

## COMMENTARY

# Evidence-based psychological approaches for auditory hallucinations

Mark Hayward

## COMMENTARY ON... AUDITORY HALLUCINATIONS IN SCHIZOPHRENIA<sup>†</sup>

**Mark Hayward** is the Director of Research at Sussex Partnership National Health Service (NHS) Foundation Trust and an honorary senior lecturer at the University of Sussex. He has practised as a clinical psychologist in NHS mental health services for 15 years and has developed the Sussex Voices Clinic – a specialist community service offering evidence-based psychological therapy to patients distressed by hearing voices.

**Correspondence** Dr Mark Hayward, School of Psychology, University of Sussex, Brighton BN1 9RH, UK. Email: mih21@sussex.ac.uk

### Copyright and usage

© The Royal College of Psychiatrists 2018

### Summary

In a previous article in this journal, Turkington *et al* suggested a number of psychological approaches that an individual can use to reduce the distress caused by hearing voices. Despite having popular appeal, only some of these approaches have evidence for their effectiveness. Within a clinical context where few patients with psychosis have access even to evidence-based approaches, the reader is invited to familiarise themselves with the evidence before selecting which approaches to introduce to their patients.

### DECLARATION OF INTEREST

M.H. is one of the authors of the self-help book *Overcoming distressing Voices* that is promoted within the article.

<sup>†</sup>See *BJPsych Advances*, 2017; **22**: 391–6.

Auditory hallucinations (or ‘voices’) are a distressing experience that can detrimentally affect the lives of people with psychosis. Turkington *et al* (2016) outline a range of approaches that individuals can be encouraged to use to cope with their voice hearing experiences. These approaches are categorised as either distraction (those that encourage the individual to turn away from voices) or focusing (those that encourage the individual to turn towards voices), and the authors suggest a sequence of approaches that culminates in focusing on the voices. Many of the focusing approaches are intuitively appealing and very much in vogue; yet limited evidence is offered for their effectiveness. Greenwood (2017) has advised against the use of approaches that do not have evidence for their effectiveness. This article will map some of these approaches onto the evidence base, thereby allowing the reader to make informed decisions about which to introduce to their patients.

### Enhancing the patient’s attempts to cope with voices

The majority of patients will naturally use one or more strategies to help them cope with their voices,

suggesting that most take actions of their own volition to cope with an unusual experience they appraise as a threat or challenge (Farhall *et al* 2007). These naturally occurring coping strategies can be grouped into three categories: behavioural, cognitive and physiological – see **Box 1** (Tsai 2006). Most of these strategies will involve attempts by the patient to distract themselves from voices.

The patient’s view of what does and does not work for them is a key perspective that may facilitate therapeutic engagement. This was the rationale behind the development of coping strategy enhancement (CSE; Tarrrier 1992), an approach premised on a functional analytic model in which triggers and reactions to voices influence the likelihood of voice re-occurrence and the maintenance of distress. CSE assumes that patients have an existing repertoire of: (a) helpful coping strategies, the effectiveness of which can be enhanced by their consistent and strategic application; and (b) unhelpful strategies that can unwittingly maintain distress. Patients are invited to scrutinise the effectiveness of their strategies and explore their deployment more often/less often/differently in order to enhance benefits.

CSE has evidence for its effectiveness from two randomised controlled trials (RCTs) when voices were one of the psychotic symptoms that were targeted during 8–10 sessions of therapy (Tarrrier *et al* 1993, 1998). We have delivered a brief (4-session) form of CSE specifically for voices to 101 patients in routine clinical practice and found small to moderate reductions in voice-related distress (Hayward *et al* 2017a). Consistent with the suggestion of Turkington *et al* (2016), CSE seems to be a practical first step towards the management of voices, but more significant and sustainable recovery might require the use of some additional approaches that can facilitate focusing on voices.

### Evidence-based<sup>a</sup> focusing approaches

Turkington *et al* (2016) suggest a range of approaches for helping patients to focus on voices. The

<sup>a</sup>For the purposes of this article, my review of the evidence is restricted to trials that take a single-symptom and targeted approach to the treatment of voices.

**BOX 1 Naturally occurring coping strategies for voice hearing**

- Behavioural – doing something, e.g. carrying out a chore
- Cognitive – thinking differently, e.g. telling oneself not to worry
- Physiological – changing one's sensations, e.g. taking a shower

(Tsai 2006)

following approaches have evidence from RCTs to suggest they are effective in this respect.

**Rational responding**

This approach combines two evidence-based techniques: (a) 'playing detective' by seeking all the available information prior to re-evaluating the accuracy of beliefs about voices; and (b) standing up for oneself by assertively presenting any new information to the voice.

