Voice-hearing across the continuum: a phenomenology of spiritual voices

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Abstract

Voice-hearing in clinical and non-clinical groups has previously been compared using standardized assessments of psychotic experiences. Findings from several studies suggest that non-clinical voice-hearing (NCVH) is distinguished by reduced distress and increased control. However, symptom-rating scales developed for clinical populations may be limited in their ability to elucidate subtle and unique aspects of non-clinical voices. Moreover, such experiences often occur within specific contexts and systems of belief, such as spiritualism. This makes direct comparisons difficult to interpret. Here we present findings from a comparative interdisciplinary study which administered a semi-structured interview to NCVH individuals and psychosis patients. The non-clinical group were specifically recruited from spiritualist communities. The findings were consistent with previous results regarding distress and control, but also documented multiple modalities that were often integrated into a single entity, high levels of associated visual imagery, and subtle differences in the location of voices relating to perceptual boundaries. Most spiritual voice-hearers reported voices before encountering spiritualism, suggesting that their onset was not solely due to deliberate practice. Future research should aim to understand how spiritual voice-hearers cultivate and control voice-hearing after its onset, which may inform interventions for people with distressing voices.

Introduction

Alongside featuring in schizophrenia¹ and other psychiatric disorders², hearing voices (or ‘auditory verbal hallucinations’) occur in non-clinical populations, with some individuals reporting recurring but non-distressing experiences^{3,4}. This offers the opportunity to investigate voice-hearing without the confounds of antipsychotic medication use or comorbid symptoms. Various studies have compared the phenomenological, cognitive, and neural characteristics of voice-hearing in psychosis patients and non-clinical voice-hearers (NCVHs), with the aim of understanding why such experiences become distressing or debilitating. Most NCVH studies have used a combination of standardized scales and clinical interviews for assessing hallucinations. Daalman et al.⁵ used the Psychotic Symptoms Rating Scale (PSYRATS) and Auditory Hallucination Rating Scale (AHRs) with 111 NCVHs, reporting that non-clinical voice-hearing was more controllable, less frequent, and less negative. Peters et al.⁶ showed that individuals in the general population with persistent psychotic-like experiences often experienced hallucinations across more perceptual modalities than individuals with psychosis, a finding observed elsewhere⁷. Using the Structured Clinical Interview for DSM-4 (SCID) with a group of self-reported ‘clairaudient’ psychics, Powers and colleagues reported NCVHs having higher levels of control over voices (i.e., initiating or stopping them at will)⁸.

While such findings are important, tools developed for clinical assessment may miss more subtle or nuanced aspects of these voice-hearing experiences, particularly if the experiences themselves go beyond the symptoms being assessed. The phenomenology of voice-hearing can be highly varied and multimodal: semi-structured and open-ended interviews with psychosis patients, for example, have shown the complexity and variation of voice-hearing across individuals, in aspects such as personification, agency, and perceived location^{9,10}.

Thus, alternative and interdisciplinary approaches are needed to evaluate the phenomenology of voice-hearing properly¹¹.

A case in point is the intersection of spiritual and paranormal experiences with NCVH.

Although few studies have sought to recruit people with clairaudient experiences explicitly⁸, such research often involves people with high levels of spiritual and paranormal belief.

Sommer et al.¹² reported that 58% of NCVH participants believed their voices came from ‘benevolent spirits’. 91% of healthy individuals with PEs in Peters et al.⁶ classed themselves as ‘spiritual’ (compared to 41% of non-voice-hearing controls, and 76.5% of psychosis patients). Assessing such groups using clinical tools may identify apparently comparable levels of hallucination, but may not sufficiently consider the strong roles of context, belief, and expectation specific to each community¹³. For example, a recent online open-ended survey with Christians who reported previously hearing the voice of God noted key differences from voices in psychosis, including personal significance, positive emotions, and occurrence in the context of prayer¹⁴.

There are also important open questions concerning the development of voice-hearing in such groups. Research with NCVHs has frequently reported an earlier age of onset than in psychosis^{6,8,12}; however, it is often unclear whether voice-hearing developed before (perhaps leading to) spiritual beliefs, or whether spiritual beliefs emerged first, with people actively cultivating their voice-hearing experiences. As well as being sharply distinguished from voices in psychosis (unlikely to be purposely developed), this issue may be informative for neurocognitive models of voice-hearing that foreground prior expectations and beliefs – viz. the predictive processing framework^{15–17} – as well as top-down processing on perception more generally^{18,19}. One study regarding spiritual beliefs and voice-hearing²⁰ indicated that, in

general, voice-hearing experiences preceded spiritual beliefs. Qualitative analysis of mediumistic experiences has also emphasized the importance of anomalous childhood experiences²¹. However, within-sample variability suggests a more complex relationship between beliefs and voice-hearing. Some participants report voice-hearing starting only when they actively engaged with relevant spiritual practices²⁰, consistent with other research emphasizing the importance of practice ('kindling') of such experiences²².

