


# Increasing access to brief Coping Strategy Enhancement for distressing voices: a service valuation exploring a possible role for briefly-trained therapists

Phil Clarke<sup>2</sup>, Anna-Marie Jones<sup>1</sup> and Mark Hayward<sup>1,2\*</sup> 

<sup>1</sup>R&D Department, Sussex Education Centre, Sussex Partnership NHS Foundation Trust, Nevill Avenue, Hove BN3 7HZ, UK and <sup>2</sup>School of Psychology, University of Sussex, Pevensey Building, Falmer BN1 9QH, UK

\*Corresponding author. Email: [m.i.hayward@sussex.ac.uk](mailto:m.i.hayward@sussex.ac.uk)

(Received 2 August 2020; revised 16 April 2021; accepted 6 May 2021)

## Abstract

Hearing voices is a distressing and trans-diagnostic experience. Cognitive behavioural therapy (CBT) is an effective psychological treatment for distressing voices, but is offered to only a minority of patients. Limited resources are a barrier to accessing CBT. Evaluations of brief forms of CBT for voices have offered encouraging findings, but the ability of briefly-trained therapists to deliver these brief therapies has yet to be explored. We evaluated the outcomes of a brief form of CBT (Coping Strategy Enhancement, CSE) for voices when delivered by highly-trained and briefly-trained therapists. This was a service evaluation comparing pre-post outcomes in patients who had completed brief CSE over four sessions, within NHS Mental Health Services, delivered by highly-trained and briefly-trained therapists. The primary outcome was the negative impact scale of the Hamilton Program for Schizophrenia Voices Questionnaire. Data were available from 92 patients who completed a course of brief CSE – nearly half of whom received therapy from a briefly-trained therapist. Modest benefits across the sample were consistent with previous evaluations and did not seem to be influenced by the training of the therapist. This service evaluation offers further evidence that brief CSE can begin a therapeutic conversation about distressing voices within routine clinical practice. The usefulness of this initial conversation does not seem to be reliant upon the extent of therapist training, suggesting that briefly-trained therapists may play a role in increasing access to these conversations for patients distressed by hearing voices.

## Key learning aims

- (1) How can access to CBT be increased for patients distressed by hearing voices?
- (2) Can a wider workforce of briefly-trained therapists start a CBT-informed conversation about distressing voices?
- (3) How do the outcomes of these conversations compare with the same conversations facilitated by highly trained therapists?

**Keywords:** CBT; coping; hallucinations; psychotherapy training; voice-hearing

## Introduction

Hearing the voice of someone or something that does not seem to be present can be distressing and disabling and is increasingly being recognised as a trans-diagnostic experience (Waters and Fernyhough, 2017). Cognitive behavioural therapy (CBT) is the recommended treatment for

distressing voices in the context of psychosis (NICE, 2014) and studies are suggesting that this treatment may be beneficial for patients with other diagnoses (e.g. borderline personality disorder; Hepworth *et al.*, 2013). However, despite a robust evidence base for its effectiveness (van der Gaag *et al.*, 2014), CBT is not available to the majority of patients distressed by hearing voices (Royal College of Psychiatrists, 2018). Reasons for limited availability include a lack of resources as CBT is resource-intensive when offered over the recommended minimum of 16 sessions and delivered by highly-trained therapists (Ince *et al.*, 2016). Attempts to increase access to CBT for distressing voices have included the offering of brief interventions, with initial findings offering some encouragement. For example, Guided Self-Help CBT for Voices (the 'GIVE' intervention) offered over eight sessions was found to be highly effective when offered by highly-trained therapists (Hazell *et al.*, 2018). However, evaluations of brief CBT offered by briefly-trained therapists to psychosis patients have generated inconclusive findings (Harding *et al.*, 2018; Turkington *et al.*, 2002; Turkington *et al.*, 2006) and there have been no evaluations specifically related to the delivery of CBT for voices. Furthermore, concerns have been expressed about the availability of some frontline practitioners to deliver CBT due to the competing demands upon the time of these busy clinicians (Harding *et al.*, 2018; Jolley *et al.*, 2013).

We have sought to increase access to CBT for voice-hearing patients by establishing the Sussex Voices Clinic (SVC: <https://www.sussexpartnership.nhs.uk/sussex-voices-clinic>), a trans-diagnostic service that seeks to train, support and supervise clinicians to deliver brief interventions within NHS Secondary Care Mental Health Services. The clinicians within SVC are drawn from all of the disciplines typically found within Secondary Care (clinical psychologists, social workers, occupational therapists, community psychiatric nurses and support workers) and have varying levels of therapy training, ranging from extensive training to no training at all. All patients referred to SVC and found to be eligible for therapy are offered a 4-session course of Coping Strategy Enhancement (CSE) as the initial intervention within a therapy pathway. Our evaluation of the initial cohort of patients ( $n=101$ ) within SVC found that this brief intervention generated small to moderate pre-post effect sizes on the primary outcome of voice-related distress (Hayward *et al.*, 2018). However, despite brief CSE being delivered by a heterogeneous group of therapists within that evaluation, no attempt was made to explore any relationships between therapist training and outcomes.

