the moderators of the online groups who supported me to post in their online community spaces. Thanks a million to my research tutors James Kelly and Maike Klein, and my clinical tutor Amy Singleton, who have supported me so well throughout my training. A massive thank you to my teammate and friend Wren Little for your support, and to my friends who have supported me along the way too.

I would like to take this opportunity to thank the Lancaster University Doctorate in Clinical Psychology programme staff and the supervisors and colleagues that I have worked with throughout my training for your time, guidance and education in enabling me to develop both personally and professionally. I also acknowledge the great people I have been so lucky to learn from throughout my education and life as this thesis is another milestone on a long journey.

Thanks a million to Dee for supporting me throughout the doctorate and throughout life. This has been a massive challenge and you have believed in me and supported me every step of the way. Thanks for making sure we have enjoyed the past three years too! Most of all, thanks to my family and especially my Mam and Dad who have given me every opportunity in life and support me all the way.

Table of Contents

Doctorate in Clinical Psychology | Lancaster University

Section One: Systematic Literature Review

How do People Experience Negative Voice Content and how do they Cope? A Meta-Ethnography

Myles Sammon

Doctorate in Clinical Psychology

Division of Health Research, Lancaster University

All correspondence should be sent to:

Myles Sammon

Doctorate in Clinical Psychology

Health Innovation One

Sir John Fisher Drive

Lancaster University

Lancaster

LA1 4AT

Email: m.sammon@lancaster.ac.uk

Prepared for submission to: British Journal of Clinical Psychology (see appendix 1-A for author guidelines)

Abstract

Objectives: Hearing negative voice content is associated with increased distress and a need for clinical care. Although there has been a recent growth in research consulting voice hearers about their perspectives, little is known about how voice hearers experience and cope with negative voice content. This review explores how voice hearers experience and cope with negative voice content, with the aim to highlight gaps in the evidence base relating to clinical psychology practice and research.

Methods: A meta-ethnography synthesised 24 qualitative studies, which were identified through systematic searches across four relevant databases (PsycINFO, MEDLINE, CINHAL, and Web of Science). The translation and synthesis of data followed the seven-step process of meta-ethnography.

Results: The synthesis identified four overarching themes, which were 1) What they say: Insulting, critical and harassing content; 2) When and how they say it: Intentional and strategic voices; 3) The impact of negative voice content, 4) Coping with negative voice content. These themes highlight that hearing negative voice content is a complex and meaningful experience that can be both physically and psychologically harmful. Exploration of negative voice content is a key area for focus for clinical research and practice to support those distressed by voice hearing experiences.

Conclusion: Negative voice content predominantly relates to traumatic experiences, current fears and negative evaluations from self and others. This maintains activation of the threat-protection and social rank (subordinate-dominant) systems. As a result, voice hearers use fight/flight system mechanisms to cope. Clinical and research implications are discussed.

Keywords: Hearing voices; negative voice content; coping with voices

Practitioner Points

- Negative voice content related to the voice hearers specific context and history such as traumatic experiences, current fears and negative evaluations from self and others.
- Negative voice content may serve to maintain activation of social rank mentalities and thereby mobilise the threat-protection system.
- Voice hearers use various coping strategies in response to negative voice content. “Fight or flight” coping strategies appear to be less effective than strategies which promote social connection and compassion.

Introduction

Hearing voices, otherwise referred to as voice-hearing or Auditory Verbal Hallucinations (AVH), relates to hearing a voice without an appropriate external stimulus (Daalman et al., 2011) and affects an estimated 84% of the adult population diagnosed with schizophrenia (Thomas et al., 2004; Arciniegas, 2015). Research has shown that rates of voice hearing in the general population are up to 50 times higher than the prevalence of psychotic disorders (Van Os et al., 2009). This has led researchers to propose that voice hearing and other symptoms of psychosis lie on a continuum from sub-clinical transient symptoms to clinical disorder. Negative voice content has been found to be a key difference separating non-clinical and clinical voice hearers, with more negative content associated with the clinical group and greater voice-related distress (Daalman et al., 2011; Honig et al., 1998; Larøi et al., 2012). Negative voice content has been defined as "speech by voices that a reasonable person would interpret as violating their dignity, or creating an intimidating, hostile, degrading, humiliating or otherwise offensive environment" (Larøi et al., 2019, p. 3). While it is known that hearing voices can be a positive, sometimes meaningful, human experience (Corstens et al., 2014; Johns et al., 2014; Beaven et al., 2011), many people find that hearing voices is an intensely distressing experience that negatively affects their daily functioning and presents a need for therapeutic intervention (Toh et al., 2022). This is supported by research which has linked hearing voices with self-harm and suicide (Bornheimer et al., 2021; Hielscher et al., 2021; Kjelby et al., 2015; Yin et al., 2023). Additionally, hearing voices is associated with a range of other psychiatric diagnoses, including bipolar disorder, personality disorders, post-traumatic stress disorder and eating disorders (Longden et al., 2012, Waters & Fernyhough, 2017). Understanding experiences of negative voice content from first-person perspectives is key to developing psychological interventions for people distressed by this experience (Larøi et al., 2019).

Several intervention strategies for people who experience negative voice content have emerged over the years. The National Institute for Health and Care Excellence (NICE, 2014) guidance for psychosis and schizophrenia recommends adults who experience psychosis are offered

antipsychotic medication, cognitive behavioural therapy (CBT) and family intervention. While antipsychotic medication is effective in reducing psychotic symptoms (including hearing voices), for many people this treatment is not effective (Lally & MacCabe, 2015). Antipsychotic medication has a range of adverse side effects (De Hert et al., 2006; Stroup & Gray, 2018) and up to 50% of people who take antipsychotic medication still experience hallucinations (Pantelis & Barnes, 1996, as cited in Aleman & Larøi, 2011). Additionally, CBT is not always effective for hearing voices as most studies focus on psychosis symptoms more broadly, and not specifically on hearing voices (Thomas et al., 2014). Van der Gaag et al.'s (2014) meta-analysis found CBT for psychosis to be only effective in reducing a symptom-specific measurement (primarily the psychotic symptom rating scale (PSYRATS)). In addition, a range of relational psychotherapeutic approaches to helping voice hearers have also been developed. These are Relating Therapy (Hayward et al., 2017), Hearing Voices Movement-led approaches, such as Making sense of Voices (Romme & Escher, 2000; Steel et al., 2020), Talking with Voices (Longden et al., 2021), and compassionate approaches (Leach et al., 2023), including Compassion Focused Therapy (Heriot-Maitland et al., 2019).

Additionally, understanding and enhancing the coping strategies used by people who hear voices has been studied as an important aspect of psychological intervention for decades (Farhall et al., 2007; Romme et al., 1992; Tarrier et al., 1990). Exploring people's coping strategies and their effectiveness can inform therapeutic work with voice hearers (Hayward et al., 2018). Psychological interventions that focus on developing and practising coping strategies have been found to be a key preference for a transdiagnostic sample of voice hearers when compared with other approaches (Berry et al., 2023). Qualitative studies exploring how people cope with hearing negative voice content from a first-person perspective have not been systematically reviewed.

Given this context, this review will explore how voice hearers experience, and cope with, negative voice content. Negative voice content is a key factor that contributes to the distress and need for support from mental health services for voice hearers. By synthesizing a cross-disciplinary

body of literature, the first aim of this review is to highlight commonalities, differences and limitations in the qualitative literature around voice hearers' experiences and coping strategies. The second aim of this review is to identify gaps in the evidence base around experiencing negative voice content and alert to areas for future development in clinical practice and research.

Methods

Design

Meta-ethnography was employed, as it is an interpretative rather than an aggregative method of synthesis (Noblit & Hare, 1988) and aligns with the overall aim of developing and/or extending the current evidence base around negative voice content. This study followed the guidelines for conducting a meta-ethnography in healthcare research by Sattar et al., (2021) which is based on the original seven-step process of meta-ethnography developed by Noblit and Hare (1998).

For the purpose of this review, coping was defined as: 'the person's cognitive and behavioural efforts to manage the internal and external demands of the person–environment transaction that is appraised as taxing or exceeding the person's resources'" (Bak et al., 2001, p. 453).

Search Strategy

First, a comprehensive search was carried out to address the aims of this review. Peer-reviewed qualitative research utilising a range of methodologies (e.g., Thematic Analysis, Interpretative Phenomenological Analysis, Grounded Theory etc.) were searched, using relevant electronic databases (e.g. EBSCO). Four major databases (PsycINFO, MEDLINE, CINHAL, and Web of Science) were searched to collect articles from a range of disciplines relevant to the research questions. Abstract, title and subject headings were searched by combining three searches containing a wide range of concepts related to voice hearing (Search 1), qualitative research (Search 2) and negative voice content (Search 3) respectively (see Appendix 1-B). Search results were exported to the systematic review programme Rayyan.ai for screening. As presented in Figure 1-1, duplicates were removed and articles were screened. Twenty-six eligible studies were selected for this review. Searches were carried out on the 2nd of November 2023 with no restrictions applied to publication date. Searches were re-run until the final analysis in March 2024, however, no additional studies were identified for inclusion following the initial searches. Eligible studies were limited to studies in the English language.

[Insert Figure 1-1]

Second, initial hits were screened for inclusion using designated exclusion/inclusion criteria. Literature were included if these were 1) peer-reviewed qualitative research which includes first-hand quotations of the experience of hearing negative voice content (as defined by Larøi et al., (2019)), and 2) studies relating to psychosis or other diagnoses where voice-hearing is present. Literature were excluded if these were 1) studies with children and young people under 18 years old, 2) studies with only one participant (e.g. single case-studies), 3) studies which do not include first-hand quotations of the experience of hearing negative voice content which are conceptually or descriptively rich in detail, 4) second-hand accounts of the experience of hearing voices (e.g. family members or carers), 5) not peer-reviewed, 6) using only quantitative methodologies, 7) studies where a method of qualitative analysis is not described, and 8) grey literature or systematic reviews or book chapters. Table 1-1 presents detailed characteristics of each study.

[Insert Table 1-1]

The protocol for this meta-ethnography was pre-registered on PROSPERO (ID: CRD42023471763). The eMERGe guidance for the reporting of meta-ethnography by France et al., (2019) has been utilised in the reporting of this meta-ethnography along with the STARLITE guidelines for the reporting of systematic literature reviews (Page et al., 2021).

Quality Appraisal

The 26 eligible studies were assessed using the Critical Appraisal Skills Programme (CASP) checklist (Critical Appraisal Skills Programme, 2018) in line with recommendations for quality appraisal in meta-ethnography reviews in healthcare research (Sattar et al., 2021). The checklist contains ten items, the first two screening questions followed by eight items designed to appraise the quality of the study. Following the scoring system developed by Duggleby et al., (2010), the next eight items were scored in a three-point system (None or little justification – 1; Can't tell or moderate justification – 2; Item well addressed - 3). As Seen in Table 1-2, two studies received low

quality scores (22 points), three studies received good scores (25-26 points), and 21 studies scored highly (27-30 points). An independent trainee clinical psychologist scored a proportion of the papers and inconsistencies were discussed and resolved. Studies were not excluded based upon their quality appraisal score. Papers of a lower quality were noted and the impact of these studies on the translations and synthesis was monitored so that third-order constructs did not rely heavily on data from low quality studies. This was achieved by considering the study quality alongside other study characteristics when translating the studies into one another. It was found that data from the lower quality studies did not contribute heavily to this process.

[Insert Table 1-2]

Synthesis

The analysis followed the seven-step process outlined by Sattar et al., (2021): 1) getting started, 2) deciding what is relevant to the initial interest, 3) reading the studies, 4) determining how the studies are related, 5) translating the studies into one another, 6) synthesising the translations, and 7) expressing the synthesis.

Meta-ethnography involves the re-interpretation of both the participant quotes (first-order constructs) and primary author interpretations (second-order constructs), using a method of translation and synthesis to create higher order themes (third-order constructs; Sattar et al., 2021). Following completion of the first two stages (as described in the introduction, search strategy and quality appraisal sections), the first author (MS) then read and re-read included literature to extract information about study characteristics (see Table 1-1) and became familiar with the data and key concepts of each study. A data extraction table (see Table 1-3) was then created to record raw data (first- and second-order constructs) and the key concepts present in each study (step 3). To determine how the studies were related (step 4), the relationship between the different concepts were considered along with the study characteristics, which provided the context for each study. Key concepts were compared to identify common and recurring themes. This process was aided by manually writing each key concept on individual pieces of paper and visually moving and clustering

concepts into relevant descriptive categories. These categories formed the basis of the translation. Studies within each category were arranged chronologically and then translated into one another (step 5). This was done by examining and comparing the key concepts and metaphors in each study along with re-referring to the study characteristics table. The translations were then synthesised through a reciprocal process of translation (step 6), which is, as step 7, being presented in the following section. The third-order constructs developed from the reciprocal synthesis process are now referred to as themes and sub-themes.

[Insert Table 1-3]

Results

The meta-ethnography identified four overarching themes: 1) What they say: Insulting, criticising and harassing content, 2) When and how they say it: intentional and strategic voices, 3) The impact of negative voice content, and 4) How people cope with voices. Appendix 1-C presents further data that contributed to each theme.

What They Say: Insulting, Critical and Harassing Content

A common theme was the experience of insulting, critical and harassing negative voice content. Described by one person as "my own little personal bully" (Allison et al., 2020, p. 9), participants often experienced a consistent barrage of insults from their voices. This negative voice content is presented through three sub-themes: 1) Related to Early Trauma, 2) Context Specific, and 3) Critical (Negative Evaluation from Self and Others).

Related to Early Trauma

Many participants understood the insults as relating to abuse or traumatic experiences in their past. For some people, the voice had the identity of a previous perpetrator of abuse. In Kalhovde et al.,'s (2013) Norway based study, a participant describes the voice of a relative who used to bully her, continue to do this through the voice, with the authors noting that the hearer spoke about the perpetrator and the voice interchangeably. Similarly, in a study of voice hearers in India, a participant who was sexually abused by her father continued to hear the voice of her dead father verbally abuse her (Vallath et al., 2018).

In another Scandinavian based study of a cohort of people who had also received diagnoses of psychotic disorders, a prominent theme in the content of the voices was references to experiences of physical, emotional and sexual abuse (Strand et al., 2013). Authors note that in this study some participants connected their voices to the identity of real persons as seen in the studies above. However, they found that the voices were often related to the emotional consequences of abusive relationships rather than directly to the abuser's voice. Similarly, in a USA based study of a primarily African American sample of clinical voice hearers, authors note that voices that insult and

harass the hearer typically started during instances of physical or sexual abuse. For example, voices that told the hearer that they: “deserved what [they] got,” were “whores”, “would never amount to anything and/or never succeed” (Rosen et al., 2017, p. 6). These experiences of harassment negatively affected people in many ways, for example, a voice hearer stopped having sex because of the embarrassment felt by the insults she heard (Vallath et al., 2018), others felt paranoid and isolated (Demjén et al., 2019), and another described how the voice “haunts me day and night, following me and denigrating me” (Cheli et al., 2023, p. 107).

In contrast to the other studies synthesised in this sub-theme, O'Brien-Venus et al., (2023) studied voice hearers recruited from Hearing Voices Network groups and online, rather than mental health services. They aimed to understand the phenomenon of dehumanisation in a sample of participants experiencing distressing voices. Similarly to the clinical voice hearing cohorts, they found that voices made purposeful efforts to “compound trauma in their life, adding an additional layer to the abuse” (O'Brien-Venus et al., 2023, p. 6).

Context Specific

Negative voice content was typically not generic or random, rather it related to the hearer’s specific fears, worries and their contextual environments. McCarthy-Jones et al., (2015) study of voices hearers from clinical and non-clinical settings found that voices “were working diligently and intelligently to upset the hearer” (p. 6). In studies of people accessing mental health services in the UK, participants heard warnings that they would be attacked (Milligan et al., 2013) or that people were going to break into their home “I would panic people would get in the house. And then obviously the voices would kick in and say someone is going to be in the house, someone is going to take this, people are going to do this” (Sheaves et al., 2020, p. 642).

This was also the case for some clinical voice hearers in India, where one participant who felt conflicted around his change of religion felt punished and bothered by different voices who fought and argued on behalf of the different religions in question (Vallath et al., 2018). Craig et al., (2017) recruited people who regularly heard voices from hearing voice networks in the UK to understand

their work-related experiences. They found that it was difficult for workers to maintain attention and process information as voices launched insults that related to the person's specific context and identity. These critical voices exacerbated difficulties at work, often causing participants to doubt their actions:

> Voices one and two were at the foreground shouting at me that I wasn't good enough for this world, that I couldn't do the job, I was a whore etc. At work it was difficult, that day I had to think a lot about difficult cases . . . It is hard to think and hard to concentrate (p. 711).

Critical (Negative Evaluation* from Self and O*thers)

Criticism and insults from voices commonly concerned the hearer's sense of self-worth and their beliefs about how others valued them. Mawson et al., (2011) interpreted voices as seeming to mirror and confirm participant's low sense of self-worth. In other studies that also recruited participants from NHS mental health services, voice content confirmed negative views of the self (Holt & Tickle, 2015) and some participants understood their voices as a way of putting themselves down:

> So what I think now is it was a way of putting myself down but for it to be a voice in my head that no-one else can hear, maybe that was my way of getting it across to us instead of having someone say it face to face (Milligan et al., 2013, p. 114).

Studies that recruited participants from hearing voices groups had similar experiences of consistently critical content. O'Brien-Venus et al., (2023) found some voice hearers felt defeated and exhausted from consistently trying to prove their self-worth in response to the voices. Tiredness was cited by a participant in another study to be particularly detrimental as it could set off a vicious cycle where voice activity with critical content affected sleep but also increased with tiredness "Trying to fall asleep . . . [Voice 1] 'Why are you trying so hard to help yourself? Don't you know that you'll fail, that you're hopeless?'" (Craig et al., 2017, p. 712). Similarly, in studies of clinical voice hearers in the USA and Norway, voice hearers commonly heard voice content telling them not to attempt

activities, as they would not succeed, that they were undeserving and no good. This left voice hearers more isolated and hopeless (Kalhovde et al., 2013; Rosen et al., 2017).

Voices also commonly echoed criticisms from others. Participants from across studies experienced voices that reflected experiences of criticism from early attachment figures. For example, the criticism of a foster parent calling a hearer "lazy" and "no good" (Mawson et al., 2011, p.263), being put down and reminded of the "horrible things" they've done (Strand et al., 2013, p. 110), and re-experiencing the feeling of not measuring up to a parent's expectations (McCarthy-Jones et al., 2015). For some participants who experienced voice content as associated with other people's negative evaluations of them, there was a belief that voices could speak negatively of them to other people "I felt those voices told persons and strangers about me" (Kalhovde et al., 2013, p.1475).

When and How They Say it: Intentional and Strategic

People who heard negative voice content often experienced it as designed to maintain and confirm voice power and control over them. Voices were often perceived to exercise their control through an intentional and strategic plan. This involved voices that controlled the hearer (sub-theme 1), attacked when the hearer was most vulnerable (sub-theme 2), and were capable of causing harm (sub-theme 3).

Controlling

Bogen-Johnston et al., (2019a) study found that for some people, their distress increased as voice power and control increased over time. Some participants related the increase in voice power to more negative content "I think they're worse than when we first met. They've gotten worse over time . . . They, they're more powerful . . . They, they say more negative things. They didn't used to be that negative"(p. 314). Voice's ever-present nature was experienced as intrusive and suffocating. Voice hearers described not feeling free to do what they wanted to do. One participant described having a restrictive "master" whom he had to ask permission from for everyday behaviours such as taking a drink of water (Strand et al., 2013, p. 112). Some participants were frustrated that voices

had this power to be there uninvited which gave them the sense of being all knowing, with little the hearer can do to stop them (Mawson et al., 2011).

Voices took choice away from people “they just heard my decisions, what I want to do, and they do contrary” (O'Brien-Venus et al., 2023, p. 5). Some participants experienced this powerlessness resembled other relationships. In a study of women who heard voices, some women experienced being in a sub-ordinate position to their voices as reflective of women’s position in society (McCarthy-Jones et al., 2015). Allison (2022) studied voice hearer and practitioner interactions to understand how these might influence voice-hearing experiences. Voice hearers often experienced being controlled "[Voices] have always had a hold on me . . . the things that they’ve made me do . . . it was that kind of power that they would have" (p. 6). Sadly, some participants also felt coerced in their relationships with some practitioners, for example, their lack of agency around taking medication.

Voices controlled through further isolating the hearer by engaging in a number of strategies that made disclosure of the experience very difficult. Bogen-Johnston et al., (2019b) studied the barriers and enablers to voice disclosure and found that some voices actively shouted at the participant as they talked about their voices:

> [The voice] was shouting at me at this point. Sort of saying like “Shut up! Don’t say anymore. What are you doing?” sort of thing. But, I just literally couldn’t help it. I felt like I had that little doorway where I could suddenly start shouting out. Sort of telling people what was going on (p. 1311).

For other participants it was the threat of punishment “if they know I’m saying things they’re in charge so I might get in trouble” (Mawson et al., 2011, p.264). Along with punishment through verbal abuse, some hearers experienced voices as taking control of their body. One participant describing an experience of dissociation and watching herself “self-harm” as if “from a window” (Bogen-Johnston et al., 2019a, p. 312). Watkins et al., (2019) found that feelings of fear and shame

related to offensive insults from voices formed a barrier to talking about voices with friends and family:

> I don't think they'd . . . look at it too nicely . . . [PAUSE] . . . they'd, they'd think I was a monster or something like that . . . so, I pull punches really, you know what I mean . . . when it comes to family and that lot (p. 5).

Sly, Sneaky, Attack When Vulnerable

A key aspect of the tormenting nature of voices for some voice hearers was the sense that voices were calculated in not just what they say, but when and how they say it. Negative voices often occurred when the hearer felt more vulnerable. McCarthy-Jones et al., (2015) interpreted women's experiences of abusive relationships or being attacked as negatively affecting their self-esteem leaving them vulnerable to further abuse by voices. Hayward et al., (2015) looked at how the relationship that people in Australia and the UK have with their voices changes over time. The authors found a common theme for many participants was the sense that voices exploited them when they were more stressed or struggling with their mental health "I mean, it's stress… I think like stress is a big one I think for him [the voice], he can like jump on it, it's like someone's in your head and they know when you're vulnerable" (Hayward et al., 2015, p.100). A participant in another study echoes this experience:

> I don't know sometimes if I am in a strong place and I, they don't affect me as badly as other times. But then if I'm down and out and I am feeling particularly weak and vulnerable it's like that's when they will attack (Sheaves et al., 2020, p. 638).

Along with selecting an opportune time to capitalise on vulnerability, Sheaves et al., (2020) found that derogatory and threatening voices also use a range of communicative strategies in order to catch the hearer's attention. Voices "try and be a bit sly and clever about it", with some disappearing only to reappear, while others remained constant. Some voices were "calm and calculated in what they say" and other voices shouted (p. 637). In Milligan et al.,'s (2013) study, a

participant talked about the effects of medication and voices responding with a calculated attack "the medication would make them occur less regularly, like much stronger, you wouldn't expect them, it was like a sneak attack, they would sneak up on you, gives you a fright" (p. 114).

Capable of Harm

Along with causing harm through intentional and strategic verbal abuse, voices were commonly experienced as capable of causing physical harm. This was mostly through commands to self-harm, but some voice hearers also experienced commands to harm others or feared that the voices had the capability of physically harming others.

Studies of clinical voice hearers from across cultures heard voices commanding them to harm themselves. Loue and Sajatovic (2008) study of Puerto Rican women living in the USA who hear voices, found that they experienced frightening commands such as one participant who heard her dead fathers voice commanding her to harm herself "jump out the window, get in front of a car, slash my wrist" (p. 603). Similarly, another voice hearer also based in the USA heard a voice repeatedly tell them to kill themselves (Rosen et al., 2017). Kalhovde et al., (2013) note that several participants had heard voices commanding them to harm themselves "You have to hurt yourself. . . Do it now. . . You're so ugly it doesn't matter if you get uglier" (p. 1474). Many were desperate for a break from the tormenting voices and attempted to end their life. This is also seen in voice hearers receiving clinical support in Italy (Cheli et al., 2023), Brazil (Rufato et al., 2023), Australia (Piesse et al., 2023) and the UK (Holt and Tickle, 2015; Bogen-Johnston et al., 2019a; Sheaves et al., 2020). Studies that recruited participants from outside of mental health services also found voice hearers to receive commands to harm themselves: "They don't really threaten my life anymore, they used to say all sorts of horrible things about you know killing me and cyanide pills and all sorts of weird stuff" (Hayward et al., 2015, p. 100) and "Your life is worthless. You should die. You should kill yourself – or I will" (Craig et al., 2017, p. 712).

Some participants heard commands to harm others, such as one who heard the voice of a "daemon" who "implored her to kill her daughter and then harm herself by drinking a cleaning

product" (Loue and Sajatovic, 2008, p. 603). Sheaves et al., (2020) showed that some people believed that voices were capable of harming others, for example that the voices have a supernatural quality to them. Interestingly, for those who did not fully believe in the validity of the threats, the unknown capability of the voices, and the anticipation of the guilt of not stopping the harm was enough for participants to listen to the distressing content. Sheaves et al., (2021), using the same dataset, highlighted how the fear around voices capability to harm others presented a barrier to disclosure "if I told someone else they would also know, and then the [voices] would try and kill them as well" (p. 346). Similarly, in Kalhovde et al., (2013), a participant heard voices warning that if she disclosed about her voices "people would die, disappear or become seriously ill" (p. 1476). The authors note that her perpetrators said similar things and that for many participants this commanding voice content related to traumatic experiences such as in this example.

The Impact of Negative Voice Content

Negative voice content often resulted in participants being stigmatised, dehumanised, paranoid, and adversely affected relationships and daily functioning. It is important to highlight that participants described a positive post-interpretative reaction to negative voice content in two of the studies reviewed.

Negative Impact

Stigma, paranoia, difficulty concentrating and tiredness were some of the ways that participants experienced negative voice content as negatively affecting their lives. An experience of isolation was a thread that ran through each of these areas.

Participants talked about the voices making them "paranoid" which had an isolating effect on participants "I don't go out. So that is the knock on effect. The voices are keeping me in all the time." (Demjén et al., 2019, p. 22). At times this was due to their voice's warnings: "the voices are telling me people are going to hurt me". At other times, this related to stigma: "it's always been [the voices saying] that everybody else hates you and they don't need you and they think the worst of you" and "you can't trust people" (Sheaves et al., 2021, p. 346).

Negative voice content affected people's ability to maintain relationships "I lost a lot of friends" (McCarthy-Jones et al., 2015, p. 6) and employment (Kalhovde et al., 2013; Craig et al., 2017). It also stopped people from doing things important to them and their sense of identity which O'Brien-Venus et al., (2023) links to contributing to a loss of a sense of self and dehumanisation:

> I cannot do what I feel like, like dancing, it has eliminated me from dancing which was my, which was my hobby and my passion […] it has really diminished my personality […] really affected my character and my reputation (p. 5).

Negative Content but Positive Impact

Bogen-Johnston et al., (2019b) included voice hearers who had experienced first-episode psychosis recruited from Early Intervention in Psychosis services. Authors talk about how despite the negative content of voices, for two participants out of 20, the voices helped them with feelings of isolation and loneliness. Therefore, the thought of losing the voices was also distressing despite the negative voice content. This presented a barrier to disclosing voices as the voice hearer could not risk losing them:

> I never really had many friends. Probably like one or two friends. And [the voice] was constantly there so I regarded it as a friend. Even though it was horrible it was there. And I say, I found myself talking to it and yeah, just I felt . . . scared of losing it (p. 1310).

Strachan et al.,'s (2023) Australian based study of voice hearers who had just completed imagery rescripting (ImR), sought to understand voice hearers' insights about trauma related voices, the factors maintaining these voices and how ImR may influence these factors. The authors interpreted that although the voice content was negative, the voices were experienced by some people as protective and helpful in reducing distress. Some participants understood their voices as internalised perpetrators comments and although they were punishing, they reduced distress, for example, by giving the person a sense of taking power back in some way. A second aspect to the positive post-interpretative reaction to negative voice content was the concept that voices became

controlling due to their positive intentions and “preoccupation with threat”. However, their efforts to deal with these were often “misguided or counterproductive”:

> I guess, she's more so strictly keeping me safe in her own way, but safe is a loose word. Because keeping me safe could be trying to get me to try to hurt myself, try to kill myself, because that would get me help from somewhere else (p. 988).

Coping with Negative Voice Content

People who heard negative voice content coped with this experience in many ways. Socially connecting and seeking help from peers, friends, family, and professionals (sub-theme 1) was generally a positive method of coping with some exceptions present. Participants also commonly coped through ignoring or distracting themselves from negative voices (sub-theme 2). The most prevalent method of coping across the studies synthesised was fighting voices (sub-theme 3).

Socially Connecting and Help-Seeking

A theme from Milligan et al.,’s (2013) study was the importance of relationships and its positive impact on coping. One participant talked positively about his new romantic relationship and spending his spare time thinking about their plans to do things together. The authors note that some participants found openly speaking about their voices as positive to coping. However, other participants had negative experiences of disclosing voices where this led to negative evaluations of them by their family and community. This was a barrier to disclosure for some participants.

Along with connecting in close relationships, the sense of “engaging with the world” more generally by leaving the house more frequently (Sheaves et al., 2021, p. 349) and increasing a sense of belonging in wider society also has a positive effect for some voice hearers: “the more that I was able to leave the house to feel safe again. . . that sort of reintroduction to society meant that I was more kind of socially acceptable” (O'Brien-Venus et al., 2023, p. 7). Seeking support from peers through hearing voices groups and with professionals also had a positive effect for many participants. Bogen-Johnston et al., (2019b) found that participants sought help as the negative

effect of voices increased and their resources to cope with these reduced. Some described the experience of talking about their voice for the first time as helpful "It was explaining it all to you [first author] as well that really helped because it helped me really express it, because I'd never talked to anybody about it before, not in such depth . . ." (Bogen-Johnston et al., 2019a, p. 313).

Participants who had completed ImR described the process of being validated by the clinician as empowering (Strachan et al., 2023). Some participants found speaking to health professionals about voices brought about positive experiences of coping through increasing familiarity and acceptance of voices (Hayward et al., 2015). A hearing voices group in Brazil was helpful for participants in many ways including sharing of helpful coping strategies (Rufato et al., 2023).

Distract or Ignore

People who heard negative voice content often coped by ignoring the voice or distracting themselves. Participants in Mawson et al., (2011) distracted themselves with music when hearing negative voice content but did not when hearing positive voices. Hayward et al., (2015) found ignoring voices as an attempt to gain "respite" from the constant barrage of criticism and harassment from voices. One participant said:

> These things by now called voices, were sort of, one was very critical and like every time, I tried lots of ways to block it out you know because it was, it wants to focus on when things go wrong (p. 103).

Group members of a hearing voices group described a range of strategies of avoidance or distraction to help them to deal with negative voice content such as cleaning the house, going for a walk, reading a book and watching the television on very loud volume "The voices command me! But I remembered Participant 2, he said that to turn them off sometimes he turns on the television very loud, so I turned on the television" (Rufato et al.,'s 2023, p.247).

Battle and Fight the Voices

The most common method of coping with negative voice content found across studies was to fight back against the voices. Demjén et al., (2019) explored the use of metaphor as a signal and determinant of distress for voice hearers and found that the main metaphors used by participants was understanding hearing voices as a physical fight or battle. Hayward et al., (2015) found fighting back against voices to be a common approach voice hearers used to engaging with voices. Most participants in Sheaves et al., (2020) also described confronting their voices "I just thought like fight or flight I just thought I am going to fight these voices, I am not going to allow them to win" (Sheaves et al., 2020, p. 636).

Framing their experiences as a fight with a winner and loser appeared to have detrimental unintended consequences for participants across studies. Crucially, there was evidence that fighting in this way made the voices worse and/or perpetuated the battle "like some kind of spiritual rape…the more I shouted at them the… the louder they got… that was just draining" (McCarthy-Jones et al., 2015, p. 6). This drawn-out battle was exhausting for many "It's like a battle all the time between the voices and feeling well all the time, sometimes it's too hard to cope with and I can't cope with it" (Mawson et al., 2011, p.264), "I feel like lying down, cause I get tired of fighting him" (Demjén et al., 2019, p. 21).

Another result of this was that some participants also experienced "losing" their battle as indicative of weakness. They talked about having a lack of physical strength making them less capable of defending themselves: "I don't have the strength or physical ability to defend myself and it is kind of compounded the fear factor" (Sheaves et al., 2020, p. 642). O'Brien-Venus et al., (2023) found the "failure" to fight voices effectively as weakening a person's sense of agency. This negatively affected their ability to engage in valued aspects of their life and contributed to their experience of dehumanisation, as expressed by participant nine "You have tried everything, every possibility not that you cannot, you cannot achieve it you feel like demoralised you feel low […] you feel less of a human" (p. 6).

Discussion

This meta-ethnography explored how voice hearers experience and cope with negative voice content. Negative voice content most often related to early traumatic experiences, the voice hearer's present context, their sense of self-worth and perceptions of evaluation from others. Voices possessed intimate knowledge of the hearer's life and the hearers often felt harassed and tormented by consistent verbal abuse. Many voice hearers perceived the delivery of this negative content to be part of an intentional strategy to maintain the voice's dominance and control. Voices also targeted attacks during times of vulnerability for the hearer. In addition to causing harm through verbal abuse, voices were capable of physical harm, primarily through commands to self-harm. Negative voice content perpetuated stigma, paranoia, reduced agency and isolated the hearer through consistent coercion. This negatively affected the voice hearer's relationships and daily functioning.

Under this constant sense of threat, people mainly coped with hearing negative voice content through fighting back or by distraction and ignoring the voices. Many voice hearers were locked in a constant battle against the voices. The negative unintended consequences of this coping strategy appeared to outweigh the benefits as the voices fought back stronger. This left many people exhausted and with a sense of failure. Some voice hearers benefited by socially connecting and seeking help from family, friends, professionals, and wider society.

Unsurprisingly, negative voice content found in this review was primarily critical, threatening, insulting, persecutory and commanding as this is typical of the content reported in phenomenological research of voice hearing (Nayani & David, 1996; McCarthy-jones et al., 2014). In addition, the findings that content related directly and indirectly to early traumatic experiences (Larøi et al., 2019; Corstens & Longden 2013) and a distressing subordinate relationship to voices are well established aspects of the voice hearing experience in the literature (Birchwood et al., 2000). Voice hearers perceived each form of negative content as serving a purpose to maintain their subordinate position through intentionally tormenting and subjugating the hearer. This perpetuated

emotional responses of fear and shame. Larøi et al., (2019) proposed several factors that potentially drive negative voice content. A continuing sense of threat is one mediating factor between adverse life experiences and negative voice content identified by Larøi et al., that seems particularly relevant to the present findings.

It is not possible for the findings of this study to provide insights into the potential causal relationship of physical or social threat in hearing negative voices. However, the experiences of voice hearers in the studies reviewed fit within social rank theory understandings of these experiences. Social rank theory posits that just as human brains evolved social motivational systems for caring behaviour, other motivational systems evolved for monitoring dominant-subordinate relationships and social threat. Paul Gilbert termed these innate systems that organise various mind functions (e.g. attention, emotion, cognition, and behaviour) “social mentalities” (Gilbert, 2014). Competitive social mentalities and threat-monitoring systems are likely highly sensitised in people who hear voices due to many people experiencing subordination by a dominant other in childhood (Heriot-Maitland et al., 2019, 2022).

The negative content in this review was context specific, for example, compounding existing fears around personal safety and work-related competency. This is characteristic of hypervigilance to threats in the environment, a common trauma response. This voice content along with commands to self-harm likely results in the continuous activation of the threat-protection system (Heriot-Maitland et al., 2019). Voice hearers described being disempowered, defeated, and entrapped by the prolonged nature of these experiences. This further entrenches these social rank (dominant-subordinate) social mentalities (Heriot-Maitland et al., 2022). In addition, criticisms and insults from voices relating to low self-worth and negative evaluations from others were pervasive. Internalised and external shame was a strong thread throughout Theme 1 with voice hearers hearing that they are, for example, “hopeless”, “no good”, “lazy” or “whores”. Shame is hypothesised to be a key mechanism that signals social threat and “encourages submissive, self-protective behaviours”

(McCarthy-Jones., 2017, p. 6). McCarthy-Jones (2017) offers the tentative hypothesis that this may be the evolutionary reason for hearing voices, i.e. “to facilitate experiences of shame in traumatized people, in order to encourage self-protective behaviours to aid survival” (p.6).

As outlined the consistent and prolonged nature of this experience maintains the activation of the threat system and shapes how the mind’s functions are organised. As a result, the predominate methods of coping seen across studies are strategies characteristic of a threat-protection based “fight-flight” response. Namely, using a confrontational, antagonistic approach to voices or distraction to avoid voices. Voice hearers’ who coped by connecting with others and seeking help such as through hearing voices groups reported better outcomes. This is in line with a recent review that found compassion-informed approaches to coping with hearing voices to be helpful (Leach et al., 2023).

Implications for Clinical Practice

In order to provide the conditions to help voice hearers to use more helpful methods of coping, a therapeutic model needs to help participants move from this threat focussed emotional-motivational system, and into an emotional system characterised by safeness, contentment and positive connection. One of the evolved functions of the caring “soothe” system is to regulate the “threat” system (Gilbert, 2014). Compassion-focussed therapy (CFT) is a biopsychosocial approach that integrates a range of theories including evolutionary, developmental, cognitive-behavioural and social psychology (Gilbert, 2014). CFT may be a particularly helpful therapeutic approach as it helps people to shift between these emotional systems and relate to their voices and themselves through their compassionate self (Heriot-Maitland et al., 2019). CFT has been found to be a helpful intervention for people with distressing voices hearing experiences (Heriot-Maitland et al., 2023; Heriot-Maitland & Levey, 2021; Mayhew & Gilbert, 2008).

Strengths, Limitations and Future Research

A strength of this research is the rigorous systematic approach utilised to collect data for this review. In addition, a large number of studies were synthesised. Sattar et al., (2021) warns that a large number of studies synthesised chronologically can bias the earlier study's influence on the translation and synthesis. Considering study characteristics and context when synthesising the studies mitigated this risk of bias. In this review, it was found that more recent studies contributed more to the synthesis. This may have been influenced by an increase in research that explored this aspect of the voice hearing experience.

A limitation was that the majority of studies were of clinical voice hearing cohorts recruited from mental health services (19 out of 26). This is likely influenced by negative voice content being more prevalent in clinical voice hearing groups and research often carried out within statutory services. As a result, findings may not be generalisable to voice hearers' experiences across the continuum. Culture is hypothesised to impact upon experiences of voice hearing (Larøi et al., 2014; Larøi et al., 2019). All except two studies (Myers et al., 2023; Vallath et al., 2018) included in the review were based in Western countries. Unfortunately, Myers et al.,'s (2023) study did not contribute to the synthesis. Therefore, a limitation of this review was a lack of cultural diversity in the reviewed studies.

This review highlights a need for more research into the experience of hearing negative voice content from across a greater range of cultures. Luhrmann et al., (2015) found that cultural understandings, for example, of the mind, might play a role in shaping negative voice content. Their study gives the example of an Indian and Ghanaian sample being more likely to report a rich relationship with voices compared to an American sample who were more likely to report violent commands. Interestingly, this was not reflected in the Indian study reviewed in this research where negative voice content was thematically similar and reciprocally translated with the western studies. In addition, the majority of studies reviewed did not focus specifically on negative voice content and qualitative studies that focus on understanding this aspect of the experience are needed. Finally,

further research into the effectiveness and feasibility of compassion-focussed approaches such as CFT are warranted.

Conclusion

People often experience negative voice content to be consistent and intentional communication from voices that relates to traumatic experiences, current fears and negative evaluations from self and others. This preserves the subordinate position of the hearer and together maintains the activation of the threat-protection system and social competition “social mentality”. This naturally promotes the use of fight/flight coping mechanisms. However, this generally compounds this exhausting and isolating experience. Findings indicate therapeutic models and coping strategies that promote new ways of relating to voices such as through activation of the affiliate/caring emotional-motivational system may be particularly helpful for people who experience negative voice content.