Here, we investigated non-clinical voice-hearing experiences in individuals with spiritualist and related beliefs (e.g., mediums, psychics). Within the UK, spiritualists typically believe in the possibility of communicating with the dead, often receiving messages they believe should be passed on to other people and working as professional mediums to do so. While there is large variability in specific beliefs surrounding spiritualism, one core tenet is that such experiences should be cultivated and controlled. We used an open-ended, semi-structured interview with spiritualist voice-hearers, developed by an interdisciplinary team for use in both clinical and non-clinical populations. Interviews were coded and directly compared to a previously existing patient dataset¹⁰. We aimed to provide a detailed description of spiritual voice-hearing, as well as to explore similarities and differences with voices in psychosis that may be missed when standardized scales are used. While the study was primarily descriptive (i.e., not hypothesis-driven), based on previous research we expected spiritual voices to be less negative, more controllable, and more likely to occur across multiple modalities than voices in psychosis. We also aimed to provide data regarding issues such as the cultivation of voices over time, the nature of the messages communicated by the voices, and the levels of personification and social agency associated with them.

Method

Participants

Spiritual NCVH (henceforth referred to as the ‘spiritual’ group; $N = 26$, 19 female) were recruited from spiritualist communities across the UK, via newsletters, social media advertisements, and word-of-mouth. Participants were mostly over 50 ($M(SD) = 58.23(11.07)$ years), although ages ranged from 30-73 years. Participants were screened via telephone, and were invited to take part if they were aged 18-75, fluent English speakers, and reported voices occurring at least once a month that did not solely take place within a spiritualist church (in order to ensure other related experiences, e.g., ‘trance’ or meditative practices, were not the sole reason for inclusion). Participants were not eligible to take part if they reported a psychiatric or neurological diagnosis during telephone screening, or reported severe distress in relation to voices.

The spiritualist group were compared to 40 psychosis patients (female = 17) recruited from Early Intervention in Psychosis (EIP) services, who completed the same interview procedure as part of a prior study¹⁰. The patients were on average younger ($M(SD) = 28.70(9.96)$), with an age range of 16-61 years. Procedures were approved by the relevant university ethics committee.

Materials

The Hearing the Voice Phenomenology Interview – participants completed a semi-structured interview, comprising eight open-ended questions about voices, with each question followed by prompts to elicit further details if needed (see Supplementary Materials). The interview was designed by a multidisciplinary team, in consultation with experts-by-experience (see Alderson-Day et al.¹⁰ for further information), and was administered by one of two

interviewers trained in clinical and phenomenological interviewing. Questions were purposely broad ('Please could you describe the voice or voice-like experiences you have been having?'), moving to more specific themes as the interview progressed.

*Psychotic Symptoms Rating Scale (PSYRATS) (hallucinations subscale only)*²³ – the PSYRATS was included as a standardized assessment of voice frequency, duration, location, loudness, distress, controllability, and disruption to life, for comparability with previous research. It contains 11 questions with each item scored between 0 and 4.

Procedure

After consenting to take part, participants undertook the phenomenology interview, followed by the PSYRATS. Sessions took place in the participants' homes or in a quiet university setting, and typically lasted 60-90 mins (range 24-111 mins). Participants also completed a questionnaire pack and were invited to take part in cognitive testing a neuroimaging session, as part of related studies (data reported elsewhere²⁴). Interviews were recorded and professionally transcribed.

Analysis

Similarly to previous work^{9,10}, the data were analysed using a mixture of quantitative and qualitative methods. We used content analysis and inductive thematic analysis to create a coding frame which was used across both the spiritual and patient groups. The coding frame was developed iteratively, involving discussions after each interview, and co-coding a subset of the spiritual interviews ($n = 5$). A number of additional codes were developed specifically for the spiritual group (e.g., regarding spiritual beliefs). Disagreements were resolved via discussion, and the remainder of the interviews were coded separately. Interrater reliability

was satisfactory ($\alpha = 0.7$). The same procedure was used for the patient interviews, outlined elsewhere¹⁰. Further details on the coding frame can be found in the Supplementary Materials. Here, we report descriptive statistics across groups for each code, and log odds ratios for the difference in rates between the spiritual and patient groups, inferring a difference between groups when 95% confidence intervals of the log odds ratios do not cross 0.

Results

Tables 1-3 present code rates for the spiritual and patient groups, alongside log odds ratios and 95% confidence intervals. PSYRATS subscale scores can be found in the Supplementary Materials.