This service evaluation aims to explore the relationships between therapist training and outcomes by evaluating the outcomes of a group of patients who completed brief CSE within SVC – half of whom received the intervention from highly-trained therapists and half of whom received the intervention from briefly-trained therapists. If brief CSE for distressing voices can be delivered by briefly-trained therapists and generate some benefits, the availability of a larger workforce of briefly-trained therapists could increase access to this intervention.

## Method

### Study design

This study was a service evaluation that examined the relationship between therapist training type and pre-post CSE differences for patients experiencing distressing voices. The allocation of patients to a highly-trained therapist (HTT) or a briefly-trained therapist (BTT) was informed by clinical judgement on a case-by-case basis; half received brief CSE from a HTT and half received brief CSE from a BTT.

### Setting

Patients received brief CSE within the Sussex Voices Clinic (SVC), a specialist psychological therapies outpatient service operating within Sussex Partnership NHS Foundation Trust. SVC provides patients with an initial 4-session brief intervention based around the principles of

Coping Strategy Enhancement (TARRIER *et al.*, 1993; TARRIER *et al.*, 1998), which patients complete alongside their usual care. A subsequent post-therapy assessment informs the need for further courses of therapy (e.g. Group Mindfulness-Based Therapy; Chadwick *et al.*, 2016) as part of a therapy pathway of a maximum 20 sessions in total.

### Patients

Patients were referred to SVC between November 2016 and December 2018 by their care co-ordinator within Secondary Care Services. Patients were eligible for therapy if they met the inclusion criteria of: (1) a subjective report of current voice hearing; and (2) experiencing voice-related distress – operationalised by a score of 8 or more on the 4-item negative impact scale of the Hamilton Program for Schizophrenic Voices Questionnaire (HPSVQ) (Van Lieshout and Goldberg, 2007). Eligibility was assessed by a clinical psychologist using data collected by a clinic assistant at a baseline assessment. Outcome data were collected by a clinic assistant at a post-therapy assessment following the 4-session intervention.

Between November 2016 and December 2018, 201 patients completed a course of brief CSE. Of these patients, 14 (7%) did not attend a post-therapy assessment, 92 (46%) completed a different assessment battery<sup>1</sup> and three (1%) did not complete the post-therapy assessment. Thus, data from a sample of 92 patients who had completed the HPSVQ measure at both the baseline and post-therapy assessment were used in this service evaluation.

### Measures

Assessments were conducted by a clinic assistant pre-therapy (T0: approximately 4 weeks before commencing therapy) and post-therapy (T1: 4 weeks after completing therapy). Clinic assistants were not involved with therapy delivery in order to reduce the risk of bias. Clinical outcomes were assessed using the following measures.

#### Primary outcome measure

The Hamilton Program for Schizophrenia Voices Questionnaire (HPSVQ; Van Lieshout and Goldberg, 2007) is a 9-item self-report questionnaire that assesses the physical characteristics and impact of voices. Each item is scored on a 5-point Likert scale ranging from 0 (least negative) to 4 (most negative), with lower scores indicating less negative impact. The HSPVQ has good psychometric properties (Berry *et al.*, 2021; Kim *et al.*, 2010). The 5-item physical scale examines the characteristics of voices, including frequency, volume and duration. The 4-item negative impact scale examines the impact of voices, including compliance with voice commands and level of distress caused by voices. The negative impact scale of the HPSVQ scale is the primary outcome measure in this service evaluation.

#### Secondary outcome measure

The Choice of Outcome in CBT for Psychoses-Short Form (CHOICE-SF) is a 12-item form of the 24-item self-report questionnaire developed with patients to assess goals for CBT for psychosis that are relevant to patient defined recovery (Greenwood *et al.*, 2010). Eleven items are related to the therapy to create a severity score and one item is a free text item where respondents can insert their personal goal. All items are rated by patients on a 0–10 scale (where 0 is worst, and 10 is best), with higher scores indicating an enhanced sense of recovery. The short

<sup>1</sup>The assessment battery within the Sussex Voices Clinic was changed in 2016 to include the HSPVQ as a self-report primary outcome.

version was developed specifically for the IAPT-SMI initiative (Jolley *et al.*, 2015), based on the highest loading items from the 24-item measure. CHOICE-SF has been found to have high validity, internal consistency and sensitivity to change (Webb *et al.*, 2020). Higher mean scores are better.