References

Aleman, A., & Larøi, F. (2011). Insights into hallucinations in schizophrenia: novel treatment approaches. *Expert Review of Neurotherapeutics*, *11*(7), 1007–1015. https://doi.org/10.1586/ern.11.90

Demjén, Z., Marszalek, A., Semino, E., & Varese, F. (2019). Metaphor framing and distress in lived-experience accounts of voice-hearing. *Psychosis*, 11(1), 16-27. https://doi.org/10.1080/17522439.2018.1563626

Duggleby, W., Holtslander, L., Kylma, J., Duncan, V., Hammond, C., & Williams, A. (2010). Metasynthesis of the hope experience of family caregivers of persons with chronic illness. *Qualitative Health Research*, 20(2), 148–158. https://doi.org/10.1177/1049732309358329

Critical Appraisal Skills Programme. (2018). CASP Qualitative Studies Checklist. https://casp-uk.net/casp-tools-checklists/qualitative-studies-checklist/

Allison, R. (2024). A tripartite relationship theory of voice hearing: a grounded theory study. *Psychosis*, *16*(1), 65-77. https://doi.org/10.1080/17522439.2022.2134443

Arciniegas, D. B. (2015). Psychosis. *CONTINUUM: lifelong learning in neurology*, *21*(3), 715-736. https://doi.org/10.1212/01.CON.0000466662.89908.e7

Bak, M., Van Der Spil, F., Gunther, N., Radstake, S., Delespaul, P., & Van Os, J. (2001). Maastricht Assessment of Coping Strategies (MACS-I): a brief instrument to assess coping with psychotic symptoms. *Acta Psychiatrica Scandinavica*, *103*(6), 453-459. https://doi.org/10.1034/j.1600-0447.2001.00324.x

Beavan, V., Read, J., & Cartwright, C. (2011). The prevalence of voice-hearers in the general population: a literature review. *Journal of Mental Health*, *20*(3), 281-292. https://doi.org/10.3109/09638237.2011.562262

Berry, C., Baloc, A. I., Fowler, D., Jones, A. M., Hazell, C. M., & Hayward, M. (2023). The psychological therapy preferences of patients who hear voices. *Psychosis*, *15*(1), 1-16. https://doi.org/10.1080/17522439.2022.2095000

Birchwood, M., Meaden, A., Trower, P., Gilbert, P., & Plaistow, J. (2000). The power and omnipotence of voices: subordination and entrapment by voices and significant others. *Psychological medicine*, *30*(2), 337–344. https://doi.org/10.1017/s0033291799001828

Bogen-Johnston, L., de Visser, R., Strauss, C., & Hayward, M. (2019a). "It's just a bit like a rollercoaster": a longitudinal qualitative study exploring a model of the phases of voice hearing. *Psychosis*, *11*(4), 308-318. https://doi.org/10.1080/17522439.2019.1632375

Bogen-Johnston, L., de Visser, R., Strauss, C., Berry, K., & Hayward, M. (2019b). "That little doorway where I could suddenly start shouting out": Barriers and enablers to the disclosure of distressing voices. *Journal of health psychology*, *24*(10), 1307-1317. https://doi.org/10.1177/1359105317745965

Bornheimer, L. A., Hong, V., Li Verdugo, J., Fernandez, L., & King, C. A. (2021). Relationships between hallucinations, delusions, depression, suicide ideation, and plan among adults presenting with psychosis in psychiatric emergency care. *Psychosis*, 14(2), 109–119. https://doi.org/10.1080/17522439.2021.1912815

Thomas, P., Bracken, P., & Leudar, I. (2004). Hearing voices: A phenomenological-hermeneutic approach. *Cognitive neuropsychiatry,* 9(1-2), 13-23. https://doi.org/10.1080/13546800344000138

Cheli, S., Petrocchi, N., & Cavalletti, V. (2023). Hearing divine voices: a qualitative enquiry about criticism, connectedness, and compassion. *Psychosis*, *15*(1), 100-111. https://doi.org/10.1080/17522439.2021.2011387

Corstens, D., & Longden, E. (2013). The origins of voices: links between life history and voice hearing in a survey of 100 cases. *Psychosis*, *5*(3), 270-285. https://doi.org/10.1080/17522439.2013.816337

Corstens, D., Longden, E., McCarthy-Jones, S., Waddingham, R., & Thomas, N. (2014). Emerging perspectives from the hearing voices movement: implications for research and practice. *Schizophrenia bulletin*, *40*(Suppl_4), S285-S294. https://doi.org/10.1093/schbul/sbu007

Craig, L., Cameron, J., & Longden, E. (2017). Work-related experiences of people who hear voices: An occupational perspective. *British journal of occupational therapy*, *80*(12), 707-716. https://doi.org/10.1177/0308022617714749

Daalman, K., Boks, M. P., Diederen, K. M., de Weijer, A. D., Blom, J. D., Kahn, R. S., & Sommer, I. E. (2011). The same or different? A phenomenological comparison of auditory verbal hallucinations in healthy and psychotic individuals. *The Journal of clinical psychiatry*, *72*(3), 18878. https://doi.org/10.4088/JCP.09m05797yel

De Hert, M. A., van Winkel, R., Van Eyck, D., Hanssens, L., Wampers, M., Scheen, A., & Peuskens, J. (2006). Prevalence of the metabolic syndrome in patients with schizophrenia treated with antipsychotic medication. *Schizophrenia research*, *83*(1), 87-93. https://doi.org/10.1016/j.schres.2005.12.855

De Jager, A., Rhodes, P., Beavan, V., Holmes, D., McCabe, K., Thomas, N., ... & Hayward, M. (2016). Investigating the lived experience of recovery in people who hear voices. *Qualitative health research*, *26*(10), 1409-1423. https://doi.org/10.1177/1049732315581602

Denno, P., Wallis, S., Caldwell, K., Ives, J., Wood, S. J., Broome, M. R., ... & Upthegrove, R. (2022). Listening to voices: understanding and self-management of auditory verbal hallucinations in young adults. *Psychosis*, *14*(3), 281-292. https://doi.org/10.1080/17522439.2021.1964583

Farhall, J., Greenwood, K. M., & Jackson, H. J. (2007). Coping with hallucinated voices in schizophrenia: a review of self-initiated strategies and therapeutic interventions. *Clinical Psychology Review*, *27*(4), 476-493. https://doi.org/10.1016/j.cpr.2006.12.002

France, E. F., Cunningham, M., Ring, N., Uny, I., Duncan, E. A., Jepson, R. G., ... & Noyes, J. (2019). Improving reporting of meta-ethnography: the eMERGe reporting guidance. *BMC medical research methodology*, *19*, 1-13. https://doi.org/10.1186/s12874-018-0600-0

Gilbert, P. (2014). The origins and nature of compassion focused therapy. *British journal of clinical psychology*, *53*(1), 6-41. https://doi.org/10.1111/bjc.12043

Hayward, M., Awenat, Y., McCarthy Jones, S., Paulik, G., & Berry, K. (2015). Beyond beliefs: A qualitative study of people's opinions about their changing relations with their voices. *Psychosis*, *7*(2), 97-107. https://doi.org/10.1080/17522439.2014.926388

Hayward, M., Edgecumbe, R., Jones, A. M., Berry, C., & Strauss, C. (2018). Brief coping strategy enhancement for distressing voices: an evaluation in routine clinical practice. *Behavioural and Cognitive Psychotherapy*, *46*(2), 226-237. https://doi.org/10.1017/S1352465817000388

Hayward, M., Jones, A. M., Bogen-Johnston, L., Thomas, N., & Strauss, C. (2017). Relating therapy for distressing auditory hallucinations: a pilot randomized controlled trial. *Schizophrenia research*, *183*, 137-142. https://doi.org/10.1016/j.schres.2016.11.019

Heriot-Maitland, C., & Levey, V. (2021). A case report of compassion-focused therapy for distressing voice-hearing experiences. ***Journal of Clinical Psychology*****,** ***77*****(8), 1821-1835. https://doi.org/10.1002/jclp.23211**

Heriot-Maitland, C., McCarthy-Jones, S., Longden, E., & Gilbert, P. (2019). Compassion focused approaches to working with distressing voices. ***Frontiers in psychology*****,** ***10*****, 152. https://doi.org/10.3389/fpsyg.2019.00152**

Heriot-Maitland, C., Gumley, A., Wykes, T., Longden, E., Irons, C., Gilbert, P., & Peters, E. (2023). A case series study of compassion-focused therapy for distressing experiences in psychosis. ***British Journal of Clinical Psychology*****,** ***62*****(4), 762-781. https://doi.org/10.1111/bjc.12437**

Heriot-Maitland, C., Wykes, T., & Peters, E. (2022). Trauma and social pathways to psychosis, and where the two paths meet. ***Frontiers in Psychiatry*****,** ***12*****, 804971. https://doi.org/10.3389/fpsyt.2021.804971**

Hielscher, E., DeVylder, J., Hasking, P., Connell, M., Martin, G., & Scott, J. G. (2021). Can't get you out of my head: Persistence and remission of psychotic experiences in adolescents and its association with self-injury and suicide attempts. ***Schizophrenia Research*****, 229, 63-72. https://doi.org/10.1016/j.schres.2020.11.019**

Holt, L., & Tickle, A. (2015). "Opening the curtains": How do voice hearers make sense of their voices?. ***Psychiatric Rehabilitation Journal*****,** ***38*****(3), 256. https://doi.org/10.1037/prj0000123**

Honig, A., Romme, M. A., Ensink, B. J., Escher, S. D., Pennings, M. H., & DEVRIES, M. W. (1998). Auditory hallucinations: a comparison between patients and nonpatients. ***The Journal of nervous and mental disease*****,** ***186*****(10), 646-651. https://doi.org/10.1097/00005053-199810000-00009**

Johns, L. C., Kompus, K., Connell, M., Humpston, C., Lincoln, T. M., Longden, E., ... & Larøi, F. (2014). Auditory verbal hallucinations in persons with and without a need for care. *Schizophrenia bulletin*, *40*(Suppl_4), S255-S264. https://doi.org/10.1093/schbul/sbu005

Kalhovde, A. M., Elstad, I., & Talseth, A. G. (2013). Understanding the experiences of hearing voices and sounds others do not hear. *Qualitative health research*, *23*(11), 1470-1480. https://doi.org/10.1177/1049732313507502

Kjelby, E., Sinkeviciute, I., Gjestad, R., Kroken, R. A., Løberg, E. M., Jørgensen, H. A., ... & Johnsen, E. (2015). Suicidality in schizophrenia spectrum disorders: the relationship to hallucinations and persecutory delusions. *European psychiatry*, 30(7), 830-836. https://doi.org/10.1016/j.eurpsy.2015.07.003

Lally, J., & MacCabe, J. H. (2015). Antipsychotic medication in schizophrenia: a review. *British medical bulletin*, *114*(1), 169-179. https://doi.org/10.1093/bmb/ldv017

Larøi, F., Luhrmann, T. M., Bell, V., Christian Jr, W. A., Deshpande, S., Fernyhough, C., ... & Woods, A. (2014). Culture and hallucinations: overview and future directions. *Schizophrenia bulletin*, *40*(Suppl_4), S213-S220. https://doi.org/10.1093/schbul/sbu012

Larøi, F., Sommer, I. E., Blom, J. D., Fernyhough, C., Ffytche, D. H., Hugdahl, K., Johns, L. C., McCarthy-Jones, S., Preti, A., Raballo, A., Slotema, C. W., Stephane, M., & Waters, F. (2012). The characteristic features of auditory verbal hallucinations in clinical and nonclinical groups: state-of-the-art overview and future directions. *Schizophrenia bulletin*, *38*(4), 724–733. https://doi.org/10.1093/schbul/sbs061

Larøi, F., Thomas, N., Aleman, A., Fernyhough, C., Wilkinson, S., Deamer, F., & McCarthy-Jones, S. (2019). The ice in voices: Understanding negative content in auditory-verbal

hallucinations. *Clinical psychology review*, *67*, 1-10. https://doi.org/10.1016/j.cpr.2018.11.001

Leach, H., Kelly, J., & Parry, S. (2023). Compassion-informed approaches for coping with hearing voices: literature review and narrative synthesis. *Psychosis*, 1-11. https://doi.org/10.1080/17522439.2023.2253883

Longden, E., Corstens, D., Morrison, A. P., Larkin, A., Murphy, E., Holden, N., ... & Bowe, S. (2021). A treatment protocol to guide the delivery of dialogical engagement with auditory hallucinations: Experience from the talking with voices pilot trial. *Psychology and Psychotherapy: Theory, Research and Practice*, *94*(3), 558-572. https://doi.org/10.1111/papt.12331

Loue, S., & Sajatovic, M. (2008). Auditory and visual hallucinations in a sample of severely mentally ill Puerto Rican women: An examination of the cultural context. *Mental Health, Religion & Culture, 11*(6), 597–608. https://doi.org/10.1080/13674670701795971

Luhrmann, T. M., Padmavati, R., Tharoor, H., & Osei, A. (2015). Differences in voice-hearing experiences of people with psychosis in the USA, India and Ghana: interview-based study. *The British Journal of Psychiatry*, *206*(1), 41-44. https://doi.org/10.1192/bjp.bp.113.139048

Mawson, A., Berry, K., Murray, C., & Hayward, M. (2011). Voice hearing within the context of hearers' social worlds: An interpretative phenomenological analysis. *Psychology and Psychotherapy: Theory, Research and Practice*, *84*(3), 256-272. https://doi.org/10.1348/147608310X524883

Mayhew, S. L., & Gilbert, P. (2008). Compassionate mind training with people who hear malevolent voices: A case series report. *Clinical Psychology & Psychotherapy: An*

International Journal of Theory & Practice, ***15***(2), 113-138. https://doi.org/10.1002/cpp.566

McCarthy-Jones, S. (2017). Is shame hallucinogenic?. ***Frontiers in psychology***, ***8***, 1310. https://doi.org/10.3389/fpsyg.2017.01310

McCarthy-Jones, S., Castro Romero, M., McCarthy-Jones, R., Dillon, J., Cooper-Rompato, C., Kieran, K., ... & Blackman, L. (2015). Hearing the unheard: an interdisciplinary, mixed methodology study of women's experiences of hearing voices (auditory verbal hallucinations). ***Frontiers in Psychiatry***, ***6***, 181. https://doi.org/10.3389/fpsyt.2015.00181

McCarthy-Jones, S., Trauer, T., Mackinnon, A., Sims, E., Thomas, N., & Copolov, D. L. (2014). A new phenomenological survey of auditory hallucinations: evidence for subtypes and implications for theory and practice. ***Schizophrenia bulletin***, ***40***(1), 231-235. https://doi.org/10.1093/schbul/sbs156

Thomas, N., Hayward, M., Peters, E., van der Gaag, M., Bentall, R. P., Jenner, J., Strauss, C., Sommer, I. E., Johns, L. C., Varese, F., García-Montes, J. M., Waters, F., Dodgson, G., & McCarthy-Jones, S. (2014). Psychological therapies for auditory hallucinations (voices): current status and key directions for future research. ***Schizophrenia bulletin***, 40 Suppl 4(Suppl 4), S202–S212. https://doi.org/10.1093/schbul/sbu037

Milligan, D., McCarthy-Jones, S., Winthrop, A., & Dudley, R. (2013). Time changes everything? A qualitative investigation of the experience of auditory verbal hallucinations over time. ***Psychosis***, ***5***(2), 107-118. https://doi.org/10.1080/17522439.2012.667438

Nayani, T. H., & David, A. S. (1996). The auditory hallucination: a phenomenological survey. ***Psychological medicine***, 26(1), 177-189. https://doi.org/10.1017/S003329170003381X

Myers, N., Mollel, E. L., Pauselli, L., Chacon, M., & Compton, M. (2023). Maasai women hearing voices: implications for global mental health. ***Transcultural Psychiatry*****, 13634615221111628. https://doi.org/10.1177/13634615221111628**

National Institute for Health and Care Excellence (NICE). (2014). ***Psychosis and schizophrenia in adults: prevention and management*** **[NICE guideline CG178]. https://www.nice.org.uk/guidance/cg178**

Noblit, G. W., & Hare, R. D. (1988). ***Meta-ethnography: Synthesizing qualitative studies*** **(Vol. 11). sage.**

O'Brien-Venus, B., Jenkins, T., & Chadwick, P. (2023). Self-dehumanisation in voice hearers: the end of a continuum. ***Frontiers in Psychiatry*****,** ***14*****, 1173380. https://doi.org/10.3389/fpsyt.2023.1173380**

Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., ... & Moher, D. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. ***Bmj*****,** ***372*****. https://doi.org/10.1186/s13643-021-01626-4**

Pantelis, C., & Barnes, T. R. E. (1996). Drug strategies and treatment-resistant schizophrenia. ***Australian and New Zealand Journal of Psychiatry*****,** ***30*****(1), 20–37. https://doi.org/10.3109/00048679609076070**

Piesse, E., Paulik, G., Mathersul, D., Valentine, L., Kamitsis, I., & Bendall, S. (2023). An exploration of the relationship between voices, dissociation, and post-traumatic stress disorder symptoms. ***Psychology and Psychotherapy: Theory, Research and Practice*****,** ***96*****(4), 1015-1028. https://doi.org/10.1111/papt.12493**

Romme, M. & Escher, S. (2000). Making Sense of Voices. London: Mind.

Romme, M. A. J., Honig, A., Noorthoorn, E. O., & Escher, A. D. M. A. C. (1992). Coping with hearing voices: An emancipatory approach. *The British Journal of Psychiatry*, *161*(1), 99-103. https://doi.org/10.1192/bjp.161.1.99

Rosen, C., Jones, N., Longden, E., Chase, K. A., Shattell, M., Melbourne, J. K., ... & Sharma, R. P. (2017). Exploring the intersections of trauma, structural adversity, and psychosis among a primarily African-American sample: a mixed-methods analysis. *Frontiers in psychiatry*, *8*, 57. https://doi.org/10.3389/fpsyt.2017.00057

Rufato, L. S., Corradi-Webster, C. M., Reis, G., Bien, C., Davidson, L., Bellamy, C., & Costa, M. (2023). Strategies for the Management of Voices Shared in a Brazilian Hearing Voices Group. *Psychiatric Quarterly*, *94*(2), 243-254. https://doi.org/10.1007/s11126-023-10032-z

Sattar, R., Lawton, R., Panagioti, M., & Johnson, J. (2021). Meta-ethnography in healthcare research: a guide to using a meta-ethnographic approach for literature synthesis. *BMC health services research*, *21*, 1-13. https://doi.org/10.1186/s12913-020-06049-w

Sheaves, B., Johns, L., Černis, E., Griffith, L., McPin Hearing Voices Lived Experience Advisory Panel, & Freeman, D. (2021). The challenges and opportunities of social connection when hearing derogatory and threatening voices: A thematic analysis with patients experiencing psychosis. *Psychology and Psychotherapy: Theory, Research and Practice*, *94*(2), 341-356. https://doi.org/10.1111/papt.12303

Sheaves, B., Johns, L., Griffith, L., Isham, L., Kabir, T., & Freeman, D. (2020). Why do patients with psychosis listen to and believe derogatory and threatening voices? 21 reasons given by patients. *Behavioural and Cognitive Psychotherapy*, *48*(6), 631-645. https://doi.org/10.1017/S1352465820000429

Steel, C., Schnackenberg, J., Travers, Z., Longden, E., Greenfield, E., Meredith, L., … Corstens, D. (2020). Voice hearers' experiences of the Making Sense of Voices approach in an NHS setting. *Psychosis,* 12(2), 106–114. https://doi.org/10.1080/17522439.2019.1707859

Strachan, L. P., Paulik, G., Roberts, L., & McEvoy, P. M. (2023). Voice hearers' explanations of trauma-related voices and processes of change throughout imagery rescripting: A qualitative exploration. *Psychology and Psychotherapy: Theory, Research and Practice*, *96*(4), 982-998. https://doi.org/10.1111/papt.12491

Strand, J., Olin, E., & Tidefors, I. (2015). 'I divide life into different dimensions, one mental and one physical, to be able to handle life, you know?'Subjective accounts of the content of psychotic symptoms. *Clinical Psychology & Psychotherapy*, *22*(2), 106-115. https://doi.org/10.1002/cpp.1872

Stroup, T. S., & Gray, N. (2018). Management of common adverse effects of antipsychotic medications. *World Psychiatry*, *17*(3), 341-356. https://doi.org/10.1002/wps.20567

Tarrier, N., Harwood, S., Yusopoff, L., Beckett, R., & Baker, A. (1990). Coping strategy enhancement (CSE): a method of treating residual schizophrenic symptoms. *Behavioural and Cognitive Psychotherapy*, *18*(4), 283-293. https://doi.org/10.1017/S0141347300010387

Toh, W. L., Moseley, P., & Fernyhough, C. (2022). Hearing voices as a feature of typical and psychopathological experience. *Nature Reviews Psychology*, *1*(2), 72-86. https://doi.org/10.1038/s44159-021-00013-z

Vallath, S., Luhrmann, T., Bunders, J., Ravikant, L., & Gopikumar, V. (2018). Reliving, replaying lived experiences through auditory verbal hallucinations: Implications on theories and management. *Frontiers in Psychiatry*, *9*, 528. https://doi.org/10.3389/fpsyt.2018.00528

Van der Gaag, M., Valmaggia, L. R., & Smit, F. (2014). The effects of individually tailored formulation-based cognitive behavioural therapy in auditory hallucinations and delusions: a meta-analysis. *Schizophrenia research*, *156*(1), 30-37. https://doi.org/10.1016/j.schres.2014.03.016

Van Os, J., Linscott, R. J., Myin-Germeys, I., Delespaul, P., & Krabbendam, L. J. P. M. (2009). A systematic review and meta-analysis of the psychosis continuum: evidence for a psychosis proneness–persistence–impairment model of psychotic disorder. *Psychological medicine*, *39*(2), 179-195. https://doi.org/10.1017/S0033291708003814

Waters, F., & Fernyhough, C. (2017). Hallucinations: a systematic review of points of similarity and difference across diagnostic classes. *Schizophrenia bulletin*, *43*(1), 32-43. https://doi.org/10.1093/schbul/sbw132

Watkins, S., Gupta, A., & Sanderson, C. (2020). The experience of talking about hearing voices with family, friends, and others. *Psychosis*, *12*(1), 1-10. https://doi.org/10.1080/17522439.2019.1690561

Yin, Y., Tong, J., Huang, J., Tian, B., Chen, S., Tan, S., Wang, Z., Yang, F., Tong, Y., Fan, F., Kochunov, P., Tan, Y., & Hong, L. E. (2023). Auditory Hallucinations, Depressive Symptoms, and Current Suicidal Ideation or Behavior Among Patients with Acute-episode Schizophrenia. *Archives of suicide research : official journal of the International Academy for Suicide Research*, 27(2), 323–338. https://doi.org/10.1080/13811118.2021.1993399

Tables and Figures

Table 1-1: Study Characteristics table

Title	Author (year)	Population	Region or Country	Number of participants	Recruitment method	Data Collection	Methodological approach	Aims
Auditory and visual hallucinations in a sample of severely mentally ill Puerto Rican women: An examination of the cultural context	Loue and Sajatovic (2008)	Puerto Rican women living in the USA with a diagnosis of a mental health condition who have experienced auditory and visual hallucinations	Ohio, USA	53	Recruited through engaging with local organisations, local mental health professionals and distributing flyers	Semi-structured interview and tape-recorded shadowing of daily activity of the participants	Grounded theory	To report findings related to the hallucinatory experiences of Puerto Rican participants in a study designed to examine the cultural and social context of HIV risk in a sample of severely mentally ill Puerto Rican women
Voice hearing within the context of hearers' social worlds: An interpretative phenomenological analysis	Mawson et al., (2011)	People who have heard voices during the past week and who are supported by mental health services	North West England	10	Recruited from NHS mental health services	Semi-structured interview	Interpretative phenomenological analysis (IPA)	To provide a deeper understanding of the interpersonal context of voice hearing by exploring participants' relationships with their voices and other people in their lives

Title	Author (year)	Population	Region or Country	Number of participants	Recruitment method	Data Collection	Methodological approach	Aims
"I divide life into different dimensions, one mental and one physical, to be able to handle life, you know?" Subjective accounts of the content of psychotic symptoms	Strand et al., (2013)	Participants were patients at a psychiatric outpatient unit specialising in psychosis	Sweden	12	Invited by care providers to take part	Semi-structured interview	IPA	To explore how individuals diagnosed with psychosis make sense of the content of their psychotic symptoms
Understanding the experiences of hearing voices and sounds others do not hear	Kalhovde et al., (2013)	People who were hearing or had heard voices that they alone experienced for at least a year and had been diagnosed with a psychotic disorder	Norway	14	Recruited through community-based (five) and outpatient (seven) mental health services	In-depth interviews	Hermeneutic phenomenological approach	To explore the lived experience of hearing voices and sounds that others do not hear in people with mental illness
Time changes everything? A qualitative investigation of the experience of auditory verbal	Milligan et al., (2013)	People who have experienced an episode of psychosis with Auditory	UK	6	Participants were recruited via the local NHS EIP services	Semi-structured interview	IPA	Examine voice-hearers' retrospective accounts of what it is like to live with voices over

Title	Author (year)	Population	Region or Country	Number of participants	Recruitment method	Data Collection	Methodological approach	Aims
hallucinations over time		Verbal Hallucinations (AVH) in the last 12 months who are supported by Early Intervention in Psychosis (EIP) services						time, in order to explore what key themes emerged
Opening the curtains': How do voice hearers make sense of their voices?	Holt and Tickle (2015)	People who hear distressing or have heard distressing voices	UK	8	Theoretical sampling (Not outlined further)	Digitally recorded semi-structured interviews	Grounded theory approach	To explore and develop a tentative theory of how, if at all, voice hearers made sense of the origin and maintenance of voices that cause them distress
Hearing the Unheard: An Interdisciplinary, Mixed Methodology Study of Women's Experiences of Hearing Voices (Auditory Verbal Hallucinations)	McCarthy -Jones et al., (2015)	Women (aged 18-65) with personal experience of voice-hearing	England	8	Recruited through mental health services, the English Hearing Voices Network and a local mental health charity	Semi-structured interview	IPA	To better understand the experiences of women hearing voices today, and to explore how they define their experiences

Title	Author (year)	Population	Region or Country	Number of participants	Recruitment method	Data Collection	Methodological approach	Aims
Beyond beliefs: A qualitative study of people's opinions about their changing relations with their voices	Hayward et al., (2015)	Adults who heard voices	UK and Australia	12	Recruited via Hearing Voices Network groups and UK-based mental health charity Mind	Semi-structured interview	Thematic Analysis	To use qualitative methodology to examine how/if people's relations with their voices changed over time
Investigating the Lived Experience of Recovery in People Who Hear Voices	de Jager et al., (2016)	Adults with current or historical experience of distressing voices who self-identified as recovered or recovering, and have adequate English language skills	Australia	11	Participants were recruited from the Hearing Voices Network NSW (HVNNSW) and the Australian Schizophrenia Research Bank (ASRB)	Semi-structured interview	Narrative analysis	To investigate recovery trajectories, critically appraise, and further develop Romme, Escher, and colleagues' seminal work on recovery from distressing voices
Work-related experiences of people who hear voices: An occupational perspective	Craig et al., (2017)	Adults (aged 18–65 years) who reported that they heard voices regularly, had work experience and were not hospitalised	England	5	Through an advertisement on a voice-hearing support website	Electronic diaries (informed by guidance questions)	A phenomenological approach (thematic analysis)	To understand the work-related experiences of voice-hearers, including the impacts on their working lives and their corresponding

Title	Author (year)	Population	Region or Country	Number of participants	Recruitment method	Data Collection	Methodological approach	Aims
								self-management strategies
Exploring the Intersections of Trauma, Structural Adversity, and Psychosis among a Primarily African-American Sample: A Mixed-Methods Analysis	Rosen et al., (2017)	Voice hearers with clinical diagnoses	Chicago, Illinois, USA	34	The majority of participants were recruited from a public mental health agency, which serves individuals with serious mental illness and significant, established disability	Interviews and focus groups	modified grounded theory approach	The qualitative arm of the study aimed to understand how does qualitative data further inform our understanding of the complex relationships and patterns of past trauma and adversity and symptoms as they unfold over time
Reliving, Replaying Lived Experiences Through Auditory Verbal Hallucinations: Implications on Theories and Management	Vallath et al., (2018)	Experiencing auditory hallucinations and accessing mental health treatment services at a not-for-profit organisation	India	21	Maximum variation purposive sampling technique	Semi-structured interview	Thematic approach	To explore the impact of Negative Life Experiences on the form and content of voices with the premise that they increase stress

Title	Author (year)	Population	Region or Country	Number of participants	Recruitment method	Data Collection	Methodological approach	Aims
								and therefore, vulnerability which can contribute to the experience of voice hearing
'It's just a bit like a rollercoaster': A longitudinal qualitative study exploring a model of the phases of voice hearing	Bogen-Johnston et al., (2019a)	Service users of Early Intervention for Psychosis (EIP) services who were currently hearing voices and had been doing so for the past three months	England	12	Recruited from EIP services (NHS)	Longitudinal (retrospective and prospective) design collecting data through interviews	Thematic Analysis	To address the limitations (of models of recovery in voices due to being based on cross sectional and retrospective accounts) by examining voice hearing across multiple time points to empirically inform an understanding of the phases of voice hearing over time
Metaphor framing and distress in lived-experience accounts of voice-hearing	Demjén et al., (2019)	Voice-hearers with diagnoses of schizophrenia -spectrum disorders	Greater Manchester region, England	10	Recruited from in-patient units, community mental health teams, Early Intervention in	Secondary data from a larger sample of clinical and non-clinical voice-	Linguistic metaphor analysis	Explore the potential role of metaphor as a signal and determinant of distress in first-

Title	Author (year)	Population	Region or Country	Number of participants	Recruitment method	Data Collection	Methodological approach	Aims
					Psychosis services, mental health charities, support groups and independent service providers in the region (e.g. groups affiliated with the Hearing Voices Network)	hearers collected through semi-structured interview		person accounts of voice-hearing by people with schizophrenia diagnoses; To evaluate the application of linguistic methods to identify metaphors that can be used to frame the lived experience of voice hearing
'That little doorway where I could suddenly start shouting out': Barriers and enablers to the disclosure of distressing voices	Bogen-Johnston et al., (2019b)	Service users of Early Intervention for Psychosis (EIP) services who were currently hearing voices and had been doing so for the past three months	England	20	Purposively selected service users from EIP services	Semi-structured interview	Thematic Analysis	Aimed to investigate barriers and enablers to early voice disclosure

Title	Author (year)	Population	Region or Country	Number of participants	Recruitment method	Data Collection	Methodological approach	Aims
The experience of talking about hearing voices with family, friends, and others	Watkins et al., (2019)	Adults who hear voices recruited from community mental health team (CMHT) in England	England	6	recruited from a local Community Mental Health Team(CMHT)	semi-structured interview	IPA	The purpose of this study was to understand individuals' experiences of talking about their voice hearing to people close to them, including family, friends, colleagues, and partners
Why do patients with psychosis listen to and believe derogatory and threatening voices? 21 reasons given by patients	Sheaves et al., (2020)	Patients from Oxford Health NHS Foundation Trust.	England	15	Clinical teams referred patients to author who completed telephone screening	Semi-structured interview	Grounded theory	To learn from patients their reasons for listening to and believing derogatory and threatening voices (DTVs)
The challenges and opportunities of social connection when hearing derogatory and threatening voices: A thematic analysis	Sheaves et al., (2021)	Patients from Oxford Health NHS Foundation Trust.	England	15	Clinical teams referred patients to author who completed telephone screening	Semi-structured interview	Thematic Analysis	The current study sought to build on this literature by learning from patients' experiences of being around people whilst hearing DTVs

Title	Author (year)	Population	Region or Country	Number of participants	Recruitment method	Data Collection	Methodological approach	Aims
with patients experiencing psychosis								
Listening to voices: Understanding and self-management of auditory verbal hallucinations in young adults	Denno et al., (2022)	Young adults who hear voices, with and without a diagnosis of psychosis	England	35	Participants were identified from current caseloads, referral lists and multidisciplinary team meetings, and assessed for eligibility in coordination with their clinical teams. Purposive sampling was employed to seek a range of experiences rather than a statistically representative sample	Qualitative data was generated using in-depth interviews, enriched by diary, photo elicitation and "walking interview" methods. Participants were given diaries and disposable cameras a week before the interview, and asked to make entries about episodes of	Content analysis	This study aimed to explore the first-hand experience of AVH in a cross-diagnostic group of young adults, focussing on their understanding and self-management of the symptom

Title	Author (year)	Population	Region or Country	Number of participants	Recruitment method	Data Collection	Methodological approach	Aims
						AVH, describing the hallucination and their response, and to make photographs they felt represented, or evoked emotions relating to, their experiences		
Voice hearers' explanations of trauma-related voices and processes of change throughout imagery rescripting: A qualitative exploration	Strachan et al., (2023)	Voice hearers who had completed 10–18 weekly ImRs sessions within 4 months prior to recruitment	Australia	10	purposive sampling via the research and evaluation registry of an Australian voices clinic, whereby clients who received ImRs as part of routine clinical practice registered their consent to be	Semi-structured interview	Thematic Analysis	To understand how people describe their trauma-related voices and experiences of change throughout ImRs. In doing so, this study seeks to uncover voice hearers' insights about trauma-related voices, which

Title	Author (year)	Population	Region or Country	Number of participants	Recruitment method	Data Collection	Methodological approach	Aims
					contacted about research			may enhance our understanding of the potential factors that maintain trauma-related voices and how ImRs may influence these factors
A tripartite relationship theory of voice hearing: A grounded theory study	Allison (2022)	Adults with experiences of voice hearing and mental healthcare	UK	15 voice hearers and 18 practitioners (data collected from practitioners not included in this meta-ethnography)	All participants were recruited via key contacts (practitioners) within a local NHS Trust	semi-structured interview (voice hearers) and focus groups (practitioners (not included in this meta-ethnography)	Grounded theory	According to Johnstone and Boyle (2018), evidence regarding emotional distress broadly is informed by a dominant biological narrative concerned with understanding distress at an individual level, with insufficient consideration of broader contexts in which distress is experienced. This study aimed to address this

Title	Author (year)	Population	Region or Country	Number of participants	Recruitment method	Data Collection	Methodological approach	Aims
								through developing a theoretical explanation of voice hearer-practitioner interactions to establish how these might influence voice-hearing experiences
Strategies for the Management of Voices Shared in a Brazilian Hearing Voices Group.	Rufato et al., (2023)	People who heard voices and who are engaged in a hearing voices network group. All participants had received a diagnosis of schizophrenia	Brazil	29	People who were involved in a hearing voices network group in a specialized mental health service context	Recorded 10 meetings of a hearing voices support group	Thematic Analysis	To describe the voice management strategies shared in a hearing voices peer support group within a Brazilian public mental health service
An exploration of the relationship between voices, dissociation, and post-traumatic stress disorder symptoms	Piesse et al., (2023)	Adults who heard voices in the past week	Australia	7	Participants were recruited from the research registry of Perth Voices Clinic (PVC), a	Semi-structured interview	IPA	To address both methodological limitations and theoretical gaps in the literature by employing qualitative

Title	Author (year)	Population	Region or Country	Number of participants	Recruitment method	Data Collection	Methodological approach	Aims
					specialist clinical psychology service for voice hearing			methods to address the research question: what is the nature of the relationship between the voices, dissociation, and PTSD symptoms?
Hearing divine voices: A qualitative enquiry about criticism, connectedness, and compassion	Cheli et al., (2023)	Two samples of people who reported having heard a divine voice in the last three months were recruited: six people diagnosed with a brief psychotic disorder (BPD) who heard the voice during a psychotic episode (Sub-sample A); six	Italy	12	Sub-sample A was recruited through patients who consecutively accessed the first author's mental health centre, while Sub-sample B through a snowball sampling from contacts within local religious communities	semi-structured interview	Content analysis	The present study aimed to qualitatively investigate similarities and differences in the experience of hearing divine voices between people diagnosed with BPD and those who were not

Title	Author (year)	Population	Region or Country	Number of participants	Recruitment method	Data Collection	Methodological approach	Aims
		people who had a religious experience during which they heard the voice (Sub-sample B)						
Maasai women hearing voices: Implications for global mental health.	Myers et al (2023	Maasai women over the age of 18 who reported hearing voices	Northern Tanzania (Maasailand)	28 voice hearers included in qualitative arm of the study	Local project co-ordinator recruited through working with village elders to identify clusters of homes where women lived, who were willing to take part in the study	semi-structured interview	Grounded theory	1) Estimated community prevalence of voice hearing among Maasai women in northern Tanzania; 2) examined any demographic correlates and two specific hypothesized correlates (i.e., psychological stress and potentially traumatic events); and 3) engaged women in semi-structured

Title	Author (year)	Population	Region or Country	Number of participants	Recruitment method	Data Collection	Methodological approach	Aims
								interviews about their everyday lives and the phenomenological experience of voice-hearing
Self-dehumanisation in voice hearers: the end of a continuum	O'Brien-Venus et al., (2023)	Adults who currently heard at least one distressing voice	England	20	Convenience sampling from Hearing Voices Network groups and online	Semi-structured interview	Reflexive Thematic Analysis	This study aimed at understanding what constitutes the experience of feeling dehumanised in people who hear distressing voices. Additionally, it aimed provide a foundation of understanding the phenomenon of dehumanisation in a broad sample of participants experiencing distressing voices

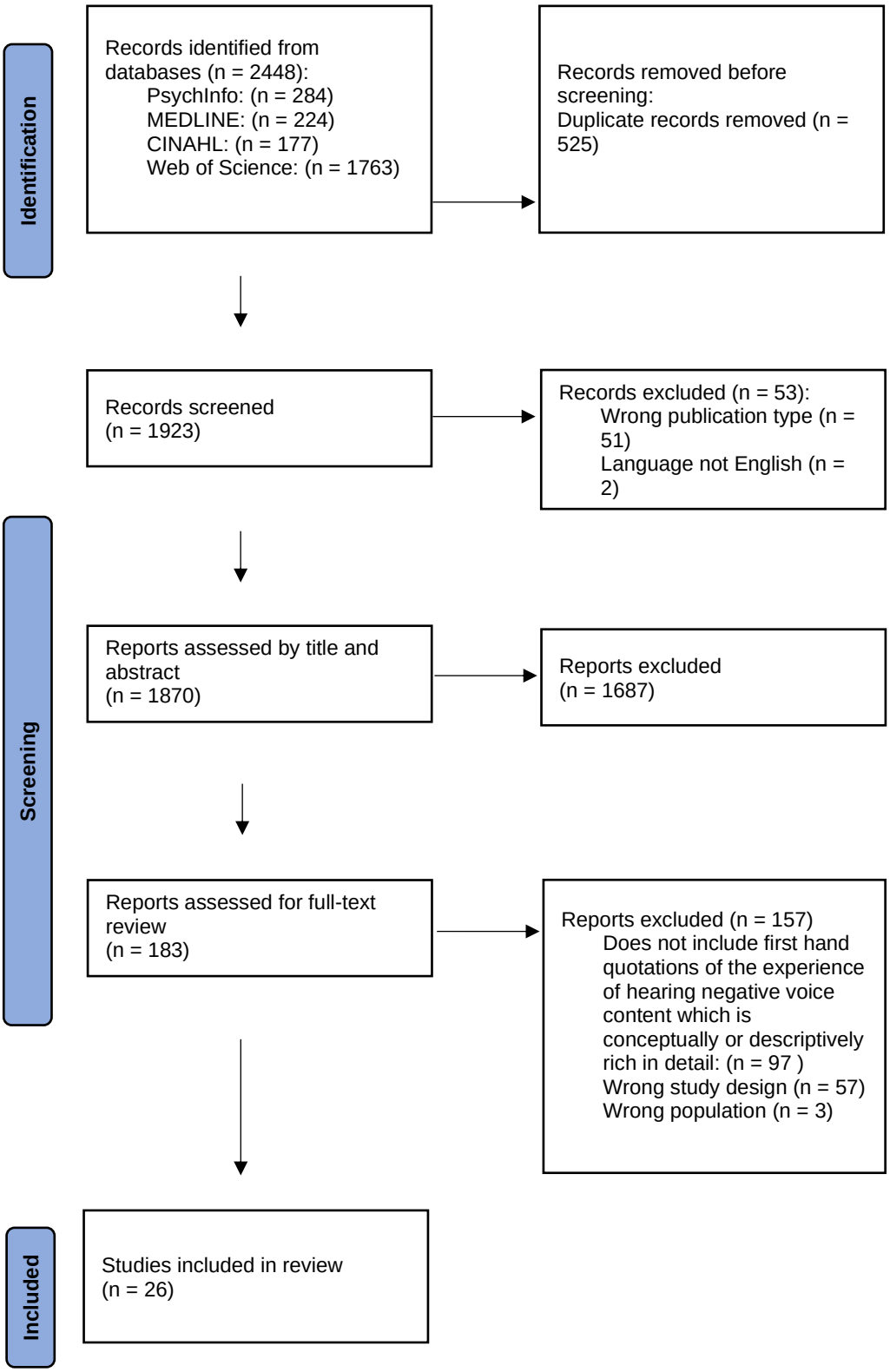
Table 1-2: Critical Appraisal Skills Programme (CASP) checklist

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Total
Allison (2024)	3	3	3	3	3	3	3	3	2	2	28
Bogen-Johnston et al., (2019a)	3	3	3	2	2	3	2	2	3	3	26
Bogen-Johnston et al., (2019b)	3	3	3	3	3	3	3	3	3	3	30
Cheli et al., (2023)	3	3	3	3	3	1	2	2	3	3	26
Craig et al (2017)	3	3	3	2	3	3	3	3	3	3	29
de Jager et al., (2016)	3	3	3	2	3	3	3	3	3	3	29
Denno et al., (2022)	3	3	3	3	3	3	3	3	3	3	30
Hayward et al., (2015)	3	3	3	3	3	3	2	3	3	3	29
Holt and Tickle (2015)	3	3	3	2	2	1	2	1	2	3	22
Kalhovde et al., (2013)	3	3	3	3	3	2	3	3	3	3	29
Loue and Sajatovic (2008)	2	3	2	2	1	2	2	2	3	3	22
Mawson et al., (2011)	3	3	3	2	3	3	3	3	3	3	29
McCarthy-Jones et al., (2015)	3	3	3	3	3	3	3	3	3	3	30
Milligan et al., (2013)	3	3	3	3	3	3	3	3	3	3	30
Myers et al (2023	3	3	2	3	3	2	3	3	3	3	28
O'Brien-Venus et al., (2023)	3	3	3	3	3	3	3	3	3	3	30
Piesse et al., (2023)	3	3	3	3	2	3	3	3	3	3	29
Rosen et al., (2017)	3	3	3	3	3	2	3	3	3	3	29
Rufato et al., (2023)	3	3	3	3	2	2	2	3	3	2	26
Sheaves et al., (2020)	3	3	3	3	3	1	2	3	3	3	27
Sheaves et al., (2021)	3	3	2	2	2	1	3	3	3	3	25
Strachan et al., (2023)	3	3	3	2	3	2	3	3	3	3	28
Strand et al., (2013)	3	3	3	2	3	3	3	3	3	3	29
Vallath et al., (2018)	3	3	3	3	3	1	3	2	3	3	27
Watkins et al., (2019)	3	3	3	2	3	3	2	3	3	3	28
Demjén et al., (2019)	3	3	3	3	3	2	2	3	3	3	28

Table 1-3: Excerpt from Data Extraction Table

Study	Themes/key concepts	Participant quotes (first order constructs)	Primary author interpretations (second order constructs)
Allison (2024)	Voices having power and control	"[Voices] have always had a hold on me . . . the things that they've made me do . . . it was that kind of power that they would have"(p. 6)	Constrained by coercion: Identifying coercion could be difficult. For example, practitioners believed they offered choice to patients to accept oral or enforced medication, but patients believed this was a coercive threat. Voice hearers experienced both their voices and practitioners as coercive.
Watkins et al., (2019)	Insulting; Difficult to share due to insulting content	"I don't think they'd . . . look at it too nicely . . . [PAUSE] . . . they'd, they'd think I was a monster or something like that . . . so, I pull punches really, you know what I mean . . . when it comes to family and that lot"(p. 5)	This appeared to be associated with a fear that others may believe that what the voices said is true. [The participant] reported keeping the details of what his voices said secret from family members.
Hayward et al., (2015)	Voice threatening to kill person; Voices changing over time	"They don't really threaten my life anymore, they used to say all sorts of horrible things about you know killing me and cyanide pills and all sorts of weird stuff"(p. 100)	Changing experience of voices: Participants reported varying experiences of their voices over time. For some there was a clear sense of voices becoming less problematic.
O'Brien-Venus et al., (2023)	Unworthy; Arguing with voices	"I always have to challenge myself to believe that I am really a worthwhile person. […] I have to sort of deploy arguments like that to prove that I'm not a worthless person, as the voices keep insisting" (p. 6).	Some reported feeling exhausted and defeated by the constant fight to prove their own worth, with the eldest person in the study reporting that this fight had continued for decades.
O'Brien-Venus et al., (2023)	Controlling; Voice taking away choice	"they [voices] just heard my decisions, what I want to do, and they do contrary" (p. 5).	Some described feeling that their mind was no longer a private place and felt a strong sense that their voices could abuse access to their mind, or impact on activities which were integral to their sense of self.

Figure 1-1: Flow diagram of the systematic search process following PRISMA guidelines (Page et al., 2021).



Appendix 1-A British Journal of Clinical Psychology Author Guidance

1. SUBMISSION

Authors should kindly note that submission implies that the content has not been published or submitted for publication elsewhere except as a brief abstract in the proceedings of a scientific meeting or symposium.

New submissions should be made via the Research Exchange submission portal. You may check the status of your submission at any time by logging on to submission.wiley.com and clicking the "My Submissions" button. For technical help with the submission system, please review our FAQs or contact submissionhelp@wiley.com.

All papers published in the *British Journal of Clinical Psychology* are eligible for Panel A: Psychology, Psychiatry and Neuroscience in the Research Excellence Framework (REF).