Modality and spatiality

The spiritual group were more likely to report experiences in modalities other than the auditory, including *gustatory* experiences (not reported at all in the patient group) and *tactile* experiences. While there was no difference between the groups in rates of reported *olfactory* or *visual* hallucinations, every participant in the spiritual group reported some form of *visual imagery* as part of their experiences, often referring to seeing things in their ‘mind’s eye’.

The spiritual group were also more likely to report *multimodal* voices – that is, having experiences in different modalities that were attributed to the same entity as the voice (regardless of simultaneity).

Spiritual voice-hearers were also more likely to report *thought-like* voices (i.e., that could be confused with their own thoughts, and were not described as having a sound), although the majority also described sometimes experiencing *auditory* voices (i.e., that were like actually

hearing a physical voice; see Box 1). The spiritual group reported broadly similar rates of *internally* vs. *externally* located voices to the patient group, with majorities in both groups reporting that voices sometimes occurred both inside and outside the head. In our previous report of the patient data, we identified that *boundary* voices (i.e., voices experienced at thresholds, such as coming through the wall or door) often occurred in psychosis, whereas these were relatively infrequent in the spiritual group.

Code	Spiritual (%)	Psychosis (%)	Log odds	95% CI (low)	95% CI (high)
Visual imagery	100	5.0	6.705*	3.628	9.781
Auditory	84.6	92.5	-0.808	-2.395	0.780
Internally located	84.6	62.5	1.194	-0.049	2.437
Egocentric	80.8	70.0	0.588	-0.599	1.775
Thought-like	76.9	52.5	1.104*	0	2.207
Externally located	73.1	80.0	-0.388	-1.55	0.775
Felt presence	69.2	52.5	0.711	-0.328	1.749
Multimodal	69.2	27.5	1.780*	0.696	2.864
Visual	60.0	75.0	-0.693	-1.767	0.380
Bodily states	53.8	65.0	-0.465	-1.473	0.543
Olfactory	50.0	37.5	0.511	-0.490	1.511
Dissociative	46.2	30.0	0.693	-0.332	1.719
Tactile	46.2	22.5	1.083*	0.012	2.153
Gustatory	26.9	0	3.439*	0.526	6.352
Non-verbal	26.9	40.0	-0.593	-1.666	0.480
Allocentric	23.1	37.5	-0.693	-1.808	0.421
Boundary	11.5	35.0	-1.418*	-2.785	-0.050

Table 1: sensory qualities, location, control, and development of voices.

* 95% confidence intervals do not cross 0.

Box 1 – modality and imagery

Thought-like voices

I'm getting told information... to relay to the people who are in the church, so the congregation, if you will... and how I get that is I 'hear', and I use the word in inverted commas because it's not like I'm hearing you, it's kind of like thoughts or impressions...[William, age 58]

Visual hallucinations

you know there's a gentleman here, he's taller than yourself, [I can] describe his hair, you know, black hair with a parting and like, his clothes, because they show you how they look... they might adjust their attire... So you can see all that, and then you can say, oh hasn't he got a deep voice, you know ... that's how it works for me. To me it's real. But I can understand why you're asking the question, because if it's real and they're standing there, why can't you see them, yeah?' [Heather, age 69]

Visual imagery

and then suddenly I just got a, just an image of a baby and you know just in my head, just an image of a baby, and then just a feeling [John, age 30]

Multimodal voices

So the next thing that normally comes in will be ... either who they were or I'll hear them say their name, and so I may hear the name, for instance, you'll get a person who'll say, 'it's OK, I'm Margaret'. OK, who are you? 'Well I'm gran.' At the same time as a picture coming in, as she's showing what she looked like. Then I'd be asking, well OK, give me more details about yourself, things like age, what did you pass from ... And the funny thing is, the voice that you get back very much mimics the personality of who they were.
[Samuel, age 48]

Control and change over time

The spiritual group reported more *volitional* experiences, as well as being more likely to report the *ability to influence* their voices. Crucially, when discussing onset or development of voices, the spiritual voice-hearers were more likely to describe a *change in influence* over their voices, which tended to reflect the development of increased control (see Box 2). This was not the case for other types of change over time: there was no difference between groups for *changes in the character* of the voices, while the spiritual group was less likely to report *structural change* over time (e.g., changes to the number of voices).

Affect, agency, and content

The spiritual group were more likely to report voices that contained *positive content*, *elicited positive emotions*, and correspondingly were less likely to report *abusive or violent*, *commanding*, or *commenting* voices that *elicited negative emotions*. Instead, their voices were more likely to impart *knowledge* they were not aware of, speak in a *simple structure*, and were more likely to be *recognisable* as the voices of persons from the voice-hearer's real life. As part of the coding, the interviews were coded for 'levels of agency' as described by Wilkinson & Bell²⁵ for AVH. The spiritual group were more likely to report both *externally individuated* voices (i.e., voices attributable to an individual or entity known by, or familiar to, the voice-hearer from the external world) and *internally individuated* voices (voices that were not attributable to the external world, but are instead internally differentiated by the voice-hearer). All spiritual participants reported at least some internally individuated voices, typically due to their beliefs that spirits – often unrecognisable to the individual – would speak in order to pass a message to another person. In our interviews with psychosis patients¹⁰, we observed that some described highly personified voices (*complex personification*), which exhibited their own intentions, emotions, and personality

characteristics. This rate was similar in the spiritual group, suggesting that the groups are not distinguished by varying degrees of personification.