### Intervention

Therapy was delivered by therapists who were either highly-trained in the delivery of CBT (HTT) or briefly-trained in the delivery of CSE (BTT). The HTT had a professional training that incorporated the delivery of CBT, e.g. clinical/counselling psychologist (or trainee) or had been specifically trained in the delivery of CBT, e.g. graduate mental health practitioner or CBT therapist. The BTT had no formal training in the delivery of CBT and were drawn from a variety of professional backgrounds, e.g. community psychiatric nurse, social worker, occupational therapist, support worker, etc. In total, there were 61 therapists in this service evaluation: 29 HTT and 32 BTT. Approximately half of the patients ( $n=48$ ; 52%) were allocated to receive therapy from a HTT; and half ( $n=44$ ; 48%) were allocated to receive therapy from a BTT. All therapists were trained to deliver brief CSE during a 90-minute training session facilitated by the last author who also provided monthly supervision.

The CSE intervention was delivered over four weekly hour-long individual therapy sessions and supported by a workbook (downloadable from <https://www.sussexpartnership.nhs.uk/resources-sussex-voices-clinic>). The sessions utilised a functional analysis framework to identify and reduce the impact of triggers to voice activity, systematically deploy helpful coping strategies and implement activities to support well-being. Sessions were structured as follows:

- Session 1: A semi-structured interview was used to identify the triggers to voice activity, and the patient's emotional and behavioural responses to the voices. This stimulated a process of identifying coping strategies and evaluating their effectiveness.
- Session 2: An existing coping strategy was collaboratively selected and considered in detail. Discussions focused on how the strategy could be modified and used differently (more or less often). A plan was agreed to implement the strategy between sessions.
- Session 3: Implementation of the modified coping strategy was reviewed. Discussions focused on the enablers and barriers to implementation, and the effectiveness of the strategy. This strategy could be further modified to enhance effectiveness, or another strategy could be selected and modified. A plan was agreed to implement the strategy between sessions.
- Session 4: Implementation of the modified coping strategy was reviewed, and any required modifications were agreed. Plans were discussed for continued implementation post-therapy. Discussions explored any learning from therapy in relation to both self and voices, and the implications of this learning for living well with voices. Any needs for further therapy were discussed.

Patients completed the sessions in addition to receiving their usual care from the mental health team. Usual care typically consisted of regular contact with a consultant psychiatrist and other clinical care team members, in addition to prescribed medication.

### Statistical analysis

Descriptive statistics [mean, standard deviation (*SD*), min, max] were used to summarise patient demographics (age, gender, ethnicity, marital status, employment status, education, diagnosis, age at voice hearing onset and duration of voice hearing). Baseline duration of voice hearing, negative impact of voices and patient-defined recovery for each group were compared using independent *t*-tests to explore the possibility that patients with more severe problems had been allocated to HTT. A linear mixed model (LMM) was created for the primary and secondary outcome

measures as dependent variables with group (HTT, BTT) and time (pre, post) as independent factors and a time by group interaction. *Post hoc* pairwise comparisons were used to estimate the mean pre–post difference by group. When interpreting the differences, the minimally clinically important difference (MCID) was used as a reference point to determine whether pre–post differences were considered meaningful. Percentages of those who had improved or deteriorated by at least the MCID were calculated. The relevant MCIDs were 2 points on the HPSVQ negative impact scale (Hazell *et al.*, 2018) and 1.45 on the CHOICE-SF (Jolley *et al.*, 2015). Standardised effect sizes (Cohen's *d*) were calculated as the mean pre–post difference divided by the baseline *SD* taking into account the pre- and post-measurement correlation. Standardised effects were interpreted in line with Cohen's criteria (Cohen, 1960; i.e. small  $\geq 0.2$ , medium  $\geq 0.5$ , and a large effect  $\geq 0.8$ ). 95% CIs were calculated for all estimates.

For our primary outcome only, if the between-group pre–post difference was non-significant (i.e. the interaction was  $p > 0.05$ ), then pre–post differences for the two groups were tested for statistical equivalence using the confidence interval approach (Wellek, 2010). This is where upper ( $\Delta U$ ) and lower ( $\Delta L$ ) equivalence boundaries are pre-selected and if the observed interaction effect size and corresponding 90% CI falls between them, then the two groups are considered practically equivalent (Lakens, 2017). The equivalence bounds for the HSPVQ were set to  $\pm 0.5$  MCID.