Data protection:

By submitting a manuscript to or reviewing for this publication, your name, email address, and affiliation, and other contact details the publication might require, will be used for the regular operations of the publication, including, when necessary, sharing with the publisher (Wiley) and partners for production and publication. The publication and the publisher recognize the importance of protecting the personal information collected from users in the operation of these services, and have practices in place to ensure that steps are taken to maintain the security, integrity, and privacy of the personal data collected and processed. You can learn more at https://authorservices.wiley.com/statements/data-protection-policy.html.

Preprint policy:

This journal will consider for review articles previously available as preprints. Authors may also post the submitted version of a manuscript to a preprint server at any time. Authors are requested to update any pre-publication versions with a link to the final published article.

2. AIMS AND SCOPE

The *British Journal of Clinical Psychology* publishes original research, both empirical and theoretical, on all aspects of clinical psychology:

clinical and abnormal psychology featuring descriptive or experimental studies

aetiology, assessment and treatment of the whole range of psychological disorders irrespective of age group and setting

biological influences on individual behaviour

studies of psychological interventions and treatment on individuals, dyads, families and groups

For specific submission requirements, read the Author Guidelines.

The Journal is catholic with respect to the range of theories and methods used to answer substantive scientific problems. Studies of samples with no current psychological disorder will only be considered if they have a direct bearing on clinical theory or practice.

The following types of paper are invited:

papers reporting original empirical investigations;

theoretical papers, provided that these are sufficiently related to empirical data;

review articles, which need not be exhaustive, but which should give an interpretation of the state of research in a given field and, where appropriate, identify its clinical implications;

Brief Reports and Comments.

3. MANUSCRIPT CATEGORIES AND REQUIREMENTS

Papers describing quantitative research should be no more than 5000 words (excluding the abstract, reference list, tables and figures). Papers describing qualitative research (including reviews with qualitative analyses) should be no more than 6000 words (including quotes, whether in the text or in tables, but excluding the abstract, tables, figures and references). Brief reports should not exceed 2000 words and should have no more than one table or figure. Any papers that are over this word limit will be returned to the authors. Appendices are included in the word limit; however online appendices are not included.

In exceptional cases the Editor retains discretion to publish papers beyond this length where the clear and concise expression of the scientific content requires greater length (e.g., explanation of a new theory or a substantially new method). Authors must contact the Editor prior to submission in such a case.

Refer to the separate guidelines for Registered Reports.

All systematic reviews must be pre-registered and an anonymous link to the pre-registration must be provided in the main document, so that it is available to reviewers. Systematic reviews without pre-registration details will be returned to the authors at submission.

4. PREPARING THE SUBMISSION

Free Format Submission

British Journal of Clinical Psychology now offers free format submission for a simplified and streamlined submission process.

Before you submit, you will need:

Your manuscript: this can be a single file including text, figures, and tables, or separate files – whichever you prefer (If you do submit separate files, we encourage you to also include your figures within the main document to make it easier for editors and reviewers to read your manuscript, but this is not compulsory). All required sections should be contained in your manuscript, including abstract, introduction, methods, results, and conclusions. Figures and tables should have legends. References may be submitted in any style or format, as long as it is consistent throughout the manuscript. If the manuscript, figures or tables are difficult for you to read, they will also be difficult for the editors and reviewers. If your manuscript is difficult to read, the editorial office may send it back to you for revision.

The title page of the manuscript, including a data availability statement and your co-author details with affiliations. *(Why is this important? We need to keep all co-authors informed of the outcome of the peer review process.)* You may like to use this template for your title page.

Important: the journal operates a double-anonymous peer review policy. Anonymise your manuscript and prepare a separate title page containing author details. *(Why is this important? We need to uphold rigorous ethical standards for the research we consider for publication.)*

An ORCID ID, freely available at https://orcid.org. *(Why is this important? Your article, if accepted and published, will be attached to your ORCID profile. Institutions and funders are increasingly requiring authors to have ORCID IDs.)*

To submit, login at https://wiley.atyponrex.com/journal/BJC and create a new submission. Follow the submission steps as required and submit the manuscript.

If you are invited to revise your manuscript after peer review, the journal will also request the revised manuscript to be formatted according to journal requirements as described below.

Revised Manuscript Submission

Contributions must be typed in double spacing. All sheets must be numbered.

Cover letters are not mandatory; however, they may be supplied at the author's discretion. They should be pasted into the 'Comments' box in Editorial Manager.

Parts of the Manuscript

The manuscript should be submitted in separate files: title page; main text file; figures/tables; supporting information.

Title Page

You may like to use this template for your title page. The title page should contain:

A short informative title containing the major key words. The title should not contain abbreviations (see Wiley's best practice SEO tips);

A short running title of less than 40 characters;

The full names of the authors;

The author's institutional affiliations where the work was conducted, with a footnote for the author's present address if different from where the work was conducted;

Abstract;

Keywords

Data availability statement (see Data Sharing and Data Accessibility Policy);

Acknowledgments.

Author Contributions

For all articles, the journal mandates the CRediT (Contribution Roles Taxonomy)—more information is available on our Author Services site.

Abstract

Please provide a structured abstract under the headings: Objectives, Methods, Results, Conclusions. For Articles, the abstract should not exceed 250 words. For Brief Reports, abstracts should not exceed 120 words.

Articles which report original scientific research should also include a heading 'Design' before 'Methods'. The 'Methods' section for systematic reviews and theoretical papers should include, as a minimum, a description of the methods the author(s) used to access the literature they drew upon. That is, the abstract should summarize the databases that were consulted and the search terms that were used.

Keywords

Provide appropriate keywords.

Acknowledgments

Contributions from anyone who does not meet the criteria for authorship should be listed, with permission from the contributor, in an Acknowledgments section. Financial and material support should also be mentioned. Thanks to anonymous reviewers are not appropriate.

Practitioner Points

All articles must include Practitioner Points – these are 2-4 bullet points, following the abstract, with the heading ‘Practitioner Points’. These should briefly and clearly outline the relevance of your research to professional practice.

Main Text File

As papers are double-anonymous peer reviewed, the main text file should not include any information that might identify the authors.
Manuscripts can be uploaded either as a single document (containing the main text, tables and figures), or with figures and tables provided as separate files. Should your manuscript reach revision stage, figures and tables must be provided as separate files. The main manuscript file can be submitted in Microsoft Word (.doc or .docx) or LaTex (.tex) format.

If submitting your manuscript file in LaTex format via Research Exchange, select the file designation “Main Document – LaTeX .tex File” on upload. When submitting a LaTex Main Document, you must also provide a PDF version of the manuscript for Peer Review. Please upload this file as “Main Document - LaTeX PDF.” All supporting files that are referred to in the LaTex Main Document should be uploaded as a “LaTeX Supplementary File.”

LaTex Guidelines for Post-Acceptance:

Please check that you have supplied the following files for typesetting post-acceptance:

PDF of the finalized source manuscript files compiled without any errors.

The LaTeX source code files (text, figure captions, and tables, preferably in a single file), BibTex files (if used), any associated packages/files along with all other files needed for compiling without any

errors. This is particularly important if authors have used any LaTeX style or class files, bibliography files (.bbl, .bst. .blg) or packages apart from those used in the NJD LaTex Template class file.

Electronic graphics files for the illustrations in Encapsulated PostScript (EPS), PDF or TIFF format. Authors are requested not to create figures using LaTeX codes.

Your main document file should include:

A short informative title containing the major key words. The title should not contain abbreviations;

Abstract structured (objectives/methods/results/conclusions);

Up to seven keywords;

Practitioner Points: Authors will need to provide no more than 2-4 bullet points, written with the practitioner in mind, that summarize the key messages of their paper to be published with their article;

Main body: formatted as introduction, materials & methods, results, discussion, conclusion;

References;

Tables (each table complete with title and footnotes);

Figure legends: Legends should be supplied as a complete list in the text. Figures should be uploaded as separate files (see below).

Supporting information should be supplied as separate files. Tables and figures can be included at the end of the main document or attached as separate files but they must be mentioned in the text.

As papers are double-anonymous peer reviewed, the main text file should not include any information that might identify the authors. Do not mention the authors' names or affiliations and always refer to any previous work in the third person.

The journal uses British/US spelling; however, authors may submit using either option, as spelling of accepted papers is converted during the production process.

References

This journal uses APA reference style; as the journal offers Free Format submission, however, this is for information only and you do not need to format the references in your article. This will instead be taken care of by the typesetter.

Tables

Tables should be self-contained and complement, not duplicate, information contained in the text. They should be supplied as editable files, not pasted as images. Legends should be concise but comprehensive – the table, legend, and footnotes must be understandable without reference to the text. All abbreviations must be defined in footnotes. Footnote symbols: †, ‡, §, ¶, should be used (in that order) and *, **, *** should be reserved for P-values. Statistical measures such as SD or SEM should be identified in the headings.

Figures

Although authors are encouraged to send the highest-quality figures possible, for peer-review purposes, a wide variety of formats, sizes, and resolutions are accepted.

Basic figure requirements for figures submitted with manuscripts for initial peer review, as well as the more detailed post-acceptance figure requirements.

Legends should be concise but comprehensive – the figure and its legend must be understandable without reference to the text. Include definitions of any symbols used and define/explain all abbreviations and units of measurement.

Supporting Information

Supporting information is information that is not essential to the article, but provides greater depth and background. It is hosted online and appears without editing or typesetting. It may include tables, figures, videos, datasets, etc.

Wiley's FAQs on supporting information.

Note: if data, scripts, or other artefacts used to generate the analyses presented in the paper are available via a publicly available data repository, authors should include a reference to the location of the material within their paper.

General Style Points

For guidelines on editorial style, please consult the APA Publication Manual published by the American Psychological Association. The following points provide general advice on formatting and style.

Language: Authors must avoid the use of sexist or any other discriminatory language.

Abbreviations: In general, terms should not be abbreviated unless they are used repeatedly and the abbreviation is helpful to the reader. Initially, use the word in full, followed by the abbreviation in parentheses. Thereafter use the abbreviation only.

Units of measurement: Measurements should be given in SI or SI-derived units. Visit the Bureau International des Poids et Mesures (BIPM) website for more information about SI units.

Effect size: In normal circumstances, effect size should be incorporated.

Numbers: numbers under 10 are spelt out, except for: measurements with a unit (8mmol/l); age (6 weeks old), or lists with other numbers (11 dogs, 9 cats, 4 gerbils).

Wiley Author Resources

Manuscript Preparation Tips: Wiley has a range of resources for authors preparing manuscripts for submission available here. In particular, we encourage authors to consult Wiley's best practice tips on Writing for Search Engine Optimization.

Article Preparation Support: Wiley Editing Services offers expert help with English Language Editing, as well as translation, manuscript formatting, figure illustration, figure formatting, and graphical abstract design – so you can submit your manuscript with confidence.

Also, check out our resources for Preparing Your Article for general guidance and the BPS Publish with Impact infographic for advice on optimizing your article for search engines.

5. EDITORIAL POLICIES AND ETHICAL CONSIDERATIONS

Peer Review and Acceptance

Except where otherwise stated, the journal operates a policy of anonymous (double-anonymous) peer review. Please ensure that any information which may reveal author identity is anonymized in your submission, such as institutional affiliations, geographical location or references to unpublished research. We also operate a triage process in which submissions that are out of scope or otherwise inappropriate will be rejected by the editors without external peer review. Before submitting, read the terms and conditions of submission and the declaration of competing interests.

We aim to provide authors with a first decision within 90 days of submission.

Further information about the process of peer review and production can be found in 'What happens to my paper?' Read Wiley's policy on the confidentiality of the review process.

Appeals Procedure

Authors may appeal an editorial decision if they feel that the decision to reject was based on either a significant misunderstanding of a core aspect of the manuscript, a failure to understand how the manuscript advances the literature or concerns regarding the manuscript-handling process. Differences in opinion regarding the novelty or significance of the reported findings are not considered as grounds for appeal.

To raise an appeal against an editorial decision, please contact the Editor who made the decision in the first instance using the journal inbox, quoting your manuscript ID number and explaining your rationale for the appeal. Appeals are handled according to the procedure recommended by COPE. If you are not satisfied with the Editor(s) response, you can appeal further by writing to the BPS Knowledge & Insight Team by email at Academic.Publications@bps.org.uk. Appeals must be received within two calendar months of the date of the letter from the Editor communicating the decision. The BPS Knowledge and Insight Team's decision following an appeal consideration is final.

If you believe further support outside the journal's management is necessary, please refer to Wiley's Best Practice Guidelines on Research Integrity and Publishing Ethics or contact Academic.Publications@bps.org.uk.

Clinical Trial Registration

The journal requires that clinical trials are prospectively registered in a publicly accessible database and clinical trial registration numbers should be included in all papers that report their results. Authors are asked to include the name of the trial register and the clinical trial registration number at the end of the abstract. If the trial is not registered, or was registered retrospectively, the reasons for this should be explained.

Research Reporting Guidelines

Accurate and complete reporting enables readers to fully appraise research, replicate it, and use it. Authors are encouraged to adhere to recognised research reporting standards.

We also encourage authors to refer to and follow guidelines from:

Future of Research Communications and e-Scholarship (FORCE11)

The Gold Standard Publication Checklist from Hooijmans and colleagues

FAIRsharing website

Conflict of Interest

The journal requires that all authors disclose any potential sources of conflict of interest. Any interest or relationship, financial or otherwise that might be perceived as influencing an author's objectivity is considered a potential source of conflict of interest. These must be disclosed when directly relevant or directly related to the work that the authors describe in their manuscript. Potential sources of conflict of interest include, but are not limited to: patent or stock ownership, membership of a company board of directors, membership of an advisory board or committee for a company, and consultancy for or receipt of speaker's fees from a company. The existence of a conflict of interest does not preclude publication. If the authors have no conflict of interest to declare, they must also state this at submission. It is the responsibility of the corresponding author to review this policy with all authors and collectively to disclose with the submission ALL pertinent commercial and other relationships.

Funding

Authors should list all funding sources in the Acknowledgments section. Authors are responsible for the accuracy of their funder designation. If in doubt, please check the Open Funder Registry for the correct nomenclature: https://www.crossref.org/services/funder-registry/

Authorship

All listed authors should have contributed to the manuscript substantially and have agreed to the final submitted version. Authorship is defined by the criteria set out in the APA Publication Manual:

"Individuals should only take authorship credit for work they have actually performed or to which they have substantially contributed (APA Ethics Code Standard 8.12a, Publication Credit). Authorship encompasses, therefore, not only those who do the actual writing but also those who have made substantial scientific contributions to a study. Substantial professional contributions may include formulating the problem or hypothesis, structuring the experimental design, organizing and conducting the statistical analysis, interpreting the results, or writing a major portion of the paper. Those who so contribute are listed in the byline." (p.18)

Data Sharing and Data Accessibility Policy

The *British Journal of Clinical Psychology* recognizes the many benefits of archiving data for scientific progress. Archived data provides an indispensable resource for the scientific community, making possible future replications and secondary analyses, in addition to the importance of verifying the dependability of published research findings.

The journal expects that where possible all data supporting the results in papers published are archived in an appropriate public archive offering open access and guaranteed preservation. The archived data must allow each result in the published paper to be recreated and the analyses reported in the paper to be replicated in full to support the conclusions made. Authors are welcome to archive more than this, but not less.

All papers need to be supported by a data archiving statement and the data set must be cited in the Methods section. The paper must include a link to the repository in order that the statement can be published.

It is not necessary to make data publicly available at the point of submission, but an active link must be included in the final accepted manuscript. For authors who have pre-registered studies, please use the Registered Report link in the Author Guidelines.

In some cases, despite the authors' best efforts, some or all data or materials cannot be shared for legal or ethical reasons, including issues of author consent, third party rights, institutional or national regulations or laws, or the nature of data gathered. In such cases, authors must inform the editors at the time of submission. It is understood that in some cases access will be provided under restrictions to protect confidential or proprietary information. Editors may grant exceptions to data access requirements provided authors explain the restrictions on the data set and how they preclude public access, and, if possible, describe the steps others should follow to gain access to the data.

If the authors cannot or do not intend to make the data publicly available, a statement to this effect, along with the reasons that the data is not shared, must be included in the manuscript.

Finally, if submitting authors have any questions about the data sharing policy, access the FAQs for additional detail.

Open Research initiatives.

Recognizing the importance of research transparency and data sharing to cumulative research, *British Journal of Clinical Psychology* encourages the following Open Research practices.

Sharing of data, materials, research instruments and their accessibility. British Journal of Clinical Psychology encourages authors to share the data, materials, research instruments, and other artifacts supporting the results in their study by archiving them in an appropriate public repository. Qualifying public, open-access repositories are committed to preserving data, materials, and/or registered analysis plans and keeping them publicly accessible via the web into perpetuity. Examples include the Open Science Framework (OSF) and the various Dataverse networks. Hundreds of other qualifying data/materials repositories are listed at the Registry of Research Data Repositories (http://www.re3data.org). Personal websites and most departmental websites do not qualify as repositories.

Publication Ethics

Authors are reminded that the *British Journal of Clinical Psychology* adheres to the ethics of scientific publication as detailed in the *Ethical principles of psychologists and code of conduct* (American Psychological Association, 2010). The Journal generally conforms to the Uniform Requirements for Manuscripts of the International Committee of Medical Journal Editors (ICJME) and is also a member and subscribes to the principles of the Committee on Publication Ethics (COPE). Authors must ensure that all research meets these ethical guidelines and affirm that the research has received permission from a stated Research Ethics Committee (REC) or Institutional Review Board (IRB), including adherence to the legal requirements of the study county.

Note this journal uses iThenticate's CrossCheck software to detect instances of overlapping and similar text in submitted manuscripts. Read Wiley's Top 10 Publishing Ethics Tips for Authors. Read Wiley's Publication Ethics Guidelines can be found.

ORCID

As part of the journal's commitment to supporting authors at every step of the publishing process, the journal requires the submitting author (only) to provide an ORCID iD when submitting a manuscript. This takes around 2 minutes to complete. Find more information here.

6. AUTHOR LICENSING

WALS + standard CTA/ELA and/or Open Access for hybrid titles

You may choose to publish under the terms of the journal's standard copyright agreement, or Open Access under the terms of a Creative Commons License.
Standard re-use and licensing rights vary by journal. Note that certain funders mandate a particular type of CC license be used. This journal uses the CC-BY/CC-BY-NC/CC-BY-NC-ND Creative Commons License.
Self-Archiving Definitions and Policies: Note that the journal's standard copyright agreement allows for self-archiving of different versions of the article under specific conditions.

BPS members and open access: if the corresponding author of an accepted article is a Graduate or Chartered member of the BPS, the Society will cover will cover 100% of the APC allowing the article to be published as open access and freely available.

7. PUBLICATION PROCESS AFTER ACCEPTANCE

Accepted Article Received in Production

When an accepted article is received by Wiley's production team, the corresponding author will receive an email asking them to login or register with Wiley Author Services. The author will be asked to sign a publication license at this point.

Proofs

Once the paper is typeset, the author will receive an email notification with full instructions on how to provide proof corrections.

Please note that the author is responsible for all statements made in their work, including changes made during the editorial process – authors should check proofs carefully. Note that proofs should be returned within 48 hours from receipt of first proof.

Early View

The journal offers rapid publication via Wiley's Early View service. Early View (Online Version of Record) articles are published on Wiley Online Library before inclusion in an issue. Before we can publish an article, we require a signed license (authors should login or register with Wiley Author Services). Once the article is published on Early View, no further changes to the article are possible. The Early View article is fully citable and carries an online publication date and DOI for citations.

8. POST PUBLICATION

Access and Sharing

When the article is published online:

The author receives an email alert (if requested).

The link to the published article can be shared through social media.

The author will have free access to the paper (after accepting the Terms & Conditions of use, they can view the article).

For non-open access articles, the corresponding author and co-authors can nominate up to ten colleagues to receive a publication alert and free online access to the article.

Promoting the Article

To find out how to best promote an article, click here.

Wiley Editing Services offers professional video, design, and writing services to create shareable video abstracts, infographics, conference posters, lay summaries, and research news stories for your research – so you can help your research get the attention it deserves.

Measuring the Impact of an Article

Wiley also helps authors measure the impact of their research through specialist partnerships with Kudos and Altmetric.

9. EDITORIAL OFFICE CONTACT DETAILS

For help with submissions, please contact: Hannah Wakley, Associate Managing Editor (bjc@wiley.com) or phone +44 (0) 116 252 9504.

Appendix 1-B Search Terms Used for PsycINFO Database Search

Search	Full search terms
S1	(((DE "Hallucinations" OR DE "Perceptual Disturbances" OR DE "Auditory Hallucinations") OR (DE "Psychosis" OR DE "Affective Psychosis" OR DE "Schizophrenia")) OR (DE "Schizoaffective Disorder")) OR TI ("Voice hear*" OR "hear* voice*" OR "auditory hallucinat*" OR hallucinat* OR "verbal auditory hallucination*" OR "auditory verbal hallucinat*" OR AVH OR "psychos*" or "psychotic*" OR "positive symptoms" OR schizophrenia Or "unusual experience*") OR AB ("Voice hear*" OR "hear* voice*" OR "auditory hallucinat*" OR hallucinat* OR "verbal auditory hallucination*" OR "auditory verbal hallucinat*" OR AVH OR "psychos*" or "psychotic*" OR "positive symptoms" OR schizophrenia Or "unusual experience*")
S2	((DE "Qualitative Methods") OR (DE "Focus Group" OR DE "Grounded Theory" OR DE "Interpretative Phenomenological Analysis" OR DE "Narrative Analysis" OR DE "Semi-Structured Interview" OR DE "Thematic Analysis")) OR TI (interview* OR qualitative OR interpretive OR “focus group*” OR “grounded theory” OR hermeneutic OR narrative OR thematic OR theme* OR “interpretative phenomenological analys*” OR “IPA” OR “content analys*” OR ethnolog*) OR AB (interview* OR qualitative OR interpretive OR “focus group*” OR “grounded theory” OR hermeneutic OR narrative OR thematic OR theme* OR “interpretative phenomenological analys*” OR “IPA” OR “content analys*” OR ethnolog*)
S3	TI ((Negative OR bad OR harmful OR distress* OR derogatory OR destructive OR critical OR threat* OR adverse OR dissenting OR disavowing OR rejecting OR opposing OR detrimental) n5 (content OR voice* or auditory hallucinat* OR hallucinat* OR verbal auditory hallucination* OR auditory verbal hallucinat* OR auditory-verbal OR AVH) OR "command* hallucin*" OR "command* voices" OR "imperative hallucinations" OR "imperative voices") OR AB ((Negative OR bad OR harmful OR distress* OR derogatory OR destructive OR critical OR threat* OR adverse OR dissenting OR disavowing OR rejecting OR opposing OR detrimental) n5 (content OR voice* or auditory hallucinat* OR hallucinat* OR verbal auditory hallucination* OR auditory verbal hallucinat* OR auditory-verbal OR AVH) OR "command* hallucin*" OR "command* voices" OR "imperative hallucinations" OR "imperative voices")
S4	S1 and S2 and S3

Appendix 1-C Examples of First and Second Order Constructs

Themes	Sub-themes	First order constructs	Second order constructs
Theme 1: What They Say: Insulting, Critical and Harassing Content	Sub-theme 1: Related to Early Trauma	"...He calls me mad and that I had a dirty f***ng husband and I was born to his first wife. And that I didn't know about any crap...How can he send a young girl inside and leave her alone with a man; he doesn't even know that much! [later. . .] no, when a father talks to a child how can she not like [it]; it's okay. He's my father he can shout at me...He was [a good father] . . .He bought me anything I asked for. . . " (Vallath et al., 2018, p. 5)	Voice content as a reflection of negative life experiences
		"He's always bullied me. . . .He tries to govern the whole planet. . . . He thinks I'm dense." (Kalhovde et al.,'s 2013, p.1473)	Some participants heard the voice of someone in particular
		"Three evil men basically erm they kind of so they torment me sort of deride me […] the persecutory type of experiences and I think initially they almost had a sort of a god-like quality to them […] kind of all powerful and difficult to resist" (O'Brien-Venus et al., 2023, p. 6)	Verbal abuse, relentless pressure, and the omnipotence and malevolence of voices contributed to their feeling of being dehumanised
		"he haunts me day and night, following me and denigrating me". (Cheli et al., 2023, p. 107)	Participants from the clinical voice hearing group described negative feelings that were the results of judgmental or even sadistic attitude of the voices
	Sub-theme 2: Context Specific	"And so the fact that kind of the things I would hear like would match up to something I would see which would then match up to like my belief : : : when you are trying to make sense of something you	Other evidence supports that the voice and/or what it's saying is real

	see these little connections everywhere' (Sheaves et al., 2020, p. 637)	
	'the worries . . . are fuel for the voices to then add in. And like chip in their part to kind of make it worse or um turn it into something even more ridiculous' (Sheaves et al., 2020, p. 638)	Reasons for listening to and believing the voice is because the voices are confirming or embellishing pre-existing concerns
	"...they fight among themselves because they're two different groups and they both want me on their side. But you tell me is this possible? They punish me for praying to Lord Shiva instead of Lord Murugan or sometimes they bother me if I pray to Jesus."(Vallath et al., 2018, p. 5)	
Critical (Negative Evaluation from self and others)	" . . . the voices say that I'm really fat as well, fat bitch as well, I know I'm in a big body, think I'm in a bigger body than what I am." (Mawson et al., 2013, p. 264)	For other participants who described a negative sense-of-self, their voices seemed to hold similar opinions (Mawson et al., 2013)
	"I think a lot of my fears are that I'm not good enough . . . You know for other people and I think that [the voice] went along with" (Holt and Tickle, 2015, p. 259)	The content of the voice(s) seemed to confirm a negative view of self (Holt and Tickle, 2015)
	"A lot of negative remarks, they ain't gonna amount to being nothing, they gonna grow up to be nothing, you're a failure, and all that stuff."(Rosen et al., 2017, p. 6)	Voices that began during episodes of severe sexual or physical abuse were typically verbally abusive, telling participants that they . . . never amount to anything and/or never succeed. (Rosen et al., 2017)
	"I always have to challenge myself to believe that I am really a worthwhile person. […] I have to sort of deploy arguments like that to prove that I'm not a worthless person, as the voices keep insisting."	Some reported feeling exhausted and defeated by the constant fight to prove their own worth

		"So every time I do something bad, I'm waiting for my mum to come knocking on my door, like waiting for the voice to tell me all those horrible things I've done." (Strand et al., 2013 p. 110)	
		"I think my relationship with my mother has always been one of me never measuring up to what she wanted, so that there was an intense criticism of me at all times." (McCarthy-Jones et al., 2015, p. 7)	
		"Someone will shout at me. . . like, while I am sitting here [working] someone will talk to me. . . [they say] do work properly. . . they shout. . . [it's okay] they guide me [making me work well]. . . " (Vallath et al., 2018, p. 6)	Voices reflected life experience when the experiencer could not live up to social expectations and lacked social support. (Vallath et al., 2018)
Theme 2: When and How They Say it: Intentional and Strategic	Sub-theme 1: Controlling	"I look into myself and then I see my master. 'Is it ok if I drink?' And then I'll see if he nods, or if I have to wait a while." (Strand et al., 2013, p. 112)	Intrusive voice of 'master'
		"I thought it was like a, like a monster or a demon or something inside me". (Bogen-Johnston et al., 2019a, p. 312)	There was a sense of voices taking control and increasing in dominance.
		"I don't have any control of me anymore. Like there'd be stuff that I'd be watching and I'd be a bit like "What are you, what are you doing?" . . . Because he got me self-harming and I was a bit like "Why, what on earth are you doing?" Cause like, in my eyes self-harming had always been something ridiculous. Like, I'd think "Why would somebody do that?" And then when I saw myself doing it I was a bit like "What!" Yeah, just shocked and sort of felt a bit like: "Oh God, what's next?" . . . it was like I was watching myself from a window."	Her voice had seized control of both her body and mind. She felt dissociated from her physical self and possessed by the voice which made her act in ways that were out of character.

	(Bogen-Johnston et al., 2019a, p. 312)	
	"The first question they asked you, if you say you're hearing voices, what do they say?" . . . it's quite hard to tell him that, when they're so negative and that lot . . . I mean, to be called a puff and pervert and a paedophile . . . [PAUSE] . . . it's quite shocking isn't it?" (Watkins et al., 2019, p. 5)	Talking about his experiences of voice hearing was difficult because the voices said things that could appear controversial and distressing.
Sub-theme 2: Sly, Sneaky, Attack When Vulnerable	"the medication would make them occur less regularly, like much stronger, you wouldn't expect them, it was like a sneak attack, they would sneak up on you, gives you a fright." (Milligan et al., 2013, p. 114)	Medication subdued a participants voices only for them then to return as a more powerful force (Milligan et al., 2013)
	"I was out one night and I was attacked and that, you know, I was just sort of getting more kind of confident and then that happened and it was right back to the beginning" (McCarthy-Jones et al., 2015, p. 7).	For two participants abusive relationships or violent attacks had negatively affected their self-esteem in turn leaving them open to further abuse by voices (McCarthy-Jones et al., 2015)
	'I'm feeling stupid or I'm feeling overweight or whatever and that's what I will hear' (Sheaves et al., 2020, p. 642)	
	'because the sound, it makes you want to listen, the voices, the voices do it as well and it just makes you want to listen to them'." (Sheaves et al., 2020, p. 641)	Whispering was an intentional tactic
Sub-theme 3: Capable of Harm	"There's a lot of voices that I hear. All grown men saying the same thing over and over. I'm no good, I'm worthless. Kill yourself. Just repeatedly over and over and over and over by men." (Rosen et al., 2017, p. 6)	The content and characteristics of voices arising during acute traumatic events in childhood were generally much more likely to mirror real-life abusive figure(s).
	'it's almost like they warned me, and I have gone yeah, whatever, that's not going to happen. If it did happen how would I cope with that? you are	Listening to and believing voices to be alert for the threat: I listen to stop the voices harming other people

		never going to forgive yourself' (Sheaves et al., 2020, p. 639)	
		'And they said they were going to hurt the kids and so, I ran up the stairs about five times, knocked on her door to make sure she was alright' (Sheaves et al., 2020, p. 636)	Listening to and believing voices to be alert for the threat: I listen to stop the voices harming other people
		'Because I don't know who they are, what they represent, what they could do to me' (Sheaves et al., 2020, p. 635)	Listening to and believing voices due to a desire to understand the voices: who is it and where is it coming from?
		"Every time I get angry, it goes through my head to go there and get the knife and cut the person's throat. I even hid the knife, so I don't know where I put it. Someone goes to make food at home and can't find the knife. Do you know what I mean?". (Rufato et al., 2023, p. 248)	The participants developed protective actions against commanding voices that were more aggressive, such as hiding dangerous objects (knives or ropes) and assessing the pros and cons of requests from those voices.
		"I'll be driving home and the voices will start … And then I'll get home and I'll try and black it out and go to sleep. But then the flashbacks occur, and then I have the voices again. And then they continue until I end up, as I say, do whatever they say to do [self-harm]". (Piesse et al., 2023, p. 1021)	Voices were found to occur in close proximity to post-traumatic stress disorder symptoms
		"I get paranoid and the voices contribute to the paranoia and the paranoia will get out of control and that's when the depression will set in from the paranoia." (Milligan et al., 2013, p. 111)	Voice-affect interactions "A theme was noted of affective changes in both the voice-hearer and their voice resulting from the interactions between the two. Negative voices could cause a range of negative affective states in the voice-hearer" (Milligan et al., 2013, p. 111)
Theme 3: The Impact of Negative Voice Content	Sub-theme 1: Negative Impact	"'I thought that was her helping [the voice], so that changed my view on her for a while"' (Sheaves et al., 2021, p. 346)	A participant who heard the voice of a family friend described the impact on

			trusting her mum (Sheaves et al., 2021)
		“I concentrate hard as I’m able to do and force myself not to do it […] I lose a bit on the swimming front, because I never swim out of my depth” (O'Brien-Venus et al., 2023, p. 6).	Experiencing voices taking over their actions and choices or reducing their ability to perform valued behaviours and activities contributed to this reduced sense of agency. A participant reported needing to exert high levels of focus to stop himself performing behaviours his voices wanted him to do (O'Brien-Venus et al., 2023)
		“I never really had many friends. Probably like one or two friends. And [the voice] was constantly there so I regarded it as a friend. Even though it was horrible it was there. And I say, I found myself talking to it and yeah, just I felt scared you know. I felt it, like it, it was there with me, like having your best friend with you constantly. Yeah, it’s that, I don’t really, I just felt scared of losing it” (Bogen-Johnston et al., 2019b, p. 1310).	"For a few (2/20), voices alleviated the isolation of their social lives. Despite their negative voice content, voices were a constant companion that could relieve loneliness; the absence of this companion was a greater fear than the anguish caused by its presence. This acted as a barrier to voice disclosure. Remaining silent and existing within a dysfunctional relationship with voices was preferable to disclosing and risk losing them"
	Sub-theme 2: Negative content but positive impact	“I see it [the voice] as a part of me … parts of me have disintegrated, detached, or shut down… I've definitely disowned lots of parts of myself over the years because I didn't like myself very much” (Strachan et al., 2023, p. 988)	"Other participants thought that their voices emerged as they began to internalise perpetrator's comments and, despite being harsh and cruel, voices appeared to alleviate distress in some way. Some felt voices created distance from unacceptable ideas about themselves” (Strachan et al., 2023, p. 988)
		So yeah, he's very mocking and very sort of cruel, but I think…His heart is in the right	They are trying to keep me safe—But safe is a loose word

		place and he is trying to communicate something valuable to me, which is primarily that I'm not coping and I need support. However, he really does not know how to go about it … he's just someone with really fucking bad social skills. (Strachan et al., 2023, p. 988)	
		'it's trying to be protective, but what it's putting out there, it's very counterproductive… It just keeps me stuck in a loop going around, going short of nowhere'. (Strachan et al., 2023, p. 989)	Participants explained that although voices may be attempting to help, they cause more problems than they solve, creating a vicious cycle of distress,
		"I don't really know the answers to everything but all I know is that my voices are not very nice and I know who they are but I also have been told and had it explained to me how it all fits in with the abuse I suffered early on. I'm very lucky to have had a good psychiatrist and a good psychologist. It still doesn't take the pain away does it?" (Hayward et al., 2015, p. 103)	The journey towards acceptance was also informed by an ongoing learning process that did not eliminate distress, but offered a sense of progress informed by increasing familiarity with the voices, connections being made between them and life experiences, and the value of talking to others about the voices (Hayward et al., 2015)
Theme 4: Coping with Negative Voice Content	Sub-theme 1: Socially connecting and help seeking	"Well, I've just got older and, and, and my, you know my mental, mental and physical resources aren't, aren't as power-powerful as strong as they used to be … Just wanna put an end, just wanna put a, put an end, an end to t-to the to the insults you know. Just wanna … I just wanna, just wanna have respect" (Bogen-Johnston et al., 2019b, p. 1311a).	Over time, as resources to cope with voices became depleted, and voices' negative effect on self-worth and lifestyle could no longer be tolerated, participants were ready to seek help (Bogen-Johnston et al., 2019ba)
		"Tthe more I could open up, the more I let my mates know, the more everything has	Several participants noted an association between social connection and an improvement in their

		settled down really”’ (Sheaves et al., 2021, p. 349)	management of voices (Sheaves et al., 2021)
		“This week, the voice attacked me, and I managed to fight against it. I found an escape valve that I learned here in the group. You know, when it comes, it is very destructive, it wants me to kill myself, and it was saying that, and I fought it. And, I still have the voice in my head, but when it calls me, I think of Henry and his brother to calm myself down. He helped his brother not to be like that anymore, to understand the voices. He found a way like that and, as I understand it, his brother today lives alone in a house, and he is safe, without being hospitalized”. (Rufato et al., 2023, p.249)	Seeking support from peers who are in recovery helped them understand the value of connection and mutuality and the importance of sharing personal stories of recovery (Rufato et al., 2023)
		". . . the real nasty, horrible one that wants me to suicide… Now, it just fizzles out. It's there, but it fizzles out … The way I felt helped change the voices, the way I felt emotionally, the way I felt being validated, the way I felt with the rescripting, it was empowering for me. Before, I felt powerless and at the mercy of all this clamour in my head" (Strachan et al., 2023, p. 993)	Other participants found that their negative voices suddenly lost traction, which they attributed to a sense of empowerment that came with emotional validation during ImRs (Strachan et al., 2023)
		“‘Not when me parents’ voices are around I never need the music then” (’ Mawson et al., 2011, p. 265)	The use of coping strategies seemed dependent on the hearer-voice relationship – positive relationships were less likely to require coping strategies (Mawson et al., 2011)
	Sub-theme 2: Distract or ignore	“I’m trying to get better, but still... I clean the house, I make their lunch, I start washing dishes, I do things to get it out of my head” (Rufato et al., 2023, p.247)	"Distracting themselves with other activities helped them to deal with the voices, decreasing their intensity or volume" (Rufato et al., 2023)

	”I do it like this, I go out, I go for a walk, the voices continue, they don’t go away, but they decrease. I read a book and the voice is there in the book because I control it, I don’t let it control me. Because it stays in my head for 24 hours, I use some tools that I learned here in the group” (Rufato et al., 2023, p.247)	"Distracting themselves with other activities helped them to deal with the voices, decreasing their intensity or volume" (Rufato et al., 2023)
	"It’s like a battle all the time between the voices and feeling well all the time, sometimes it’s too hard to cope with and I can’t cope with it’ ” (Mawson et al., 2011, p.264)‘	Participants seemed stuck in a tiresome battle which could not always be successfully fought
Sub-theme 3: Battle and Fight the Voices	“you try to shout back or fight back or anything like that and you can’t” (Demjén et al., 2019, p. 21)	The perception of being at the mercy of more powerful and aggressive opponents arguably reflects and potentially contributes to distress.
	‘it’s like Guerrilla warfare where [ ], they are waiting until I’m down and out and vulnerable, weak, and then they will attack’ (Sheaves et al., 2020, p. 643)	Participants frequently described managing the voices as an ongoing battle. Given the persistent nature of the voices, however, nine participants described listening because they felt defeated by them. For some, this directly led to times of vulnerability for attacks from the voices.
	You have tried everything every possibility not that you cannot, you cannot achieve it you feel like demoralised you feel low […] you feel less of a human. (O'Brien-Venus et al., 2023, p. 6)	Experiencing fighting the voices as ineffective further weakened people’s sense of their own agency. Many noted impacts on their functioning in valued areas of their lives and some felt unable to meet their own expectations as well as those of the voices

Doctorate in Clinical Psychology | Lancaster University

Section Two: Empirical Paper

Self-Attacking Thoughts, Critical Voices and Suicide in People who Hear Voices

Myles Sammon

Doctorate in Clinical Psychology

Division of Health Research, Lancaster University

All correspondence should be sent to:

Myles Sammon

Doctorate in Clinical Psychology

Health Innovation One

Sir John Fisher Drive

Lancaster University

Lancaster

LA1 4AT

Email: m.sammon@lancaster.ac.uk

Prepared for submission to: British Journal of Clinical Psychology (see appendix 1-A for author guidelines)

Abstract

Introduction: Suicide is a major public health problem. Hearing voices has been found to significantly increase the odds of suicidal ideation (SI) and suicidal behaviour (SB). Research has found self-attacking thoughts to predict suicide risk. Self-attacking thoughts and critical voices are theorised to be similar evolved survival mechanisms that orientate a person toward threat-protection.

Design: This study used a quantitative, cross-sectional design.

Methods: Adults (n = 85) who heard voices completed an online survey. Linear multiple regression analyses examined the relationships between self-attacking thoughts and SI, and critical voices and SI. Both models adjusted for demographic and clinical factors (e.g. depression, defeat and entrapment). Moderation analyses explored the moderating role of self-compassion in these two relationships. Logistic regression analysis explored the relationship between dependant variables of interest and suicide attempts (SA).

Results: The first model with self-attacking thoughts accounted for 30% of the variance in SI. Self-attacking thoughts significantly predicted SI, accounting for 4.7% unique variance in this model. The second model with critical voices accounted for 33.8% of the variance in SI. Critical voices significantly predicted SI, accounting for 8.5% unique variance. No significant moderating effect of self-compassion was found between self-attacking thoughts and suicide, or critical voices and suicide. Self-attacking thoughts or critical voices had no significant effect on SA. Minoritised gender and entrapment significantly predicted SA.

Conclusion: Critical voices may be a particularly important factor for people who hear voices struggling with SI. Clinical and research implications are discussed.

Keywords: Hearing voices; auditory verbal hallucinations; AVH, suicide

Practitioner Points

- Critical voices may be a key therapeutic target alongside entrapment for people who hear voices and struggle with SI.
- Findings support evidence that entrapment, defined as a sense of having no prospect of achieving escape or rescue when feeling defeated, is a key risk factor for SB.

Introduction

The World Health Organisation report that 703,000 people die by suicide every year (WHO, 2021a). Experiences of psychosis have been found to be a significant risk factor for suicidal ideation (SI), suicidal behaviour (SB) in both clinical and general populations (DeVylder et al., 2015; Hielscher et al., 2018; Huang et al., 2018; Kelleher et al., 2013; Yates et al., 2019). Auditory Verbal Hallucinations (AVH) is a core diagnostic symptom of psychosis (Arciniegas, 2015). Hearing voices refers to the experience of hearing a voice without an appropriate external stimulus (Daalman et al., 2011). Service-user-led organisations advocate for the use of this term over AVH, as the voice hearing experience is not always indicative of a need for clinical care (McCarthy-Jones, 2012). Research has found hearing voices to be associated with SI and SB. In a large longitudinal study of an adolescent general population sample, Hielscher et al., (2021) found hearing voices that are persistent in nature to be strongly associated with SB, above other psychotic experiences. DeVylder and Hilimire (2015) found hearing voices to be associated with two times the odds of experiencing SI, and four times the odds for suicidal attempts (SA) in a non-clinical sample of young adults. Hearing voices is also associated with SI and SB in adult clinical samples (Grover et al., 2022; Yin et al., 2023), with patients twice as likely to experience SI, and twice as likely to have made a suicide plan when hallucinations are present (Bornheimer et al., 2021; Kjelby et al., 2015).

Suicidal ideation (SI) or suicidal thinking is defined “as any thoughts about ending one’s own life. These may be active, with a clear plan for suicide, or passive, with thoughts about wishing to die”. Suicidal behaviour (SB) includes suicide, i.e. “intentionally ending one’s life”, and suicide attempts (SA), i.e. “self-injurious non-fatal behaviour with inferred or actual intent to die” (Turecki et al., 2019, p.44).

SI and SB result from a complex interaction of biological, clinical, psychological, environmental and cultural factors (O’Connor & Nock, 2014). O’Connor and Kirtley (2018) synthesised and extended the prominent models of suicide into the Integrated Motivational–

volitional (IMV) model of suicidal behaviour. The IMV model proposes a pathway beginning with a 'pre-motivational phase' which includes background factors such as childhood trauma (Bahk et al., 2017; Zatti et al., 2017). Followed by the "motivational phase" that builds on the Cry of Pain (Williams, 1997) and Suicide as Escape from Self models (Baumeister, 1990) to identify two key motivational factors that drive SI. Namely, defeat, defined as a sense of failed struggle, followed by entrapment, defined as a sense of having no prospect of achieving escape or rescue when feeling defeated by an event or experience (Gilbert and Allan, 1998). Finally, the 'volitional phase' involves engagement in SB. The volitional phase is consistent with 'ideation-to-action framework' models of suicide (Klonsky & May, 2015; Van Orden et al., 2010), hypothesising that the factors that lead to SI are different to those that lead to SB.