Code	Spiritual (%)	Patient (%)	Log odds	95% CI (low)	95% CI (high)
Elicit positive emotions	100	35	4.573*	1.703	7.443
Voice knowledge	96.2	45	3.42*	1.326	5.513
Volitional	92.3	2.5	6.148*	3.695	8.602
Non-volitional	92.3	100	-2.112	-5.19	0.965
Positive/helpful	92.3	42.5	2.787*	1.214	4.360
Recurring	92.3	92.5	-0.027	-1.889	1.834
Ability to influence	84.6	27.5	2.674*	1.403	3.946
Change in frequency	80.8	70	0.588	-0.599	1.775
Recognisable	76.9	47.5	1.304*	0.201	2.407
Change in influence	73.1	12.5	2.944*	1.668	4.221
Simple structure	69.2	40	1.216*	0.171	2.262
Conversational	65.4	47.5	0.736	-0.283	1.755
Direct address	61.5	82.5	-1.081	-2.216	0.055
Structural change	50	80	-1.386*	-2.478	-0.295
First voice traumatic event	42.3	65	-0.929	-1.943	0.084
Companionship	42.3	32.5	0.421	-0.601	1.442
Elicit negative emotions	38.5	100	-4.846*	-7.741	-1.952
Commanding	26.9	67.5	-1.729*	-2.820	-0.639
Commenting	19.2	45	-1.234*	-2.392	-0.077
Character change	11.5	17.5	-0.486	-1.94	0.967
Abusive/violent	11.5	87.5	-3.983*	-5.508	-2.458

Table 2: affect, agency, and content of voices.

* 95% confidence intervals of log odds ratios do not cross 0.

Social context and interpretation

Unsurprisingly the most common narrative applied to voices in the spiritual group was around the *supernatural*, with all participants in that group describing belief in a supernatural explanation. That said, a substantial number also described potential *biophysical* explanations or described the experiences ‘running in the family’, at a similar rate to the patient group. The spiritual group were less likely to offer *stress* as an explanation than the patients.

The spiritual group were also less likely to say that their voices caused a negative impact on relationships with others, less likely to mention disrupted sleep, and less likely to describe suicidal ideation. A majority of the spiritual group suggested that their voices were an *important part of their identity*, with social aspects of their spiritual beliefs playing an important role.

We also developed a group of codes applicable only to the spiritual group. These indicated that most of the spiritual group reported that their first voice experiences were spontaneous (88.5%) and tended to precede their beliefs in spiritualism (69.2%). Most engaged in ongoing cultivation of the voices (96.2%) and viewed voice-hearing/clairaudience as a learnable skill (76.9%). Finally, most were highly convinced of their spiritual beliefs (80.8%), and most used their voice-hearing as part of a profession (e.g., as a medium) (88.5%).

Code	Spiritual (%)	Patient (%)	Log odds	95% CI (low)	95% CI (high)
Supernatural narrative	100	20	5.311*	2.414	8.209
Internally individualised	100	75	2.904*	0.020	5.788
Externally individualised	80.8	50	1.435*	0.28	2.591
Minimal personification	61.5	60	0.065	-0.948	1.077
Important to identity	57.7	12.5	2.256*	1.038	3.474
Complex personification	38.5	40	-0.065	-1.077	0.948
Agency w/o individuation	38.5	45	-0.269	-1.275	0.737
Self-stigma	30.8	47.5	-0.711	-1.749	0.328
Negative on relationships	26.9	77.5	-2.235*	-3.376	-1.094
Biophysical narrative	23.1	25	-0.105	-1.265	1.054
Archetypal	23.1	42.5	-0.902	-2.009	0.205
Family narrative	19.2	22.5	-0.198	-1.424	1.027
Positive on relationships	15.4	5	1.24	-0.537	3.016
Trauma narrative	15.4	25	-0.606	-1.89	0.677
Sleep disruption	15.4	62.5	-2.216*	-3.458	-0.973
Idiosyncratic narrative	11.5	32.5	-1.306	-2.679	0.067
Stress narrative	11.5	37.5	-1.526*	-2.889	-0.163
Absent agency	11.5	15	-0.302	-1.786	1.181
Suicidality	3.8	50	-3.219*	-5.312	-1.126

Table 3: personification, narratives around voices, and effects on relationships.

* 95% confidence interval of log odds ratios do not cross 0.