Data were selected for individuals who had both pre- and post-CSE HPSVQ scores. However, the resulting sample included missing data for CHOICE-SF scores, which was assumed to be missing at random (MAR; Jakobsen *et al.*, 2017; Sterne *et al.*, 2009) and multiple imputation using chained equations (MICE) was applied (White *et al.*, 2011). The imputation model included the original analysis variables and auxiliary variables that were significantly ( $p < 0.05$ ) associated with the missing data. From the pool of all demographic variables, only employment, diagnosis and age at onset were associated with missing CHOICE-SF scores ( $p < 0.05$ ) and so were included as auxiliary variables. Multiple imputation was carried out using 14 imputations based on the percentage of missing data (14%; Rezvan *et al.*, 2015). A sensitivity analysis was carried out by comparing the results of the analyses using all available cases to those following multiple imputation. STATA 16 was used for all analyses.

## Results

Table 1 displays a descriptive summary of patient characteristics and baseline clinical outcomes. Patients were on average 39.6 years old ( $SD = 13.3$ ) and the majority were female (57.6%), White British (81.5%), not in a relationship (72.8%) and not working (75.0%). Mean ( $SD$ ) scores at baseline on the primary outcome of negative impact of voices were 12.3 (2.8) for the HTT group and 11.4 (3.2) for the BTT group. Independent *t*-tests indicated no differences between the patients in the HTT and BTT groups with respect to duration of voice hearing (difference = 2.2;  $t_{81} = 0.74$ ;  $p = 0.462$ ), baseline levels for negative impact of voices (difference = 1.0;  $t_{90} = 1.54$ ;  $p = 0.486$ ) and patient-defined recovery (difference = 0.5;  $t_{83} = 1.44$ ;  $p = 0.154$ ).

### Negative impact of voices (HPSVQ)

Estimates from the LMM indicated improvements (reductions) on the negative impact of voices scale post-CSE treatment when compared with the baseline (see Table 2). No missing data were found for this sample, and thus no data imputation was needed. The mean pre–post difference for all therapists ( $n = 92$ ) was  $-1.26$  points [95% confidence interval (CI)  $-1.92, -0.60$ ], with a small to medium standardised effect size of  $d = -0.44$  and was statistically significant ( $p < 0.001$ ).

Effect sizes remained roughly consistent when examining the HTT and BTT groups individually using *post hoc* pairwise comparisons. Patients in the HTT group ( $n = 48$ ) reported a marginally larger mean pre–post difference of  $-1.31$  (95% CI  $-2.22, -0.40$ ) and stronger effect size ( $d = -0.48$ ) than patients seen by BTTs ( $n = 44$ ) with a mean pre–post difference of  $-1.20$  (95% CI  $-2.16, -0.25$ ) and effect size of  $d = -0.40$ . The group–time interaction was

**Table 1.** Descriptive statistics and baseline clinical characteristics of patients, by type of therapist training

		Highly-trained therapists		Briefly-trained therapists	
		N=48		N=44	
		Count	Percentage	Count	Percentage
		<i>n</i>	%	<i>n</i>	%
Age	Years: <i>n</i> , mean ( <i>SD</i> )	48	41.7 (13.4)	44	37.3 (12.9)
Gender	Male	15	31.3	24	54.6
	Female	33	68.8	20	45.5
Ethnicity	White British	39	86.7	36	81.8
	White other	3	6.7	3	6.8
	Asian British/other	1	2.2	2	4.5
	Black British/other	1	2.2	2	4.5
	Chinese British/other	0	0.0	0	0
	Mixed ethnicity	0	0.0	1	2.3
	Other	1	2.2	0	0
Marital status	Single	29	64.4	28	66.7
	Widow	2	4.4	0	0.0
	Separated/divorced	7	15.6	1	2.4
	Cohabit	2	4.4	2	4.8
	Married/civil partnership	5	11.1	6	14.3
Employment status	Long-term relationship	0	0.0	5	11.9
	Employed/self-employed	9	20	9	21.4
	Unemployed	31	68.8	28	66.7
	Student	0	0	4	9.5
	Retired	2	4.4	1	2.4
Education	Other	3	6.7	0	0
	Left school before 16 years	8	17.4	8	18.6
	Left school at 16 years	6	13.0	7	16.3
	Left school at 17/18 years	9	19.6	7	16.3
	Attended college	16	34.8	8	18.6
Diagnosis	Attended university	7	15.2	13	30.2
	Schizophrenia	14	29.8	11	27.5
	Schizoaffective disorder	3	6.4	0	0.0
	BPD/EUPD	7	14.9	8	20.0
	PTSD	1	2.1	0	0.0
	Complex trauma	0	0.0	1	2.5
	Depression	4	8.5	4	10.0
	Mixed <sup>1</sup>	13	27.7	9	22.5
Other <sup>2</sup>	5	10.6	7	17.5	
Age voice hearing onset	Years: <i>n</i> , mean ( <i>SD</i> )	43	23.0 (13.1)	40	20.4 (12.8)
Duration voice hearing	Years: <i>n</i> , mean ( <i>SD</i> )	43	17.0 (14.5)	40	14.8 (12.5)
HPSVQ (baseline)	Mean ( <i>SD</i> )		12.3 (2.8)		11.4 (3.2)
CHOICE (baseline)	Mean ( <i>SD</i> )		2.9 (1.5)		3.4 (1.7)