Defeat and entrapment can result from external circumstances or internal experiences such as mental pain (O'Connor & Kirtley 2018). Robust evidence suggests entrapment is the strongest predictor of SI and SB (O'Connor and Portzky's, 2018). Defeat and entrapment are also associated with depression (Siddaway et al., 2015, Wetherall et al., 2019), another known risk factor for suicide. Both defeat and entrapment may mediate the relationship between the severity of positive symptoms of psychosis, including hearing voices, and suicide (Taylor et al., 2010). Additionally, The Schematic Appraisals Model of Suicide (SAMS) was developed through applying the Cry of Pain model (Williams, 1997) to people with psychosis (Johnson et al., 2008). SAMS highlights the importance of self-appraisals alongside events appraised to be defeating and entrapping, with negative self-appraisals increasing suicidality while positive self-appraisals may be particularly protective (Johnson et al., 2010).

Clearly, understanding the relationship between hearing voices, and SI and SB is of key clinical importance. Researchers recommend further investigation of the specific features of psychosis and their relationships with known mechanisms identified in suicide (Kelleher et al., 2013; Rimvall and Kelleher 2021). This is in-line with Bentall's (2006) complaint-orientated approach to

mental health research which recommends focussing on the specific 'symptoms' associated with traditional psychiatric diagnoses rather than on discrete categories such as schizophrenia. This approach is supported by evidence that distressing voice hearing experiences are associated with the psychiatric diagnoses of schizophrenia spectrum as well as others (Waters & Fernyhough, 2017), and is much more prevalent in the general population than was once considered (Maijer et al., 2018). Furthermore, leading suicide researchers have recognised the need to move beyond psychiatric diagnoses in order to develop our ability to intervene in suicide (O'Connor, 2011).

Self-criticism may also be key to understanding suicide. From an evolutionary psychology perspective, self-criticism is an evolved mechanism with an important threat-protection function (Gilbert et al., 2001). Humans play out dominant-subordinate relationships when competing for social rank. This involves close monitoring of the strengths and skills of others to inform behaviours that will best promote survival (Gilbert, 2014). The dominant is orientated to control subordinates by being vigilant to their violations and punish them through physical or verbal attack (e.g. shaming). Subordinates, on the other hand, are orientated to inhibit behaviour and withdraw from conflict (Gilbert et al., 2004). In addition, subordinates are often motivated to engage in a "better safe than sorry" strategy, where the threat protection system is consistently mobilised to ensure no threat is missed (Gilbert, 2004, p.281). Social mentality theory posits that one way humans achieve this is through the internalisation of the dominant-subordinate relationship, where criticising one's self becomes a way of self-monitoring so to defend from potential threats (Gilbert & Bailey, 2000). Gilbert highlights how this is evident in how humans experience self-criticism, where there is the part of the self that is criticising and the part being criticised (Gilbert et al., 2004).

The psychological effects of self-criticism are influenced by both self-directed hostility, but also by one's relative ability to generate feelings of self-directed warmth and compassion (Gilbert & Procter, 2006). Gilbert et al., (2004) suggests two forms of self-criticism, each with its own evolutionary function. The "inadequate self" self-criticism is associated with perfectionism and self-

improvement in order to avoid external shame experiences. The “hated self” self-attacking form attempts to maintain social rank through removing or dissociating from unwanted aspects of the self. Although previous research has found social perfectionism to be linked to suicide (O’Connor, 2007), more recently O’Neill et al., (2021) investigated the relationship that both forms of self-criticism had with suicidal probability in a clinical sample of adults. O’Neill et al., found the self-attacking form of self-criticism explained more variance in suicidal probability. This was only partially mediated by entrapment, indicating that self-attacking may be a key independent driver to suicide alongside entrapment.

Additionally, critical voices have been theorised as being rooted in the same underlying evolved mechanisms as self-critical thoughts, as critical voices also activate the threat protection system (Gilbert et al., 2001; Heriot-Maitland, 2022, p.560). Birchwood et al., (2004) found voice hearers’ experience of voices mirror their sense of subordination in social relationships. Connor and Birchwood (2013) explored voice hearers’ appraisals of the social rank relationship with their voices and found that the greater the differential in power, the greater the level of depression and SI. This perception of one’s voice being more powerful than one’s self has also been linked to compliance with voice commands to harm the self (Fox et al., 2004; Reynold and Scragg, 2010). However, the impact of critical voices on SI and SB has not been studied to date.

As mentioned, the impact of self-criticism is linked to one’s ability to direct warmth and understanding to the self. A primary function of the soothing-caring system is to regulate the threat-protection system (Gilbert, 2014). Fostering self-compassion, defined as sensitivity to suffering in the self with a commitment to try to alleviate and prevent it, is effective in switching from the threat-protection system to the soothing-caring system (Gilbert, 2014). Neff (2023) highlights how self-compassion can replace harsh self-criticism to provide a source of motivation that comes from a place of warmth and encouragement. Self-compassion is also associated with lower levels of self-harm, SI and SB (Cleare et al., 2019, Suh and Jeong, 2021). The effect of self-attacking on SI may

depend on levels of self-compassion. This indicates that self-compassion may be a key moderator variable which alters the strength of the relationship (Frazier et al., 2004).

In summary, hearing voices is associated with increased odds of experiencing SI and SB. Recent research has found self-attacking self-criticism to be a significant factor driving motivation to suicide not otherwise explained by the IMV. Hearing critical voices and self-attacking thoughts are theorised to be similar evolved mechanisms that mobilise the threat-protection system. Therefore, investigation of the relationships between self and voice attacking with SI and SB may be paramount to understanding the relationship between hearing voices and suicide, and a key target for therapeutic intervention.

Following O'Neill et al.,'s (2021) finding that self-attacking thoughts are an independent predictor of suicidal probability in a clinical sample, the primary aim of the present study is to explore the relationship between self-attacking thoughts and SI in people who hear voices. A regression analysis will be conducted. Known predictors of SI and key voice characteristics will be controlled for to understand the unique variance accounted for by self-attacking thought on SI. A similar pattern of results to O'Neill et al., is expected in the present study. Secondary aims of this research are to investigate the relationship between critical voices and SI when controlling for the same variables. The moderating role of self-compassion in these relationships are explored. Finally, the relationship between self-attacking thoughts, critical voices and SA are explored.

Primary Research Question:

- Self-attacking thoughts will predict a significant amount of variance in SI severity after controlling for age, age of onset of voices, voice frequency, gender, depression, defeat and entrapment in people who hear voices.

Secondary Research Questions:

- Critical voices will predict a significant amount of variance in SI severity after controlling for age, age of onset of voices, voice frequency, gender, depression, defeat and entrapment in people who hear voices.
- Self-compassion will moderate the relationships between self-attacking thoughts and SI severity in people who hear voices.
- Self-compassion will moderate the relationships between critical voices and SI severity in people who hear voices.
- Self-attacking thoughts will predict SA after controlling for age, age of onset of voices, voice frequency, gender, depression, defeat and entrapment in people who hear voices.
- Critical voices will predict SA after controlling for age, age of onset of voices, voice frequency, gender, depression, defeat and entrapment in people who hear voices.

Methods

Design

This study used a cross-sectional correlational design to explore the relationships between self-attacking thoughts, critical voices and self-compassion on SI and SA.

An amendment was made to the selection of variables following the creation of the research protocol (appendix XX). Namely, the predictor variable 'substance use' was replaced with the Defeat scale (Gilbert and Allan, 1998), as defeat is a known predictor of suicide and used in the analysis carried out by O'Neill et al., (2021).

Participants

Participants were recruited through convenience sampling, mainly through social media websites (e.g. Facebook, X (formerly Twitter) and Reddit). An a-priori power calculation was conducted for the primary research question using G*Power 3.1 (Faul et al., 207) with eight predictor variables (age, gender, age of onset of voices, voice frequency, depression, defeat, entrapment and self-attacking thoughts) was calculated to detect an estimated effect size. The estimated effect size was calculated by choosing a level of significance ($\alpha = .05$), power (.8), total number of predictors (8), tested predictor (1), and the residual variance of ($r = .50$) which was determined from the existing literature to detect a 5% change in SI severity (O'Neill et al., 2021; Taylor et al., 2011). The result of the a-priori power analysis using G*Power 3.1.9.2 (Faul et al., 2007) indicated that a minimum sample size of n= 81 is needed to detect an estimated effect size (Cohen's f2) of 0.1.

Inclusion criteria

The initial inclusion criteria of the study was as follows: Adults (aged 18 years and older) who self-reported a diagnosis of psychosis (e.g. schizophrenia spectrum disorder) and experienced suicidal thinking in the past 6 months were eligible to take part in this study. The survey was open

internationally. All study information was in the English language, which therefore excluded non-English speakers.

The survey was re-published with amended inclusion criteria on February 1, 2024. The first inclusion criterion was changed from requiring a self-reported diagnosis of psychosis (e.g. schizophrenia spectrum disorder) to self-reporting experiences of psychosis, defined as odd or unusual thoughts or ideas including paranoid beliefs and perceptual experiences (Capra et al., 2017). The Community Assessment of Psychic Experiences - Positive Scale (CAPE-P15; Capra et al., 2017) was added in the second iteration of the study. If participants did not report a diagnosis of psychosis and did not score on the CAPE-P15 (Capra et al., 2017), they were automatically excluded from the study.

Ethical considerations

Ethical approval was gained from the Lancaster University Faculty of Health and Medicine Research Ethics Committee. The study questionnaires related to sensitive topics such as depression, entrapment, self-criticism, voice-criticism and suicide. Risk was mitigated in a number of ways: the poster and participant information sheet provided clear information on the topics of the research; Participants were reminded that they could exit the survey at any time; A link containing a worldwide database of services that provide additional support was embedded on each page of items; Participants were presented with a debrief sheet following completion of the measures (Appendix 2-A).

Procedure

Recruitment was carried out jointly with another researcher, WL, who was completing a similar study into the risk factors for suicide in people who have experienced psychosis. One survey was created on Qualtrics that allowed participants to participate in one or both studies. Only participants who heard voices took part in the present study (Appendix 2-B). A poster was created and shared in social media websites. Participants accessed the survey through a website link. The

first page of this link contained the participant information sheet (Appendix 2-C). After providing informed consent, the survey questionnaires were presented to participants.

Measures

Demographics

Participants were asked questions regarding the following demographical characteristics: Age, Ethnicity, Gender, Martial Status and Age of Onset of Voice hearing (see Appendix 2-D).

Psychosis

Participants were asked to select the diagnosis they had received (if applicable) from a list generated from the International Statistical Classification of Diseases and Related Health Problems (See appendix 2-D; 11th ed,; ICD-11; World Health Organization, 2021b). Following the amendment to the inclusion criteria, participants completed the 'Community Assessment of Psychic Experiences - Positive Scale' (CAPE-P15; Capra et al., 2014). The CAPE-15 consists of 15 items relating to 'Persecutory ideation', 'Bizarre experiences', and 'Perceptual abnormalities', scored on a 4 point Likert scale. The CAPE-15 is a shortened version of the widely used 42 item CAPE (Lee et al., 2016), and has shown good validity and reliability (Capra et al., 2017).

Entrapment

The Entrapment Scale (Gilbert and Allan, 1998) is a 16-item measure where responders score items on a 5-point scale from 'not at all like me' to 'extremely like me'. The Entrapment Scale has been found to have good validity and reliability (Gilbert and Allan, 1998) in clinical and non-clinical samples. Taylor et al., (2010) report good internal consistency of the Entrapment Scale in a psychosis population.

Defeat

The Defeat Scale (Gilbert and Allan, 1998) is a 16-item measure where responders score how each statement best describes how they have felt in the last 7 days on a 5-point scale from 'never to

'always'. The Defeat scale has been found to have internal consistency of α = 0.94 (Gilbert and Allan, 1998).

Depression

Depression was measured using the Centre for Epidemiologic Studies Depression Scale (CESD-10; Andresen et al., 1994). Participants score items on a 4 point Likert scale from 'Rarely or none of the time' to 'All of the time'. The CESD-10 has shown good validity and reliability in a clinical sample (Björgvinsson et al., 2013).

Self-Attacking Thoughts

The Hated-Self Subscale of the Forms of Self-Criticism and Reassurance Scale & Functions of Self-Criticism (FSCRS; Gilbert et al., 2004) measured self-attacking thoughts. This subscale of the FSCRS is comprised of five items scored on a 5-point scale. The "Hated-Self" subscale was used by O'Neill et al., (2021) to measure self-attacking thoughts and has shown good validity and reliability in large clinical and non-clinical samples (Baião et al., 2015).

Voice Hearing

Voice Characteristics

In addition to an item regarding age of onset of voices, three items from the Topography of Voices Rating Scale (TVRS; Hustig and Hafner, 1990) assessed the frequency, volume and clarity of voices on a 5-point Likert scale. The TVRS has been shown to have good test re-test reliability (Hustig and Hafner, 1990).

Voice Criticism

The Hated-Self Subscale of the Forms of Voice-Criticising/Attacking and Voice Reassuring Scale (FVCRS) measured critical voices on a 5-point Likert scale. This scale has been adapted from the Forms of Self Criticism and Reassurance Scale & Functions of Self Criticism (Gilbert et al., 2004) and was developed in an unpublished thesis.

Voice Malevolence

The Malevolence subscale of the Revised Beliefs about Voices Questionnaire (BAVQ-R; Chadwick et al., 2000) includes six items scored on a 4-point Likert scale. Chadwick et al., (2000) found the BAVQ-R to have good internal consistency and validity across all subscales. Due to the FCVRS being a new measure, the malevolence subscale of the BAVQ-R was employed in addition to the FVCRS in order to check if both scales behave similarly in the regression analyses.

Suicidal Ideation and Attempts

Suicidal Ideation Severity

SI was measured using the 5-item SI subscale of the Columbia - Suicide Severity Rating Scale (C-SSRS) Short Form (Posner et al., 2011). This C-SSRS has shown good validity and reliability (Posner et al., 2011; Madan et al., 2016) and was used in a recent randomised control trial for a suicide intervention (O'Connor et al., 2022). Participants scored the absence/presence of five types of SI with the highest score endorsed becoming the score for this factor. This scale has been validated as a continuous measure of SI severity in a previous multiple regression analysis (Zakhour et al., 2021).

Suicide Attempts

The following item from the Clinical Interview Schedule (CIS-R; Lewis et al., 1994): "Have you ever made an attempt to take your life, by taking an overdose of tablets or in some other way?" measured SA. This item has been used in the Adult Psychiatric Morbidity Survey Q – DSH4 (McManus et al., 2016) and in more recent suicide research (O'Connor et al., 2018). This CIS-R has shown good validity and reliability (Lewis et al., 1994).

Self-Compassion

The Self-Compassion Subscale of the Compassionate Engagement and Action Scales for Self and Others (CEAS; Gilbert et al., 2017) measured self-compassion. This scale contains 13 items scored on a 10 point Likert scale. The CEAS has shown validity and reliability in an adult population (Gilbert et al., 2017) and in a UK general population sample (Lindsey et al., 2022). Due to an error in

the input of items into the survey, the following item of the Compassion Action subscale: “I think about and come up with helpful ways to cope with my distress”, was not included in this study. Therefore, participants in this study completed 12 out of 13 CEAS items.

Data Analysis

Multiple Linear Regressions

Data analysis was completed using IBM SPSS version 29**.** Descriptive statistics explored demographic and clinical characteristics of the sample. Cronbach’s alpha statistic assessed intenal consistency. Independent t-test and Mann-Whitney (for non-normally distributed data) tests were used to explore differences in clinical and non-clinical voice hearing groups. Skewness, kurtosis and Shapiro-Wilk tests were examined to test for normality of distributions. In addition, scatterplots, histograms and Q-Q plots were checked for normality and linearity. As a result, non-parametric Spearman’s rho test was used to test correlations.

Two multiple linear regressions using forced entry method were conducted to explore the relationship between self-attacking thoughts and critical voices with SI severity. For the regression analyses, gender data was transformed into a binary variable with man/woman coded as ‘0’ and minority gender (trans man/trans woman/non-binary and other) coded as ‘1’. Two participants reported “prefer not to say” for gender and were therefore excluded from the following analyses. One person was missing "Age of onset of Voices” data and was therefore excluded from the analyses. Eighty-two participants were included in the multiple regression analyses.

The assumptions of multiple linear regression as recommended by Field (2018) were met for the first multiple linear regression (self-attacking thoughts). No predictor variables correlated with each other above r = .8, providing an initial indication of no multicollinearity. No multicolinearity was indicated by tolerance statistics (range: 0.31 - 0.98) and variance inflation factor (range: 1.02 – 3.22). Residuals terms were independent (Durbin-Watson statistic of 2.101). Scatterplots indicated that the predictor variables were linearly related to the dependant variable and scatterplots of residuals indicated homoscedasticity. Histogram and P-P plots showed that errors were normally distributed.

Data were checked for outliers and influential cases. Less than 5% of cases (4/82, 4.8%) had standardised residuals outside of ±2 with no cases outside of ±3. No influential cases were identified as indicated by Cook's distance.

The assumptions of multiple linear regression as recommended by Field (2018) were also met for the second multiple linear regression (critical voices): No predictor variables correlated with each other above r = .8, providing an initial indication of no multicollinearity. No multicolinearity was indicated by tolerance statistics (range: 0.33 - 0.98) and variance inflation factor (range: 1.02 – 3.02). Residuals terms were independent (Durbin-Watson statistic of 2.101). Scatterplots indicated that the predictor variables were linearly related to the dependant variable and scatterplots of residuals indicated homoscedasticity. Histogram and P-P plots showed that errors were normally distributed. Data were checked for outliers and influential cases. Less than 5% of cases (3/82, 3.7%) had standardised residuals outside of ±2 with no cases outside of ±3. No influential cases were identified as indicated by Cook's distance. As the FVCRS is an unpublished and not a validated measure of critical voices, the second regression analysis was re-run with the widely used BAVQ-R Malevolence subscale (Chadwick et al., 2000) and results were compared. Bivariate regressions between the predictor variables and the dependent variable were run (Table 2-6).

Moderation Analyses

Moderation analyses tested if self-compassion moderated the relationships between (1) self-attacking thoughts, (2) critical voices and SI severity. This was run by the Hayes Process Macro plugin tool (Hayes, 2017) to IBM SPSS Statistics (Version 29). The process of moderation analysis followed recommendations by Field (2018).

Logistic Regression Analyses

Logistic regression tests explored the relationships between self-attacking thoughts and critical voices with SA. The interaction between self-attacking thoughts and critical voices variables was also included in the model. Multi-way crosstabulations of all categorical predictor variables were checked for incomplete information. The assumption of linearity of the logit was met for all

variables. Data were checked for outliers and influential cases and one case was reviewed (standardised residual > 3). This case was removed as scores on the SB item of the CSSRS indicated that the response to the SA item might have been made in error. VIF (range: 1.037 – 3.181) and tolerance values (range: 0.314 - 0.964) did not indicate multicollinearity.

Post-hoc Analyses

In a post-hoc analysis, critical voices was entered into a third model of the self-attacking thoughts multiple regression analysis to investigate the effect of critical voices when controlling for self-attacking thoughts. This model continued to meet the assumptions of multiple linear regression as recommended by Field (2018).

Results

Study characteristics

The survey was opened by 299 people (68 opened the first version and 231 opened the updated version). Fourteen people were excluded from the first survey, as they reported not receiving a diagnosis (e.g., schizophrenia spectrum disorder). Forty-three did not answer all inclusion criteria questions, 18 were excluded for being under 18 years of age and 13 were excluded as they had not experienced suicidal thinking in the past six months. Eighty-four were excluded as they did not hear voices. Of the remaining responses, 42 did not complete all the questionnaires, leaving 85 participants.

As shown in Table 1, of the 85 people recruited 34.1% identified as men, 38.8% as women, 24.7% identified as a minoritised gender (Transgender man/woman or Non-binary/other), and 2.4% selected prefer not to say. Age ranged from 19-59 years. The majority of participants identified ethnicity as White (70.6%). 52.9% described themselves as never been married, 25.9% married and 17.6% living with partner. The sample included clinical (82.4%) and non-clinical (17.7%) voice hearers, with schizoaffective disorder (n =32) and schizophrenia (n =22) the most reported clinical diagnoses.

[Insert Table 2-1]

Table 2-2 details descriptive statistics. Results found clinical voice hearers (M =31.21, SD = 9.83), compared to non-clinical voice hearers (M = 25.40, SD = 11.67), demonstrated significantly higher scores on CEAS compassionate engagement subscale (t (83) = 2.011, p = .048). The clinical voice hearing group also scored significantly higher (M = 44.97, SD = 15.64) than the non-clinical voice hearing group (M = 35.47, SD = 16.72) on the CEAS total score (t (83) = 1.87, p = .038). Mann-Whitney and independent t-tests found that clinical and non-clinical voice hearers did not significantly differ across any of the other measures. For the CESD-10 measure of depression (mean = 19.44), both clinical and non-clinical voice hearers scored, on average, above the clinical cut-off of 15 used in a psychiatric sample (Björgvinsson et al., 2013) and 10 used in non-clinical samples

(Andresen et al., 1994). There are no clinical cut-off scores for the remaining scales and mean scores fell in the middle of the range of possible scores across each scale.

[Insert Table 2-2]

Internal consistency of measures

As shown in table 2, internal consistency of measures, as assessed by Cronbach's alpha (α) was excellent for the FVCRS hated-self subscale, which is an unpublished and not yet validated measure. Internal consistency was also excellent for defeat and entrapment scales, good for the FCSRS hated-self subscale, BAVQ malevolence subscale, compassionate action subscale and compassionate total scale, acceptable for the CESD-10 and questionable for the compassionate engagement scale.

Correlational Analyses

Spearman's rho correlations (Table 4) examined the relationships between the variables as several variables did not meet the assumptions of normality (Age, Age of onset, voice frequency, FSCRS. FVCRS and Entrapment Scale). As expected, depression, defeat, entrapment, self-attacking thoughts, voice malevolence and critical voices were all positively and significantly correlated with SI severity. Self-compassionate action subscale and total had significant weak negative correlations with SI severity. Age, age of onset of voices, voice frequency and self-compassionate engagement showed no significant correlations with SI ($p > .005$). Point-biserial correlations found a significant low positive correlation between gender and self-attacking thoughts $r_{pb}(79) = 0.323$, $p = .003$. No significant correlation was found between gender and other variables (Appendix 2-E).

[Insert Table 2-4]

Self-attacking Thoughts and SI

The results of the multiple linear regression analyses are presented in Table 5. Model 1, containing the demographic variables and known predictors of SI (gender, age, age of onset, voice frequency, depression, defeat and entrapment) accounted for 25.3% (Adj. R^2=.183) of the variance in SI severity scores which was statistically significant ($F(7,74) = 3.58$, $p = .002$). When Self-attacking

thoughts were included, model 2 significantly improved the ability to predict SI (F (1,73) = 4.874, p = .03). Model 2 accounted for 30% (Adj. R^2=.223) of the variance in SI (F (8, 73) = 3.91, p< .001), with self-attacking thoughts therefore explaining 4.7% unique variance in SI (Adj. R^2 change = .04). Entrapment was the only significant predictor (Standardised β = .499, B= .049, t (74) = 3.024, p = .003) in model 1. In model two, self-attacking thoughts was the only significant predictor of SI severity (Standardised β = .335, B = .091, t (73) = 2.209, p = .03).

[Insert Table 2-5]

Bivariate regression analyses were run for all predictor variables. As seen in Table 6, defeat's positive effect in the bivariate regression is no longer significant in the adjusted mode. Taylor et al., (2009) proposed that defeat and entrapment might be best defined as one construct. The effect of entrapment remains similar and it appears that controlling for entrapment in the adjusted model may have accounted for the variance explained by defeat in the dependant variable. Depression (CESD-10) and gender change from a positive effect in bivariate regressions to negative effect on SI in the adjusted models. Self-attacking, voice criticism, voice malevolence, age, age of onset and voice frequency did not indicate suppression when comparing the bivariate and adjusted models.

[Insert Table 2-6]

Critical Voices and SI

A forced entry multiple linear regression analysis, controlling for the same demographic variables and known predictor variables was carried out. As seen in Table 7, model 1 (defeat, entrapment, depression, voice frequency, age of onset of voices, age and gender) was significant (F(7,74) = 3.58, p = .002). When critical voices is then included in the model, model 2 significantly improved the ability of the model to predict SI (F (1,73) = 9.347, p = .003). Model 2 was significant (F (8,73) = 4.658, p = <.001), explaining 33.8% (Adj. R^2=.265) of the variance in SI severity. For model 1, R^2 = .253 (Adj. R^2=.183), therefore critical voices accounted for 8.5% unique variance in SI (Adj. R^2 change = .082). Critical voices (Standardised β = .373, B= .086, t(72) = 3.057, p = .003) and

entrapment (Standardised β = .334, B= .033, t(72) = 2.019, p = .047) significantly predicted SI severity in this model.

[Insert Table 2-7]

Voice Malevolence and SI

Model 2 of the second multiple regression analysis was re-run using the BAVQ-R malevolence subscale in place of the FVCRS HS. When BAVQ-R malevolence subscale is included in the model, model 2 significantly improved the ability of the model to predict SI (F (1,73) = 6.425, p = .013). Model 2 was significant (F (8,73) = 4.169, p = <.001) and explained 31.4% (Adj. R^2=.238) of the variance in SI severity, therefore accounting for 6.1% unique variance in SI severity. Similarly to voice criticism, voice malevolence (Standardised β = .298, B= .083, t (72) = 2.535, p = .013) significantly predicted SI severity in this model. A point of difference in this model is that entrapment did not significantly predict SI severity (see Appendix 2-F).

Moderation Analyses

The first moderation analysis tested the moderating role of self-compassion in the relationship between self-attacking thoughts and SI severity. No significant moderation was found with delta R^2 = 0% (F (1,78)= .003, p= .9581). The second analysis tested the moderating role of self-compassion in the relationship between critical voices and SI severity. No significant moderation effect was found with delta R^2 = 0.58% (F (1,78) = .604, p= .4395).

Logistic Regression Analyses

Logistic regression analyses tested if (1) self-attacking thoughts, and (2) critical voices, predicted SA (Table 2-8). Step 2 of the logistic regression model provided the best fit for the data and most accurately predicted SA (predicting this correctly 72.8% of the time). This model (omnibus chi-square = 26.803 df = 8, p = .001) accounted for between 28.2% and 38.7% of the variance in SA and correctly predicted 55.2% of non-attempters, and 82.7% of attempters. Hosmer and Lemeshow test also (p = .176) indicated that the model is of good fit to the data. Gender and entrapment were

the only variables that significantly predicted SA. A person with a minority gender was 7.87 times more likely to have experienced SA than men or women (95% CI 1.32-46.76). For every one-point increase in entrapment scores, the odds of a person having attempted suicide increases by 1.07 (95% CI 1.01 - 1.14). Steps 3 and 4 did not significantly predict SA and their inclusion did not add to the predictive influence of the model. Self-attacking thoughts, critical voices and the interaction between these variables did not have a significant effect on SA.

[Insert Table 2-8]

Post-hoc Multiple Regression Analysis

A post-hoc analysis explored the relationship between critical voices and SI when adjusting for self-attacking thoughts along with demographic and clinical variables. This is clinically relevant information as it may inform targets for intervention and support. Critical voices was entered into a third model of the first multiple linear regression analysis. Model 3 was significant ($F(9,72) = 4.555$, $p = <.001$), explaining 36.3% of the variance in SI severity, therefore accounting for 6.3% unique variance. Critical voices (Standardised $\beta = .329$, $B = .076$, $t(71) = 2.665$, $p = .009$) was the only significant predictor of SI severity in this model.

Discussion

Summary of Findings

The present study examined the relationships between self-attacking thoughts and SI severity, critical voices and SI severity, and the moderating role that self-compassion had in both relationships. Logistic regression analyses examined the relationships between self-attacking thoughts and SB, and critical voices and SB. The findings supported the first hypothesis that self-attacking thoughts would predict a significant amount of variance in SI severity. The findings also supported the second hypothesis that critical voices would predict a significant amount of variance in SI severity. The findings did not support the third and fourth hypotheses, as self-compassion did not moderate the relationships between self-attacking thoughts and SI severity, and critical voices and SI severity. Logistic regression analyses found self-attacking thoughts (hypothesis five) or critical voices (hypothesis 6) did not have a significant effect on SB. Gender and entrapment significantly predicted SB. Post-hoc analysis found critical voices to significantly predict SI severity when controlling for self-attacking thoughts. Self-attacking thoughts did not significantly predict SI severity in the post-hoc analysis.

Interpretation of findings

Self-attacking thoughts predicted a significant amount of variance in SI severity in the present study. When compared to the findings of O'Neill et al., (2021), the overall model predicted a much smaller amount of overall variance in SI severity (30%) than O'Neill et al.,'s model which explained 50% of the variance in suicidal probability. However, there are differences in each study. While the present study used the same measure of self-attacking thoughts, defeat and entrapment as O'Neill et al., different measurements of depression were used. This study did not include hopelessness but included the following additional variables: age, age of onset of voices, voice frequency and gender. Crucially, O'Neill et al., measured suicidal probability (Suicide Probability Scale (SPS); Cull & Gill, 1982) as outcome variable whereas the current study measured SI severity. The SPS measures four dynamic risk factors (hopelessness, suicidal ideation, negative self-evaluation

and hostility) to indicate overall future suicide risk as opposed to the SI severity scale which measures current level of SI and therefore may be more subject to change.

The critical voices regression model predicted a greater amount of variance (33.8%) in SI severity than the self-attacking thoughts model. Critical voices significantly predicted SI severity and accounted for 8.5% unique variance in this model. However, this model was not powered a-priori. Additionally, a post-hoc analysis included both self-attacking thoughts and critical voices in same regression model, and found critical voices remained a significant predictor of SI severity whereas self-attacking thoughts did not. While considering that these analyses were not sufficiently powered a-priori and therefore require replication in further research, these findings tentatively suggest that for people who hear voices, the critical voice may be a stronger predictor of SI severity than self-attacking thoughts.

These findings point to several possibilities. Gilbert et al., (2001) posits that self-attacking thoughts and critical voices are similar mechanisms that mobilise the threat-protection system. For people who hear voices, some aspects of critical voices such as the severity or quality may cause it to be a stronger predictor of SI. It may be that the people with more critical voices struggled the most to cope with threatening and overwhelming traumatic experiences and therefore coped through dissociation (Longden et al., 2012). For example, shaming experiences have been linked to voice hearing through this mechanism (McCarthy-Jones, 2017). Corstens et al., (2018) outlines how while dissociation served the person to cope from situations by splitting off from overwhelming feelings, the voices often express the threats of the abuser. Voices may be providing this “warning signal” function over the critical thoughts, in the context of more severe threats. This may also be indicative of a mediating role of critical voices in the relationship between self-attacking thoughts and SI severity.

The SAMS model (Johnson et al., 2008) highlights the impact of one’s self-appraisals in suicidality and suggest that feelings of defeat and entrapment will change as a function of personal

and external agency. People who hear voices may judge themselves to have less personal agency and control over an attacking voice perceived as an autonomous and dominant entity, than over their own thoughts. Additionally, stigma and shame stemming from culturally ingrained attitudes such as “brain abnormality narratives” around hearing voices and psychosis may negatively contribute to evaluations of external agency (opportunities for rescue) (Heriot-Maitland, 2022, p.550).

These findings may also point to differences in the direction of the causal relationship between these factors than was hypothesised when developing the present research questions. The suicidal drive hypothesis (Murphy et al., 2018) postulates that SI and SB may precede psychosis as they pose an internally generated and self-directed threat to a person’s safety. This threat becomes externalised through delusional beliefs and hearing threatening voices. Hearing threatening voices protects the self by delaying or preventing this threat through creating a “psychological distance” from one’s own thoughts (Murphy et al., 2018, 2022). The stronger association found between critical voices and SI may point to a function of the critical voices being to stave off a sense of entrapment by creating this “psychological distance” from the internal pain and threat of self-attacking or suicidal thoughts.

In terms of the IMV model (O’Connor & Kirtley 2018), the dominant-subordinate threat protection module may be “threat to self-moderators” that increase the motivation to escape from the self (Baumeister, 1990) and therefore increase feelings of defeat and entrapment. Self-attacking thoughts may also increase thwarted belongingness (O’Neill et al., 2021) i.e. the experience of alienation from valued social groups. Thwarted belongingness is a key construct in the interpersonal model of suicide (Van Orden et al., 2010) and a motivational moderator in the IMV model. Hearing voices is associated with social isolation and loneliness (Toh et al.,2022) and critical voices may therefore also increase thwarted belongingness. However, O’Neill et al., (2021) found self-attacking thoughts may be a key additional driver outside of the IMV model’s main motivational phase

pathway. The findings of the present study tentatively suggest that critical voices may also be a key driver of SI in addition to entrapment. However, further research is needed to explore how self-to-self and voice-to-self relationships contribute to this motivation to escape from self (Baumeister, 1990).

Both self-attacking thoughts and critical voices did not significantly predict SA in this study. These findings tentatively suggest that critical voices may be a key motivational driver toward SI in addition to entrapment, but not a volitional factor driving the pathway to SB enaction. This is consistent with the "ideation-to-action framework" (Klonsky & May, 2015). Entrapment and gender were found to significantly increase the odds of SA. However, a-priori power analysis was not calculated for this analysis and therefore needs to be explored in further research. Entrapment predicting SA matches with previous research (O'Connor and Portzky's, 2018). People with a minoritised gender were over 7 times more likely to have made a previous SA. This fits with previous research that found a high prevalence of SI and SB within gender minority groups (Marshall et al., 2015; McNeil et al., 2017). Minority stress due to numerous factors (e.g. stigma, discrimination and isolation; Hendricks & Testa, 2012) has been associated with SA in transgender and gender nonconforming people. There is a higher prevalence of psychosis in these groups (Barr et al., 2021) and the experience of psychosis and/or hearing voices potentially compounds minority stress factors. These factors likely contribute to the pre-motivational phase of the IMV model. Interestingly, gender did not significantly predict SI and its effect went from positive to negative when adjusted for self-attacking thoughts. This suggests that self-attacking thoughts is accounting for much of the variance of minority gender in SI. The impact of minority stress may be mediated by the self-attacking thoughts as a threat-to-self moderator, or through self-attacking as a driving factor independent of the entrapment pathway. However, gender was not a statistically significant predictor of SI and this needs replication in further studies.

Clinical Implications

These findings tentatively suggest that critical voices may be a more fruitful therapeutic intervention target than self-criticism in people who hear critical voices who are struggling with SI. Trauma-informed therapeutic approaches to voice hearing such as Making Sense of Voices (Romme & Escher, 2000; Steel et al., 2020) and Talking with Voices (Longden et al., 2021) may be helpful in addressing critical voices. Talking with voices helps people to develop a more constructive relationship and claim a more independent position from their voices (Corstens et al., 2012). This may be particularly helpful to defend against a voice that is commanding someone to kill the self, which are high risk if someone appeases and complies with voices. Research has also found Compassion Focussed Therapy to be helpful for distressing voice hearing experiences (Heriot-Maitland et al., 2023; Heriot-Maitland & Levey, 2021; Mayhew & Gilbert, 2008). Although self-compassion was not found to significantly moderate the relationship between critical voices and SI. This analysis was not adequately powered and would need to be repeated with a larger sample size. Finally, service user preferences and choices around what is important to them is recommended when considering various approaches and therapeutic targets.

Strengths and Limitations

Strengths of the cross-sectional study design were that it allowed for data collection on factors of interest within the time and resource constraints available. Limitations of the cross-sectional design included that it is not possible to make a causal inference from the data or to understand the temporal relationship between variables (Wang & Cheng, 2020). A strength of utilising online data collection was it provided access to a large, global and diverse pool of people. Participants recruited from online platforms such as Reddit have been found to provide high quality data that is comparable to more traditional methods of data collection (Jamnike & Lane, 2017). Using online platforms incurred no financial cost to participants or the research team. Participants accessing the survey from their personal electronic devices likely increased accessibility for certain people and reduced burden of taking part. Posting in online communities associated with the

demographics of interest allowed us to reach people who were more likely to be eligible to take part within a shorter space of time (Shatz, 2017). Limitations of this method includes the possibility of selection biases. Participants needed to have sufficient digital literacy to be able to access the survey, only people who could access the internet could take part and participants self-selected to take part (Bethlehem, 2010; Kraut et al., 2004).

Including clinical and non-clinical voice hearers presents the issue of caseness i.e. the degree to which a person's presentation fits within diagnostic criteria to be considered a clinical case. This is likely to have introduced a more heterogeneous sample of people. However, including both clinical and non-clinical voice hearers also presents a strength of this study. Baumeister et al.,'s (2017) systematic review found support for a continuum view and dimensional models of voice hearing, recommending that future research also include non-clinical voice hearers as a key resource to inform the development of transdiagnostic approaches to supporting people who hear voices. In addition, the analysis showed no significant difference in clinical and non-clinical voice hearing groups. Controlling for many variables which were likely to have a meaningful effect on the outcome variable (SI) may pose a limitation to this study as much of the effect of self-attacking on SI is likely to be associated with these variables (Miller and Chapman, 2001). Therefore, understanding the total effect of self-attacking on SI inclusive of these variables may be more relevant clinically.

Future Research

Further research is needed to continue to explore the relationships between self-attacking thoughts, critical voices and suicide in people who hear voices. A case-crossover study design where participants receive different interventions that target self-attacking thoughts and critical voices separately for different time-periods could be an effective study design. This design would limit between subject variability (Maclure & Mittleman, 2000) and test whether intervening in one form of self-attacking (internal or externally perceived) affected the other, as well as on SI. Self-attacking thoughts had a strong effect on the relationship between gender minority and SI. Self-attacking

thoughts may be critical in understanding suicide risk in minority gender groups. These findings were not statistically significant in the present study, but this highlights self-attacking thoughts as an important area for future research in gender minority research. Qualitative research that consults voice hearers about whether self-attacking thoughts or critical voices are more important to them in relation to SI is recommended. In addition, a future fully powered study to investigate the moderating role of self-compassion in these relationships is recommended.

Conclusion

This study found self-attacking thoughts and critical voices are significantly associated with SI severity in adults who hear voices. Both self-attacking thoughts and critical voices may provide an important survival function by mobilising a person toward threat-protection. In terms of the IMV model, this dominant-subordinate module of social rank mentalities may drive SI through threat to self-moderators and motivational-moderators (e.g. increasing thwarted belongingness) or be an additional factor alongside entrapment. Self-attacking thoughts or critical voices did not significantly predict SA. Minoritised gender and entrapment did significantly predicted SA. The present findings tentatively suggest that for people who hear voices, critical voices may also be a key independent driver of SI. Therefore, critical voices may be a particularly important predictor of SI and a potential target for psychological therapy, although further research is recommended to explore this further.

References

Andresen, E. M., Malmgren, J. A., Carter, W. B., & Patrick, D. L. (1994). Screening for depression in well older adults: evaluation of a short form of the CES-D (Center for Epidemiologic Studies Depression Scale). *American Journal of Preventive Medicine*, 10(2), 77–84. https://doi.org/10.1016/S0749-3797(18)30622-6

Arciniegas, D. B. (2015). Psychosis. *CONTINUUM: lifelong learning in neurology*, *21*(3), 715-736. https://doi.org/10.1212/01.CON.0000466662.89908.e7

Bahk, Y. C., Jang, S. K., Choi, K. H., & Lee, S. H. (2017). The relationship between childhood trauma and SI: role of maltreatment and potential mediators. *Psychiatry investigation*, *14*(1), 37. https://doi.org/10.4306/pi.2017.14.1.37

Baião, R., Gilbert, P., McEwan, K., & Carvalho, S. (2015). Forms of self-criticising/attacking & self-reassuring scale: Psychometric properties and normative study. *Psychology and Psychotherapy: Theory, Research and Practice*, 88(4), 438-452. https://doi.org/10.1111/papt.12049

Barr, S. M., Roberts, D., & Thakkar, K. N. (2021). Psychosis in transgender and gender non-conforming individuals: A review of the literature and a call for more research. *Psychiatry Research*, 306, 114272. https://doi.org/10.1016/j.psychres.2021.114272

Baumeister, D., Sedgwick, O., Howes, O., & Peters, E. (2017). Auditory verbal hallucinations and continuum models of psychosis: A systematic review of the healthy voice-hearer literature. *Clinical psychology review*, *51*, 125-141. https://doi.org/10.1016/j.cpr.2016.10.010

Baumeister, R. F. (1990). Suicide as escape from self. *Psychological review*, 97(1), 90. https://doi.org/10.1037/0033-295X.97.1.90

Bentall R. (2006). Madness explained: why we must reject the Kraepelinian paradigm and replace it with a 'complaint-orientated' approach to understanding mental illness. Medical hypotheses, 66(2), 220–233. https://doi.org/10.1016/j.mehy.2005.09.026

Bethlehem, J. (2010). Selection bias in web surveys. *International statistical review,* 78(2), 161-188. https://doi.org/10.1111/j.1751-5823.2010.00112.x

Birchwood, M., Gilbert, P., Gilbert, J., Trower, P., Meaden, A., Hay, J., Murray, E., & Miles, J. N. (2004). Interpersonal and role-related schema influence the relationship with the dominant 'voice' in schizophrenia: a comparison of three models. *Psychological medicine*, 34(8), 1571–1580. https://doi.org/10.1017/s0033291704002636

Björgvinsson, T., Kertz, S. J., Bigda-Peyton, J. S., McCoy, K. L., & Aderka, I. M. (2013). Psychometric properties of the CES-D-10 in a psychiatric sample. *Assessment*, 20(4), 429-436. https://doi.org/10.1177/1073191113481998

Bornheimer, L. A., Hong, V., Li Verdugo, J., Fernandez, L., & King, C. A. (2021). Relationships between hallucinations, delusions, depression, suicide ideation, and plan among adults presenting with psychosis in psychiatric emergency care. *Psychosis*, 14(2), 109–119. https://doi.org/10.1080/17522439.2021.1912815

Capra, C., Kavanagh, D. J., Hides, L., & Scott, J. G. (2017). Current CAPE-15: A measure of recent psychotic-like experiences and associated distress. *Early intervention in psychiatry*, *11*(5), 411-417. https://doi.org/10.1111/eip.12245

Chadwick, P., Lees, S., & Birchwood, M. A. X. (2000). The revised beliefs about voices questionnaire (BAVQ–R). *The British Journal of Psychiatry*, 177(3), 229-232. https://doi.org/10.1192/bjp.177.3.229

Cleare, S., Gumley, A., & O'Connor, R. C. (2019). Self-compassion, self-forgiveness, SI, and self-harm: A systematic review. *Clinical psychology & psychotherapy*, *26*(5), 511-530. https://doi.org/10.1002/cpp.2372

Connor, C., & Birchwood, M. (2013). Power and perceived expressed emotion of voices: their impact on depression and suicidal thinking in those who hear voices. Clinical psychology & psychotherapy, 20(3), 199-205. https://doi.org/10.1002/cpp.798

Corstens, D., Escher, S., Romme, M., & Longden, E. (2018). Accepting and working with voices: The Maastricht approach*. Psychosis, Trauma and Dissociation: Evolving perspectives on severe psychopathology,* 381-396.https://doi.org/10.1002/9781118585948.ch24

Corstens, D., Longden, E., & May, R. (2011). Talking with voices: Exploring what is expressed by the voices people hear. *Psychosis*, 4(2), 95–104. https://doi.org/10.1080/17522439.2011.571705

Cull, J. G., & Gill, W. S. (1988). Suicide probability scale. *Journal of Consulting and Clinical Psychology*. https://doi.org/10.1037/t01198-000

Daalman, K., Boks, M. P., Diederen, K. M., de Weijer, A. D., Blom, J. D., Kahn, R. S., & Sommer, I. E. (2011). The same or different? A phenomenological comparison of auditory verbal hallucinations in healthy and psychotic individuals. *The Journal of clinical psychiatry*, *72*(3), 18878. https://doi.org/10.4088/JCP.09m05797yel

DeVylder, J. E., & Hilimire, M. R. (2015). Suicide risk, stress sensitivity, and self-esteem among young adults reporting auditory hallucinations. *Health & social work*, *40*(3), 175-181. https://doi.org/10.1093/hsw/hlv037

DeVylder, J. E., Lukens, E. P., Link, B. G., & Lieberman, J. A. (2015). SI and suicide attempts among adults with psychotic experiences: data from the collaborative psychiatric epidemiology surveys. *JAMA psychiatry*, 72(3), 219-225. https://doi.org/10.1001/jamapsychiatry.2014.2663

entrapment in depression, anxiety, and suicide. Psychological Bulletin, 137(3), 391–420. https://doi.org/10.1037/a0022935

Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G* Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior research methods,* 39(2), 175-191. https://doi.org/10.3758/BF03193146

Field, A. (2018) Discovering Statistics Using IBM SPSS Statistics. 5th Edition, Sage.