Box 2 – onset, cultivation, and control

Spontaneous onset

I think the first time I ever heard a voice was when I was about eighteen, and I thought I heard somebody calling my name, well I was positive I heard somebody calling my name. And I was the only person in the house at the time. And it sounded like it was coming from outside the house. So I went to the front door, nobody there, went to the back door, walked all the way round the house, nothing, came back in and thought, oh that was weird, wasn't a radio on, there wasn't TV on, there was nothing, and I heard it again, calling my name, Laura, Laura, [said with urgency]. And I had to go round the house again, outside, opening all the doors, and I thought, well that's bizarre, dismiss it, ignore it. So that was the first time it ever happened, I didn't know anything about spirit or anything like that. [Laura, age 56]

I think for me, when I very first started, the only thing that would happen was I'd get my name shouted when I was at work, you know, when there was nobody around... and I think for me sort of I almost questioned if it was real... you know there's no one else heard it... I think in terms of feelings when I first started having experiences, like I said, I didn't really have many clairaudient experiences, but I sort of had this feeling of presences... And I think initially I was almost a little bit concerned. And sort of thinking, is there something wrong, you know and being honest, was I mental, was there some sort of illness happening? [John, age 30]

Volitional control

What I do is I kind of take my consciousness out and allow the spirit world to come in basically... However, sometimes I may not even consciously be thinking about anything and certain words will come into my head. For example if I have, like for example, the other day there I wanted to ask spirit a question and I asked them the question and for the last three days I've been getting the same answer... How I do it is I have a little mantra I go through, which is, and I just basically say to the spirit world that I am ready to work... [Ruth, age 50]

Spontaneous onset and cultivation

There was things happening when I was younger that I didn't understand at the time, which, once I started learning about it, started to make more sense [...] I deliberately developed it, well I'm saying deliberately, I kinda got drawn to it, I was brought up as a Catholic, and I got to... typically get to teenage years and you start questioning things. And I found that the Catholic faith created more questions than answers, and I started looking around for something else. And by the time I think I first went, I would have been about ... nineteen, twenty, when I started going to spiritualist churches [William, age 58]

Discussion

For the present study we conducted phenomenological interviews with a group of non-clinical voice-hearers reporting spiritual voices. Despite much overlap in the voice-hearing experience, we also observed crucial differences between the clinical and non-clinical groups, including variation in control, multimodality, and valence, as well as nuanced differences in descriptions of location.

Consistent with previous studies⁷ with NCVHs, the spiritual voice-hearers were more likely to report experiences occurring across sensory modalities, being more likely to describe tactile or gustatory experiences, as well as visual imagery associated with the voices. Additionally, a novel finding was that the voices themselves were more likely to be multisensory, compared to voices reported by psychosis patients; that is, not only did the spiritual voice-hearers report experiences co-occurring across modalities, but they were also more likely to attribute them to the same entity (e.g., a spirit). Our analysis of the interviews also deliberately distinguished between experiences such as visual hallucinations and visual imagery. All participants in the spiritual group reported visual imagery in association with voice-hearing, with rates of visual hallucinations being comparable to the psychosis patient group. This highlights an important consideration relating to understanding the experiences of different voice-hearing groups: the language used to describe voices – often shaped by clinicians (in the case of psychosis patients) or peers (in the spiritual group) – can have large effects on interpretations by researchers^{11,26–28}. In this case, many participants in the spiritual group reported visual images in their ‘mind’s eye’ that they distinguished from typical visual imagery by its spontaneity and/or alien quality, but which was easily distinguished from external visual perception.

This might raise the worry that spiritual voice-hearers are generally having an experience more akin to imagery than something resembling “true” hallucination, but the majority of spiritual voice-hearers in our study did report some experience of externalized, vivid perceptions which they held to be really occurring. Moreover, voice-hearing in psychosis is often described with ‘thought-like’ qualities (with majorities of both the spiritual and psychosis groups reporting sometimes having thought-like experiences) and are often located inside the head. Traditional categorization into ‘true’ and ‘pseudo’ hallucinations are nowadays thought to be of questionable clinical relevance²⁹. It is unclear whether high rates of visual hallucinations reported in other studies of NCVHs may include such reports of imagery – further detailed phenomenological research would be needed to understand whether the difference between such experiences is quantitative (e.g., amount of perceptual detail) or whether they are of different kinds completely.