*SD*, standard deviation; BPD/EUPD, borderline personality disorder/emotional unstable personality disorder; PTSD, post-traumatic stress disorder. Total data are missing for ethnicity ( $n=3$ ), marital status ( $n=5$ ), employment ( $n=5$ ), education ( $n=3$ ), diagnosis ( $n=5$ ), age onset/duration ( $n=9$ ) and CHOICE ( $n=7$ ); HSPVQ, Hamilton Programme for Schizophrenia Voices Questionnaire negative impact scale; CHOICE, Choice of Outcome in CBT for Psychoses-Short Form. <sup>1</sup>Examples of mixed diagnoses are anxiety/depression, EUPD/PTSD, dissociation disorder/depression; <sup>2</sup>examples of other include drug-induced psychosis and attention deficit hyperactivity disorder (ADHD).

relatively small and non-significant,  $-0.11$  (95% CI  $-1.42, 1.21$ ) with  $d=-0.04$ . These results suggest that the brief-CSE intervention was effective in reducing the negative impact of voices for all patients regardless of group, with slightly larger differences in the HTT group. However, overall differences in outcomes between HTTs and BTTs were negligible. Within each group, the MCID of 2 points was contained within the 95% CI around the mean difference suggesting clinically meaningful change for some patients. Further analysis showed that in the HTT group and BTT group, 37.5% (18/48) and 43.2% (19/44) of patients achieved the MCID of 2 points, respectively. Deterioration at least as large as the MCID was found in 19.5% (8/41) and 18.2% (8/44) of patients in the HTT and BTT groups, respectively.

**Table 2.** Linear mixed model results and corresponding effect sizes for complete case and adjusted analyses

	Mean difference	Count (n)	SEM	Test statistic (z)	p-value	Mean difference (95% CI)		Pre-post correlation	Cohen's d	Cohen's d (95% CI)	
						Lower	Upper			Lower	Upper
<b>HPSVQ (complete cases)</b>											
Baseline – PL1 (all therapists)	-1.26	92	0.34	-3.76	<0.001	-1.92	-0.60	0.555	-0.44	-0.73	-0.15
Baseline – PL1 (highly trained)	-1.31	48	0.46	-2.82	0.005	-2.22	-0.40	0.532	-0.48	-0.88	-0.07
Baseline – PL1 (briefly trained)	-1.20	44	0.49	-2.48	0.013	-2.16	-0.25	0.566	-0.40	-0.83	0.02
Interaction	-0.11	92	0.67	-0.16	0.87	-1.42	1.21	0.500 <sup>1</sup>	-0.04	-0.33	0.25
<b>CHOICE-SF (complete cases)</b>											
Baseline – PL1 (all therapists)	0.99	79	0.15	6.60	<0.001	0.70	1.28	0.696	0.70	0.48	1.08
Baseline – PL1 (highly trained)	1.13	41	0.21	5.40	<0.001	0.72	1.53	0.578	0.82	0.37	1.27
Baseline – PL1 (briefly trained)	0.85	38	0.22	3.91	<0.001	0.42	1.27	0.787	0.53	0.08	0.99
Interaction	0.28	79	0.30	0.93	0.352	-0.31	0.87	0.500 <sup>1</sup>	0.17	-0.14	0.48
<b>CHOICE-SF (adjusted data)</b>											
Baseline – PL1 (all therapists)	0.93	92	0.17	5.37*	<0.001	0.59	1.27	0.626	0.64	0.34	0.94
Baseline – PL1 (highly trained)	1.02	48	0.24	4.32*	<0.001	0.56	1.49	0.491	0.63	0.22	1.04
Baseline – PL1 (briefly trained)	0.82	44	0.25	3.32*	0.001	0.33	1.31	0.740	0.65	0.22	1.08
Interaction	0.20	92	0.34	0.60*	0.55	-0.46	0.87	0.500 <sup>1</sup>	0.12	-0.30	0.54

\*t-test statistic rather than z-test statistic; <sup>1</sup>set at 0.500 to estimate the effect size equivalent to the calculation for independent groups. HSPVQ, Hamilton Programme for Schizophrenia Voices Questionnaire negative impact scale; CHOICE, Choice of Outcome in CBT for Psychoses-Short Form; SEM, standard error of the mean.