First, in the context of the confirmation bias that can restrict the array of information used to support beliefs (i.e. by drawing attention primarily to confirmatory evidence; Maher 1974), patients can be supported to seek and consider a broader array of information; this may include information that does not support their beliefs about the power, control and truthfulness of voices (Birchwood & Chadwick, 1997). If such information is available, patients can be invited to re-evaluate the accuracy of their beliefs about voices in the light of this new information. There is no attempt to 'persuade' patients that their beliefs are in any way false or wrong; they are merely encouraged to work beyond the normal heuristics of information processing to ensure that their beliefs are based on more of the available information and are as accurate as possible. The strongest evidence for the effectiveness of this technique relates to beliefs about the power of voices that issue commands (Birchwood *et al* 2014).

Second, if patients identify any disconfirmatory information and conclude that they have a different view to that of their voices (e.g. they do not consider themselves to be useless and worthless all the time), they can be taught to assertively articulate this view to their voices during role-play. Within avatar therapy, patients are coached on how to respond assertively to a visual depiction of their voice on a computer screen (Craig *et al* 2017), whereas in relating therapy, role-play involves either the patient or the therapist taking the part of the voice (Hayward *et al* 2017b). In each of these therapies, the patient is taught how to articulate their views calmly and

respectfully, with attention paid to non-verbal communication and the use of experiential 'data' from their everyday lives to back up their views.

**Schema-based techniques**

This approach can build on the skills of rational responding. As stated by Turkington *et al* (2016), the critical and derogatory comments of voices can be an echo of the beliefs that patients hold about themselves (often reflecting adversity they experienced in their early life). Negative core beliefs are commonly held by people who hear distressing voices (Thomas *et al* 2015), yet the current focus of therapeutic practice is not on identifying and challenging these negative beliefs. The rationale for this is that strongly held, fact-like negative core beliefs about the self can be difficult to shift. Patients are instead invited to identify and strengthen existing but weakly held positive beliefs about the self by recalling and re-experiencing positive events – an approach that can be experientially supported by exercises that help the patient to 'relive' and 'soak up' these positive experiences (van der Gaag *et al* 2012; Chadwick *et al* 2016).

**Mindfulness**

Paul Chadwick (2006) has identified three main adaptations to mindfulness practice for patients who hear distressing voices. First, practice time is limited to 10 min maximum, as most patients find this is the most they can manage. Second, extended silences during practices are avoided – therapists provide guidance throughout the practice. This is an important grounding method, and helps patients to decentre from voices, rumination, etc. and to reconnect with present experience with clearer awareness. Third, practice outside sessions is not a requirement, although recordings of 10 min guided practices are provided and practice is encouraged.

These adapted practices can be safely used with patients to enable them to 'step back' from voices and deliberately pay attention to and process information that may be beyond their usual gaze; this makes new information available that can be incorporated into re-evaluations of beliefs about self and voices. When combined with cognitive-behavioural strategies in this manner, mindfulness-based groups have been found to reduce voice-related distress and depression (Chadwick *et al* 2016).

**Non-evidence-based<sup>b</sup> focusing approaches**

Turkington *et al* (2016) also propose the use of the following approaches to help patients to focus on voices, but evidence for their effectiveness is not yet available.

<sup>b</sup> By non-evidence-based I mean that I found no evidence for effectiveness from an RCT.

### Attention training

This approach has much in common with mindfulness, as it can facilitate: (a) the deliberate moving of attention away from voices in a manner that can reduce the likelihood of getting caught up with and ruminating on voice comments; and (b) the generation of experiential data to support a view that the patient can have some control over their attention, even when voices are active. The literature appears to contain only one case study in which attention training was used specifically for voices (Valmaggia *et al* 2007).

### Acceptance and commitment to a valued goal

Accepting the presence of voices and directing one's focus and energy towards the achievement of valued goals are the central tenets of acceptance and commitment therapy (ACT). Despite seeming to have a wide appeal among clinicians, the only RCT of ACT specifically for voices found no evidence for its effectiveness in the treatment of voices that issued commands, albeit in comparison with an active control condition of befriending (Shawyer *et al* 2012).

### Generating compassion

Responding with compassion to self and voices are central tenets of compassion-focused therapy (CFT). As with ACT, CFT seems to be appealing to clinicians, but to date it has evidence from only one case study when used specifically for the treatment of voices (Mayhew 2008).