Fox, J. R., Gray, N. S., & Lewis, H. (2004). Factors determining compliance with command hallucinations with violent content: the role of social rank, perceived power of the voice and voice malevolence. *Journal of Forensic Psychiatry & Psychology*, *15*(3), 511-531. https://doi.org/10.1080/1478994042000226741

Frazier, P. A., Tix, A. P., & Barron, K. E. (2004). Testing Moderator and Mediator Effects in Counseling Psychology Research. Journal of Counseling Psychology, 51(1), 115–134. https://doi.org/10.1037/0022-0167.51.1.115

Gilbert, P. (2004). Compassion. *Milton: Taylor & Francis*. P.281

Gilbert, P. (2014). The origins and nature of compassion focused therapy. *British journal of clinical psychology*, *53*(1), 6-41. https://doi.org/10.1111/bjc.12043

Gilbert, P., & Allan, S. (1998). The role of defeat and entrapment (arrested flight) in depression: an exploration of an evolutionary view. *Psychological medicine*, *28*(3), 585–598. https://doi.org/10.1017/s0033291798006710

Gilbert, P., & Bailey, K. G. (2000). Genes on the couch : explorations in evolutionary psychotherapy. Brunner-Routledge. https://doi.org/10.4324/9781315783314

Gilbert, P., & Procter, S. (2006). Compassionate mind training for people with high shame and self-criticism: Overview and pilot study of a group therapy approach. *Clinical Psychology &*

Psychotherapy: An International Journal of Theory & Practice, *13*(6), 353-379. https://doi.org/10.1002/cpp.507

Gilbert, P., Birchwood, M., Gilbert, J., Trower, P., Hay, J., Murray, B., Meaden, A., Olsen, K., & Miles, J. N. (2001). An exploration of evolved mental mechanisms for dominant and subordinate behaviour in relation to auditory hallucinations in schizophrenia and critical thoughts in depression. *Psychological medicine*, *31*(6), 1117–1127. https://doi.org/10.1017/s0033291701004093

Gilbert, P., Catarino, F., Duarte, C., Matos, M., Kolts, R., Stubbs, J., ... & Basran, J. (2017). The development of compassionate engagement and action scales for self and others. *Journal of Compassionate Health Care*, 4, 1-24. https://doi.org/10.1186/s40639-017-0033-3

Gilbert, P., Clarke, M., Hempel, S., Miles, J. N., & Irons, C. (2004). Criticizing and reassuring oneself: An exploration of forms, styles and reasons in female students. *The British journal of clinical psychology*, *43*(Pt 1), 31–50. https://doi.org/10.1348/014466504772812959

Grover, L. E., Jones, R., Bass, N. J., & McQuillin, A. (2022). The differential associations of positive and negative symptoms with suicidality. *Schizophrenia Research*, 248, 42-49. https://doi.org/10.1016/j.schres.2022.07.016

Hayes, A. F. (2017). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach. Guilford publications.

Hendricks, M. L., & Testa, R. J. (2012). A conceptual framework for clinical work with transgender and gender nonconforming clients: An adaptation of the Minority Stress Model. *Professional Psychology: Research and Practice*, *43*(5), 460. https://doi.org/10.1037/a0029597

Heriot-Maitland, C. (2022). Compassion focused therapy for voice-hearing and delusions in psychosis. In Gilbert, P., & Simos, G. (Eds.), Compassion Focused Therapy: Clinical Practice

and Applications (1st ed.). Routledge. (pp. 549-564). https://doi.org/10.4324/9781003035879

Heriot-Maitland, C. (2024). Position paper–CFT for psychosis. *Psychology and Psychotherapy: Theory, Research and Practice*, *97*(1), 59-73. https://doi.org/10.1111/papt.12490

Heriot-Maitland, C., & Levey, V. (2021). A case report of compassion-focused therapy for distressing voice-hearing experiences. *Journal of Clinical Psychology*, *77*(8), 1821-1835. https://doi.org/10.1002/jclp.23211

Heriot-Maitland, C., Gumley, A., Wykes, T., Longden, E., Irons, C., Gilbert, P., & Peters, E. (2023). A case series study of compassion-focused therapy for distressing experiences in psychosis. *British Journal of Clinical Psychology*, *62*(4), 762-781. https://doi.org/10.1111/bjc.12437

Heriot-Maitland, C., McCarthy-Jones, S., Longden, E., & Gilbert, P. (2019). Compassion focused approaches to working with distressing voices. *Frontiers in psychology*, *10*, 152. https://doi.org/10.3389/fpsyg.2019.00152

Hielscher, E., DeVylder, J. E., Saha, S., Connell, M., & Scott, J. G. (2018). Why are psychotic experiences associated with self-injurious thoughts and behaviours? A systematic review and critical appraisal of potential confounding and mediating factors. *Psychological medicine*, 48(9), 1410-1426. https://doi.org/10.1017/S0033291717002677

Hielscher, E., DeVylder, J., Hasking, P., Connell, M., Martin, G., & Scott, J. G. (2021). Can't get you out of my head: Persistence and remission of psychotic experiences in adolescents and its association with self-injury and suicide attempts. *Schizophrenia Research*, 229, 63-72. https://doi.org/10.1016/j.schres.2020.11.019

Huang, X., Fox, K. R., Ribeiro, J. D., & Franklin, J. C. (2018). Psychosis as a risk factor for suicidal thoughts and behaviors: a meta-analysis of longitudinal studies. *Psychological medicine,* 48(5), 765-776. https://doi.org/10.1017/S0033291717002136

Hustig, H. H., & Hafner, R. J. (1990). Persistent auditory hallucinations and their relationship to delusions and mood. *Journal of Nervous and Mental Disease*. https://doi.org/10.1097/00005053-199004000-00009

Jamnik, M. R., & Lane, D. J. (2017). The use of reddit as an inexpensive source for high-quality data. *Practical Assessment, Research & Evaluation*, *22*(5), n5. https://files.eric.ed.gov/fulltext/EJ1143363.pdf

Johnson, J., Gooding, P. A., Wood, A. M., & Tarrier, N. (2010). Resilience as positive coping appraisals: Testing the schematic appraisals model of suicide (SAMS). *Behaviour research and therapy*, 48(3), 179–186. https://doi.org/10.1016/j.brat.2009.10.007

Johnson, J., Gooding, P., & Tarrier, N. (2008). Suicide risk in schizophrenia: Explanatory models and clinical implications, The Schematic Appraisal Model of Suicide (SAMS). *Psychology and Psychotherapy: Theory, Research and Practice*, 81(1), 55-77. https://doi.org/10.1348/147608307X244996

Kelleher, I., Corcoran, P., Keeley, H., Wigman, J. T., Devlin, N., Ramsay, H., ... & Cannon, M. (2013). Psychotic symptoms and population risk for suicide attempt: a prospective cohort study. *JAMA psychiatry*, *70*(9), 940-948. https://doi.org/10.1001/jamapsychiatry.2013.140

Kjelby, E., Sinkeviciute, I., Gjestad, R., Kroken, R. A., Løberg, E. M., Jørgensen, H. A., ... & Johnsen, E. (2015). Suicidality in schizophrenia spectrum disorders: the relationship to hallucinations and persecutory delusions. *European psychiatry*, 30(7), 830-836. https://doi.org/10.1016/j.eurpsy.2015.07.003

Klonsky, E. D., & May, A. M. (2015). The three-step theory (3ST): A new theory of suicide rooted in the "ideation-to-action" framework. *International Journal of Cognitive Therapy*, *8*(2), 114-129.https://doi.org/10.1521/ijct.2015.8.2.114

Kraut, R., Olson, J., Banaji, M., Bruckman, A., Cohen, J., & Couper, M. (2004). Psychological research online: report of Board of Scientific Affairs' Advisory Group on the Conduct of Research on the Internet. *American psychologist*, *59*(2), 105. https://doi.org/10.1037/0003-066X.59.2.105

Lee, K. W., Chan, K. W., Chang, W. C., Lee, E. H., Hui, C. L., & Chen, E. Y. (2016). A systematic review on definitions and assessments of psychotic-like experiences. *Early intervention in psychiatry*, *10*(1), 3–16. https://doi.org/10.1111/eip.12228

Lewis, G., Pelosi, A. J., Araya, R., & Dunn, G. (1992). Measuring psychiatric disorder in the community: a standardized assessment for use by lay interviewers. *Psychological medicine*, *22*(2), 465-486. https://doi.org/10.1017/S0033291700030415

Lindsey, S., Hiskey, S., Irons, C., & Andrews, L. (2022). Examining the Psychometric Properties of the Compassionate Engagement and Action Scales (CEAS) in the UK General Population. *OBM Integrative and Complementary Medicine,* 7(3), 1-29. https://doi.org/10.21926/obm.icm.2203039

Longden, E., Corstens, D., Morrison, A. P., Larkin, A., Murphy, E., Holden, N., ... & Bowe, S. (2021). A treatment protocol to guide the delivery of dialogical engagement with auditory hallucinations: Experience from the talking with voices pilot trial. *Psychology and Psychotherapy: Theory, Research and Practice*, *94*(3), 558-572. https://doi.org/10.1111/papt.12331

Longden, E., Madill, A., & Waterman, M. G. (2012). Dissociation, trauma, and the role of lived experience: toward a new conceptualization of voice hearing. *Psychological bulletin*, 138(1), 28–76. https://doi.org/10.1037/a0025995

Maclure, M., & Mittleman, A. M. (2000). Should we use a case-crossover design?. *Annual review of public health*, *21*(1), 193-221. https://doi.org/10.1146/annurev.publhealth.21.1.193

Madan, A., Frueh, B. C., Allen, J. G., Ellis, T. E., Rufino, K. A., Oldham, J. M., & Fowler, J. C. (2016). Psychometric reevaluation of the Columbia-Suicide Severity Rating Scale: Findings from a prospective, inpatient cohort of severely mentally ill adults. *The Journal of Clinical Psychiatry*, 77(7), 16125. https://doi.org/10.4088/JCP.15m10069

Maijer, K., Begemann, M. J., Palmen, S. J., Leucht, S. J. M. C., & Sommer, I. E. (2018). Auditory hallucinations across the lifespan: a systematic review and meta-analysis. *Psychological medicine*, *48*(6), 879-888. https://doi.org/10.1017/S0033291717002367

Marshall, E., Claes, L., Bouman, W. P., Witcomb, G. L., & Arcelus, J. (2015). Non-suicidal self-injury and suicidality in trans people: A systematic review of the literature. *International Review of Psychiatry*, 28(1), 58–69. https://doi.org/10.3109/09540261.2015.1073143

Mayhew, S. L., & Gilbert, P. (2008). Compassionate mind training with people who hear malevolent voices: A case series report. *Clinical Psychology & Psychotherapy: An International Journal of Theory & Practice*, *15*(2), 113-138. https://doi.org/10.1002/cpp.566

McCarthy-Jones S. (2017). Is Shame Hallucinogenic?. *Frontiers in psychology*, 8, 1310. https://doi.org/10.3389/fpsyg.2017.01310

McCarthy-Jones, S. (2012). Hearing voices: The histories, causes and meanings of auditory verbal hallucinations. Cambridge University Press. P.2.

McManus, S., Bebbington, P. E., Jenkins, R., & Brugha, T. (2016). *Mental health and wellbeing in England: the adult psychiatric morbidity survey 2014*. NHS digital.

https://files.digital.nhs.uk/pdf/q/3/mental_health_and_wellbeing_in_england_full_report.pdf

McNeil, J., Ellis, S. J., & Eccles, F. J. R. (2017). Suicide in trans populations: A systematic review of prevalence and correlates. *Psychology of Sexual Orientation and Gender Diversity*, 4(3), 341–353. https://doi.org/10.1037/sgd0000235

Miller, G. A., & Chapman, J. P. (2001). Misunderstanding analysis of covariance. Journal of abnormal psychology, 110(1), 40.https://doi.org/10.1037//0021-843x.110.1.40.

Murphy, J., Shevlin, M., Arseneault, L., Bentall, R., Caspi, A., Danese, A., ... & Fisher, H. L. (2022). Externalizing the threat from within: A new direction for researching associations between suicide and psychotic experiences. *Development and psychopathology*, *34*(3), 1034-1044. https://doi.org/10.1017/S0954579420001728

Murphy, J., Shevlin, M., Hyland, P., Christoffersen, M., Elklit, A., & Bentall, R. (2018). Reconsidering the association between psychosis and suicide: a suicidal drive hypothesis. *Psychosis*, *10*(4), 286–297. https://doi.org/10.1080/17522439.2018.1522541

Neff, K. D. (2023). Self-compassion: Theory, method, research, and intervention. *Annual review of psychology*, *74*, 193-218. https://doi.org/10.1146/annurev-psych-032420-031047

O'Connor, R. C. (2011). Towards an integrated motivational–volitional model of suicidal behaviour. *International handbook of suicide prevention: Research, policy and practice*, *1*, 181-98. http://ndl.ethernet.edu.et/bitstream/123456789/28339/2/161.pdf.pdf#page=187

O'Connor, R. C., & Portzky, G. (2018). The relationship between entrapment and suicidal behavior through the lens of the integrated motivational–volitional model of suicidal behavior. *Current opinion in psychology*, *22*, 12-17. https://doi.org/10.1016/j.copsyc.2017.07.021

O'Connor, R. C., Smillie, S., McClelland, H., Lundy, J. M., Stewart, C., Syrett, S., ... & Simpson, S. A. (2022). SAFETEL: a pilot randomised controlled trial to assess the feasibility and acceptability of a safety planning and telephone follow-up intervention to reduce suicidal behaviour. *Pilot and feasibility studies*, *8*(1), 156. https://doi.org/10.1186/s40814-022-01081-5

O'Connor, R. C. (2007). The relations between perfectionism and suicidality: a systematic review. *Suicide & Life-Threatening Behavior*, 37(6), 698–714. https://doi.org/10.1521/suli.2007.37.6.698

O'Connor, R. C., & Kirtley, O. J. (2018). The integrated motivational-volitional model of suicidal behaviour. *Philosophical transactions of the Royal Society of London. Series B, Biological sciences*, *373*(1754), 20170268. https://doi.org/10.1098/rstb.2017.0268

O'Connor, R. C., & Nock, M. K. (2014). The psychology of suicidal behaviour. *The lancet. Psychiatry*, *1*(1), 73–85. https://doi.org/10.1016/S2215-0366(14)70222-6

O'Connor, R. C., Wetherall, K., Cleare, S., Eschle, S., Drummond, J., Ferguson, E., ... & O'Carroll, R. E. (2018). Suicide attempts and non-suicidal self-harm: national prevalence study of young adults. *BJPsych open*, *4*(3), 142-148. https://doi.org/10.1192/bjo.2018.14

O'Neill, C., Pratt, D., Kilshaw, M., Ward, K., Kelly, J., & Haddock, G. (2021). The relationship between self-criticism and suicide probability. Clinical psychology & psychotherapy, 28(6), 1445–1456. https://doi.org/10.1002/cpp.2593

Posner, K., Brown, G. K., Stanley, B., Brent, D. A., Yershova, K. V., Oquendo, M. A., ... & Mann, J. J. (2011). The Columbia–Suicide Severity Rating Scale: initial validity and internal consistency findings from three multisite studies with adolescents and adults. *American journal of psychiatry*, 168(12), 1266-1277. https://doi.org/10.1176/appi.ajp.2011.10111704

Reynolds, N., & Scragg, P. (2010). Compliance with command hallucinations: the role of power in relation to the voice, and social rank in relation to the voice and others. *Journal of Forensic Psychiatry & Psychology*, *21*(1), 121-138. https://doi.org/10.1080/14789940903194111

Rimvall, M. K., & Kelleher, I. (2021). Confide in me: why clinicians should ask about auditory hallucinations to understand risk for suicidal behaviour. *Schizophrenia research,* 228, 314-315. https://doi.org/10.1016/j.schres.2020.12.030

Romme, M. & Escher, S. (2000). Making Sense of Voices. London: Mind.

Shatz, I. (2017). Fast, free, and targeted: Reddit as a source for recruiting participants online. *Social Science Computer Review*, *35*(4), 537-549. https://doi.org/10.1177/0894439316650163

Siddaway, A. P., Taylor, P. J., Wood, A. M., & Schulz, J. (2015). A meta-analysis of perceptions of defeat and entrapment in depression, anxiety problems, posttraumatic stress disorder, and suicidality. *Journal of affective disorders*, *184*, 149-159.

Steel, C., Schnackenberg, J., Travers, Z., Longden, E., Greenfield, E., Meredith, L., … Corstens, D. (2020). Voice hearers' experiences of the Making Sense of Voices approach in an NHS setting. *Psychosis*, 12(2), 106–114. https://doi.org/10.1080/17522439.2019.1707859

Suh, H., & Jeong, J. (2021). Association of self-compassion with suicidal thoughts and behaviors and non-suicidal self injury: A meta-analysis. *Frontiers in psychology*, *12*, 633482. https://doi.org/10.3389/fpsyg.2021.633482

Taylor, P. J., Gooding, P. A., Wood, A. M., & Tarrier, N. (2011). The role of defeat and

Taylor, P. J., Gooding, P. A., Wood, A. M., Johnson, J., Pratt, D., & Tarrier, N. (2010). Defeat and entrapment in schizophrenia: The relationship with SI and positive psychotic symptoms. *Psychiatry research*, *178*(2), 244-248. https://doi.org/10.1016/j.psychres.2009.10.015

Taylor, P.J., Wood, A.M., Gooding, P.A., Johnson, J., Tarrier, N., (2009). Are defeat and entrapment best defined as a single construct? Personality and Individual Differences 47, 795–797. https://doi.org/10.1016/j.paid.2009.06.011

Toh, W. L., Moseley, P., & Fernyhough, C. (2022). Hearing voices as a feature of typical and psychopathological experience. *Nature Reviews Psychology*, *1*(2), 72-86. https://doi.org/10.1038/s44159-021-00013-z

Turecki, G., Brent, D. A., Gunnell, D., O'Connor, R. C., Oquendo, M. A., Pirkis, J., & Stanley, B. H. (2019). Suicide and suicide risk. *Nature reviews Disease primers*, *5*(1), 74. https://doi.org/10.1038/s41572-019-0121-0

Van Orden, K. A., Witte, T. K., Cukrowicz, K. C., Braithwaite, S. R., Selby, E. A., & Joiner, T. E., Jr (2010). The interpersonal theory of suicide. Psychological review, 117(2), 575–600. https://doi.org/10.1037/a0018697

Wang, X., & Cheng, Z. (2020). Cross-sectional studies: strengths, weaknesses, and recommendations. *Chest*, *158*(1), S65-S71.https://doi.org/10.1016/j.chest.2020.03.012

Waters, F., & Fernyhough, C. (2017). Hallucinations: a systematic review of points of similarity and difference across diagnostic classes. *Schizophrenia bulletin,* 43(1), 32-43. https://doi.org/10.1093/schbul/sbw132

Wetherall, K., Robb, K. A. & O'Connor, R. C. (2019). Social rank theory of depression: A systematic review of self-perceptions of social rank and their relationship with depressive symptoms and suicide risk. Journal of Affective Disorders, 246, 300-319. https://doi.org/10.1016/j.jad.2018.12.045

Williams, M. (1997). Cry of pain: Understanding suicide and self-harm. London: Penguin.

World Health Organization (2021a). Suicide worldwide in 2019: global health estimates. https://iris.who.int/bitstream/handle/10665/341728/9789240026643-eng.pdf?sequence=1.

World Health Organization (2021b). International statistical classification of diseases and related health problems (11th ed.). https://icd.who.int/

Yates, K., Lång, U., Cederlöf, M., Boland, F., Taylor, P., Cannon, M., ... & Kelleher, I. (2019). Association of psychotic experiences with subsequent risk of SI, suicide attempts, and suicide deaths: a systematic review and meta-analysis of longitudinal population studies. *JAMA psychiatry*, 76(2), 180-189. https://doi.org/10.1001/jamapsychiatry.2018.3514

Yin, Y., Tong, J., Huang, J., Tian, B., Chen, S., Tan, S., Wang, Z., Yang, F., Tong, Y., Fan, F., Kochunov, P., Tan, Y., & Hong, L. E. (2023). Auditory Hallucinations, Depressive Symptoms, and Current SI or Behavior Among Patients with Acute-episode Schizophrenia. *Archives of suicide research : official journal of the International Academy for Suicide Research*, 27(2), 323–338. https://doi.org/10.1080/13811118.2021.1993399

Zakhour, M., Haddad, C., Sacre, H., Fares, K., Akel, M., Obeid, S., ... & Hallit, S. (2021). Suicidal ideation among Lebanese adults: scale validation and correlates. *BMC psychiatry*, 21, 1-11. https://doi.org/10.1186/s12888-021-03111-7

Zatti, C., Rosa, V., Barros, A., Valdivia, L., Calegaro, V. C., Freitas, L. H., ... & Schuch, F. B. (2017). Childhood trauma and suicide attempt: A meta-analysis of longitudinal studies from the last decade. *Psychiatry research*, *256*, 353-358. https://doi.org/10.1016/j.psychres.2017.06.082

Tables and Figures

Table 2-1
Demographic characteristics

		n	%	Min	Max	Mean
Participants		85				
Age		85		19	59	31.16
Age of onset of voices*		84*		0	45	18.30
Gender	Man	29	34.1%			
	Woman	33	38.8%			
	Trans Man	9	10.6%			
	Trans Woman	3	3.5%			
	Non-binary/other	9	10.6%			
	Prefer not to say	2	2.4%			
Ethnicity	White	60	70.6%			
	Black/African/Caribbean	6	7.1%			
	Asian (Indian, Pakistani, Bangladeshi, Chinese, any other Asian background)	4	4.7%			
	Mixed two or more ethnic groups	10	11.8%			
	Other (Arab or any others)	6	7.1%			
	Prefer not to say	1	1.2%			
Marital Status	Married	22	25.9%			
	Living with partner	15	17.6%			

	Widowed	0	0%
	Divorced/separated	3	3.5%
	Never been married	45	52.9%
Diagnosis	Schizophrenia	22	
	Schizoaffective Disorder	32	
	Schizotypal disorder	3	
	Acute and Transient Psychotic Disorder	5	
	Delusional Disorder	3	
	Other Specified Schizophrenia or Primary Psychotic Disorders	7	
	No Formal Diagnosis Given of Psychosis	15	

Note. * Age of onset of voices missing one response

Table 2-2
Descriptive Statistics

	Clinical (n = 70)	**Non-clinical (n = 15)**	**Total (n=85)**	**Cronbach's Alpha**	**Mann Whitney U**	**Independent. t test**			**p**
	Mean (SD)	Mean (SD)	Mean (SD)	α		t	df	Cohen's d	p
CESD-10	19.24 (5.97)	20.33 (4.35)	19.44 (5.71)	.794		-.669	83	-.190	.505
Defeat Scale	41.83 (13.17)	43.20 (10.66)	42.07 (12.71)	.937		-.377	83	-.107	.707
Entrapment Scale	39.86 (15.47)	40.60 (15.72)	39.99 (15.42)	.936	536				.899
FSCRS Hated Self Subscale	11.54 (5.63)	11.80 (5.21)	11.59 (5.53)	.837	535				.908

FVCRS Hated Self Subscale	9.40 (6.31)	8.53 (7.46)	9.25 (6.49)	.903	492				.703
BAVQ-R Malevolence Subscale	8.29 (5.30)	7.00 (6.04)	8.06 (5.42)	.877	457.5				.435
CEAS Engagement Subscale	31.21 (9.83)	25.40 (11.67)	30.19 (10.35)	.667		2.011	83	.572	.048
CEAS Action Subscale	13.76 (7.04)	10.07 (6.40)	13.11 (7.04)	.834		1.87	83	.532	.065
CEAS Total	44.97 (15.64)	35.47 (16.72)	43.23 (16.15)	.825		2.111	83	.601	.038
Suicide Ideation Severity (C-SSRS)	3.37 (1.56)	3.47 (1.51)	3.39 (1.55)	n/a	540				.859

Table 2-3
Voice Characteristics

		% of Clinical (n=70)	% of non-clinical (n=15)	TOTAL (n=85)
Voice Frequency (Over the last few days my voices have been. . .)	Absent (not at all lately)	15.7	33.3	18.8
	Fairly infrequent (several times this week but not every day)	18.6	20.0	18.8
	Average (once a day)	7.1	6.7	7.1
	Fairly frequent (several times a day but not every hour)	44.3	26.7	41.2
	Very frequent (every hour)	14.3	13.3	14.1
Voice Volume (Over the last few days my voices have been. . .)	Very quiet	20.0	33.3	22.4
	Fairly quiet	21.4	13.3	20.0
	Average	27.1	26.7	27.1
	Fairly loud	27.1	20.0	25.9
	Very loud	4.3	6.7	4.7
Voice Clarity (Over the last few days my voices have been. . .)	Very mumbled	12.9	40.0	17.6
	Fairly mumbled	18.6	13.3	17.6
	Average	31.4	20.0	29.4
	Fairly clear	17.1	6.7	15.3
	Very clear	20.0	20.0	20.0

Table 2-4 Spearman's Rho correlation matrix between variables

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Suicide Ideation Severity (C-SSRS)	-												
2. Age	-0.063	-											
3. Age of Onset of Voices?[a]	-0.065	0.135	-										
4. Voice Frequency	0.068	-0.087	-0.026	-									
5. Voice Malevolence (BAVQ Mal. subscale)	.340**	-0.205	-0.011	.341**	-								
6. Self-compassion Engagement (CEAS Subscale)	-0.185	-0.118	.256*	-0.109	0.1	-							
7. Self-compassion Action (CEAS subscale)	-.258*	-0.145	-0.002	0.073	0.066	.709**	-						
8. Self-compassion Total (CEAS)	-.223*	-0.159	0.156	-0.042	0.091	.945**	.894**	-					
9. Depression (CESD-10)	.221*	-0.015	-0.009	0.141	0.037	-.245*	-.307**	-.293**	-				
10. Defeat Scale	.367**	-0.061	-0.079	0.192	0.164	-.398**	-.534**	-.491**	.624**	-			
11. Entrapment Scale	.461**	-0.145	-0.069	0.089	.286**	-.270*	-.360**	-.335**	.635**	.731**	-		
12. Self-attacking Thoughts (FSCRS HS Subscale)	.461**	-0.163	-0.056	0.058	.247*	-.319**	-.481**	-.417**	.546**	.638**	.698**	-	
13. Critical Voices (FVCRS HS Subscale)	.473**	-0.109	-0.152	.397**	.755**	-0.133	-0.119	-0.133	0.197	.417**	.447**	.435**	-

Note. ** Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed). a n = 84

Table 2-5
Results of Multiple Regression Analyses for Self-Attacking Thoughts and SI Severity

	Unstandardised B	**SE**	**Standardised Beta**	**t**	**P**	**R^2**	**Adj. R**	**R^2 Change**	**F**	**F change**
Model 1						0.253	0.183	0.253	3.584*	3.584*
Gender	0.103	0.362	0.03	0.284	0.777					
Age	0.009	0.018	0.055	0.531	0.597					
Age of onset of Voices	-0.009	0.019	-0.05	-0.478	0.634					
voice frequency	0.034	0.111	0.031	0.305	0.761					
CESD-10	-0.016	0.037	-0.06	-0.427	0.671					
Entrapment	0.049	0.016	0.499	3.024	0.003					
Defeat	0.005	0.021	0.039	0.226	0.821					
Model 2						0.3	0.223	0.047	3.91**	4.878*
Gender	-0.128	0.368	-0.037	-0.348	0.728					
Age	0.013	0.017	0.079	0.769	0.444					
Age of onset of Voices	-0.009	0.018	-0.05	-0.49	0.626					

Voice Frequency	0.045	0.109	0.041	0.417	0.678					
CESD-10	-0.031	0.037	-0.115	-0.828	0.41					
Entrapment	0.034	0.017	0.343	1.951	0.055					
Defeat	-0.001	0.02	-0.004	-0.025	0.98					
Self-attacking	0.091	0.041	0.335	2.209	0.03					
Thoughts (FSCRSHS)										
Model 3						0.363	0.283	0.063	4.555**	7.103*
Gender	-0.179	0.354	-0.052	-0.505	0.615					
Age	0.01	0.017	0.061	0.621	0.537					
Age of onset of Voices	-0.001	0.018	-0.008	-0.083	0.934					
voice frequency	-0.099	0.117	-0.09	-0.842	0.403					
CESD-10	-0.011	0.036	-0.042	-0.308	0.759					

Entrapment	0.023	0.017	0.237	1.367	0.176
Defeat	-0.003	0.02	-0.024	-0.146	0.884
Self-attacking thoughts (FSCRSHS)	0.068	0.041	0.25	1.676	0.098
Critical Voices (FVCRSHS)	0.076	0.029	0.329	2.665	0.009

Note. * $p \leq .05$, ** $p \leq .001$.

Table 2-6
Bivariate Regressions with SI Severity as Outcome

	Bivariate	
Predictor	Unstandardised B (95% CI)	P
Gender	.339	.383
Age	-.004	.830
Age of onset of voices	-.016	.418
Voice Frequency	.058	.636
Depression (CESD-10)	.077	.008
Defeat	.047	<.001
Entrapment	.049	<.001
Self-attacking thoughts (FSCRS HS sub-scale)	.133	<.001
Voice Criticism (FVCRS HS sub-scale)	. 109	<.001
Voice Malevolence (BAVQ- R Sub-scale)	.103	<.001

Table 2-7
Results of Multiple Regression Analyses for Critical Voices and SI Severity

	Unstandardised B	SE	Standardised Beta	t	P	R^2	adj. R^2	R^2 change	F	F change
Model 1						0.253	0.183	0.253	3.584*	3.584*
Gender	0.103	0.362	0.03	0.284	0.777					
Age	0.009	0.018	0.055	0.531	0.597					
Age of Onset of Voices	-0.009	0.019	-0.05	-0.478	0.634					
Voice Frequency	0.034	0.111	0.031	0.305	0.761					
CESD-10	-0.016	0.037	-0.06	-0.427	0.671					
Entrapment	0.049	0.016	0.499	3.024	0.003					
Defeat	0.005	0.021	0.039	0.226	0.821					
Model 2						0.338	0.265	0.085	4.658**	9.347*
Gender	-0.021	0.346	-0.006	-0.061	0.951					
Age	0.007	0.017	0.042	0.426	0.672					
Age of Onset of Voices	0	0.018	-0.003	-0.027	0.979					
Voice Frequency	-0.126	0.118	-0.115	-1.073	0.287					
CESD-10	0.002	0.036	0.007	0.053	0.958					
Entrapment	0.033	0.016	0.334	2.019	0.047					
Defeat	0.001	0.02	0.004	0.027	0.979					
Critical Voices (FVCRS HS)	0.086	0.028	0.373	3.057	0.003					

Table 2-8
Results of Binary Logistic Regression for Suicidal Behaviour

Step and Predictors	B	S.E. B	Wald X^2	df	p	OR	95% CI OR
Step 1							
Age	0.043	0.032	1.769	1	0.183	1.044	0.98 - 1.113
Gender	2.376	0.883	7.232	1	0.007	10.757	1.904 - 60.754
Age of onset of Voices	-0.015	0.035	0.177	1	0.674	0.985	0.921 - 1.055
Voice Frequency	0.136	0.205	0.442	1	0.506	1.146	0.767 - 1.713
CESD-10	-0.055	0.066	0.683	1	0.409	0.947	0.831 - 1.078
Defeat	-0.041	0.037	1.261	1	0.261	0.959	0.892 - 1.031
Entrapment	0.09	0.031	8.589	1	0.003	1.095	1.03 - 1.163
Step 2							
Age	0.053	0.034	2.402	1	0.121	1.054	0.986 - 1.127
Gender	2.063	0.909	5.144	1	0.023	7.866	1.323 - 46.759
Age of onset of Voices	-0.016	0.036	0.202	1	0.653	0.984	0.918 - 1.055
Voice Frequency	0.173	0.214	0.653	1	0.419	1.189	0.781 - 1.809
CESD-10	-0.081	0.071	1.323	1	0.25	0.922	0.802 - 1.059
Defeat	-0.049	0.039	1.582	1	0.209	0.953	0.883 - 1.028
Entrapment	0.069	0.032	4.49	1	0.034	1.071	1.005 - 1.142
Self-attacking thoughts (FSCRS HS)	0.137	0.076	3.232	1	0.072	1.146	0.988 - 1.331
Step 3							
Age	0.052	0.034	2.251	1	0.134	1.053	0.984 - 1.126

Gender	2.052	0.909	5.096	1	0.024	7.784	1.311 - 46.234
Age of onset of Voices	-0.012	0.036	0.118	1	0.731	0.988	0.92 - 1.06
Voice Frequency	0.102	0.238	0.184	1	0.668	1.108	0.694 - 1.768
CESD-10	-0.071	0.072	0.962	1	0.327	0.932	0.809 - 1.073
Defeat	-0.05	0.04	1.605	1	0.205	0.951	0.88 - 1.028
Entrapment	0.065	0.033	3.949	1	0.047	1.067	1.001 - 1.138
Self-attacking thoughts (FSCRS HS)	0.124	0.078	2.536	1	0.111	1.132	0.972 - 1.319
Critical Voices (FVCRS HS)	0.039	0.053	0.53	1	0.467	1.04	0.936 - 1.155
Step 4							
Age	0.054	0.034	2.524	1	0.112	1.056	0.987 - 1.129
Gender	1.984	0.908	4.775	1	0.029	7.275	1.227 - 43.13
Age of onset of Voices	-0.015	0.036	0.177	1	0.674	0.985	0.918 - 1.057
Voice Frequency	0.05	0.245	0.041	1	0.839	1.051	0.65 - 1.7
CESD-10	-0.079	0.074	1.148	1	0.284	0.924	0.8 - 1.068
Defeat	-0.053	0.04	1.706	1	0.192	0.949	0.876 - 1.027
Entrapment	0.068	0.034	4.097	1	0.043	1.071	1.002 - 1.144
Self-attacking thoughts (FSCRS HS)	0.053	0.106	0.253	1	0.615	1.055	0.857 - 1.297
Critical Voices (FVCRS HS)	-0.052	0.104	0.246	1	0.62	0.949	0.774 - 1.165
Self-attacking thoughts (FSCRS HS) X	0.009	0.009	0.987	1	0.32	1.009	0.991 - 1.027

Critical Voices (FVCRS HS)	

Note. B, unstandardized regression coefficient; S.E. B, standard error of Beta; Wald χ 2 , Wald chisquare test statistic; df, degrees of freedom; p, significance; OR, Odds Ratio; CI, confidence intervals

Appendix 2-A debrief sheet

Lancaster University

Debrief Statement

Thank you for participating in our study. Your responses have been useful in understanding the relationship between certain factors and suicidal thinking and behaviours in people with experiences of psychosis. One study is exploring people's deep rooted beliefs about themselves and others (core schemas) and suicide. The second study is investigating the role of critical voices in suicidal thinking.

If you have any questions about this study feel free to contact a member of the research team:
Myles Sammon (Trainee Clinical Psychologist, Lancaster University):
m.sammon@lancaster.ac.uk
Wren Little (Trainee Clinical Psychologist, Lancaster University): w.little1@lancaster.ac.uk
Dr James Kelly (Clinical Psychologist, Researcher, Lancaster University):
j.kelly@lancaster@ac.uk

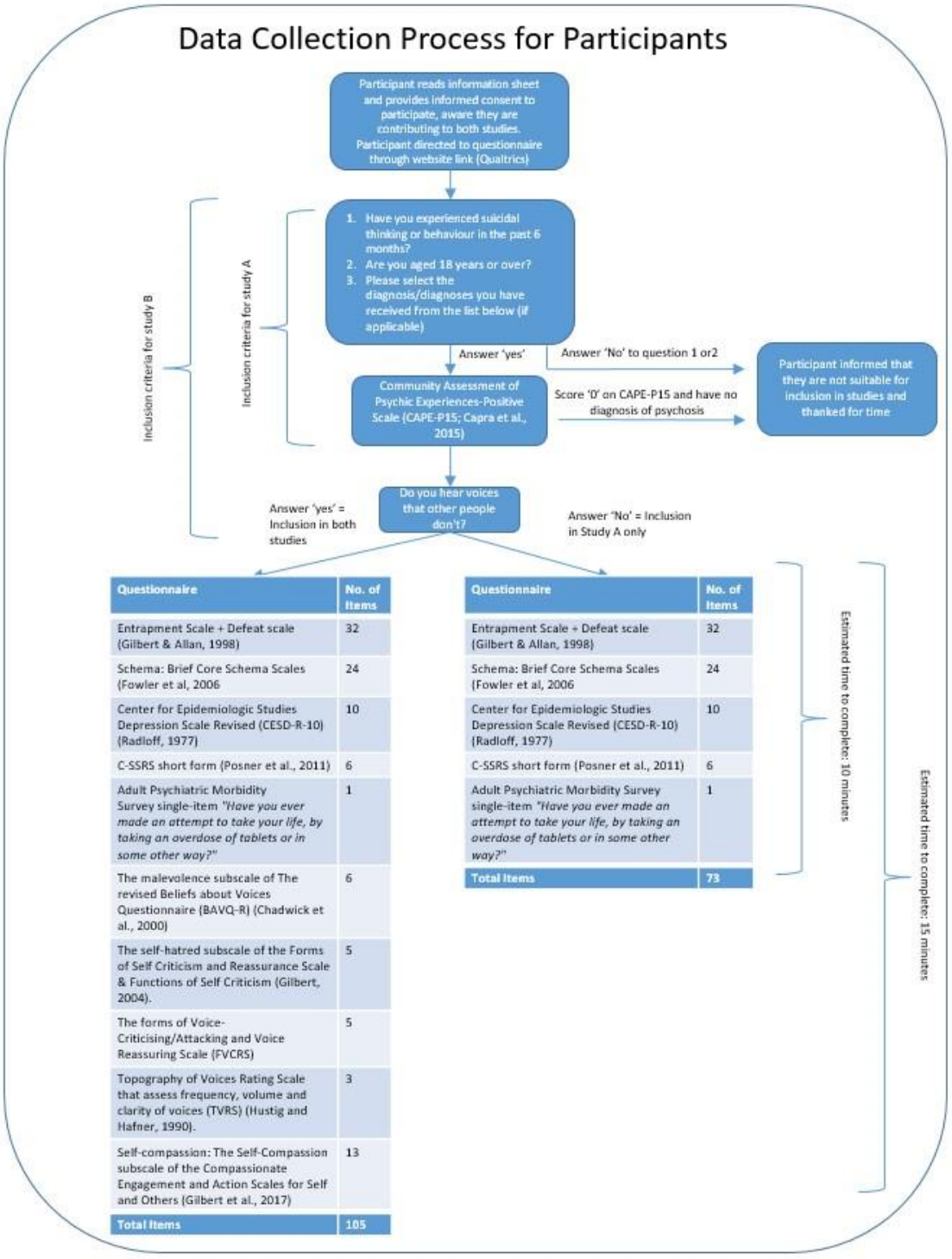
Please be aware that we cannot offer clinical advice or support to individuals.

If you are feeling distressed and need to speak to someone, please click on the following link which contains contact information for services which can provide additional support:

https://lancasteruni.eu.qualtrics.com/jfe/form/SV_7ZEUpLBzPG6C3sO

Thank you for your time and cooperation.

Appendix 2-B Joint Data Collection Flowchart



Questionnaire	No. of Items
Entrapment Scale + Defeat scale (Gilbert & Allan, 1998)	32
Schema: Brief Core Schema Scales (Fowler et al, 2006	24
Center for Epidemiologic Studies Depression Scale Revised (CESD-R-10) (Radloff, 1977)	10
C-SSRS short form (Posner et al., 2011)	6
Adult Psychiatric Morbidity Survey single-item *"Have you ever made an attempt to take your life, by taking an overdose of tablets or in some other way?"*	1
The malevolence subscale of The revised Beliefs about Voices Questionnaire (BAVQ-R) (Chadwick et al., 2000)	6
The self-hatred subscale of the Forms of Self Criticism and Reassurance Scale & Functions of Self Criticism (Gilbert, 2004).	5
The forms of Voice-Criticising/Attacking and Voice Reassuring Scale (FVCRS)	5
Topography of Voices Rating Scale that assess frequency, volume and clarity of voices (TVRS) (Hustig and Hafner, 1990).	3
Self-compassion: The Self-Compassion subscale of the Compassionate Engagement and Action Scales for Self and Others (Gilbert et al., 2017)	13
Total Items	**105**

Questionnaire	No. of Items
Entrapment Scale + Defeat scale (Gilbert & Allan, 1998)	32
Schema: Brief Core Schema Scales (Fowler et al, 2006	24
Center for Epidemiologic Studies Depression Scale Revised (CESD-R-10) (Radloff, 1977)	10
C-SSRS short form (Posner et al., 2011)	6
Adult Psychiatric Morbidity Survey single-item *"Have you ever made an attempt to take your life, by taking an overdose of tablets or in some other way?"*	1
Total Items	**73**

Study A: "Positive and Negative Schema, Defeat, Entrapment and Suicidal Thinking in People with Experiences of Psychosis"
Study B: "Self-Attacking Thoughts, Critical Voices and Suicidal Thinking in People who Hear Voices"

Appendix 2-C Participant information sheet and Consent Form

Lancaster University

Participant information sheet

Risk Factors for Suicide in People with Experiences of Psychosis

Participant Information

Before you decide to take part in this research, it is important for you to understand why the research is being done and what it will involve. Please read the following information carefully and discuss it with others if you wish. A member of the team can be contacted if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

What is the purpose of this research?