As both ends of the interval cross the equivalence boundaries ( $\Delta L = -1$ ,  $\Delta U = 1$ ), there is not enough evidence to suggest that observed pre–post CSE reductions in negative impact of voices for each therapist group are equivalent. However, as both ends of the interval remain within the MCID of  $\pm 2$  HPSVQ points, this suggests that this non-equivalence, or observed difference, is not clinically meaningful and patients would essentially experience similar levels of benefit regardless of therapist type. This corroborates the very small and statistically non-significant group–time interaction found in the pre–post outcomes analysis. Those findings indicated that neither set of therapist outcomes were superior to the other.

### Patient defined recovery (CHOICE-Short Form)

Pre–post CSE improvements (increases) in the secondary outcome, CHOICE-SF, were also indicated by the LMM (see Table 2 for a full description). In addition to the complete case analysis, the data showed that in the HTT and BTT groups, 41.5% (17/41) and 36.8% (14/38) of patients achieved the MCID of 1.45 points, respectively. Conversely, 5% (2/41) and 5% (2/38) in the HTT and BTT groups, respectively, showed deterioration at least as large as the MCID.

Based on our adjusted data, patients in the HTT group ( $n=48$ ) reported a mean difference of 1.02 (95% CI 0.56, 1.49) with a medium to large effect size ( $d=0.63$ ). The mean difference was smaller for the BTT group ( $n=44$ ) at 0.82 (95% CI 0.33, 1.31) with a similar medium to large effect size ( $d=0.65$ ). Both effect sizes were statistically significant with  $p < 0.001$ . The group–time interaction was 0.20 (–0.46, 0.87;  $d=0.12$ ) which was non-significant, indicating negligible differences in the mean pre–post CHOICE-SF between the HTT and the BTT groups. The 95% CI for the mean differences only included the MCID of 1.45 for the HTT group.

Our sensitivity evaluation compared the complete case and the adjusted analyses. Apart from the notable reduced standardised effect size for HTTs ( $d=0.82$  and  $d=0.63$  in the complete case analysis and adjusted analysis, respectively), there were only small changes across the two sets of estimates. However, our final conclusions did not change as a result of making adjustments to the analysis for the missing data; in line with findings from the analysis of the primary outcome, therapist training did not significantly affect pre–post brief-CSE outcomes of patient-defined recovery.

## Discussion

This service evaluation aimed to explore the relationships between therapist training and the outcomes of brief CSE for distressing voices within routine clinical practice. Outcomes were evaluated for a cohort of 92 patients and the small–medium pre–post effect sizes on the primary outcome of the negative impact of voices were consistent with a previous evaluation of brief CSE (Hayward *et al.*, 2018). A between-groups comparison found no significant difference between the outcomes for patients seen by HTT and BTT on the primary outcome, suggesting that brief CSE can generate some benefits irrespective of the training of the therapist who is delivering the intervention. However, we did not have enough evidence to demonstrate equivalence in outcomes for the two groups. Effect sizes on the secondary outcome of patient-defined recovery were medium to large overall, and were larger within the HTT group, but not to an extent that was statistically significant.

These findings offer further evidence that brief CSE is a low-intensity intervention that can generate some benefits as the first step of a therapy pathway for patients experiencing distressing voices. Moreover, the evidence for positive outcomes from briefly-trained therapists offers some tentative evidence that a more widely available workforce of briefly-trained clinicians can increase access to brief CBT-informed interventions for voices. Similar evidence has been generated by a comparison of CBT for depression as outcomes were similar, irrespective of the training of the therapists (Richards *et al.*, 2018).



However, the current service evaluation is not suggesting that interventions across an entire therapy pathway can be delivered by briefly-trained therapists to patients distressed by hearing voices. If a course of brief CSE is able to ‘start a conversation’ about distressing voices (possibly in the context of overcoming some of the barriers to such conversations; Bogen-Johnston *et al.*, 2019), the continuation of the conversation may require the guidance of a highly-trained therapist – particularly if this extended conversation is informed by a longitudinal formulation (e.g. Relating Therapy; Hayward *et al.*, 2017; also see Morrison, 2017).

### Limitations

This service evaluation has limitations in at least four respects. Firstly, patients were allocated to be seen by an HTT or BTT on the basis of clinical judgement. Whilst this was appropriate in the context of the current service evaluation, this means that the groups cannot be assumed to be comparable. Any subsequent research study would need to allocate randomly. Secondly, the post-therapy assessments could not be conducted blind – increasing the likelihood that the assessment may have been influenced by the desire of the assessors to elicit favourable outcomes. Thirdly, the service evaluation was not controlled, creating the un-evaluated possibility that benefits occurred naturally over time. Finally, there was no attempt to assess the sustainability of benefits over a follow-up period – leaving the unanswered question about a relationship between therapist training and the maintenance of gains.