### Working with imagery

Imagery has been used indirectly for the treatment of voices within competitive memory training (COMET; van der Gaag *et al* 2012). In COMET, imagery is one of the techniques that a patient can use to facilitate the 'reliving' of positive experiences. A more direct attempt to revisit and transform memories linked to voices using creative imagery was successfully deployed by Ison *et al* (2014) – but this evidence is currently limited to a case series.

### Writing down voice content, voice postponement and voice study periods

These attempts to exert some control over voices are described in the anecdotal literature (e.g. Romme 2000), but have not been the subject of empirical investigation. These techniques seem more consistent with distraction approaches and may be explored within a CSE approach.

## So, what approaches should a clinician use?

The above review of evidence endorses the suggestion of Turkington *et al* (2016) that treatment for distressing voices can begin with the refinement of strategies to help patients distract themselves from voices. I suggest using the patient's current repertoire of coping strategies as an engaging and validating starting point in this respect, and propose CSE as a model-driven framework within which to structure these conversations.

If a patient needs and desires further treatment after CSE, a limited number of evidence-based approaches are available to help them to focus on voices. It is important to note that the evidence described above (summarised in Box 2) is not for the isolated use of specific approaches (e.g. rational responding), but for their use within broader therapeutic packages (e.g. relating therapy).

Some of the more novel forms of focusing, although intuitively appealing and very much in vogue, do not yet have evidence for their effectiveness. In a context where even evidence-based approaches are rarely made available to patients with psychosis (Schizophrenia Commission 2012), Greenwood (2017) warns against routine implementation of novel approaches (until we know they work), as they can interrupt the delivery of evidence-based approaches.

## An integrated approach

Where does this leave a clinician who wants to help a patient to distract themselves, then subsequently focus on their voices – but who has no training in the delivery of broader packages of therapy? My colleagues and I have responded to this dilemma by developing the 'Guided self-help intervention for distressing VoiceEs' (GiVE), which combines some of the evidence-based approaches in an

### BOX 2 Focusing approaches for voice hearing

#### Evidence-based

- Rational responding
- Schema-based techniques
- Mindfulness

#### Non-evidence-based

- Attention training
- Acceptance and commitment to a valued goal
- Generating compassion
- Working with imagery
- Writing down voice content, voice postponement and voice study periods

accessible format. GiVE is based on our self-help book *Overcoming Distressing Voices* (Hayward *et al* 2012) and the clinician guides the patient through a companion workbook that combines coping, rational responding (re-evaluating the accuracy of beliefs about voices and assertive responding) and schema-based techniques. Reductions in the negative impact of voices were very large when GiVE was delivered by highly trained therapists in a small RCT (Hazell *et al* 2017), and we are currently exploring patient experiences and outcomes when GiVE is delivered by clinicians with no formal therapy training.

### A final caveat – voices beyond psychosis

Distressing voices are experienced by many patients who do not have a psychosis diagnosis, and there is increasing interest in the voice hearing experiences of people with borderline personality disorder, post-traumatic stress disorder and mood disorders (Thomas *et al* 2014). The relevance of this interest is corroborated by our experience in the Sussex Voices Clinic ([www.sussexpartnership.nhs.uk/sussex-voices-clinic](http://www.sussexpartnership.nhs.uk/sussex-voices-clinic)), where more than half of the referred patients have non-psychosis diagnoses. Given that most of the evidence described above was generated with psychosis patients, future research needs to clarify the extent to which this evidence is generalisable to patients who are distressed by voices in the context of non-psychosis diagnoses.

### Conclusions

Turkington *et al* (2016) suggest that a broad range of approaches can be used to help people with psychosis to cope with their distressing voice hearing experiences. Only some of these approaches currently have evidence for their effectiveness. Amidst a potentially confusing array of approaches, some of which may be more appealing than others, a clinician can have confidence that an approach will be beneficial to patients if the selection is guided by a consideration of the evidence for its effectiveness.