As has been reported in previous studies^{8,30–32}, the ability to exhibit control over or influence voices seems to be an important difference between experiences reported by clinical and non-clinical groups. A key distinction here is between volitional control (ability to bring on or stop voices intentionally), and the ability to influence voices (through other strategies such as engagement or distraction from voices), referred to elsewhere as *direct* and *indirect* control³⁰. In the present study, the spiritual group reported substantially higher levels of control and influence over voices, compared to patients. Importantly, nearly three-quarters of the group reported a *change* in their ability to influence the voices over time – compared to 12.5% of psychosis patients – suggesting that this ability is not always present from the onset of voice-hearing in non-clinical populations, and instead can be actively developed. Indeed, our analysis indicated that 88.5% of the spiritual group described their voices starting spontaneously, with 69.2% reporting that this was before they had contact with spiritualism

itself. Thus, while most of the group (96.2%) reported ongoing cultivation of the voices, and often reported developing influence over time, it seems that spiritual practices mostly do not elicit the actual initial onset of the voices, instead playing a role in honing the experience. This is consistent with previous qualitative analysis suggesting that mediums, and people of Christian faith who report hearing the voice of God¹⁴, often discuss non-spiritual anomalous experiences in childhood²¹ which, as adults, are only later interpreted as spiritual in nature. NCVHs in other studies have also reported earlier ages of onset compared to psychosis patients, and other childhood experiences such as imaginary companions are increasingly recognised as common experiences that may share some underlying cognitive markers³³. While others have argued for the importance of spiritual practice, expectation and belief in the occurrence of voices or hallucination-like experiences²², our data suggests that although the spiritual practices and beliefs reported by this group may play a role in developing control over and influencing the experience, for most, they may be less important in initial onset.

It is noteworthy that, despite the rarity of negative or abusive voices in this group, 42.3% of the spiritual group reported some form of traumatic event around the point of initial voice onset. These experiences were often non-violent events (e.g., family separation, bereavement), but also included verbal or physical abuse from parents. While it is well-established that people with psychosis report heightened rates of adverse childhood experiences³⁴, our data shows that this does not necessarily inform the negative content of the experiences. One possibility is that spiritual practices may alleviate or control negative affective elements of the experience: for example, many spiritual mediums report that they interpret many voices as containing a message meant for other people, which could reduce negative impact and mean that voices are seen as inherently helpful. It is also worth mentioning that, for a minority of participants, voices only occurred after contact with (and

presumably as a result of) spiritual practices. An important question for future research is to understand differences between spontaneous and non-spontaneous onset of voices.

As noted by others³⁰, the spiritual group's ability to exert control over voices may have much to tell us about coping strategies that could be employed by people experiencing distressing voices; for example, the spiritual voice-hearers described using techniques similar to meditation, mindfulness, or voice-dialogue to control or influence voices. However, because the spiritual voice-hearer group reported a higher rate of positive and helpful voices, their experiences may be more amenable to the development of control or influence – that is, positive voices could be constructively engaged with, which may not be the case with more distressing experiences. An alternative position is that differences in cognition could at least partially underlie differences in control between the groups. A separate study²⁴ investigating cognition in this sample suggested that ability to intentionally inhibit intrusive memories may be higher in the spiritual group than in voice-hearing psychosis patients, raising the possibility that inhibitory ability could underlie control over voices.

The issue of location (internally vs. externally located voices) has also been discussed in previous research, with mixed findings. Our interviews suggested that the spiritual voice-hearers were no more likely to describe internally located voices. However, one novel finding was that the spiritual group were less likely to describe *boundary* voices – that is, voices located at thresholds such as doors or through walls – compared to the patient group. To our knowledge, this has not been previously reported. In psychosis patients, boundary voices seem to be linked to descriptions of uncertainty or anxiety regarding who is speaking; in contrast, the spiritual group, while often not initially knowing the source of a voice, are used to engaging with and interpreting their voices (i.e., minimising uncertainty) and, as discussed,

typically develop control and influence over their experiences. It may be that increased engagement with the voices leads to clearer and more certain reports of both the source and location of the voice; alternatively, the 'boundary' location of the voice may play a part in the associated distress of some patients (i.e., anxiety regarding a voice crossing into their personal space), meaning that such experiences are less likely to be non-distressing and thus deemed 'non-clinical'.

There were a number of limitations to the present study. Firstly, although the sample size is not small within qualitative research, the size of the group precludes strong statistical inferences particularly regarding equivalence between groups. Secondly, the spiritualist and patient groups differed on a number of demographic attributes, including education, gender, and age. It should be noted that these two groups were recruited in originally separate studies, and the aim of this paper was to treat the previously published data from the patient group as a reference point, rather than a matched control group. It seems unlikely that key differences between the groups (e.g., modality of experiences) could be explained by such group differences. Finally, the spiritualist voice-hearer group predominantly represented beliefs and traditions endorsed by spiritualist churches in the UK, and the sample was of a primarily white British demographic. Further research should attempt to increase the diversity of both clinical and non-clinical groups recruited into NCVH research. It is notable that ethnic minority groups show higher rates of diagnosed psychotic disorders in the UK and USA, and recent research with Black psychosis service-users has suggested that interventions should take into account personal beliefs regarding mental health³⁵, which may include different psychosocial and spiritual explanations between ethnic groups.