### Clinical implications

The findings from this service evaluation suggest that clinicians within Secondary Care Mental Health Services can be trained to deliver brief CSE for the benefit of patients distressed by hearing voices. Furthermore, the brevity of this intervention may partially address the challenges of time-management for these busy clinicians (Waller *et al.*, 2015). Training and the delivery of brief CSE can be supported by the structured nature of this conversation – aided by the resources available on the SVC website (<https://www.sussexpartnership.nhs.uk/sussex-voices-clinic>) – and training facilitated by a highly-trained therapist.

The availability of regular supervision from a highly-trained therapist would also be a prerequisite. For some patients, starting a conversation may be the beginning of an extended therapeutic conversation that can involve the delivery of higher intensity forms of CBT for voices delivered by highly-trained therapists, e.g. mindfulness-based group therapy (Chadwick *et al.*, 2016), avatar therapy (Craig *et al.*, 2017) or cognitive therapy for command hallucination (Birchwood *et al.*, 2014). For other patients, the conversation within brief CSE may form a foundation from which to engage with evidence-based interventions for other associated problems, e.g. worry and paranoia (Freeman *et al.*, 2015).

**Acknowledgements.** We would like to express our thanks to the many therapists and clinic assistants within the Sussex Voices Clinic who have delivered therapy and collected data for this study.

**Financial support.** The evaluation was not supported by any funding. All resources were made available by Sussex Partnership NHS Foundation Trust through routine clinical care.

**Conflicts of interest.** The authors declare no conflicts of interest.

**Ethical statement.** The authors have abided by the Ethical Principles of Psychologists and Code of Conduct as set out by the BABCP and BPS. Approval for this study was granted by the University of Sussex Social Sciences & Arts Research Ethics Committee. Additionally, this study was registered with the Clinical Audit Department of Sussex Partnership NHS Foundation Trust, who approved access to secondary patient data and advised that participant consent was not necessary (Department of Health, 2017).

**Data availability statement.** The data that support the findings of this evaluation are available from the corresponding author upon reasonable request.

### Key practice points

- (1) Brief CSE can be used to start a conversation about distressing voices.
- (2) The usefulness of this conversation is not reliant upon the training of therapists.
- (3) Within a specialist psychological therapies outpatient clinic, briefly-trained therapists can increase access to CBT-informed conversations about distressing voices.

### Further reading

**Hayward, M.** (2018). Evidence-based psychological approaches for auditory hallucinations: commentary on auditory hallucinations in schizophrenia. *BJPsych Advances*, 24, 174–177.

**Hayward, M., Strauss, C. & Kingdon, D.** (2018). *Overcoming Distressing Voices* (2nd edn). London, UK: Robinson.

**Hazell, C., Greenwood, K., Fielding-Smith, S., Rammou, A., Bogen-Johnston, L., Berry, C., Jones, A-M. & Hayward, M.** (2018). Understanding the barriers to accessing symptom-specific cognitive behavior therapy (CBT) for distressing voices: reflecting on and extending the lessons learnt from the CBT for psychosis literature. *Frontiers*, 9, 727.

### References

**Berry, C., Newcombe, H., Strauss, C., Rammou, A., Schlier, B., Lincoln, T., & Hayward, M.** (2021). Validation of the Hamilton Program for Schizophrenia Voices Questionnaire: associations with emotional distress and wellbeing, and invariance across diagnosis and sex. *Schizophrenia Research*, 228, 336–343.

**Birchwood, M., Michail, M., Meaden, A., Tarrier, N., Lewis, S., Wykes, T., ... & Peters, E.** (2014). Cognitive behaviour therapy to prevent harmful compliance with command hallucinations (COMMAND): a randomised controlled trial. *Lancet Psychiatry*, 1, 23–33.

**Bogen-Johnston, L., de Visser, R., Strauss, C., Berry, K., & Hayward, M.** (2019). ‘That little doorway where I could suddenly start shouting out’: barriers and enablers to the disclosure of distressing voices. *Journal of Health Psychology*, 24, 1307–1317.

**Chadwick, P., Strauss, C., Jones, A. M., Kingdon, D., Ellett, L., Dannahy, L., & Hayward, M.** (2016). Group mindfulness-based intervention for distressing voices: a pragmatic randomised controlled trial. *Schizophrenia Research*, 175, 168–175.

**Cohen, J.** (1960). A coefficient of agreement for nominal scales. *Educational and Psychological Measurement*, 20, 37–46.

**Craig, T. K. J., Rus-Calafell, R., Ward, T., Leff, J. P., 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.

**Department of Health** (2017). *UK Policy Framework for Health and Social Care Research*. London, UK: Department of Health.