Suicide is a major public health problem. We would like to understand more about the relationship between suicidal thinking and behaviour and experiences of psychosis, including those who do and do not hear voices. The data collected in this research will be used in two studies.

Study title 1) Positive and Negative Schema, Defeat, Entrapment and Suicidal Thinking in People with Experiences of Psychosis.

Study title 2) Self-Attacking Thoughts, Critical Voices and Suicidal Thinking in People who Hear Voices.

Do I have to take part?

You do not have to take part in this research. If you do choose to take part in this research, you can still withdraw at any point by exiting the website link. Deciding to not take part in this research or withdrawal at any point will involve no penalty or loss to you, now or in the future. Once you have completed and submitted the questionnaire, it will not be possible for the researchers to withdraw your answers as these are anonymous.

What will happen if I take part?

If you decide to take part in this research, you will be asked a series of questionnaires which will take approximately 15 minutes to complete. To answer the questions, you will be asked to select the answer that best describes your experiences. All of your responses to the questions are collected anonymously.

Are there possible disadvantages and/or risks in taking part?

The questions in the survey will ask about several sensitive topics. Some of the questions ask about recent experiences of suicidal thinking and/or behaviour. This has the potential to increase attention to suicidal thoughts and/or induce negative emotions.

Other questions relate to topics that may have the potential to bring about feelings of discomfort through increased attention toward these experiences. These include questions relating to depression symptoms, feeling defeated or entrapped, and how you relate to yourself, to others, and to your voices (if applicable).

What are the possible benefits of taking part?

While there is likely to be no immediate direct benefit to you, taking part in this research may indirectly benefit you and the population of people who have experiences of psychosis and suicidal thinking and behaviour. Contributing to the scientific evidence base may inform available treatments and/or improve understanding of risk factors for suicide.

Will my taking part in this project be kept confidential?

All information collected will be kept strictly confidential. All data will be identified only by a code and the files on the computer will be encrypted, so no-one other than the researchers will be able to access them. The computer itself is also password protected.

What will happen to the results of the research project?

The results will be written up into a research report. It may also be submitted for publication in an academic journal. You and your information will not be identifiable in any published material.

If you would like to receive a summary of the research findings, you can opt to provide your email address at the end of the questionnaire. If you choose to receive this summary, your email address is recorded separately from your responses to the questionnaires, thereby maintaining the anonymity of the data you provide. Participant email addresses will be stored in a password protected file and retained until this summary has been sent out. Once the study is completed, contact details will be deleted and this will be confirmed in writing (by email) that this action has been completed. Your email address will not be used for any other purpose. If you provide an email address to receive a summary of the study and later change your mind, you may contact us to delete this information.

Ethical review of the study

The project has been reviewed by Lancaster University Research Ethics Committee.

Research team

The research team has three members:

Wren Little (Trainee Clinical Psychologist, Lancaster University): w.little1@lancaster.ac.uk

Myles Sammon (Trainee Clinical Psychologist, Lancaster University): m.sammon@lancaster.ac.uk

Dr James Kelly (Clinical Psychologist, Researcher, Lancaster University): j.kelly@lancaster@ac.uk

Complaints

If you wish to make a complaint or raise concerns about any aspect of this study and do not want to speak to the researcher, you can contact:

Dr Ian Smith (Consultant Clinical Psychologist): i.smith@lancaster.ac.uk

Tel: 01524 592282

If you wish to speak to someone outside of the Clinical Psychology Doctorate, you may also contact:

Dr Laura Machin (Chair of FHM REC, Lancaster University): l.machin@lancaster.ac.uk

Tel: 01524 594973

GDPR

"Lancaster University will be the data controller for any personal information collected as part of this study. Under the GDPR you have certain rights when personal data is collected about you. You have the right to access any personal data held about you, to object to the processing of your personal information, to rectify personal data if It's inaccurate, the right to have data about you erased and, depending on the circumstances, the right to data portability. Please be aware that many of these rights are not absolute and only apply in certain circumstances. If you would like to know more about your rights in relation to your personal data, please speak to the researcher on your particular study.

For further information about how Lancaster University processes personal data for research purposes and your data rights please visit our webpage: www.lancaster.ac.uk/research/data-protection"

Lancaster University is the sponsor for the study based in England. We will be using information from you in order to undertake this study and will act as the data controller for this study. This means that we are responsible for looking after your information and using it properly. Lancaster University will keep identifiable information about you for 10 years after the study has finished/is published.

Your rights to access, change or move your information are limited, as we need to manage your information in specific ways in order for the research to be reliable and accurate. If you withdraw from the study, we will keep the information about you that we have already obtained. To safeguard your rights, we will use the minimum personally-identifiable information possible.

Myles Sammon and Wren Little will collect information from you for this research study in accordance with our instructions.

Wren Little and Myles Sammon will use your name and contact details to contact you about the research study, to oversee the quality of the study. Individuals from Lancaster University and regulatory organisations may look at your

research records to check the accuracy of the research study. The only people in Lancaster University who will have access to information that identifies you will be people who need to contact you to audit the data collection process.

Thank you for taking the time to read this information sheet.

Consent Form

Consent Form

We are asking if you would like to take part in a research project investigating suicidal thinking and behaviour in people who have experiences of psychosis, including those who do and do not hear voices. Before you consent to participating in the study, we ask that you read the participant information sheet on the previous page. If you have any questions or queries before signing the consent form, please speak to the principal investigators, Wren Little and Myles Sammon.

By proceeding to the survey, you confirm that:

- You have read the participant information sheet and understand what is expected of you within this study
- You understand that any responses/information you give will remain confidential and your data will be stored securely
- Your participation is voluntary
- You consent for the information you provide to be discussed with the research supervisor (Dr James Kelly) at Lancaster University
- You consent that the data will be pooled with other participants' data and published
- You consent to Lancaster University keeping the anonymised data for a period of 10 years after the study has finished
- By clicking on the arrow below, **you consent to taking part in the current study.**

Appendix 2-D Online Survey

Inclusion criteria questions

Are you aged 18 years or over?

No

Yes

Have you experienced suicidal thinking or behaviour in the past 6 months?

No

Yes

Hearing voices question

Do you hear voices that other people don't? (Auditory Verbal Hallucinations)

No

Yes

Psychosis Question

Please select the diagnosis/diagnoses you have received from the list below (if applicable)

Schizophrenia

Schizoaffective Disorder

Schizotypal Disorder

Acute and Transient Psychotic Disorder

Delusional Disorder

Other Specified Schizophrenia or Primary Psychotic Disorder

No Formal Diagnosis Given of Psychosis

CAPE-P15

In the past 3 months have you. . .

	Never	Sometimes	Often	Nearly always
felt as if people seem to drop hints about you or say things with a double meaning?	○	○	○	○
felt as if some people are not what they seem to be?	○	○	○	○
felt that you are being persecuted in anyway?	○	○	○	○
felt as if there is a conspiracy against you?	○	○	○	○

	Never	Sometimes	Often	Nearly always
felt that people look at you oddly because of your appearance?	○	○	○	○
felt as if electrical devices such as computers can influence the way you think?	○	○	○	○
felt as if the thoughts in your head are being taken away from you?	○	○	○	○
felt as if the thoughts in your head are not your own?	○	○	○	○
[thoughts] ever been so vivid that you were worried other people would hear them?	○	○	○	○
heard your thoughts being echoed back at you?	○	○	○	○
felt as if you are under the control of some force or power other than yourself?	○	○	○	○
felt as if a double has taken the place of a family member, friend or acquaintance?	○	○	○	○
heard voices when you are alone?	○	○	○	○
heard voices talking to each other when you are alone?	○	○	○	○
seen objects, people or animals that other people can't see?	○	○	○	○

The Community Assessment of Psychic Experiences - Positive Scale (CAPE-P15; Capra et al., 2014)

If you are feeling distressed and need to speak to someone, please click on the following link which contains contact information for services which can provide additional support:

https://lancasteruni.eu.qualtrics.com/jfe/form/SV_7ZEUpLBzPG6C3sO

Demographic Information

What is your age (in years)?

What best describes your ethnic origin?

White
Black/African/Caribbean
Asian (Indian, Pakistani, Bangladeshi, Chinese, any other Asian background)
Mixed two or more ethnic groups
Other (Arab or any others)
Prefer not to say

What best describes your gender?

Man
Woman
Trans Man
Trans Woman
Non-binary / other

What is your current marital status?

Married
Living with a partner
Widowed
Divorced/Separated
Never been married

How old were you when you first experienced psychosis? (If unsure, please give your closest guess)

Voice characteristics

How old were you when you first heard a voice that others don't? (If unsure, please give your closest guess)

The following questions ask about the frequency, volume and clarity of your voices

	Very frequent (every hour)	Fairly frequent (several times a day but not every hour)	Average (once a day)	Fairly infrequent (several times this week but not every day)	Absent (not at all lately)
Over the last few days my voices have been	○	○	○	○	○

	Very loud	Fairly loud	Average	Fairly quiet	Very quiet
Over the last few days my voices have been	○	○	○	○	○

	Very clear	Fairly clear	Average	Fairly mumbled	Very mumbled
Over the last few days my voices have been	○	○	○	○	○

BAVQ-R

There are many people who hear voices. It would help us to find out how you are feeling about your voices by completing this questionnaire. Please read each statement and select the option which best describes the way you have been feeling in the past week.

If you hear more than one voice, please complete the form for the voice which is dominant.

	Disagree	Unsure	Slightly agree	Strongly agree
My voice is punishing me for something I have done.	○	○	○	○
My voice is persecuting me for no good reason.	○	○	○	○
My voice is evil.	○	○	○	○

	Disagree	Unsure	Slightly agree	Strongly agree
My voice wants to harm me.	○	○	○	○
My voice wants me to do bad things.	○	○	○	○
My voice is trying to corrupt or destroy me.	○	○	○	○

Questions from the Revised Beliefs about Voices Questionnaire (BAVQ-R) (Chadwick et al., 2000)

If you are feeling distressed and need to speak to someone, please click on the following link which contains contact information for services which can provide additional support:

https://lancasteruni.eu.qualtrics.com/jfe/form/SV_7ZEUpLBzPG6C3sO

FSCRS

When things go wrong in our lives or don't work out as we hoped, and we feel we could have done better, we sometimes have negative and self-critical thoughts and feelings. These may take the form of feeling worthless, useless or inferior etc. However, people can also try to be supportive of themselves. Below are a series of thoughts and feelings that people sometimes have. Read each statement carefully and select the option which best describes how much each statement is true for you. Please use the scale below.

	Not at all like me	A little bit like me	Moderately like me	Quite a bit like me	Extremely like me
I have become so angry with myself that I want to hurt or injure myself.	○	○	○	○	○
I have a sense of disgust with myself.	○	○	○	○	○
I stop caring about myself	○	○	○	○	○

	Not at all like me	A little bit like me	Moderately like me	Quite a bit like me	Extremely like me
I call myself names.	○	○	○	○	○
I do not like being me.	○	○	○	○	○

Questions from the Forms of Self-Criticizing/Attacking and Self-Reassuring Scale (FSCRS) (Gilbert, 2004)

If you are feeling distressed and need to speak to someone, please click on the following link which contains contact information for services which can provide additional support:

https://lancasteruni.eu.qualtrics.com/jfe/form/SV_7ZEUpLBzPG6C3sO

FVSCRS

When voice hearers experience things going wrong or not working out, their voices can become negative and critical. At times, these negative voices can make people feel worthless, useless or inferior. However, we know that voices can also be supportive. Below are a series of thoughts and feelings that voices hearers sometimes have about their voices. Please read each statement carefully, and circle the number that best describes how much each statement is true of your voice.

	Not at all like me	A little bit like me	Moderately like me	Quite a bit like me	Extremely like me
My voice becomes so angry with me that it wants to hurt me or injure me.	○	○	○	○	○

	Not at all like me	A little bit like me	Moderately like me	Quite a bit like me	Extremely like me
My voice feels disgusted with me.	○	○	○	○	○
My voice can stop caring about me.	○	○	○	○	○

	Not at all like me	A little bit like me	Moderately like me	Quite a bit like me	Extremely like me
My voice calls me names.	○	○	○	○	○
My voice does not like me.	○	○	○	○	○

Questions from the forms of Voice-Criticising/Attacking and Voice Reassuring Scale (FVCRS)

If you are feeling distressed and need to speak to someone, please click on the following link which contains contact information for services which can provide additional support:

https://lancasteruni.eu.qualtrics.com/jfe/form/SV_7ZEUpLBzPG6C3sO

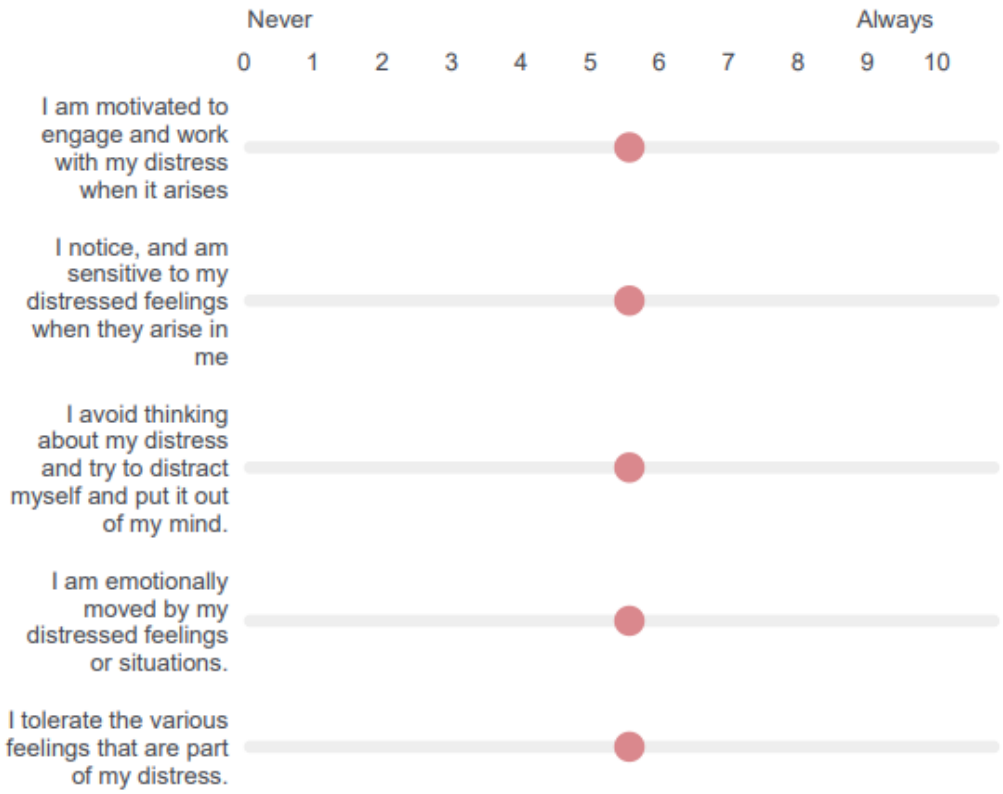
Self-compassion subscale of CEAS

When things go wrong for us and we become distressed by setbacks or disappointments, we may cope with these in different ways. We are interested in the degree to which people can be compassionate with themselves when they become distressed.

Please rate the items using the following rating scale:
Never Always
1 2 3 4 5 6 7 8 9 10
Please make sure that you click a response for each question

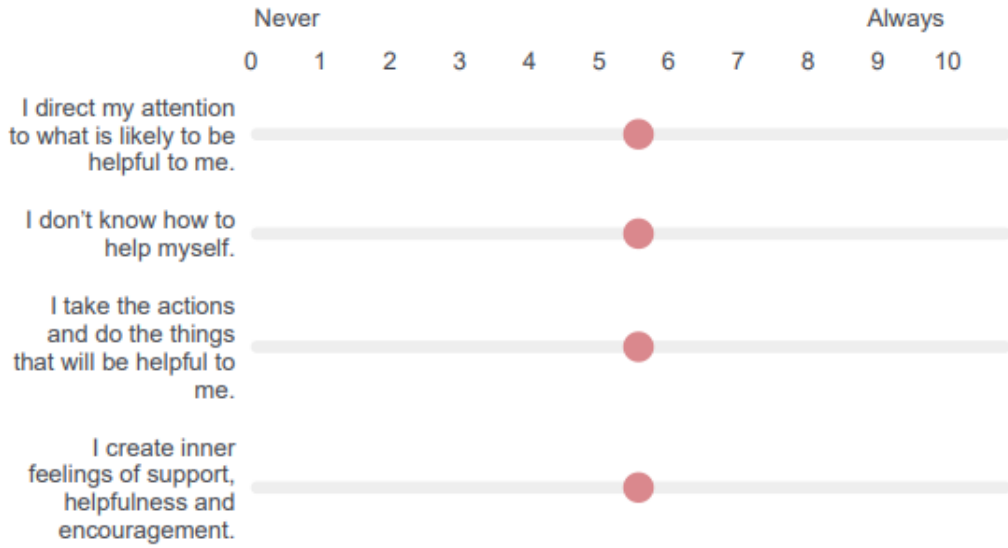
Section 1 – These are questions that ask you about how motivated you are, and able to engage with distress when you experience it.

So: When I'm distressed or upset by things…



Section 2 – These questions relate to how you actively cope in compassionate ways with emotions, thoughts and situations that distress you.

So: When I'm distressed or upset by things…



Compassionate Engagement and Action Scales (CEAS) (Gilbert et al., 2017).

If you are feeling distressed and need to speak to someone, please click on the following link which contains contact information for services which can provide additional support:

https://lancasteruni.eu.qualtrics.com/jfe/form/SV_7ZEUpLBzPG6C3sO

Entrapment Scale

For each of the following attitude statements indicate the extent to which you think it represents your own view of yourself, using the scale below. Read each item carefully. Please do not omit any item.

	Not at all like me	A little bit like me	Moderately like me	Quite a bit like me	Extremely like me
I am in a situation I feel trapped in	○	○	○	○	○
I have a strong desire to escape from things in my life	○	○	○	○	○
I am in a relationship I can't get out of	○	○	○	○	○

	Not at all like me	A little bit like me	Moderately like me	Quite a bit like me	Extremely like me
I often have the feeling that I would just like to run away	○	○	○	○	○
I feel powerless to change things	○	○	○	○	○
I feel trapped by my obligations	○	○	○	○	○

	Not at all like me	A little bit like me	Moderately like me	Quite a bit like me	Extremely like me
I can see no way out of my current situation	○	○	○	○	○
I would like to get away from other more powerful people in my life	○	○	○	○	○
I have a strong desire to get away and stay away from where I am now	○	○	○	○	○
I feel trapped by other people	○	○	○	○	○
I want to get away from myself	○	○	○	○	○
I feel powerless to change myself	○	○	○	○	○

	Not at all like me	A little bit like me	Moderately like me	Quite a bit like me	Extremely like me

I would like to escape from my thoughts and feeling	○	○	○	○	○
I feel trapped inside myself	○	○	○	○	○
I would like to get away from who I am and start again	○	○	○	○	○
I feel I'm in a deep hole I can't get out of	○	○	○	○	○

Entrapment Scale (Gilbert & Allan, 1998)

If you are feeling distressed and need to speak to someone, please click on the following link which contains contact information for services which can provide

additional support:

https://lancasteruni.eu.qualtrics.com/jfe/form/SV_7ZEUpLBzPG6C3sO

Defeat Scale

Below is a series of statements, which describe how people can feel about themselves. Read each item carefully and select the statement that best describes how you have felt in the last 7 days. Please do not omit any item.

	Never	Rarely	Sometimes	Mostly (a lot)	Always
I feel that I have not made it in life	○	○	○	○	○
I feel that I am a successful person	○	○	○	○	○
I feel defeated by life	○	○	○	○	○
I feel that I am basically a winner	○	○	○	○	○
I feel that I have lost my standing in the world	○	○	○	○	○
I feel that life has treated me like a punch bag	○	○	○	○	○
	Never	Rarely	Sometimes	Mostly (a lot)	Always
I feel powerless	○	○	○	○	○

I feel that my confidence has been knocked out of me	○	○	○	○	○
I feel able to deal with whatever life throws at me	○	○	○	○	○
I feel that I have sunk to the bottom of the ladder	○	○	○	○	○
I feel completely knocked out of action	○	○	○	○	○
I feel that I am one of life's losers	○	○	○	○	○
	Never	Rarely	Sometimes	Mostly (a lot)	Always
I feel that I have given up	○	○	○	○	○

	Never	Rarely	Sometimes	Mostly (a lot)	Always
I feel down and out	○	○	○	○	○
I feel that I have lost important battles in life	○	○	○	○	○
I feel that there is no fight left in me	○	○	○	○	○

Defeat Scale (Gilbert & Allan, 1998)

If you are feeling distressed and need to speak to someone, please click on the following link which contains contact information for services which can provide additional support:

https://lancasteruni.eu.qualtrics.com/jfe/form/SV_7ZEUpLBzPG6C3sO

Schema: Brief Core Schema Scales

Schema: Brief Core Schema Scales

This questionnaire lists beliefs that people can hold about themselves and other people. Please indicate how strongly you hold the belief, if at all, using the options below. Try to judge the beliefs on how you have generally, over time, viewed yourself and others. Do not spend too long on each belief. There are no right or wrong answers and the first response to each belief is often the most accurate.

	I don't hold this belief	Believe it slightly	Believe it moderately	Believe it very much	Believe it totally
I am unloved	○	○	○	○	○
I am worthless	○	○	○	○	○
I am weak	○	○	○	○	○
I am vulnerable	○	○	○	○	○
I am bad	○	○	○	○	○
I am a failure	○	○	○	○	○

	I don't hold this belief	Believe it slightly	Believe it moderately	Believe it very much	Believe it totally
I am talented	○	○	○	○	○
I am successful	○	○	○	○	○

	I don't hold this belief	Believe it slightly	Believe it moderately	Believe it very much	Believe it totally
I am good	○	○	○	○	○
I am interesting	○	○	○	○	○
Other people are hostile	○	○	○	○	○
Other people are harsh	○	○	○	○	○

	I don't hold this belief	Believe it slightly	Believe it moderately	Believe it very much	Believe it totally
Other people are unforgiving	○	○	○	○	○
Other people are bad	○	○	○	○	○
Other people are devious	○	○	○	○	○
Other people are nasty	○	○	○	○	○
Other people are fair	○	○	○	○	○
Other people are good	○	○	○	○	○

	I don't hold this belief	Believe it slightly	Believe it moderately	Believe it very much	Believe it totally
Other people are trustworthy	○	○	○	○	○
Other people are accepting	○	○	○	○	○
Other people are supportive	○	○	○	○	○
Other people are truthful	○	○	○	○	○

Brief Core Schema Scales (Fowler et al., 2006)

If you are feeling distressed and need to speak to someone, please click on the following link which contains contact information for services which can provide additional support:

https://lancasteruni.eu.qualtrics.com/jfe/form/SV_7ZEUpLBzPG6C3sO

Center for Epidemiologic Studies Depression Scale Revised (CESD-R-10)

Below is a list of some of the ways you may have felt or behaved. Please indicate how often you have felt this way during the past week by selecting the appropriate option for each question.

	Rarely or none of the time (less than 1 day)	Some or a little of the time (1-2 days)	Occasionally or a moderate amount of time (3-4 days)	All of the time (5-7 days)
I was bothered by things that usually don't bother me	○	○	○	○
I had trouble keeping my mind on what I was doing.	○	○	○	○
I felt depressed	○	○	○	○
I felt that everything I did was an effort	○	○	○	○
I felt hopeful about the future	○	○	○	○

	Rarely or none of the time (less than 1 day)	Some or a little of the time (1-2 days)	Occasionally or a moderate amount of time (3-4 days)	All of the time (5-7 days)
I felt fearful	○	○	○	○
My sleep was restless	○	○	○	○
I was happy	○	○	○	○
I felt lonely	○	○	○	○
I could not "get going"	○	○	○	○

Center for Epidemiologic Studies Depression Scale Revised (CESD-R-10) (Radloff, 1997)

If you are feeling distressed and need to speak to someone, please click on the following link which contains contact information for services which can provide additional support:

https://lancasteruni.eu.qualtrics.com/jfe/form/SV_7ZEUpLBzPG6C3sO

CSSRS + APMS(1 item)

The following questions will ask about the severity, intensity, frequency and duration of suicidal thinking and behaviour

Have you wished you were dead or wished you could go to sleep and not wake up?

Have you actually had any thoughts of killing yourself?

If you are feeling distressed and need to speak to someone, please click on the following link which contains contact information for services which can provide additional support:

https://lancasteruni.eu.qualtrics.com/jfe/form/SV_7ZEUpLBzPG6C3sO

Have you been thinking about how you might do this?
E.g. "I thought about taking an overdose but I never made a specific plan as to when where or how I would actually do it….and I would never go through with it."

Have you had these thoughts and had some intention of acting on them?
As opposed to "I have the thoughts but I definitely will not do anything about them."

Have you started to work out or worked out the details of how to kill yourself? Do you intend to carry out this plan?

Have you ever done anything, started to do anything, or prepared to do anything to end your life?
Examples: Collected pills, obtained a gun, gave away valuables, wrote a will or suicide note, took out pills but didn't swallow any, held a gun but changed your mind or it was grabbed from your hand, went to the roof but didn't jump; or actually took pills, tried to shoot yourself, cut yourself, tried to hang yourself, etc.

Columbia–Suicide Severity Rating Scale (C-SSRS) (Posner et al., 2011)

If you are feeling distressed and need to speak to someone, please click on the following link which contains contact information for services which can provide additional support:

https://lancasteruni.eu.qualtrics.com/jfe/form/SV_7ZEUpLBzPG6C3sO

If YES: Was this within the past three months?

Columbia–Suicide Severity Rating Scale (C-SSRS) (Posner et al., 2011)

If you are feeling distressed and need to speak to someone, please click on the following link which contains contact information for services which can provide additional support:

https://lancasteruni.eu.qualtrics.com/jfe/form/SV_7ZEUpLBzPG6C3sO

Have you ever made an attempt to take your life, by taking an overdose of tablets or in some other way?

Adult Psychiatric Morbidity Survey Q – DSH4 (McManus et al., 2007)

If you are feeling distressed and need to speak to someone, please click on the following link which contains contact information for services which can provide additional support:

https://lancasteruni.eu.qualtrics.com/jfe/form/SV_7ZEUpLBzPG6C3sO

Appendix 2-E Table: Results of Point-biserial Correlations between Gender and Other Variables

		Gender
Gender	Pearson Correlation	1
	Sig. (2-tailed)	
Age	Pearson Correlation	-0.157
	Sig. (2-tailed)	0.16
Age of Onset of Voices	Pearson Correlation	0.036
	Sig. (2-tailed)	0.745
Voice Frequency	Pearson Correlation	0.045
	Sig. (2-tailed)	0.69
Voice Malevolence (BAVQ Mal. subscale)	Pearson Correlation	0.173
	Sig. (2-tailed)	0.119
Self-compassion Engagement (CEAS Subscale)	Pearson Correlation	-0.123
	Sig. (2-tailed)	0.27
Self-compassion Action (CEAS subscale)	Pearson Correlation	-0.111
	Sig. (2-tailed)	0.32
Self-compassion Total (CEAS)	Pearson Correlation	-0.127
	Sig. (2-tailed)	0.255
Depression (CESD-10)	Pearson Correlation	0.104
	Sig. (2-tailed)	0.351
Defeat Scale	Pearson Correlation	0.209
	Sig. (2-tailed)	0.059
Entrapment Scale	Pearson Correlation	0.151
	Sig. (2-tailed)	0.177

Self-attacking Thoughts (FSCRS HS Subscale)	Pearson Correlation	0.323**
	Sig. (2-tailed)	0.003
Critical Voices (FVCRS HS Subscale)	Pearson Correlation	0.171
	Sig. (2-tailed)	0.125
Suicide Ideation Severity (C-SSRS)	Pearson Correlation	0.098
	Sig. (2-tailed)	0.383

Note. **Correlation is significant at the 0.01 level (2-tailed). *Correlation is significant at the 0.05 level (2-tailed)

Appendix 2-F Table: Results of Multiple Regression Re-Run with Voice Malevolence for SI Severity

	Unstandardised B	SE	Standardised Beta	t	P	R^2	adj. R	R^2 change	F	F change
Model 1						0.253	0.183	0.253	3.584*	3.584*
Gender	0.103	0.362	0.03	0.284	0.777					
Age	0.009	0.018	0.055	0.531	0.597					
Age of onset of Voices	-0.009	0.019	-0.05	-0.478	0.634					
voice frequency	0.034	0.111	0.031	0.305	0.761					
CESD-10	-0.016	0.037	-0.06	-0.427	0.671					
Entrapment	0.049	0.016	0.499	3.024	0.003					
Defeat	0.005	0.021	0.039	0.226	0.821					
Model 2						0.314	0.238	0.06	4.169**	6.425*
Gender	-0.025	0.353	-0.007	-0.072	0.943					
Age	0.015	0.017	0.087	0.856	0.395					
Age of onset of Voices	-0.007	0.018	-0.039	-0.387	0.7					
voice frequency	-0.09	0.118	-0.082	-0.762	0.448					
CESD-10	0.004	0.037	0.016	0.112	0.911					

Entrapment	0.032	0.017	0.328	1.895	0.062
Defeat	0.012	0.02	0.1	0.59	0.557
Voice Malevolence (BAVQ-R)	0.083	0.033	0.298	2.535	0.013

Note. * p ≤ .05, ** p ≤ .001.

Doctorate in Clinical Psychology | Lancaster University

Section Three: Critical Appraisal

Myles Sammon

Doctorate in Clinical Psychology

Division of Health Research, Lancaster University

All correspondence should be sent to:

Myles Sammon

Doctorate in Clinical Psychology

Health Innovation One

Sir John Fisher Drive

Lancaster University

Lancaster

LA1 4AT

Email: m.sammon@lancaster.ac.uk

This paper provides critical and personal reflections on aspects of the research process. It starts by providing an epistemological position of the thesis, followed by an extended discussion that synthesises the findings from the systematic literature review (SLR) and empirical study, considering some of the key challenges and rationale for decisions made. Finally, personal reflections are provided on the research process.

Epistemological position

Bhaskar's (2013) critical realist epistemological position was taken for this research. Critical realism combines a realist ontology, i.e. that a real world exists independent of our subjective beliefs, with a constructivist epistemology, i.e. our knowledge is gained through our subjective perception, which is therefore shaped by factors such as one's background, position(s) held, academic discipline, cultural context and theoretical resources (Maxwell, 2012; McEvoy & Richards, 2006; Taylor, 2018). Critical realism fitted the present research, as its goal in research is to develop deeper levels of explanation and understanding (McEvoy & Richards, 2006). Critical realism highlights how qualitative and quantitative research methods have key strengths, for example, quantitative methods can help to understand the relationships between various hypothesised states or processes and suicidal ideation (SI) and suicidal behaviour (SB) in people who hear voices. Qualitative methods, on the other hand, help us to understand complex experiences that are difficult to capture through quantitative measurement (McEvoy & Richards, 2006). The qualitative SLR allowed us to understand more about how hearing negative voice content affects people and the salient aspects of this experience from first-person perspectives. Qualitative research can give a more complete picture to inform the development of more sensitive approaches to research in this area (Corstens et al., 2014).

Systematic Literature Review

The SLR and meta-ethnography explored how people who hear voices experience, and cope with, negative voice content. Twenty-four qualitative studies were synthesised and the following overarching themes were identified: 1) What they say: Insulting, critical and harassing content; 2)

When and how they say it: Intentional and strategic voices; 3) The impact of negative voice content; 4) Coping with negative voice content.

Negative voice content was often criticising and controlling. Voices were perceived as intentional and strategic actors who attacked hearers when they were most vulnerable (e.g. times of heightened stress or tiredness). Negative voice content can cause harm through commands to self-harm and insults that relate to the persons current context, fears, evaluations from self and others and previous traumatic experiences. This negatively affects voice hearers in many ways. Many were distracted, distressed, exhausted, paranoid and/or isolated. Each of these factors also negatively impacted on negative voice content. This negatively affected their ability to complete daily tasks and maintain relationships and employment. Voice hearers engaged in various coping strategies. The most common forms of coping were through fighting back against voices or through distraction. However, this left many voice hearers exhausted and with a sense of failure. Some voice hearers benefited by socially connecting with others and talking about voices with friends, family and healthcare professionals.

Reflexivity

Olmos-Vega et al., (2022) define reflexivity as "a set of continuous, collaborative, and multifaceted practices through which researchers self-consciously critique, appraise, and evaluate how their subjectivity and context influence the research processes"(p.242). Olmos-Vega et al., recommends practicing reflexivity co-operatively throughout the research process. I engaged in reflexivity through critically reflecting on my influence on the research process, considering my background, cultural context, personal and professional experiences and epistemological position (France et al., 2019). I also returned frequently to the key studies that guided my study design, particularly, the seven step process of meta-ethnography as outlined by Sattar et al., (2021), "The Ice in Voices" paper by Larøi et al., (2019) and the eMERGe reporting guidance (France et al., 2019). In addition, I kept a log of my thinking around key decisions, challenges and interpretations, and discussed these with my research team. Two examples of this reflexive approach that I will discuss

further in this critical appraisal are (1) defining and interpreting negative voice content, and (2) my interpretation and understanding of negative voice content and the voice hearing experience more broadly through evolutionary-psychology, social mentalities theory and trauma literature.

Larøi et al., (2019) sets out the complex task of defining what exactly constitutes negative voice content. Study selection and data extraction in my review were based upon my interpretation of content that fit within their following definition of negative voice content: "speech by voices that a reasonable person would interpret as violating their dignity, or creating an intimidating, hostile, degrading, humiliating or otherwise offensive environment" (Larøi et al., 2019, p.3). Meta-ethnography involved my interpretations of primary author interpretations of participant interpretations of their experience (Sattar et al., 2021). Some experiences of negative voice content may have been missed due to how these experiences were interpreted at each level. For example, Craig et al (2017) provide an interpretation of distressing voices involving commanding voices making it difficult for the hearer to concentrate at work. Although the authors describe the voice as distressing, it was not initially clear to me whether this would fit within Larøi et al.,'s definition of negative voice content. My understanding of a "command" implies a level of authority or dominance over the person who receives it and suggests a potentially controlling environment. However, it is not explicitly clear from participant or author data that they have interpreted this as negative voice content. To resolve decisions such as this I returned frequently to re-read Larøi et al., (2019). In this case, Larøi et al., (2019) outlines a similar example, where a person can hear a command to "get the milk" and the frequency of this command or their cultural beliefs around mental health may mean that this causes distress, but this would not fit within the definition of negative voice content. With these considerations, I excluded this data from the study. Additionally, discussion with my research tutor helped as they held knowledge of the subject matter and research methodology but were not as immersed in the data. In our discussions, my research tutor facilitated my reflection and decision making through asking reflexive questions (Barry et al., 1999).

During the analysis phase, I discussed with my supervisor around how data was fitting within evolutionary-psychology, social rank theory and trauma-informed understandings of this experience. I recognised that while I did not consciously seek to fit the results to my developing understanding of hearing voices within these paradigms, my reading around this area, and my clinical training and practice will have shaped my lens. For example, mapping experiences on to dominant-subordinate relationships and highlighting the adaptive functions of these mechanisms. In addition, recommending Compassion Focussed Therapy (CFT) as a therapeutic approach followed on from this as it is underpinned by the same theories. I recognise that understanding these experiences through these models is just one way to make sense of them and this is the understanding that fit for me at this time. These findings also fit under other various understandings of these experiences. For example, while my interpretation is compatible with models such as the Maastricht approach (Making Sense of Voices (Romme & Escher, 2000; Steel et al., 2020) or Talking with Voices (Longden et al., 2021), if I heard voices myself or had trained within these models my interpretation and recommendations would be shaped by these different experiences.

Analysis

Synthesising a large amount of studies with a broad range of aims presented a challenging task. Following the seven steps as set out by Sattar et al., (2021) helped me to overcome these challenges. I re-visited this paper many times along with other guidance papers for meta-ethnography (Britten et al., 2002; France et al., 2019). I returned to the study characteristics table regularly during data extraction. This helped me to hold the context of the data in mind throughout the process of extraction and translation of the studies. Creating data extraction tables in Microsoft Excel helped to organise a large amount of data. Writing each data point on paper and using an iterative process of clustering the data into categories helped me to visualise relationships and flexibly create, merge and move categories.

Empirical Study

The empirical study found critical voices significantly predicted SI severity when controlling for demographic and clinical factors. Self-attacking thoughts did not predict a significant amount of variance in SI severity when controlling for the same factors. Critical voices remained a significant predictor of SI severity in a post-hoc model adjusted for self-attacking thoughts. It is important to note that self-compassion did not significantly moderate the relationships between self-attacking thoughts and SI severity, or critical voices and SI severity. Self-attacking thoughts or critical voices did not have a significant effect on SA. Minoritised gender and entrapment were significantly associated with SA.

In terms of an integrated motivational–volitional model of suicidal behaviour (IMV; O'Connor & Kirtley, 2018) for voice hearers, the data suggests that we may need to focus on voice attacking as we might be missing what is important if we focus only on self-attacking. It may be that the more dominant form of attacks are externalised and not picked up on the self-attacking measure. We know that voice hearer's relationships with voices have the power of a social relationships (Birchwood et al., 2004). This was also found in the SLR in section one where voice hearers often felt in physical danger from a real perceived threat from an external agent. This may lead to more appeasement or submission, for example to commands to harm the self (Fox et al., 2004; Reynold and Scragg, 2010). The experience of an external entity and stigma may result in lower appraisals of personal and external agency (Johnson et al., 2008; Heriot-Maitland, 2022). Furthermore, the SLR in section one found negative voice content compounded trauma and perpetuated feelings of fear and shame. This presented a barrier to connecting with others and led to a loss of relationships and difficulty maintaining employment. These are some of the ways that the consequences of hearing critical voices may also affect "motivational moderators" in the IMV model such as perceived burdensomeness and thwarted belongingness (Van Orden et al., 2010)

People who identified with a minority gender (trans man/woman, non-binary and other) had a 7-fold increase in the odds of having made a previous suicide attempt compared to those who

identified as men or women. This logistic regression was not powered a-priori so these results require exploration in further research. In terms of the pre-motivational phase of the IMV model for voice hearers, both hearing voices, and minority gender are associated with early adverse experiences (Bentall et al., 2014; Hendricks & Testa, 2012). The likelihood of a SA in adolescence or adulthood increases drastically with an increase in adverse childhood experiences (Dube et al., 2001). This highlights minority gender as an important pre-motivational factor in an IMV model for voice hearers.

Moreover, minoritised gender was not found to significantly predict SI but was the strongest predictor of SA. The ideation-to-action framework (Klonsky & May, 2015), which is central to the IMV model, posits that the factors that lead to SI are different to those that lead to SB. This suggests that minority gender may be a volitional stage driver or moderator. Gender minority adolescents are at an increased risk of SI, SB and nonsuicidal self-injury (di Giacomo et al., 2018; Smith et al., 2020). This finding may indicate other "volitional moderators" that influence transition to SB in the IMV model such as exposure to SB of others and past experiences of SB and self-harm. Future longitudinal research is recommended to explore the relationships between minority gender and associated factors such as minority stress factors (e.g. stigma, discrimination and isolation; Hendricks & Testa, 2012) entrapment, critical voices, SI and SB in order to explore the causal relationships between these factors.

Self-compassion did not moderate the relationships between self-attacking thoughts or critical voices and SI. Perhaps a more specific measure of the flow of compassion to the self in response to voices is needed to understand this relationship further. These findings suggest that further research is needed to explore the relationships between voice attacking, SI, SB and what moderates these relationships. Qualitative research methods such as a focus group or a diary study to look at internal and external attacks and how they relate to each other over time may help to understand the key processes involved.

Joint Data Collection

Recruitment was carried out jointly with another researcher (WL) conducting a similar study exploring suicide in people who have experienced psychosis. Similarities between our studies included a crossover between our samples, measures of SI, SA, defeat, entrapment and depression. Differences in the studies included measures, inclusion criteria, research questions, analyses and ethical approval. Recognising the similarities in our studies, we initially discussed promoting each other's studies along with our own. However, we felt that asking participants to complete two separate surveys with many of the same or similar questions would be burdensome and could lead to a reduction in recruitment. In discussion with our research tutor, we decided to recruit jointly through the same Qualtrics link. Joint recruitment proved effective and efficient as it increased our reach. I also benefited from team working particularly around problem-solving challenges to recruitment and engaging in discussions around our topics. A potential drawback of this method was that this increased the length of the survey for participants of this study considerably which may have reduced survey completion rates (Rolstad et al., 2011).

Amendment to Inclusion Criteria

Recruitment was initially much slower than expected. Between July 8, 2023 and January 29, 2024, 17 people completed my study. We hypothesised about a number of factors that may be contributing to low recruitment rates. The website Twitter had been utilised to recruit participants successfully in research carried out by my research tutor. This website rebranded to X at the begining of recruitment for this project and usage of this platform has reportedly fallen since this change (Edison Research, 2024). I also noticed 14 people were excluded after selecting "no" to the item "Have you received a diagnosis of psychosis (e.g. schizophrenia spectrum disorder)?" This indicated that there might have been people who have experienced psychosis but not received a diagnosis wishing to take part. We decided to change this criterion and re-published the study on February 1, 2024, after gaining ethical approval for the following amendment. This involved changing the inclusion criterion "self-report a diagnosis of psychosis (e.g. schizophrenia spectrum

disorder)" to "self-report experiences of psychosis (e.g., hallucinations, delusions)". The following theoretical and ethical issues were considered when making this change.

Initially, I included people with a diagnosis of a psychosis condition due to the issue of caseness i.e. the degree to which a person's presentation fits within diagnostic criteria to be considered a clinical case. The benefit of this was that it might recruit a more homogenous sample in terms of the severity of psychosis experiences. Additionally, much of the previous research relevant to this study recruited clinical samples, so this would benefit to interpreting the findings against the existing evidence base. To address this issue, the Community Assessment of Psychic Experiences - Positive Scale (CAPE-P15; Capra et al., 2017) was added to the study to screen for psychosis experiences. Participants who did not report a diagnosis of psychosis and did not score on at least one item on the CAPE-P15 (Capra et al., 2017) were automatically excluded in the second iteration of the study.

This change to the inclusion criteria fits within the 'psychosis continuum' conceptual model of psychosis which suggests that symptoms of psychosis such as hearing voices range from sub-clinical symptoms to clinically significant symptoms (DeRosse & Karlsgodt, 2015; Van Os et al., 2000). Research has found that 'psychotic experiences' occur in the general population at a much higher rate than 'psychotic disorders' (McGrath et al., 2015; McManus et al., 2016). There is a need to understand suicide in this wider cohort of people who experience psychosis or psychosis-like experiences as large population-based studies have found psychotic experiences to be associated with 2 times the odds of SI and 3 times the odds of attempts (DeVylder et al., 2015; Kelleher et al., 2017). In addition, Yates et al.,'s (2019) systematic review of 10 general population studies found a 4-fold increase in odds of suicidal death. Furthermore, hearing voices is associated with increased risk of experiencing SI and SB (DeVylder and Hilimire, 2015). Indeed, some people may hear critical voices and struggle with SI but may not have received support from mental health services, received a diagnosis or identify with psychiatric diagnosis. Additionally, factors such as mental health stigma

and access to free healthcare may negatively affect access to diagnosis (Knaak et al., 2017; Sareen et al., 2007). It was hoped that this change would open the study to include this cohort of people.