In summary, using a mixed-methods approach we compared voice phenomenology in a non-clinical, spiritual voice-hearer group to a group of voice-hearing psychosis patients. As well as supporting previous findings regarding low levels of distress and increased control and multimodality in non-clinical groups, we also provided novel evidence of other more subtle differences, including a lower likelihood of experiencing voices coming from perceptual boundaries, and increased integration of modalities into one entity. The majority of participants in the spiritual group reported unusual sensory experiences before encountering spiritualism, suggesting that, while spiritual practices may shape, influence, or increase the frequency of such experiences, they are not typically involved in the initial onset. Future research should aim to understand more about strategies used to control voices, which could inform interventions for those in distress.

References

1. Bauer SM, Schanda H, Karakula H, et al. Culture and the prevalence of hallucinations in schizophrenia. *Compr Psychiatry*. 2011;52(3):319-325. doi:10.1016/j.comppsy.2010.06.008
2. Toh WL, Thomas N, Rossell SL. Auditory Verbal Hallucinations in Bipolar Disorder (BD) and Major Depressive Disorder (MDD): A Systematic Review. *J Affect Disord*. 2015;184:18-28. doi:10.1016/j.jad.2015.05.040
3. Larøi F, Sommer IE, Blom JD, et al. The Characteristic Features of Auditory Verbal Hallucinations in Clinical and Nonclinical Groups: State-of-the-Art Overview and Future Directions. *Schizophr Bull*. 2012;38(4):724-733. doi:10.1093/schbul/sbs061
4. Johns LC, Kompus K, Connell M, et al. Auditory Verbal Hallucinations in Persons with and without a Need for Care. *Schizophr Bull*. 2014;40(Suppl 4):S255-S264. doi:10.1093/schbul/sbu005
5. Daalman K, Boks MPM, Diederer KJM, et al. The Same or Different?: A Phenomenological Comparison of Auditory Verbal Hallucinations in Healthy and Psychotic Individuals. *J Clin Psychiatry*. 2011;72(03):320-325. doi:10.4088/JCP.09m05797yel
6. Peters E, Ward T, Jackson M, et al. Clinical, socio-demographic and psychological characteristics in individuals with persistent psychotic experiences with and without a "need for care." *World Psychiatry*. 2016;15(1):41-52. doi:10.1002/wps.20301
7. Toh WL, Thomas N, Robertson M, Rossell SL. Characteristics of non-clinical hallucinations: A mixed-methods analysis of auditory, visual, tactile and olfactory hallucinations in a primary voice-hearing cohort. *Psychiatry Res*. 2020;289:112987. doi:10.1016/j.psychres.2020.112987
8. Powers AR, Kelley MS, Corlett PR. Varieties of Voice-Hearing: Psychics and the Psychosis Continuum. *Schizophr Bull*. 2017;43(1):84-98. doi:10.1093/schbul/sbw133
9. Woods A, Jones N, Alderson-Day B, Callard F, Fernyhough C. Experiences of Hearing Voices: Analysis of a Novel Phenomenological Survey. *Lancet Psychiatry*. 2015;2(4):323-331. doi:10.1016/S2215-0366(15)00006-1
10. Alderson-Day B, Woods A, Moseley P, et al. Voice-Hearing and Personification: Characterizing Social Qualities of Auditory Verbal Hallucinations in Early Psychosis. *Schizophr Bull*. doi:10.1093/schbul/sbaa095
11. Woods A, Jones N, Bernini M, et al. Interdisciplinary Approaches to the Phenomenology of Auditory Verbal Hallucinations. *Schizophr Bull*. 2014;40(Suppl 4):S246-S254. doi:10.1093/schbul/sbu003
12. Sommer IEC, Daalman K, Rietkerk T, et al. Healthy Individuals With Auditory Verbal Hallucinations; Who Are They? Psychiatric Assessments of a Selected Sample of 103 Subjects. *Schizophr Bull*. 2010;36(3):633-641. doi:10.1093/schbul/sbn130