### References

- Birchwood M, Chadwick P (1997) The omnipotence of voices: testing the validity of a cognitive model. *Psychological Medicine*, **27**: 1345–53.
- Birchwood M, Michail M, Meaden A, Tarrier N, Lewis S, Wykes T, Davies L, Dunn G, Peters E (2014) Cognitive behaviour therapy to prevent harmful compliance with command hallucinations (COMMAND): a randomised controlled trial. *Lancet Psychiatry*, **1**: 23–33.
- Chadwick P (2006) *Person-based Cognitive Therapy for Distressing Psychosis*. John Wiley & Sons: England.
- Chadwick P, Strauss C, Jones AM, et al (2016) Group mindfulness-based intervention for distressing voices: a pragmatic randomised controlled trial. *Schizophrenia Research*, **175**: 168–73.
- Craig TKJ, Rus-Calafell R, Ward T, Leff JP, Huckvale M, Howarth E, Garety P (2017) AVATAR therapy for auditory verbal hallucinations in people with psychosis: a single-blind, randomized controlled trial. *Lancet Psychiatry*, **5**: 31–40.
- Farhall J, Greenwood KM, Jackson HJ (2007) Coping with hallucinated voices in schizophrenia: a review of self-initiated strategies and therapeutic interventions. *Clinical Psychology Review*, **27**: 476–93.
- Greenwood K (2017) Psychological treatments for psychosis. *BJPsych Advances*, **23**: 24–6.
- Hayward M, Strauss C, Kingdon D (2012) *Overcoming Distressing Voices: A Self-Help Guide to Using Cognitive Behavioral Techniques*. Constable and Robinson.
- Hayward M, Edgecumbe R, Jones A-M, et al (2017a) Brief coping strategy enhancement for distressing voices: an evaluation in routine clinical practice. *Behavioural & Cognitive Psychotherapy*. doi: 10.1017/S1352465817000388 [Epub ahead of print].
- Hayward M, Jones A-M, Bogen-Johnston L, et al (2017b) Relating therapy for distressing auditory hallucinations: a pilot randomized controlled trial. *Schizophrenia Research*, **183**: 137–42.
- Hazell C, Hayward M, Cavanagh K, et al (2017) Guided self-help cognitive-behaviour intervention for VoicEs (GiVE): results from a pilot randomised controlled trial. *Schizophrenia Research*, doi: 10.1016/j.schres.2017.10.004 [Epub ahead of print].
- Ison R, Medoro L, Keen D, et al (2014) The use of rescripting imagery for people with psychosis who hear voices. *Behavioural & Cognitive Psychotherapy*, **42**: 129–42.
- Maier BA (1974) Delusional thinking and perceptual disorder. *Journal of Individual Psychology*, **30**: 98–113.
- Mayhew S, Gilbert P (2008) Compassionate mind training with people who hear malevolent voices: a case series report. *Clinical Psychology & Psychotherapy*, **15**: 113–38.
- Romme M, Escher S (2000) *Making Sense of Voices: A Guide for Mental Health Professionals Working with Voice-Hearers*. MIND.
- Schizophrenia Commission (2012) *The Abandoned Illness: A Report from the Schizophrenia Commission*. Rethink Mental Illness.
- Shawyer F, Farhall J, Mackinnon A, et al (2012) A randomised controlled trial of acceptance-based cognitive behavioural therapy for command hallucinations in psychotic disorders. *Behaviour Research & Therapy*, **50**: 110–21.
- Tarrier N (1992) Management and modification of residual psychotic symptoms. In *Innovations in the Psychological Management of Schizophrenia* (eds M Birchwood, N Tarrier): 38–72. Wiley.
- Tarrier N, Beckett R, Harwood S, et al (1993) A trial of two cognitive-behavioural methods of treating drug-resistant residual psychotic symptoms in schizophrenic patients: I. Outcome. *British Journal of Psychiatry*, **162**: 524–32.
- Tarrier N, Yusupoff L, Kinney C, et al (1998) Randomised controlled trial of intensive cognitive behaviour therapy with chronic schizophrenia. *BMJ*, **317**: 303–7.
- Thomas N, Hayward M, Peters E (2014) Psychological therapies for auditory hallucinations (voices): current status and key directions for future research. *Schizophrenia Bulletin*, **40**(suppl. 4), S202–12.
- Thomas N, Farhall J, Shawyer F (2015) Beliefs about voices and schemas about self and others in psychosis. *Behavioural & Cognitive Psychotherapy*, **43**: 209–23.
- Tsai YF, Chen CY (2006) Self-care symptom management strategies for auditory hallucinations among patients with schizophrenia in Taiwan. *Applied Nursing Research*, **19**: 191–6.
- Turkington D, Lebert L, Spencer H (2016) Auditory hallucinations in schizophrenia: helping patients to develop effective coping strategies. *BJPsych Advances*, **22**: 391–6.
- Valmaggia LR, Bouman TK, Schuurman L (2007) Attention training with auditory hallucinations. *Cognitive and Behavioral Practice*, **14**: 127–33.
- van der Gaag M, van Oosterhout B, et al (2012) Initial evaluation of the effects of competitive memory training (COMET) on depression in schizophrenia-spectrum patients with persistent auditory verbal hallucinations: a randomized controlled trial. *British Journal of Psychology*, **51**: 158–71.