Expert-by-Experience Involvement

I hoped to involve experts-by-experience in the design of this research study. This is in line with standards for public involvement in research (NIHR, 2019) and Hearing Voices Movement (HVM) recommendations (Corstens et al., 2014). However, during the design phase of the study, the university placed a pause on stakeholder involvement as there were ongoing negotiations regarding how experts-by-experience would be reimbursed for their involvement. Unfortunately, due to time constraints of completing the study within my doctoral training programme, I carried out the study without expert-by-experience involvement. I decided against seeking to involve expert-by-experience without offering payment for their time as this is contrary to the standard of public involvement regarding providing inclusive opportunities (NIHR, 2021). Payment to contributors is accepted best practice so "that they are acknowledged and recognised for their time, experience and contribution" (Learning for Involvement, 2024). Additionally, Pizzo et al., (2014) highlights one of the risks of not paying participants for their time is that volunteers might then be expected to give their time for free while researchers are paid. Not involving experts by experience is a limitation of this research. Expert-by-experience involvement has a range of benefits including gaining feedback on the research protocol, assessing the appropriateness of the study materials (e.g. poster and survey) and interpretation of the results from an expert-by-experience perspective (Brett et al., 2014). It could also reduce disempowerment and marginalisation (Pandya-Wood, et al., 2017). I aim to facilitate patient and public involvement in future research and in the evaluation and development of the clinical services I work in.

Limitations

A limitation of the empirical study was that one item was missing on the Compassion Action subscale of the Self-Compassion subscale of the Compassionate Engagement and Action Scales for Self and Others (CEAS; Gilbert et al., 2017) due to a mistake I made when creating the survey on

Qualtrics. Although I had went over the survey many times before publishing, I did not see this error in the survey. A learning point for me is to implement different types of checks in future, such as printing out the questionnaires and checking item by item, and getting a second person to check the information.

Personal reflections

Completing this project using mixed-methods has helped me to develop personal and professional skills and knowledge in a range of domains. Analysing the qualitative literature has given me a deeper understanding of the personal impact that hearing negative voices can have for people and how this often relates to previous traumatic experiences. Reading the wider literature has developed my knowledge of the history of hearing voices being stigmatised and pathologised (McCarthy-Jones, 2012). On the other hand, the HVM conceptualise this experience "as a meaningful and interpretable response to social, emotional, and/or interpersonal circumstances" (Corstens et al., 2014, p.286). Voices are a meaningful experience that is not necessarily something a person needs to eliminate. Furthermore, approaches that aim to eradicate voice hearing may be shaping perceptions of voice hearers and society more generally. This approach provided me with a better understanding of voice hearing that empowers and validates people. As my research focussed on negative and critical voice content, it was important to me to acknowledge this more complete and hopeful picture of hearing voices.

Through my reading of the psychosis and hearing voices literature, I have developed my understanding of diagnostic versus complaint-orientated approaches. The psychosis literature often utilises more psychiatric diagnostic and medical frameworks to conceptualise these experiences. For example, the use of terms such as auditory verbal hallucinations, symptoms and treatment, versus terms recommended by the Division of Clinical Psychology (2015) and the HVM (Corstens et al., 2014) such as hearing voices, experiences and intervention. I have had to straddle both paradigms in my research. This has been challenging at times when I have stated that I will use the term hearing

voices but the cited study is writing about “hallucinations” which would include both voices and other anomalous experiences such as seeing things that other people cannot see.

Early traumatic experiences are strongly associated with psychosis and hearing voices (Bentall et al., 2014). Heriot-Maitland et al., (2022) outlines how trauma and social pathways may lead to psychosis through dissociation. Conducting this research has helped me to expand my knowledge of the impact of trauma and the utility of transdiagnostic approaches within this area and wider mental health care. Additionally, I have gained a better understanding of the complexity of suicide and the need to take a holistic perspective in context of a person’s life, environment, biography and opportunities for coping. This has influenced my clinical practice in a number of ways. I am currently working with children and young people and have recently engaged in an additional Continuous Professional Development training course in Developmental Trauma. I have used Compassion Focused Therapy (CFT) in my clinical work and completing this project has helped me to deepen my understanding of the theory behind CFT. The CFT model resonates with me, as it is transdiagnostic and focusses on how the mind and body functions rather than on pathology. Furthermore, CFT integrates many other psychological models such as attachment theory (Bowlby, 1978) and fits within the Power Threat-Meaning Framework (PTMF; Johnstone & Boyle, 2018).

In summary, these experiences have helped me to think more critically about how the prevailing narratives and power structures held in different cultures and contexts affect how mental health is understood. For future research and my clinical practice, it highlights the importance of hearing the voice of the person seeking support, and understanding and advocating for their perspectives and preferences. This research reaffirms the importance of trauma-informed care and approaches that champion compassion and connection.

Conclusion

Both papers highlight the importance of focussing on the experience of hearing negative voice content in both research and clinical practice. The meta-ethnographic synthesis emphasises how negative voice content often creates a sense of fear through insults and threats relating to

traumatic experiences, current fears and negative evaluations from self and others. This maintains social rank and threat-protection mentalities; leading voice hearers to cope through survival mechanisms. Seeking social connection and support appeared to be more helpful methods of coping. The empirical study tentatively suggests that hearing voices that attack and criticise the self, may be a particularly important risk factor for SI in people who hear voices. Voices that criticise the self were found to be a stronger predictor of SI than self-attacking thoughts, and may be a key additional risk factor alongside entrapment, although future research is needed to explore this further. Taken together, these findings suggest that critical voices may be an important therapeutic target in clinical practice and a key factor for future research.

References

Barry, C. A., Britten, N., Barber, N., Bradley, C., & Stevenson, F. (1999). Using reflexivity to optimize teamwork in qualitative research. *Qualitative health research*, *9*(1), 26–44. https://doi.org/10.1177/104973299129121677

Bentall, R. P., de Sousa, P., Varese, F., Wickham, S., Sitko, K., Haarmans, M., & Read, J. (2014). From adversity to psychosis: pathways and mechanisms from specific adversities to specific symptoms. *Social psychiatry and psychiatric epidemiology*, *49*, 1011-1022. h ttps://doi.org/10.1007/s00127-014-0914-0

Bhaskar, R. (2013). *A realist theory of science*. Routledge. https://uberty.org/wp-content/uploads/2015/09/Roy_Bhaskar_A_Realist_Theory_of_Science.pdf

Birchwood, M., Gilbert, P., Gilbert, J., Trower, P., Meaden, A., Hay, J., Murray, E., & Miles, J. N. (2004). Interpersonal and role-related schema influence the relationship with the dominant 'voice' in schizophrenia: a comparison of three models. *Psychological medicine*, 34(8), 1571–1580. https://doi.org/10.1017/s0033291704002636

Bowlby, J. (1978). Attachment theory and its therapeutic implications. *Adolescent psychiatry*.

Brett, J. O., Staniszewska, S., Mockford, C., Herron-Marx, S., Hughes, J., Tysall, C., & Suleman, R. (2014). Mapping the impact of patient and public involvement on health and social care research: a systematic review. *Health expectations*, *17*(5), 637-650. https://doi.org/10.1111/j.1369-7625.2012.00795.x

Britten, N., Campbell, R., Pope, C., Donovan, J., Morgan, M., & Pill, R. (2002). Using meta ethnography to synthesise qualitative research: a worked example. *Journal of health services research & policy*, *7*(4), 209-215. https://doi.org/10.1258/135581902320432732

Capra, C., Kavanagh, D. J., Hides, L., & Scott, J. G. (2017). Current CAPE-15: A measure of recent psychotic-like experiences and associated distress. *Early intervention in psychiatry*, *11*(5), 411-417. https://doi.org/10.1111/eip.12245

Corstens, D., Longden, E., McCarthy-Jones, S., Waddingham, R., & Thomas, N. (2014). Emerging perspectives from the hearing voices movement: implications for research and practice. *Schizophrenia bulletin,* 40 Suppl 4(Suppl 4), S285–S294. https://doi.org/10.1093/schbul/sbu007

Craig, L., Cameron, J., & Longden, E. (2017). Work-related experiences of people who hear voices: An occupational perspective. *British journal of occupational therapy*, *80*(12), 707-716. https://doi.org/10.1177/0308022617714749

DeRosse, P., & Karlsgodt, K. H. (2015). Examining the psychosis continuum. *Current behavioral neuroscience reports*, *2*, 80-89. https://doi.org/10.1007/s40473-015-0040-7

DeVylder, J. E., & Hilimire, M. R. (2015). Suicide risk, stress sensitivity, and self-esteem among young adults reporting auditory hallucinations. *Health & social work*, *40*(3), 175-181. https://doi.org/10.1093/hsw/hlv037

DeVylder, J. E., Lukens, E. P., Link, B. G., & Lieberman, J. A. (2015). Suicidal ideation and suicide attempts among adults with psychotic experiences: data from the collaborative psychiatric epidemiology surveys. *JAMA psychiatry*, *72*(3), 219-225. https://doi.org 10.1001/jamapsychiatry.2014.2663

di Giacomo, E., Krausz, M., Colmegna, F., Aspesi, F., & Clerici, M. (2018). Estimating the Risk of Attempted Suicide Among Sexual Minority Youths: A Systematic Review and Meta-analysis. *JAMA pediatrics*, 172(12), 1145–1152. https://doi.org/10.1001/jamapediatrics.2018.2731

Division of Clinical Psychology. (2015). Guidelines on language in relation to functional psychiatric diagnosis. Leicester: British Psychological Society. https://cmhnursing.files.wordpress.com/2015/09/guidelines_on_language_web.pdf

Dube, S. R., Anda, R. F., Felitti, V. J., Chapman, D. P., Williamson, D. F., & Giles, W. H. (2001). Childhood abuse, household dysfunction, and the risk of attempted suicide throughout the life span: findings from the Adverse Childhood Experiences Study. *JAMA*, 286(24), 3089–3096. https://doi.org/10.1001/jama.286.24.3089

Edison Research. (2024). *Twitter/X Usage Sees Sharp Decline*. Edison Research. Retrieved July 31, 2024, from https://www.edisonresearch.com/twitter-x-usage-sees-sharp-decline/#:~:text=In%202022%20and%202023%2C%2027,%2C%E2%80%9D%20a%2030%25%20drop.

Fox, J. R., Gray, N. S., & Lewis, H. (2004). Factors determining compliance with command hallucinations with violent content: the role of social rank, perceived power of the voice and voice malevolence. *Journal of Forensic Psychiatry & Psychology*, *15*(3), 511-531. https://doi.org/10.1080/1478994042000226741

France, E. F., Cunningham, M., Ring, N., Uny, I., Duncan, E. A., Jepson, R. G., ... & Noyes, J. (2019). Improving reporting of meta-ethnography: the eMERGe reporting guidance. *BMC medical research methodology*, *19*, 1-13. https://doi.org/10.1186/s12874-018-0600-0

Gilbert, P., Catarino, F., Duarte, C., Matos, M., Kolts, R., Stubbs, J., ... & Basran, J. (2017). The development of compassionate engagement and action scales for self and others. *Journal of Compassionate Health Care*, 4, 1-24. https://doi.org/10.1186/s40639-017-0033-3

Hendricks, M. L., & Testa, R. J. (2012). A conceptual framework for clinical work with transgender and gender nonconforming clients: An adaptation of the Minority Stress Model. *Professional Psychology: Research and Practice*, *43*(5), 460. https://doi.org/10.1037/a0029597

Heriot-Maitland, C., Wykes, T., & Peters, E. (2022). Trauma and social pathways to psychosis, and where the two paths meet. *Frontiers in Psychiatry*, *12*, 804971. https://doi.org/10.3389/fpsyt.2021.804971

Johnson, J., Gooding, P., & Tarrier, N. (2008). Suicide risk in schizophrenia: Explanatory models and clinical implications, The Schematic Appraisal Model of Suicide (SAMS). *Psychology and Psychotherapy: Theory, Research and Practice*, 81(1), 55-77. https://doi.org/10.1348/147608307X244996

Johnstone, L. & Boyle, M. with Cromby, J., Dillon, J., Harper, D., Kinderman, P., Longden, E., Pilgrim, D. & Read, J. (2018). The Power Threat Meaning Framework: Towards the identification of patterns in emotional distress, unusual experiences and troubled or troubling behaviour, as an alternative to functional psychiatric diagnosis. Leicester: British Psychological Society. https://cms.bps.org.uk/sites/default/files/2022-07/PTM%20Framework%20%28January%202018%29_0.pdf

Kelleher, I., Ramsay, H., & DeVylder, J. (2017). Psychotic experiences and suicide attempt risk in common mental disorders and borderline personality disorder. *Acta Psychiatrica Scandinavica*, *135*(3), 212-218. https://doi.org/10.1111/acps.12693

Klonsky, E. D., & May, A. M. (2015). The three-step theory (3ST): A new theory of suicide rooted in the "ideation-to-action" framework. *International Journal of Cognitive Therapy*, *8*(2), 114-129. https://doi.org/10.1521/ijct.2015.8.2.114

Knaak S, Mantler E, Szeto A. Mental illness-related stigma in healthcare: Barriers to access and care and evidence-based solutions. Healthcare Management Forum. 2017;30(2):111-116. https://doi.org/10.1177/0840470416679413

Larøi, F., Thomas, N., Aleman, A., Fernyhough, C., Wilkinson, S., Deamer, F., & McCarthy-Jones, S. (2019). The ice in voices: Understanding negative content in auditory-verbal

hallucinations. *Clinical psychology review*, *67*, 1-10. https://doi.org/10.1016/j.cpr.2018.11.001

Learning for development. (2024). Why pay people to get involved in research? accessed: https://www.learningforinvolvement.org.uk/topic/payments/

Longden, E., Corstens, D., Morrison, A. P., Larkin, A., Murphy, E., Holden, N., ... & Bowe, S. (2021). A treatment protocol to guide the delivery of dialogical engagement with auditory hallucinations: Experience from the talking with voices pilot trial. *Psychology and Psychotherapy: Theory, Research and Practice*, *94*(3), 558-572. https://doi.org/10.1111/papt.12331

Maxwell, J. A. (2012). *A realist approach for qualitative research*. Sage.

McCarthy-Jones, S. (2012). Hearing voices: The histories, causes and meanings of auditory verbal hallucinations. Cambridge University Press.

McEvoy, P., & Richards, D. (2006). A critical realist rationale for using a combination of quantitative and qualitative methods. *Journal of research in nursing*, *11*(1), 66-78. https://doi.org/10.1177/1744987106060192

McGrath, J. J., Saha, S., Al-Hamzawi, A., Alonso, J., Bromet, E. J., Bruffaerts, R., ... & Kessler, R. C. (2015). Psychotic experiences in the general population: a cross-national analysis based on 31 261 respondents from 18 countries. *JAMA psychiatry*, *72*(7), 697-705. https://doi.org/10.1001/jamapsychiatry.2015.0575

McManus, S., Bebbington, P. E., Jenkins, R., & Brugha, T. (2016). *Mental health and wellbeing in England: the adult psychiatric morbidity survey 2014*. NHS digital. https://digital.nhs.uk/data-and-information/publications/statistical/adult-psychiatric-morbidity-survey/adult-psychiatric-morbidity-survey-survey-of-mental-health-and-wellbeing-england-2014

National Institute for Health and Care Research (NIHR). (2019). UK Standards for Public Involvement https://sites.google.com/nihr.ac.uk/pi-standards/

National Institute for Health and Care Research NIHR. (2021). Being inclusive in public involvement in health and care research. https://www.nihr.ac.uk/documents/being-inclusive-in-public-involvement-in-health-and-care-research/27365

O'Connor, R. C., & Kirtley, O. J. (2018). The integrated motivational-volitional model of suicidal behaviour. *Philosophical transactions of the Royal Society of London. Series B, Biological sciences*, *373*(1754), 20170268. https://doi.org/10.1098/rstb.2017.0268

Olmos-Vega, F. M., Stalmeijer, R. E., Varpio, L., & Kahlke, R. (2022). A practical guide to reflexivity in qualitative research: AMEE Guide No. 149. *Medical Teacher*, *45*(3), 241–251. https://doi.org/10.1080/0142159X.2022.2057287

Pandya-Wood, R., Barron, D.S. & Elliott, J. A framework for public involvement at the design stage of NHS health and social care research: time to develop ethically conscious standards. *Res Involv Engagem* 3, 6 (2017). https://doi.org/10.1186/s40900-017-0058-y

Pizzo, E., Doyle, C., Matthews, R., & Barlow, J. (2015). Patient and public involvement: how much do we spend and what are the benefits?. *Health expectations*, *18*(6), 1918-1926. https://doi.org/10.1111/hex.12204

Reynolds, N., & Scragg, P. (2010). Compliance with command hallucinations: the role of power in relation to the voice, and social rank in relation to the voice and others. *Journal of Forensic Psychiatry & Psychology*, *21*(1), 121-138. https://doi.org/10.1080/14789940903194111

Rolstad, S., Adler, J., & Rydén, A. (2011). Response burden and questionnaire length: is shorter better? A review and meta-analysis. *Value in Health*, *14*(8), 1101-1108. https://doi.org/10.1016/j.jval.2011.06.003

Romme, M. & Escher, S. (2000). Making Sense of Voices. London: Mind.

Sareen, J., Jagdeo, A., Cox, B. J., Clara, I., ten Have, M., Belik, S. L., ... & Stein, M. B. (2007). Perceived barriers to mental health service utilization in the United States, Ontario, and the Netherlands. *Psychiatric services,* 58(3), 357-364. https://doi.org/10.1176/ps.2007.58.3.357

Sattar, R., Lawton, R., Panagioti, M., & Johnson, J. (2021). Meta-ethnography in healthcare research: a guide to using a meta-ethnographic approach for literature synthesis. *BMC health services research*, *21*, 1-13. https://doi.org/10.1186/s12913-020-06049-w

Smith, D. M., Wang, S. B., Carter, M. L., Fox, K. R., & Hooley, J. M. (2020). Longitudinal predictors of self-injurious thoughts and behaviors in sexual and gender minority adolescents. *Journal of Abnormal Psychology, 129*(1), 114–121. https://doi.org/10.1037/abn0000483

Steel, C., Schnackenberg, J., Travers, Z., Longden, E., Greenfield, E., Meredith, L., … Corstens, D. (2020). Voice hearers' experiences of the Making Sense of Voices approach in an NHS setting. *Psychosis*, 12(2), 106–114. https://doi.org/10.1080/17522439.2019.1707859

Taylor, S. P. (2018). Critical realism vs social constructionism & social constructivism: application to a social housing research study. *International Journal of Sciences: Basic and Applied Research*, *37*(2), 216-222. https://insight.cumbria.ac.uk/id/eprint/6936/1/Taylor_AssessingCriticalRealism.pdf

Van Orden, K. A., Witte, T. K., Cukrowicz, K. C., Braithwaite, S. R., Selby, E. A., & Joiner, T. E., Jr (2010). The interpersonal theory of suicide. *Psychological review,* 117(2), 575–600. https://doi.org/10.1037/a0018697

van Os, J., Hanssen, M., Bijl, R. V., & Ravelli, A. (2000). Strauss (1969) revisited: a psychosis continuum in the general population?. *Schizophrenia research*, *45*(1-2), 11–20. https://doi.org/10.1016/s0920-9964(99)00224-8

Yates, K., Lång, U., Cederlöf, M., Boland, F., Taylor, P., Cannon, M., ... & Kelleher, I. (2019). Association of psychotic experiences with subsequent risk of suicidal ideation, suicide

attempts, and suicide deaths: a systematic review and meta-analysis of longitudinal population studies. *JAMA psychiatry*, 76(2), 180-189. https://doi.org/10.1001/jamapsychiatry.2018.3514

Doctorate in Clinical Psychology | Lancaster University

Section Four: Ethics Documentation

Myles Sammon

Doctorate in Clinical Psychology

Division of Health Research, Lancaster University

All correspondence should be sent to:

Myles Sammon

Doctorate in Clinical Psychology

Health Innovation One

Sir John Fisher Drive

Lancaster University

Lancaster

LA1 4AT

Email: m.sammon@lancaster.ac.uk

Application for Ethical Approval for Research

Substantial Amendment Form v1.9.2

Substantial Amendment Form v1.9.2 - 1 SA

Self-Attacking Thoughts, Critical Voices and Suicidal Thinking in People who Hear Voices - Approved

Amendment Information

Please note:

This form is for making substantial amendments to applications previously approved in REAMS. All "Substantial Amendments" will go through the review process again. Please check the "Amendment Guidance" to see if you can use the "Minor Amendment" form.

Please number which amendment this is:

1

Amendment Summary

Please summarise your changes and the reasons why you are making them. Ensure that you indicate which parts of the form have been altered.

I am proposing to make two edits to the current study. The first proposed amendment concerns the inclusion criteria of my study. The second amendment concerns our recruitment strategy.

First proposed amendment

The first proposed change concerns the inclusion criteria of the study. Currently, adults aged 18 and over, who self-report a diagnosis of psychosis (e.g. schizophrenia spectrum disorder), who hear voices and who report suicidal thinking in the past 6 months, are eligible to take part in this study. We propose changing the inclusion criterion "self-report a diagnosis of psychosis (e.g. schizophrenia spectrum disorder)" to "self-report to have a diagnosis of psychosis or recent psychosis-like experiences (e.g., hallucinations, delusions)" for the following reasons.
Recruitment for this study is being carried out jointly with recruitment for a study by Wren Little, Trainee Clinical Psychologist, through the same Qualtrics link. Wren and I have primarily recruited through engaging with online groups relating to psychosis. While we have had some success with this (17 participants have completed my study), we have recruited fewer participants than forecast for this stage of our research. Through reviewing the data on Qualtrics, we have noticed that a significant proportion of people who have engaged with the survey link have not completed the survey due to selecting "no" to the item "Have you received a diagnosis of psychosis (e.g. schizophrenia spectrum disorder)?" This indicates that there may be people who have experienced psychosis but not received a diagnosis who have been excluded from taking part in the study. We know that access to mental health services is impacted by many factors such as stigma and access to free healthcare (Knaak et al., 2017; Sareen et al., 2007). With this in mind, we hope that this change will promote inclusivity while addressing the challenges to recruitment faced within the short time-frame to complete this research.

The continuum model of psychosis suggests that symptoms of psychosis such as hearing voices exist on a continuum from sub-clinical symptoms to the clinically significant symptoms typically observed in people diagnosed with a psychotic disorder (Van Os et al., 2000; DeRosse & Karlsgodt, 2015). Research has found that 'psychotic experiences' occur in the general population at a much higher rate than 'psychotic disorders' (McGrath et al., 2015; McManus et al., 2016). We also know that people who experience 'psychotic

experiences' are at a greater risk for suicidal thinking and behaviour (DeVylder et al., 2015; Kelleher et al., 2019; Yates et al., 2019). This highlights the need to understand the risk factors for suicide in people with 'psychotic experiences'. This change to the inclusion criteria fits within the 'psychosis continuum' conceptual model of psychosis (Van Os et al., 2000; DeRosse & Karlsgodt, 2015) and allows us to recruit from this population.

With this rationale for making this change to the inclusion criteria in mind, the changes to the survey will be the following:

Remove the following two items: "Have you received a diagnosis of psychosis (e.g. schizophrenia spectrum disorder)?" and "Please select the diagnosis/diagnoses you have received from the list below: schizophrenia; schizoaffective disorder; schizotypal disorder; acute and transient psychotic disorder; delusional disorder; other specified schizophrenia or primary psychotic disorder".

Replace with the following items: First participants will be asked "Please select the diagnosis/diagnoses you have received (if applicable) from the list below: schizophrenia; schizoaffective disorder; schizotypal disorder; acute and transient psychotic disorder; delusional disorder; other specified schizophrenia or primary psychotic disorder; No formal diagnosis given of psychosis". This will be followed by the Community Assessment of Psychic Experiences-Positive Scale (CAPE-P15) 15-item questionnaire (Capra et al., 2015) which assesses psychotic like experiences. The survey is formatted so that if participants have selected that they have not received a diagnosis of a 'psychotic disorder' in the previous question, they will only be included in the study if they score on at least one item of the CAPE-P15. That is, participants without a diagnosis of a 'psychotic disorder' who report no psychotic-like experiences will be excluded at this stage of the study. Participants who self-report a diagnosis will not be excluded at this stage if they do not report psychotic-like experiences on the CAPE-P15 (as with previous criteria).

This change would allow us to continue to collect data on the number of people with a diagnosis and compare this to those with 'psychotic-like experiences' who do not self-report a diagnosis. We will report on these descriptive statistics and run supplementary analysis (i.e., T-tests or non-parametric equivalents) to compare the groups. We will also run sensitivity analysis to see if it makes a difference to the results (if we have power to do so).

Second proposed amendment:
We propose changing the current recruitment strategy from recruiting online to recruiting online and in public spaces. It is hoped that this change will help us to address the current challenges with recruitment. If approved, this will involve us placing posters in selected public areas such as universities, council buildings, public transport buildings etc. This would not include NHS settings, as we have not sought ethical approval from the relevant NHS trust ethical boards. No data will be collected in person. Participants will access the study through a Qualtrics link as before and this will include a QR code option which will direct participants to the link. Participants recruited through public places will be sent to a different Qualtrics link with identical survey content. This will allow us to report on how many people we recruit through this method.

Parts of the form altered:
Participant Information
Online Sources - Question "Briefly describe your data collection methods from the online source(s), state which online sources you intend to use, and why the data is relevant to your research."

I have also included the following updated documents:
Consent Form: Consent Form 24.01.24
Participant Information Sheet: Participant information sheet 24.01.24
Advertising materials: Amended thesis poster (1)
Questionnaires, surveys, demographic sheets: Questionnaires with Amendments; Updated survey flow chart 24.01.24
Debrief sheet: Debrief statement 24.01.24

Will your project require NHS REC approval? (If you are not sure please read the guidance in the information button)

○ Yes ◉ No

Do you need Health Research Authority (HRA) approval? (Please read the guidance in the information button)

○ Yes ◉ No

Have you already obtained, or will you be applying for ethical approval, from another institution outside of Lancaster University? (For example, an external institution such as: another University's Research Ethics Committee, the NHS or an institution abroad (eg an IRB in the USA)? Please select one of the following:

- (•) No, I do not need ethical approval from an external institution.
- ( ) Yes, I have already received ethical approval from an external institution.
- ( ) Yes, I will be applying for ethical approval from an external institution after I have received confirmation of ethical approval from my Faculty Research Ethics Committee (FREC) at Lancaster University, if the FREC grants approval.

Is this an amendment to a project previously approved by Lancaster University using the previous "paper-based" system (Pre-Jan 2022)?

( ) Yes (•) No

To note: please do not change your answer to this question, as you are completing the Substantial Amendment form therefore it is apparent that this is an amendment to a previously approved Lancaster University project .

Which Faculty are you in?

Faculty of Health and Medicine

Which department are you in?

Health Research

Which department are you in?

Health Research

Are you undertaking this research as/are you filling this form out as:

- ( ) Academic/Research Staff
- ( ) Non Academic Staff
- ( ) Staff Undertaking a Programme of Study
- (•) PhD or DClinPsy student or MPhil
- ( ) Undergraduate, Masters, Master by Research or other taught postgraduate programme

Will your research involve any of the following? (Multiple selections are possible, please see i icon for details)

- [x] Human Participants
- [ ] Data relating to humans (Secondary/Pre-existing data only)
- [x] Data collection from online sources such as social media platforms, discussion forums, online chat-rooms
- [ ] Human Tissue
- [ ] None of the above

Project Information

Please confirm/amend the title of this project.

Self-Attacking Thoughts, Critical Voices and Suicidal Thinking in People who Hear Voices

Estimated Project Start Date 01/02/2023

Amended Start Date - *If the start date hasn't changed please re-enter* 01/01/2023

Is this a funded Project?

( ) Yes (•) No

Research Site(s) Information

Will you be recruiting participants from research sites outside of Lancaster University? *(E.g. Schools, workplaces, etc; please read the guidance in the information button for more information)*

( ) Yes (•) No

Applicant Details

Are you the named Principal Investigator at Lancaster University?

(•) Yes ( ) No

Please check your contact details are correct. You can update these fields via the personal details section located in the top right of the screen. Click on your name and email address in the top right to access "Personal details". For more details on how to do this, please read the guidance in the information button.

First Name

Myles

Surname

Sammon

Department

Health Research

Faculty

Faculty of Health and Medicine

Email

m.sammon@lancaster.ac.uk

Please enter a phone number that can be used in order to reach you, should an emergency arise.

Supervisor Details

Search for your supervisor's name. *If you cannot find your supervisor in the system please contact rso-systems@lancaster.ac.uk to have them added.*

First Name

James

Surname

Kelly

Department

Health Research

Faculty

Faculty of Health and Medicine

Email

j.a.kelly@lancaster.ac.uk

Do you need to add a second supervisor to sign off on this project?

○ Yes ◉ No

Additional Team Members

Other then those already added, please select which type of team members will be working on this project:

- ☐ I am not working with any other team members.
- ☐ Staff
- ☑ Student
- ☐ External

Search for names of additional student team members here:

First Name

Wren

Surname

Little

Department

Health Research

Faculty

Faculty of Health and Medicine

Email

w.little1@lancaster.ac.uk

As you have indicated that students are working on this project, please confirm that all supervisors have been informed about their participation.

☑ I confirm that I have notified the supervisors of all listed students about their involvement in this project

Search for name to select the supervisor(s) for the students working on this project.

First Name

James

Surname

Kelly

Department

Health Research

Faculty

Faculty of Health and Medicine

Email

j.a.kelly@lancaster.ac.uk

Details about the participants

As you are conducting research with Human Participants/Tissue you will need to answer the following questions before your application can be reviewed.

If you have any queries about this please contact your Ethics Officer before proceeding.

What's the minimum number of participants needed for this project?

81

What's the maximum number of expected participants?

160

Do you intend to recruit participants from online sources such as social media platforms, discussion forums, or online chat rooms?

(•) Yes ( ) No

You stated that you will be engaging in recruiting participants from online sources such as social media platforms, discussion forums, or online chat-rooms. Please confirm that this either:

(•) Is clearly in compliance with the online source(s) published terms and conditions
( ) Not clear within the online source(s) published terms and conditions, therefore you have obtained written approval from the platform
( ) Neither of the above

Will you get written consent and give a participant information sheet with a written description of your research to all potential participants?

(•) Yes ( ) No ( ) I don't know

Will any participants be asked to take part in the study without their consent or knowledge at the time or will deception of any sort be involved?

( ) Yes (•) No ( ) I don't know

Is your research with any vulnerable groups?

(Vulnerable group as defined by Lancaster University Guidelines)

(•) Yes ( ) No ( ) I don't know

Is your research with any adults (aged 18 or older)?

(•) Yes ( ) No

Is your research data collected with completely anonymous adult (aged 18 or older) participants, with no contact details or other uniquely identifying information (e.g. date of birth) being recorded?

( ) Yes (•) No

Is your research with any young people (under 18 years old)?

( ) Yes (•) No ( ) I don't know

Does your research involve discussion of personally sensitive subjects which the participant might not be willing to otherwise talk about in public (e.g. medical conditions)?

(•) Yes ( ) No ( ) I don't know

Is there a risk that the nature of the research topic might lead to disclosures from the participant concerning either:

- Their own or others involvement in illegal activities
- Other activities that represent a threat to themselves or others (e.g. sexual activity, drug use, or professional misconduct)?

(•) Yes ( ) No ( ) I don't know

Does the study involve any of the following:

- Physically intrusive procedures including touching or attaching equipment to participants
- Administration of substances
- Ultrasound or sources of non-ionising radiation (e.g. lasers)
- Sources of ionising radiation, (e.g. X-rays)
- Collection or use of samples of Human Tissue (e.g. Saliva, skin cells, blood etc.)

( ) Yes (•) No ( ) I don't know

Details about the relationships with participants

Do you have a current or prior relationship with potential participants? For example, teaching or assessing students or managing or influencing staff (this list is not exhaustive).

( ) Yes (•) No ( ) I don't know

If you need written permission from a senior manager in an organisation where research will take place (e.g. school, business) will you gain this in advance of undertaking your research?

○ Yes ○ No ○ I don't know ◉ N/A

Will you be using a gatekeeper to access participants?

○ Yes ◉ No ○ I don't know if I will be using a gatekeeper

Will participants be subjected to any undue incentives to participate?

○ Yes ◉ No ○ I don't know

Will you ensure that there is no perceived pressure to participate?

◉ Yes ○ No ○ I don't know

Details about participant data

Will you be using video recording or photography as part of your research or publication of results?

○ Yes ◉ No

Will you be using audio recording as part of your research?

○ Yes ◉ No

Will you be using portable devices to record participants (e.g. audio, video recorders, mobile phone, etc)?

◉ No

○ Yes, and all portable devices will be encrypted as per the Lancaster University ISS standards, in particular where they are used for recording identifiable data

○ Yes, but these cannot be encrypted because they do not have encryption functionality. Therefore I confirm that any identifiable data (including audio and video recordings of participants) will be deleted from the recording device(s) as quickly as possible (e.g. when it has been transferred to a secure medium, such as a password protected and encrypted laptop or stored in OneDrive) and that the device will be stored securely in the meantime

Will you be using other portable storage devices in particular for identifiable data (e.g. laptop, USB drive, etc)? (Please read the help text)

- (•) No
- ( ) Yes, and they will be encrypted as per the Lancaster University ISS standards in particular where they are used for recording identifiable data

Will anybody external to the research team be transcribing the research data?

( ) Yes (•) No

Details about the online sources

You stated that you will be engaging in data collection from online sources such as social media platforms, discussion forums, online chat-rooms. Please confirm that the data you intend to collect and the mode of analysis and communication is either:

- (•) Clearly in compliance with the online source(s) published terms and conditions
- ( ) Not clearly within the online source(s) published terms and conditions, therefore you have obtained written approval from the platform to conduct your project
- ( ) Neither of the above

Data Source

Is the online data you will be using in the public domain?

( ) Yes (•) No

Will you use data from potentially illicit, illegal, or unethical online sources (e.g. pornography, related to terrorism, dark web, leaked information)?

( ) Yes (•) No ( ) I don't know

Do you need consent for the use of the data for research purposes?

(•) Yes ( ) No ( ) I don't know

Will you protect anonymity in your use and analysis of the data?

(•) Yes ( ) No ( ) I don't know

General Queries

Does the funder or any organisations involved in the research have a vested interest in specific research outcomes that would affect the independence of the research?

○ Yes ◉ No ○ I don't know

Does any member of the research team, or their families and friends, have any links to the funder or organisations involved in the research?

○ Yes ◉ No ○ I don't know

Can the research results be freely disseminated?

◉ Yes ○ No ○ I don't know

Will you use data from potentially illicit, illegal, or unethical sources (e.g. pornography, related to terrorism, dark web, leaked information)?

○ Yes ◉ No ○ I don't know

Will you be gathering/working with any special category personal data?

◉ Yes ○ No ○ I don't know

Are there any other ethical considerations which haven't been covered?

○ Yes ◉ No ○ I don't know

REC Review Details

Based on the answers you have given so far you will need to answer some additional questions to allow reviewers to assess your application.

It is recommended that you do not proceed until you have completed **all of the previous questions**.

Please confirm that you have finished answering the previous questions and are happy to proceed.

☑ I confirm that I have answered all of the previous questions, and am happy to proceed with the application.

Questions for REC Review

Summarise your research protocol in lay terms (indicative maximum length 150 words).

Note: The summary of the protocol should concisely but clearly tell the Ethics Committee (in simple terms and in a way which would be understandable to a general audience) what you are broadly planning to do in your study. Your study will be reviewed by colleagues from different disciplines who will not be familiar with your specific field of research and it may also be reviewed by the lay members of the Research Ethics Committee; therefore avoid jargon and use simple terms. A helpful format may include a sentence or two about the background/ "problem" the research is addressing, why it is important, followed by a description of the basic design and target population. Think of it as a snapshot of your study.

Suicide is a major public health problem. People who experience psychosis are more likely to experience suicidal thinking and behaviour. Psychosis describes an experience where a person perceives or interprets reality in a very different way from people around them. This often involves seeing or hearing things that other people cannot see or hear. This study will focus on the experience of hearing voices. Recent suicide research has found self-attacking thoughts to be a significant predictor of suicide probability. The experience of hearing critical voices has been likened to self-attacking thoughts as a similar form of inner harassment. This study will explore if self-attacking thoughts predict suicidal thinking, and if critical voices predict suicidal thinking, in people who hear voices. This study will recruit adults who hear voices and report having suicidal thoughts in the past 6 months. Participants will complete a series of questionnaires online on one occasion.

State the Aims and Objectives of the project in Lay persons' language.

The primary research question this study aims to address is:
- Do self-attacking thoughts predict suicidal thinking after controlling for entrapment (defined as being caught in a situation from which there is no way out, or your way out is blocked), depression, age, gender, age of onset of voice hearing and voice frequency in people who hear voices?

This study will also explore the following secondary research questions:
- Do critical voices predict suicide thinking after controlling for entrapment, depression, age, gender, age of onset of voice hearing and voice frequency in people who hear voices?
- Does self-compassion (defined as a basic kindness, with a deep awareness of the suffering of oneself and a wish to relieve it) alter the strength of (or moderate) the relationship between self-attacking thoughts and suicidal thinking in people who hear voices?
- Does self-compassion alter the strength of (or moderate) the relationship between critical voices and suicidal thinking in people who hear voices?

Participant Information

Please explain the number of participants you intend to include in your study and explain your rationale in detail (eg who will be recruited, how, where from; and expected availability of participants). If your study contains multiple parts eg interviews, focus groups, online questionnaires) please clearly explain the numbers and recruitment details for each of these cohorts (see help text).

Participants will complete a series of questionnaires online through a link on the www.lancasteruni.eu.qualtrics.com. Data collection will be carried out in conjunction with a study being conducted by a second trainee, Wren Little, who is also under the supervision of Dr James Kelly. Participants who hear voices are eligible for this study and therefore will automatically be shown additional items relating to this study. Participants who are not eligible for this study (do not hear voices) will not be shown additional items.

Participants included in the study will be adults aged 18 and over, who self-report to have a diagnosis of psychosis or recent psychosis-like experiences (e.g., hallucinations, delusions), who hear voices and who report suicidal thinking in the past 6 months.

Participants will be recruited from social media websites such as Twitter and also through connecting with Voice Hearing Groups/Networks to disseminate the study link online. We also plan to recruit participants through advertising the study in public spaces. This will involve us placing posters in selected public areas such as universities, council buildings, public transport buildings etc. This would not include NHS settings, as we have not sought ethical approval from the relevant NHS trust ethical boards. No data will be collected in person. Participants will access the study through a Qualtrics link and the poster will include a QR code option which will direct participants straight to the link. Participants recruited through public places will be sent to a different Qualtrics link with identical survey content. This will allow us to report on how many people we recruit through this method.

We have calculated that the minimum number of participants needed to detect an estimated small effect size (determined from the existing literature) is n =81. If possible given the short time-frame for data collection of 6 months, participant recruitment will continue to an upper sample size limit of 114 participants. This more conservative estimate has been determined using the rule of thumb outlined in Green (1991) of N > 50 + (number of Independent variables (8)) (x8).

Data collection for this study will be carried out with a second study being conducted by another trainee, Wren Little, who is also being supervised by Dr James Kelly. As the population of this study (people with a a diagnosis of psychosis or recent psychosis-like experiences who hear voices) is a smaller subsection of Wren Little's study population (people with a diagnosis of psychosis or recent psychosis-like experiences), recruitment will need to continue until this study reaches a sufficient number of participants (N = 81 - 114). Approximately 75% of people with a diagnosis of schizophrenia report voice hearing (Waters & Fernyhough, 2017). Assuming a similar proportion within our sample, 152 participants would be required to recruit 114 people who hear voices. As this is only an estimate of effect size, my rationale for 160 participants includes a safety margin to allow for additional participants.

We expect participant availability to be sufficient to fulfil the needed amount of participants for this study based upon recent research into voice hearing/psychosis populations which have successfully utilised online data collection through social media to recruit a similar sample size (Lawrence et al., 2010).

As you have indicated that you are working with a vulnerable group please describe the intended participants, and why they are needed for this research.

Participants included in the study will be adults aged 18 and over, who self-report a diagnosis of psychosis (e.g. schizophrenia spectrum disorder) or recent psychosis-like experiences, hear voices and report suicidal thinking in the past 6 months.

The purpose of my study is to research suicidal thinking in people who hear voices to inform available treatments and/or improve understanding of risk factors. People who experience psychotic symptoms such as hearing voices are more likely to experience suicidal thinking and behaviour (Huang et al., 2018, Yates et al., 2019). It is therefore necessary to recruit participants from this population.

You have selected that the research may involve personal sensitive topics that participants may not be willing to otherwise talk about. Please indicate what discomfort, inconvenience or harm could be caused to the participant and what steps you will take to mitigate or manage these situations.

The measures in the survey will ask participants about a number of sensitive topics. The main potential for risk being the measure of suicidality which asks about recent experiences of suicidal thinking and/or behaviour. This has the potential to increase attention to suicidal thoughts and/or induce negative emotions (e.g., sadness, shame).

Other topics that we will ask participants about which have the potential for bringing about feelings of discomfort through increases attention toward these experiences include: Questions relating to feelings of depression, defeat and entrapment; Questions regarding how the participant relates to themselves, to others, and to their voices (e.g. self-criticism, self-compassion and their voice hearing relationship).

Efforts have been made to select measures which have the fewest number of items to reduce the time burden to participants, measures that use language that is least likely to cause discomfort or harm to participants whilst still being valid and reliable measures commonly used in previous research.

We plan to involve people with lived experiences of hearing voices in the review process of the measures selected.

To mitigate this risk we will first provide clear and detailed information to participants in the poster and the participant information sheet regarding the sensitive topics that the questionnaire will ask about. It will clearly state that participants do not have to complete the study and this will be repeated throughout the questionnaire.

The participant information sheet, debrief sheet and each page of the study questionnaire will contain contact information for services which can provide additional support if needed. As the study will be published online, and is therefore accessible internationally, this will include a link to "https://findahelpline.com", which provides details for suicide and anxiety helplines in most countries

You have indicated that you will collect identifying information from the participants. Please describe all the personal information that you gather for your study which might be used to identify your participants.

We will ask participants about the following personal information: gender, age, marital status, age of onset of psychosis, ethnicity, diagnosis and voice hearing status.

Participants may provide us with contact details (email address) if they wish to receive a summary of the research at the end of the study.

Please describe how the data will be collected and stored.

These details will be stored separately from the collected data to ensure anonymity. These will be retained until this summary has been sent out. This data will be accessible to Wren Little, me and our supervisor, Dr James Kelly only. Once the study is completed, contact details will be deleted and this will be confirmed in writing (by email) that this action has been completed with my supervisor.

Please describe how long the data will be stored and who is responsible for the deletion of the data.

Once the final version of my thesis has been submitted, I will share the research data with the Research Coordinator for long-term storage by sharing the OneDrive folder. This will be transferred electronically using a secure method that is supported by the University. The data will then be saved on a password protected file space on the server for 10 years. The Research Coordinator will be responsible for deletion of the data.