13. Woods A, Wilkinson S. Appraising Appraisals: Role of Belief in Psychotic Experiences. *Lancet Psychiatry*. 2017;4(12):891-892. doi:10.1016/S2215-0366(17)30434-0
14. Cook CCH, Powell A, Alderson-Day B, Woods A. Hearing spiritually significant voices: A phenomenological survey and taxonomy. *Med Humanit*. Published online December 6, 2020. doi:10.1136/medhum-2020-012021
15. Corlett PR, Horga G, Fletcher PC, Alderson-Day B, Schmack K, Powers AR. Hallucinations and Strong Priors. *Trends Cogn Sci*. 2018;0(0). doi:10.1016/j.tics.2018.12.001
16. Fletcher PC, Frith CD. Perceiving Is Believing: A Bayesian Approach to Explaining the Positive Symptoms of Schizophrenia. *Nat Rev Neurosci*. 2009;10(1):48-58. doi:10.1038/nrn2536
17. Alderson-Day B, Lima CF, Evans S, et al. Distinct Processing of Ambiguous Speech in People with Non-Clinical Auditory Verbal Hallucinations. *Brain*. 2017;140(9):2475-2489. doi:10.1093/brain/awx206
18. de Lange FP, Heilbron M, Kok P. How Do Expectations Shape Perception? *Trends Cogn Sci*. 2018;22(9):764-779. doi:10.1016/j.tics.2018.06.002
19. Hohwy J. *The Predictive Mind*. Oxford University Press; 2014.
20. Powell A, Moseley P. When spirits speak: absorption, attribution, and identity among spiritualists who report “clairaudient” voice experiences. *Ment Health Relig Cult*. Published online 2020.
21. Roxburgh EC, Roe CA. Reframing voices and visions using a spiritual model. An interpretative phenomenological analysis of anomalous experiences in mediumship. *Ment Health Relig Cult*. 2014;17(6):641-653. doi:10.1080/13674676.2014.894007
22. Luhrmann TM, Nusbaum H, Thisted R. The Absorption Hypothesis: Learning to Hear God in Evangelical Christianity. *Am Anthropol*. 2010;112(1):66-78. doi:https://doi.org/10.1111/j.1548-1433.2009.01197.x
23. Haddock G, McCarron J, Tarrier N, Faragher EB. Scales to measure dimensions of hallucinations and delusions: the psychotic symptom rating scales (PSYRATS). *Psychol Med*. 1999;29(4):879-889. doi:10.1017/s0033291799008661
24. Moseley P, Alderson-Day B, Common S, et al. *Continuities and Discontinuities in the Cognitive Mechanisms Associated with Clinical and Non-Clinical Auditory Verbal Hallucinations*. PsyArXiv; 2020. doi:10.31234/osf.io/pgaz2
25. Wilkinson S, Bell V. The Representation of Agents in Auditory Verbal Hallucinations. *Mind Lang*. 2016;31(1):104-126. doi:10.1111/mila.12096
26. Luhrmann TM. Diversity Within the Psychotic Continuum. *Schizophr Bull*. 2017;43(1):27-31. doi:10.1093/schbul/sbw137
27. Larøi F, Luhrmann TM, Bell V, et al. Culture and Hallucinations: Overview and Future Directions. *Schizophr Bull*. 2014;40(Suppl 4):S213-S220. doi:10.1093/schbul/sbu012

28. Collins LC, Semino E, Demjén Z, et al. A linguistic approach to the psychosis continuum: (dis)similarities and (dis)continuities in how clinical and non-clinical voice-hearers talk about their voices. *Cognit Neuropsychiatry*. 2020;0(0):1-19. doi:10.1080/13546805.2020.1842727
29. Copolov D, Trauer T, Mackinnon A. On the Non-Significance of Internal versus External Auditory Hallucinations. *Schizophr Res*. 2004;69(1):1-6. doi:10.1016/S0920-9964(03)00092-6
30. Swyer A, Powers AR. Voluntary control of auditory hallucinations: phenomenology to therapeutic implications. *Npj Schizophr*. 2020;6(1):1-9. doi:10.1038/s41537-020-0106-8
31. Honig A, Romme M a. J, Ensink BJ, Escher SDM a. C, Pennings MHA, Devries MW. Auditory Hallucinations: A Comparison between Patients and Nonpatients. *J Nerv Ment Dis*. 1998;186(10):646-651.
32. Baumeister D, Sedgwick O, Howes O, Peters E. Auditory Verbal Hallucinations and Continuum Models of Psychosis: A Systematic Review of the Healthy Voice-Hearer Literature. *Clin Psychol Rev*. 2017;51:125-141. doi:10.1016/j.cpr.2016.10.010
33. Fernyhough C, Watson A, Bernini M, Moseley P, Alderson-Day B. Imaginary companions, inner speech, and auditory verbal hallucinations: What are the relations? *Front Psychol*. 2019;10:1665. doi:10.3389/fpsyg.2019.01665
34. Varese F, Smeets F, Drukker M, et al. Childhood Adversities Increase the Risk of Psychosis: A Meta-analysis of Patient-Control, Prospective- and Cross-sectional Cohort Studies. *Schizophr Bull*. 2012;38(4):661-671. doi:10.1093/schbul/sbs050
35. Bard S, Degnan A, Berry K, Edge D. Exploring the relationships between illness beliefs and psychosis symptoms among Black African and Caribbean people with non-affective psychosis. *Psychosis*. 2021;0(0):1-11. doi:10.1080/17522439.2020.1856173