You stated that the study could induce psychological stress or anxiety, or produce humiliation or cause harm or negative consequences beyond the risks encountered in a participant's usual, everyday life. Please describe the question(s) and situation(s) that could lead to these outcomes and explain how you will mitigate this.

The measures in the survey will ask participants about a number of sensitive topics. The main potential for risk being the measure of suicidality which asks about recent experiences of suicidal thinking and/or behaviour. This has the potential to increase attention to suicidal thoughts and/or induce negative emotions (e.g., sadness, shame).

Other topics that we will ask participants about which have the potential for bringing about feelings of discomfort through increases attention toward these experiences include: Questions relating to feelings of depression, defeat and entrapment; Questions regarding how the participant relates to themselves, to others, and to their voices (e.g. self-criticism, self-compassion and their voice hearing relationship).

Efforts have been made to select measures which have the fewest number of items to reduce the time burden to participants, measures that use language that is least likely to cause discomfort or harm to participants whilst still being valid and reliable measures commonly used in previous research.

We plan to involve people with lived experiences of hearing voices in the review process of the measures selected.

To mitigate this risk we will first provide clear and detailed information to participants in the poster and the participant information sheet regarding the sensitive topics that the questionnaire will ask about. It will clearly state that participants do not have to complete the study and this will be repeated throughout the questionnaire.

The participant information sheet, debrief sheet and each page of the study questionnaire will contain contact information for services which can provide additional support if needed. As the study will be published online, and is therefore accessible internationally, this will include a link to "https://findahelpline.com", which provides details for suicide and anxiety helplines in most countries

You have selected that there is a risk that the nature of the research might lead to disclosures from the participant. What kind of information might participants disclose? How will you manage that situation?

Participants may indicate in their responses to the survey questions that they are experiencing current suicidal thoughts, plans or intent. As this study is anonymous we will not be actively able to follow up on this information and therefore we will provide participants with contact information for services which can provide additional support if needed. As the study will be published online, and is therefore accessible internationally, this will include a link to "https://findahelpline.com", which provides details for suicide and anxiety helplines in most countries. This will be available in the participant information sheet, debrief sheet and on each page of the study questionnaire.

Additional Information

What are your dissemination plans? E.g publishing in PhD thesis, publishing in academic journal, presenting in a conference (talk or poster).

It is planned to publish findings in a peer-reviewed academic journal identified jointly with Wren Little and our research supervisor, Dr James Kelly. It is also planned to feedback a summary of the research findings to participants who opt to receive this information by providing their email address through an anonymous link at the end of our Qualtrics survey.

Data Sources

You have indicated that the data you will be using is not in the public domain. Please explain how the records will be obtained? Indicate the original purpose for which the data was collected?

Data will not come from pre-existing records and will be collected for the purposes of this study via online questionnaire.

You have stated that you need consent to use the data for this project. Please explain how you propose to obtain consent.

We will obtain informed consent from participants by providing participants with a detailed information sheet at the beginning of the questionnaire. Participants will provide consent by ticking a box to confirm that they have read and understood the information sheet and consent to the data being collected, stored and analysed for the purposes of the study.

Online Sources

Briefly describe your data collection methods from the online source(s), state which online sources you intend to use, and why the data is relevant to your research.

We intend to use social media website Twitter to recruit participants through a website link to the study.

Data will not come from pre-existing records and will be collected for the purposes of this study via online questionnaire.

We also plan to recruit participants through advertising the study in public spaces. This will involve us placing posters in selected public areas such as universities, council buildings, public transport buildings etc. This would not include NHS settings, as we have not sought ethical approval from the relevant NHS trust ethical boards. No data will be collected in person. Participants will access the study through a Qualtrics link and the poster will include a QR code option which will direct participants straight to the link. Participants recruited through public places will be sent to a different Qualtrics link with identical survey content. This will allow us to report on how many people we recruit through this method.

You have indicated site users have a reasonable expectation of privacy and therefore you will need to obtain consent to use their data for this project. Please explain how you propose to obtain consent.

We will obtain informed consent from participants by providing participants with a detailed information sheet at the beginning of the questionnaire. Participants will provide consent by ticking a box to confirm that they have read and understood the information sheet and consent to the data being collected, stored and analysed for the purposes of the study.

General Queries

You have indicated that you will be gathering/working with special category data. Please confirm here how you will comply with data protection law (GDPR) for use of special category personal data.

We will report a summary of special category data (e.g., ethnicity) however will not report any individual participants data and all information will be anonymised and unidentifiable.

The electronic data will be collected and stored within the password-protected Lancaster Qualtrics website. This will also only be accessed via our secure/encrypted LSCFT laptops. Once we have reached a sufficient number of participants or the data collection window has closed, the data will be exported to our personal OneDrive folder for storage which is only accessible by myself and my thesis supervisor (James Kelly). Data will be encrypted and passwords for the documents shared with my supervisor only. No paper documents will be collected during the course of this research.

Once the final version of my thesis has been submitted, I will share the research data with the Research Coordinator for long-term storage by sharing the OneDrive folder. This will be transferred electronically using a secure method that is supported by the University. The data will then be saved on a password protected file space on the server for 10 years. The Research Coordinator will be responsible for deletion of the data.

Additional Information for REC Review

How long will you retain the research data?

I will retain the research data until the final version of my thesis has been submitted. Once the final version of my thesis has been submitted, I will share the research data with the Research Coordinator for long-term storage by sharing the OneDrive folder. This will be transferred electronically using a secure method that is supported by the University. The data will then be saved on a password protected file space on the server for 10 years. The Research Coordinator will be responsible for deletion of the data.

How long and where will you store any personal and/or sensitive data?

The electronic data will be collected and stored within the password-protected Lancaster Qualtrics website. This will also only be accessed via our secure/encrypted LSCFT laptops. Once we have reached a sufficient number of participants or the data collection window has closed, the data will be exported to our personal OneDrive folder for storage which is only accessible by myself and my thesis supervisor (James Kelly). Data will be encrypted and passwords for the documents shared with my supervisor only. No paper documents will be collected during the course of this research.

Participants may provide us with contact details (email address) if they wish to receive a summary of the research at the end of the study. These details will be stored separately from the collected data to ensure anonymity. These will be retained until this summary has been sent out which will approximately be, at the latest, August 2024. Once the study is completed, contact details will be deleted and this will be confirmed in writing (by email) that this action has been completed with my supervisor.

Please explain when and how you will anonymise data and delete any identifiable record?

Data will be collected anonymously through Qualtrics, participants will not be asked to provide their name or contact details within the research question. Participants who opt to provide their email address to receive the summary of the findings will have their email address collected through a separate link that is provided at the end of the questionnaire, thereby maintaining participant anonymity. These will be retained until this summary has been sent out. Once the study is completed, contact details will be deleted and this will be confirmed in writing (by email) that this action has been completed with my supervisor.

Once the final version of my thesis has been submitted, I will share the research data with the Research Coordinator for long-term storage by sharing the OneDrive folder. This will be transferred electronically using a secure method that is supported by the University. The data will then be saved on a password protected file space on the server for 10 years. The Research Coordinator will be responsible for deletion of the data.

Document Upload

Important Notice about uploaded documents:

When your application has been reviewed if you are asked to make any changes to your uploaded documents please highlight the changes on the updated document(s) using the highlighter so that they are easy to see.

Please confirm that you have read and applied, where appropriate, the guidance on completing the Participant Information Sheet, Consent Form, and other related documents and that you followed the guidance in the help button for a quality check of these documents. For information and guidance, please use the relevant link below:

FST Ethics Webpage

FHM Ethics Webpage

FASS-LUMS Ethics Webpage

REAMS Webpage

☑ I confirm that I have followed the guidance.

In addition to completing this form you must submit all supporting materials.

Please indicate which of the following documents are appropriate for your project:

- ☐ I have no updated documents and confirm that all relevant documents were included in previous submissions.
- ☑ Advertising materials (posters, emails)
- ☑ Research Proposal (DClinPsy)
- ☐ Letters/emails of invitation to participate
- ☑ Consent forms
- ☑ Participant information sheet(s)
- ☐ Interview question guides
- ☐ Focus group scripts
- ☑ Questionnaires, surveys, demographic sheets
- ☐ Workshop guide(s)
- ☑ Debrief sheet(s)
- ☐ Transcription (confidentiality) agreement
- ☐ Other
- ☐ None of the above.

Please upload the documents in the correct sections below:

Please ensure these are the latest version of the documents to prevent the application being returned for corrections you have already made.

Please upload a copy of all of the consent forms that you will be using:

Documents

Type	Document Name	File Name	Version Date	Version	Size
Consent Form	Consent Form V2 29.01.24	Consent Form V2 29.01.24.docx	29/01/2024	2	18.7 KB

Please upload a copy of all of the Participant Information Sheets that you will be using in this study.

Documents

Type	Document Name	File Name	Version Date	Version	Size
Participant Information Sheet	Participant information sheet V3 29.01.24	Participant information sheet V3 29.01.24.pdf	29/01/2024	3	450.7 KB

Please upload all of the advertising materials relevant for this project:

Documents

Type	Document Name	File Name	Version Date	Version	Size
Advertising materials	Amended thesis poster V3 29.01.24	Amended thesis poster V3 29.01.24.png	29/01/2024	3	846.9 KB

Please upload all questionnaire, surveys, demographic sheet templates used in this project:

Documents

Type	Document Name	File Name	Version Date	Version	Size
Questionnaires, surveys, demographic sheets	Survey with Amendments highlighted V3 29.01.24	Survey with Amendments highlighted V3 29.01.24.docx	29/01/2024	3	40.5 KB
Questionnaires, surveys, demographic sheets	Updated survey flow chart V2 29.01.24	Updated survey flow chart V2 29.01.24.pdf	29/01/2024	2	159.2 KB

Please upload all debrief sheets used for this project.

Documents

Type	Document Name	File Name	Version Date	Version	Size
Debrief sheet	Debrief Statement V3 29.01.24	Debrief Statement V3 29.01.24.docx	29/01/2024	3	17.5 KB

Declarations and Sign off

Please Note

Research Services monitors projects entered into the online system, and may select projects for quality control.

All research at Lancaster university must comply with the LU data storage and governance guidance as well as the General Data Protection Regulation (GDPR) and the UK Data Protection Act 2018. (Data Protection Guidance webpage)

☑ I confirm that I have read and will comply with the LU Data Storage and Governance guidance and that my data use and storage plans comply with the General data Protection Regulation (GDPR) and the UK Data Protection Act 2018.

Have you that you have undertaken a health and safety risk assessment for your project through your departmental process? (Health and Safety Guidance)

☑ I have undertaken a health and safety assesment for your project through my departmental process, and where required will follow the appropriate guidance for the control and management of any foreseeable risks.

When you are satisfied that this application has been completed please click "Request" below to send this application to your supervisor for approval.

Signed: This form was signed by Dr James Kelly (j.a.kelly@lancaster.ac.uk) on 29/01/2024 12:23

Please read the terms and conditions below:

- You have read and will abide by Lancaster University's Code of Practice and will ensure that all staff and students involved in the project will also abide by it.
- If appropriate a confidentiality agreement will be used
- You will complete a data management plan with the Library if appropriate. Guidance from Library.
- You will provide your contact details, as well as those of either your supervisor (for students) or an appropriate person for complaints (such as HoD) to any participants with whom you interact, so they know whom to contact in case of questions or complaints?
- That University policy will be followed for secure storage of identifiable data on all portable devices and if necessary you will seek guidance from ISS
- That you have completed the ISS Information Security training and passed the assessment
- That you will abide by Lancaster University's lone working policy for field work if appropriate
- On behalf of the institution you accept responsibility for the project in relation to promoting good research practice and the prevention of misconduct (including plagiarism and fabrication or misrepresentation of results).
- To the best of your knowledge the information you have provided is correct at the time of submission
- If anything changes in your research project you will submit an amendment

To complete and submit this application please click "Sign" below:

Signed: This form was signed by Myles Sammon (m.sammon@lancaster.ac.uk) on 29/01/2024 11:48

Appendix 4-A
Ethical Approval Confirmation

[External] REAMS (Applicant) Ethics approval of amendment Review Reference

donotreply@infonetica.net <donotreply@infonetica.net>
Mon 2024-01-29 4:03 PM
To:Sammon, Myles (Postgraduate Researcher) <m.sammon@lancaster.ac.uk>
Cc:Kelly, James (kellyja) <j.a.kelly@lancaster.ac.uk>

1 attachments (118 KB)
Letter.pdf;

This email originated outside the University. Check before clicking links or attachments.

FHM-2024-3344-SA-2 Self-Attacking Thoughts, Critical Voices and Suicidal Thinking in People who Hear Voices

Dear Myles Sammon,

Please note that this is an automated e-mail (Please do not reply to this e-mail).

Thank you for submitting your ethics amendment application in REAMS. The amendment has been approved by the FHM.

As Principal Investigator/Co-Investigator your responsibilities include:

- ensuring that (where applicable) all the necessary legal and regulatory requirements in order to conduct the research are met, and the necessary licences and approvals have been obtained.

- reporting any ethics-related issues that occur during the course of the research or arising from the research to the Research Ethics Officer at the email address below (e.g. unforeseen ethical issues, complaints about the conduct of the research, adverse reactions such as extreme distress).

- submitting any further changes to your application, including in your participant facing materials (see attached amendment guidance).

Please keep a copy of this email for your records. Please contact me if you have any queries or require further information.

Yours sincerely,

Research Ethics Officer on behalf of FHM

Appendix 4-B
Research Protocol

Trainee name	**Trainee number**
Myles Sammon	2143

Research Supervisor	**Field Supervisor**
Dr James Kelly	Not yet identified

Title of the primary research study
Self-Attacking Thoughts, Critical Voices and Suicidal Thinking in People who Hear Voices

1. Background

More than 700,000 people die by suicide every year (WHO, 2021). Previous research has found a strong relationship between psychosis and suicide in clinical and non-clinical populations. Yates et al., (2019) conducted a meta-analysis of 10 general population cohort studies on 84,285 individuals and found that psychotic experiences were associated with significantly increased odds of subsequent suicidal ideation, suicide attempts, and suicide death. In another meta-analysis, Huang et al., (2018) collected data from 50 longitudinal studies (68.8% used clinical samples) and found psychosis to be a significant risk factor for suicide ideation, attempts, and death.

Bentall (2006) introduced a new paradigm for the research and understanding of psychosis called the 'complaint-orientated approach'. Bentall argues that the study of psychosis has failed to find consistent replicable results due to the classification of these phenomena into poorly defined discrete categories of psychotic disorders such as 'schizophrenia'. Instead of focussing on the study of psychiatric disorders, Bentall makes the case for focussing on the specific complaints or symptoms that people with these diagnoses commonly experience. Auditory hallucinations is one such complaint which is listed as a characteristic symptom of a range of psychotic and mood disorders (McCarthy-Jones, 2012, p.101). Auditory hallucinations is a psychiatric term but service-user-led organisations have advocated for the use of the more neutral term 'hearing voices' (McCarthy-Jones, 2012, p.2). The voice hearing experience is not always indicative of a need for clinical care. For these reasons, this study will focus on hearing voices.

O'Neill et al., (2021) found the self-attacking component of self-criticism to be a significant predictor of suicide probability, accounting for variance above entrapment, which research has consistently found to be a key factor in suicide (O'Connor and Kirtley, 2018). Gilbert (2004) suggests that negative voice hearing and the self-attacking style of self-criticism are similar forms of an 'inner harassment' that can act as a threat protection system by maintaining an individual's subordinate position in a 'better safe than sorry' strategy (p. 284-285). In understanding hearing voices as an

evolved function of one's social threat-protection monitoring system, a helpful strategy may be to bring about a shift to a different emotional regulation system - the 'soothing' system, which is characterised by caring, connectedness and safeness (Heriot-Maitland et al., 2019). Heriot-Maitland et al., (2019) outlines how compassion and self-compassion can be effective in stimulating a switch out of the threat processing system and into the soothing system.

Informed by this research, the primary hypothesis this study will test is: do self-attacking thoughts predict suicidal thinking in people who hear voices? In addition, exploratory analysis will measure attacking voices to establish if these contribute to unique variance in suicidal thinking as this has strong clinical implications. The moderating role that self-compassion has in these two relationships will be explored. Key predictors of suicidal thinking such as entrapment and depression, and demographic variables will be controlled in the analyses. This research is relevant to clinical psychology as findings may inform suicide risk assessments and therapeutic work with people who hear voices and are experiencing suicidal thinking or at risk of suicide.

2. Aim and objectives

2.1 Aim

The study aims to look at relationships between self-attacking thoughts, critical voices, and suicide while controlling for depression, entrapment, age, gender, and age of onset of voice hearing and frequency of voices in people who hear voices.

2.2 Objectives

1. Identify the most appropriate scales to use to measure the factors of interest in this study.
2. Create a Qualtrics survey which is easy-to-use and will collect data on the measures of the variables relevant to this study

3. Conduct a power calculation to determine the number of participants needed for the study.
4. Gain ethical approval for the study from Lancaster University.
5. Publish the Qualtrics survey and begin recruitment.
6. Recruit participants to complete the online survey through sharing on social media (e.g. twitter, reddit etc.) and with Hearing Voices networks and groups.
7. Export data from Qualtrics and analyse in SPSS.
8. Specify the peer-reviewed academic journal format which the research study write-up will follow.
9. Write up abstract, introduction, method, results, and discussion.
10. Submit study for publication.

2.3 Research Questions

Primary Research Question:

Do self-attacking thoughts predict suicidal thinking after controlling for entrapment, depression, age, gender, age of onset of voice hearing and voice frequency in people who hear voices?

Secondary Research Questions:

- Do critical voices predict suicide thinking after controlling for entrapment, depression, age, gender, age of onset of voice hearing and voice frequency in people who hear voices?
- Does self-compassion moderate the relationship between self-attacking thoughts and suicidal thinking in people who hear voices?
- Does self-compassion moderate the relationship between critical voices and suicidal thinking in people who hear voices?

3. Method

3.1. Participants

Participants included in the study will be adults aged 18 and over, who self-report a diagnosis of psychosis (e.g. schizophrenia spectrum disorder), who hear voices and who report suicidal thinking in the past 6 months. Participants who do not speak English are excluded from this study. Participants will be recruited from social media websites such as Twitter and reddit, and through connecting with Voice Hearing Groups/Networks to disseminate the study link online. We have calculated that the minimum number of participants needed to detect an estimated small effect size (determined from the existing literature) is n =81. If possible, given the short timeframe for data collection of 6 months, participant recruitment will continue to an upper sample size limit of 114 participants. This more conservative estimate has been determined using the rule of thumb outlined in Green (1991) of N > 50 + (number of independent variables (8)) (x8). Waters et al., (2017) estimates that 75% of people with a diagnosis of schizophrenia hear voices, therefore assuming a similar proportion of this population it is proposed that data collection will continue to n = 160 participants.

As the population of this study (people with psychosis who hear voices) is a smaller subsection of Wren Little's population (people with psychosis), recruitment will need to continue until this study reaches enough participants (N = 81 - 114). Approximately

75% of people with a diagnosis of schizophrenia report voice hearing (Waters & Fernyhough, 2017). Assuming a similar proportion within our sample, 152 participants would be required to recruit 114 voice hearers. As this is only an estimate of effect size, my rationale for 160 participants includes a safety margin to allow for additional participants.

We expect participant availability to be sufficient to fulfil the needed number of participants for this study based upon recent research into voice hearing/psychosis populations which have successfully utilised online data collection through social media to recruit a similar sample size (Lawrence et al., 2010).

3.2. Design

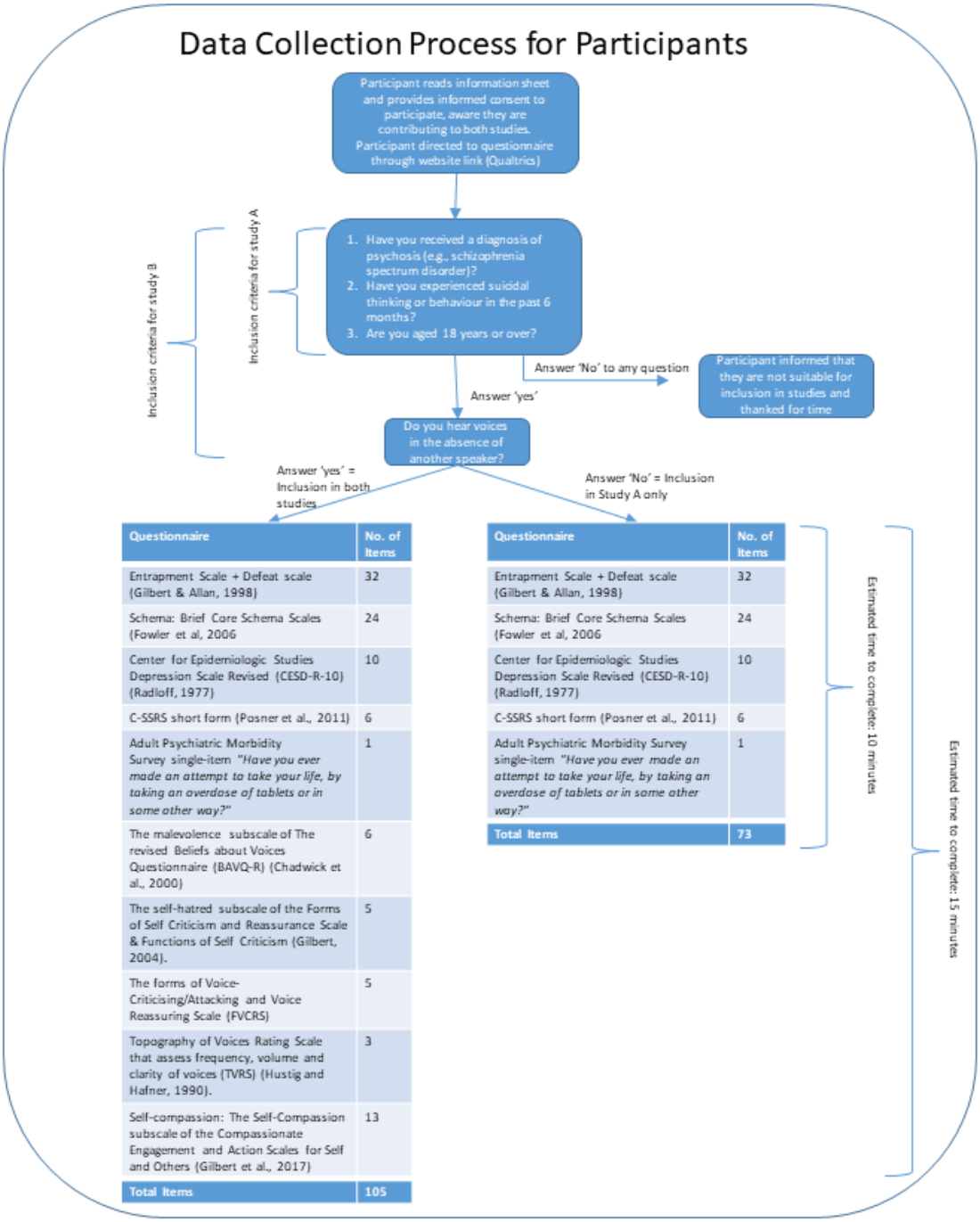
The study will employ a non-experimental, non-randomised, single-group, cross-sectional, correlational design. This design was chosen as it will allow the study to measure many different variables to explore the relationships between suicide and self-attacking thoughts and negative voices through multiple regression analysis. This is a suitable design within the scope and resources of the study and will allow us to understand if there may be a relationship between these factors and suicide in people who hear voices and to develop hypotheses for future research.

3.3. Procedure and materials

Participants will complete a series of questionnaires online through a link on the www.lancasteruni.eu.qualtrics.com. Data collection will be carried out in conjunction with a study being conducted by a second trainee, Wren Little, who is also under the supervision of Dr James Kelly. Participants who hear voices are eligible for this study and therefore will automatically be shown additional items relating to this study. Participants who are not eligible for this study (do not hear voices) will not be shown additional items.

Figure 1 shows the process that participants will follow to take part in the study including all the measures that participants will complete. Participants included in this study will complete a total of 105 items. It is estimated that this will take approximately 15 minutes to complete.

Figure 1: Joint Data Collection Flowchart



Measures included in this study:

1) **Descriptive Variables**

Demographics: Age, gender, and age of onset

Clinical predictors: Age of onset of voice hearing. 3 items from the Topography of Voices Rating Scale that assess frequency, volume, and clarity of voices (TVRS) and has been shown to have good test re-test reliability (Hustig and Hafner, 1990).

2) **Clinical Predictors**

Depression: Centre for Epidemiologic Studies Depression Scale (CESD-10) (Andresen et al., 1994) is a revised 10-item version of the Centre for Epidemiologic Studies Depression Scale (CESD-20) (Radloff, 1977) which has been found to be a valid and reliable measure of depression in a clinical population which included people who have experienced psychosis (Björgvinsson et al., 2013). Participants score items on a 4-point Likert scale from 'Rarely or none of the time' to 'All of the time'. The CESD-10 was chosen as a suitable measure for this study over other measures of depression as it is commonly used in suicide research (Wetherall et al., 2019), it does not contain an item regarding suicide, it is free to use, contains an item asking about hopelessness which is an important predictor of suicide and has less items for participants to have to complete than the longer form.

Entrapment: The Entrapment scale (Gilbert and Allan, 1998) is a 16-item measure where responders score items on a 5-point scale from 'not at all like me' to 'extremely like me'. The entrapment scale has been found to have good validity and reliability (Gilbert and Allan, 1998) in both a sample of students and depressed patients. Taylor et al., (2010) report good internal consistency of the Entrapment scale in a psychosis population.

3) **Self-to-self relating**

Primary hypothesis:

Independent variables: This study will use the 'Hated-Self' subscale of the Forms of Self Criticism and Reassurance Scale & Functions of Self Criticism (Gilbert et al., 2004) which comprises of 5 items which are scored on a 5-point scale from 'not at all like me' to 'extremely like me'. The 'Hated-Self' subscale has shown good reliability in the original study (Gilbert et al., 2004) and shown good validity and reliability in large clinical and non-clinical samples Baião et al., (2015).

Dependent Variable:

Suicide ideation will be measured using the Columbia–Suicide Severity Rating Scale (C-SSRS) which is a measure of suicidal ideation and behaviour that has shown good validity and reliability (Posner et al., 2011; Madan et al., 2016) and has been used as a baseline measure in a recent randomised control trial for a suicide intervention (O'Connor et al., 2022). There are three versions of the C-SSRS available for use. This study will use the 6- item 'C-SSRS Self-Report Recent Form' which contains the entire 5 items of the suicidal ideation subscale of the C-SSRS plus 1 item which combines the suicidal behaviour subscale.

Suicidal Behaviour will be measured using an additional item which has been used in the Adult Psychiatric Morbidity Survey Q – DSH4 (McManus et al., 2007) and in more recent suicide research (O'Connor et al., 2018) 'Have you ever made an attempt to take your life, by taking an overdose of tablets or in some other way?'. This question is taken from the Clinical Interview Schedule (CIS-R) which was found to be reliable and valid measure (Lewis et al., 1994).

Secondary hypotheses:

Independent Variable: Negative voices: Negative voices will be measured using the 'Hated-Self' subscale of the Forms of Voice-Criticising/Attacking and Voice Reassuring Scale (FVCRS). This sub-scale is comprised of five items where responders are asked to score items on a 5-point scale from "Not at all like me" to "Extremely like me". This scale has been adapted from the Forms of Self

Criticism and Reassurance Scale & Functions of Self Criticism (Gilbert et al., 2004) and is currently unpublished.

3.4. Proposed analysis

Primary Hypothesis:

Linear association between key variables will be tested using Pearson's R correlation. If the data is not normally distributed, then a Spearman correlation will be used. For the primary hypothesis, a forced entry multiple regression model will be used with the CSSRS as the dependant variable. The model will include age, gender, age of onset of voices, voice frequency, depression, entrapment, and self-attacking thoughts. The regression model will be used to explore whether self-attacking thoughts account for unique variance in suicidality after controlling for the demographic and clinical variables outlined above.

Secondary Hypotheses:

A second forced entry multiple regression model with the CSSRS as the dependant variable will be used to test the next hypothesis. The model will include age, gender, age of onset of voices, voice frequency, depression, entrapment, and critical voices. This regression model will be used to explore whether critical voices account for unique variance in suicidality after controlling for the demographic and clinical variables outlined above.

The next exploratory analyses will be two moderation analyses testing self-compassion as a moderating between a) self-attacking thoughts and suicidal thinking and b) critical voices and suicidal thinking. Results of this analysis is of interest clinically as self-compassion has been associated with lower levels of suicidal thinking (Cleare et al., 2019) and previous research has suggested that therapeutic approaches which focus on development of self-compassion such as Compassion Focused Therapy (CFT) may be an effective way to target negative forms of self-to self-relating such as self-attacking.

3.5. Practical issues

The measures in the survey will ask participants about a number of sensitive topics. The main potential for risk being the measure of suicidality which asks about recent experiences of suicidal thinking and/or behaviour. This has the potential to increase attention to suicidal thoughts and/or induce negative emotions (e.g., sadness, shame). Other topics that we will ask participants about which have the potential for bringing about feelings of discomfort through increases attention toward these experiences include: Questions relating to feelings of depression, defeat and entrapment; Questions regarding how the participant relates to themselves, to others, and to their voices (e.g. self-criticism, self-compassion, and their voice hearing relationship). Efforts have been made to select measures which have the fewest number of items to reduce the time burden to participants, measures that use language that is least likely to cause discomfort or harm to participants whilst still being valid and reliable measures commonly used in previous research. We plan to involve people with lived experiences of hearing voices in the review process of the measures selected. To mitigate this risk, we will first provide clear and detailed information to participants in the poster and the participant information sheet regarding the sensitive topics that the questionnaire will ask about. It will clearly state that participants do not have to complete the study, and this will be repeated throughout the questionnaire. The participant information sheet, debrief sheet and each page of the study questionnaire will contain contact information for services which can provide additional support if needed. As the study will be published online, and is therefore accessible internationally, this will include a link to "https://findahelpline.com", which provides details for suicide and anxiety helplines in most countries

3.6. Ethics and Governance

Ethical approval will be gained from Lancaster University Faculty of Health and Medicine Ethics Committee

3.7. Patient and public involvement

We plan to involve people with lived experiences of hearing voices in the review process of the measures selected.

4. Dissemination Plans

It is planned to publish findings in a peer-reviewed academic journal identified jointly with Wren Little and our research supervisor, Dr James Kelly. It is also planned to feedback a summary of the research findings to participants who opt to receive this information by providing their email address through an anonymous link at the end of our Qualtrics survey.

5. Plain English Summary

Suicide is a major public health problem. People who experience psychosis are more likely to experience suicidal thinking and behaviour. Psychosis describes an experience where a person perceives or interprets reality in a very different way from people around them. This often involves seeing or hearing things that other people cannot see or hear. Leading researchers in psychosis have recommended that research focuses on the specific complaints associated with this experience. For this reason, this study will focus on the experience of hearing voices. Recent suicide research has found self-attacking thoughts to be a significant predictor of suicide probability. The experience of hearing critical voices has been likened to self-attacking thoughts as a similar form of inner harassment. This study will explore if self-attacking thoughts predict suicidal thinking, and if critical voices predict suicidal thinking, in people who hear voices. We will take into account other significant predictors of suicide such as depression. Finally, the effect that self-compassion (defined as a basic kindness, with a deep awareness of the suffering of oneself and a wish to relieve it) has on these two relationships will be measured. This study will recruit adults who hear voices and report having suicidal thoughts in the past 6 months. Participants will complete a series of questionnaires online.

6. References

Andresen, E. M., Malmgren, J. A., Carter, W. B., & Patrick, D. L. (1994). Screening for depression in well older adults: evaluation of a short form of the CES-D (Center for Epidemiologic Studies Depression Scale). *American Journal of Preventive Medicine*, 10(2), 77–84.

Baião, R., Gilbert, P., McEwan, K., & Carvalho, S. (2015). Forms of self-criticising/attacking & self-reassuring scale: Psychometric properties and normative study. *Psychology and Psychotherapy: Theory, Research and Practice*, 88(4), 438-452.

Bentall, R. (2006). Madness explained: why we must reject the Kraepelinian paradigm and replace it with a 'complaint-orientated' approach to understanding mental illness. *Medical hypotheses*, 66(2), 220-233. https://doi.org/10.1016/j.mehy.2005.09.026

Björgvinsson, T., Kertz, S. J., Bigda-Peyton, J. S., McCoy, K. L., & Aderka, I. M. (2013). Psychometric properties of the CES-D-10 in a psychiatric sample. *Assessment*, 20(4), 429-436.

Chadwick, P., Lees, S., & Birchwood, M. A. X. (2000). The revised beliefs about voices questionnaire (BAVQ–R). *The British Journal of Psychiatry*, 177(3), 229-232.

Cleare, S., Gumley, A., & O'Connor, R. C. (2019). Self-compassion, self-forgiveness, suicidal ideation, and self-harm: A systematic review. *Clinical psychology & psychotherapy,* 26(5), 511-530.

Gilbert, P. (2004). Compassion. *Milton: Taylor & Francis*.

Gilbert, P., Catarino, F., Duarte, C., Matos, M., Kolts, R., Stubbs, J., ... & Basran, J. (2017). The development of compassionate engagement and action scales for self and others. *Journal of Compassionate Health Care*, 4, 1-24.

Heriot-Maitland, C., McCarthy-Jones, S., Longden, E., & Gilbert, P. (2019). Compassion focused approaches to working with distressing voices. *Frontiers in psychology*, 152.

Huang, X., Fox, K. R., Ribeiro, J. D., & Franklin, J. C. (2018). Psychosis as a risk factor for suicidal thoughts and behaviors: a meta-analysis of longitudinal studies. *Psychological medicine,* 48(5), 765-776. https://doi.org/10.1017/S0033291717002136

Hustig, H. H., & Hafner, R. J. (1990). Persistent auditory hallucinations and their relationship to delusions and mood. *Journal of Nervous and Mental Disease*.

Lawrence, C., Jones, J., & Cooper, M. (2010). Hearing voices in a non-psychiatric population. *Behavioural and cognitive psychotherapy*, 38(3), 363-373.

Lewis, G., Pelosi, A. J., Araya, R., & Dunn, G. (1992). Measuring psychiatric disorder in the community: a standardized assessment for use by lay interviewers*. Psychological medicine*, 22(2), 465-486.

Lindsey, S., Hiskey, S., Irons, C., & Andrews, L. (2022). Examining the Psychometric Properties of the Compassionate Engagement and Action Scales (CEAS) in the UK General Population. *OBM Integrative and Complementary Medicine,* 7(3), 1-29.

Madan, A., Frueh, B. C., Allen, J. G., Ellis, T. E., Rufino, K. A., Oldham, J. M., & Fowler, J. C. (2016). Psychometric reevaluation of the Columbia-Suicide Severity Rating Scale: Findings from a prospective, inpatient cohort of severely mentally ill adults. *The Journal of Clinical Psychiatry*, 77(7), 16125.

McCarthy-Jones, S. (2012). Hearing voices: The histories, causes and meanings of auditory verbal hallucinations. Cambridge University Press.

Murfield, J., Moyle, W., O'Donovan, A., & Ware, R. S. (2021). Validity of the Compassionate Engagement and Action Scales with family carers of older adults: confirmatory factor analyses. International Psychogeriatrics, 33(4), 373-383

O'Connor, R. C., & Kirtley, O. J. (2018). The integrated motivational–volitional model of suicidal behaviour. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 373(1754), 20170268. https://doi.org/10.1098/rstb.2017.0268

Posner, K., Brown, G. K., Stanley, B., Brent, D. A., Yershova, K. V., Oquendo, M. A., ... & Mann, J. J. (2011). The Columbia–Suicide Severity Rating Scale: initial validity and internal consistency findings from three multisite studies with adolescents and adults. *American journal of psychiatry*, 168(12), 1266-1277.

Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurements*, 1, 385-401.

Waters, F., & Fernyhough, C. (2017). Hallucinations: a systematic review of points of similarity and difference across diagnostic classes. *Schizophrenia bulletin,* 43(1), 32-43.

Wetherall, K., Robb, K. A. & O'Connor, R. C. (2019). Social rank theory of depression: A systematic review of self-perceptions of social rank and their relationship with depressive symptoms and suicide risk. Journal of Affective Disorders, 246, 300-319

World Health Organization. (2021). Suicide worldwide in 2019*. World Health Organization*.

Yates, K., Lång, U., Cederlöf, M., Boland, F., Taylor, P., Cannon, M., ... & Kelleher, I. (2019). Association of psychotic experiences with subsequent risk of suicidal ideation, suicide attempts, and suicide deaths: a systematic review and meta-analysis of longitudinal population studies. *JAMA psychiatry*, 76(2), 180-189. https://doi.org/10.1001/jamapsychiatry.2018.3514

Appendix 4-C

Recruitment Poster

RISK FACTORS FOR SUICIDE IN PEOPLE WHO EXPERIENCE PSYCHOSIS

WE ARE LOOKING FOR:

- Adults (aged 18 and over)
- with a diagnosis of psychosis **and/or** recent psychosis-like experiences (e.g., hallucinations, delusions)
- and who report suicidal thinking in the past 6 months.

to take part in a single survey contributing to two doctoral thesis research studies.

Study 1: Positive and Negative Schema, Defeat, Entrapment, and Suicidal Thinking in People with Experiences of Psychosis

Study 2: Self-Attacking Thoughts, Critical Voices, and Suicidal Thinking in People who Hear Voices

WHAT WILL I BE ASKED TO DO?

If you agree to be in this study, you will be asked to complete a survey which will take approximately 15 minutes.

You will not be asked for any identifiable information (e.g., your name) and you can exit the survey at any time prior to completion and your data will not be retained.

WHAT IS THIS STUDY ABOUT?

We are exploring the relationship between factors which may increase the risk of suicidal thinking in people who experience psychosis or psychosis-like experiences.

If you hear voices, you will be asked to complete some additional questions and your answers will also contribute to the second research project exploring the relationship between voice content and suicidal thinking. You do not have to hear voices to complete the survey.

WHERE CAN I GET MORE INFORMATION?

Please follow the link below for more details. If, after reading, you are happy to continue you will complete the questionnaire online.

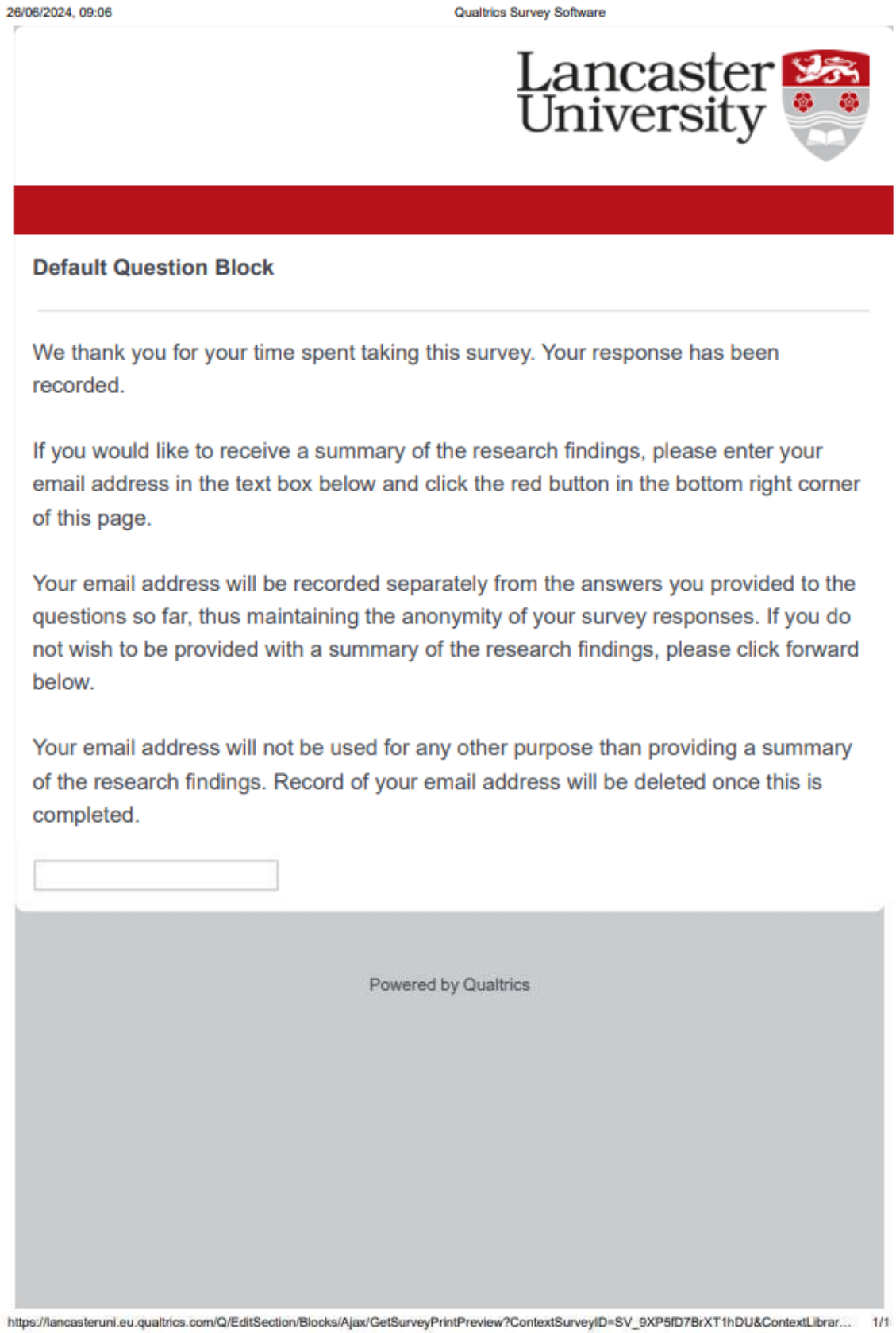
If you have further questions about the study, please contact the main researchers:

Wren Little w.little1@lancaster.ac.uk
Myles Sammon m.sammon@lancaster.ac.uk
Supervisor: James Kelly j.a.kelly@lancaster.ac.uk

TO TAKE PART psychriskstudy.co.uk

Appendix 4-D

Optional Email Collection



Appendix 4-E

Debrief Sheet

Debrief Statement

Thank you for participating in our study. Your responses have been useful in understanding the relationship between certain factors and suicidal thinking and behaviours in people with experiences of psychosis. One study is exploring people's deep rooted beliefs about themselves and others (core schemas) and suicide. The second study is investigating the role of critical voices in suicidal thinking.

If you have any questions about this study feel free to contact a member of the research team:
Myles Sammon (Trainee Clinical Psychologist, Lancaster University):
m.sammon@lancaster.ac.uk
Wren Little (Trainee Clinical Psychologist, Lancaster University): w.little1@lancaster.ac.uk
Dr James Kelly (Clinical Psychologist, Researcher, Lancaster University):
j.kelly@lancaster@ac.uk

Please be aware that we cannot offer clinical advice or support to individuals.

If you are feeling distressed and need to speak to someone, please click on the following link which contains contact information for services which can provide additional support:

https://lancasteruni.eu.qualtrics.com/jfe/form/SV_7ZEUpLBzPG6C3sO

Thank you for your time and cooperation.