**Freeman, D., Dunn, G., Startup, H., Pugh, K., Cordwell, J., Mander, H., ... & Kingdon, D.** (2015). Effects of cognitive behaviour therapy for worry on persecutory delusions in patients with psychosis (WIT): a parallel, single-blind, randomised controlled trial with a mediation analysis. *Lancet Psychiatry*, 2, 305–313.

**Greenwood, K. E., Sweeney, A., Williams, S., Garety, P., Kuipers, E., Scott, J., & Peters, E.** (2010). Choice of outcome in CBT for psychoses (CHOICE): the development of a new service user-led outcome measure of CBT for psychosis. *Schizophrenia Bulletin*, 36, 126–135.

**Harding, H., Landau, S., Fornells-Ambrojo, M., Hassanali, Jolley, S., McCrone, P., ... & Garety, P.** (2018). Improving implementation of evidence based practice for people with psychosis through training the wider workforce: results of the GOALS randomized controlled trial. *Journal of Behaviour Therapy & Experimental Psychiatry*, 59, 121–128.

**Hayward, M., Edgcombe, 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, 226–237.

**Hayward, M., Jones, A-M., Bogen-Johnston, L., Thomas, N., & Strauss, C.** (2017). Relating therapy for distressing voices: a pilot randomized controlled trial. *Schizophrenia Research*, 183, 137–142.

**Hazell, C. M., Hayward, M., Cavanagh, K., Jones, A. M., & Strauss, C.** (2018). Guided self-help cognitive-behaviour Intervention for VoicEs (GiVE): results from a pilot randomized controlled trial in a transdiagnostic sample. *Schizophrenia Research*, 195, 441–447.

**Hepworth, C. R., Ashcroft, K., & Kingdon, D.** (2013). Auditory hallucinations: a comparison of beliefs about voices in individuals with schizophrenia and borderline personality disorder. *Clinical Psychology and Psychotherapy*, 20, 239–245.

**Ince, P., Haddock, G., & Tai, S.** (2016). A systematic review of the implementation of recommended psychological interventions for schizophrenia: rates, barriers, and improvement strategies. *Psychology and Psychotherapy: Theory, Research and Practice*, 89, 324–350.

- Jakobsen, J. C., Gluud, C., Wetterslev, J., & Winkel, P. (2017). When and how should multiple imputation be used for handling missing data in randomised clinical trials – a practical guide with flowcharts. *BMC Medical Research Methodology*, *17*, 162.
- Jolley, S., Garety, P., Peters, E., Fornells-Ambrojo, M., Onwumere, J., Harris, V., ... & Johns, L. (2015). Opportunities and challenges in improving access to psychological therapies for people with severe mental illness (IAPT-SMI): evaluating the first operational year of the South London and Maudsley (SLaM) demonstration site for psychosis. *Behavioural Research and Therapy*, *64*, 24–30.
- Jolley, S., Onwumere, J., Kuipers, E., Craig, T., Moriarty, A., & Garety, P. (2013). Increasing access to psychological therapies for people with psychosis: predictors of successful training. *Behaviour Research and Therapy*, *50*, 457–462.
- Kim, S. H., Jung, H. Y., Hwang, S. S., Chang, J. S., Kim, Y., Ahn, Y. M., & Kim, Y. S. (2010). The usefulness of a self-report questionnaire measuring auditory verbal hallucinations. *Progress in Neuro-Psychopharmacology & Biological Psychiatry*, *34*, 968–973.
- Lakens, D. (2017). Equivalence tests: a practical primer for t tests, correlations, and meta-analyses. *Social Psychological and Personality Science*, *8*, 355–362.
- Morrison, A. P. (2017). A manualised treatment protocol to guide delivery of evidence-based cognitive therapy for people with distressing psychosis: learning from clinical trials. *Psychosis*, *9*, 271–281.
- National Institute for Health and Care Excellence (NICE) (2014). *Psychosis and Schizophrenia in Adults: Prevention and Management*. London, UK: NICE.
- Rezvan, P. H., Lee, K. J., & Simpson, J. A. (2015). The rise of multiple imputation: a review of the reporting and implementation of the method in medical research. *BMC Medical Research Methodology*, *15*, 30.
- Richards, D. A., Ekers, D., McMillan, D., Taylor, R. S., Byford, S., Warren, F. C., ... & O'Mahen, H. (2016). Cost and Outcome of Behavioural Activation versus Cognitive Behavioural Therapy for Depression (COBRA): a randomised, controlled, non-inferiority trial. *Lancet*, *388*, 871–880.
- Royal College of Psychiatrists (2018). *National Clinical Audit of Psychosis – National Report for the Core Audit 2018*. London, UK: Healthcare Quality Improvement Partnership.
- Sterne, J. A. C., White, I. R., Carlin, J. B., Spratt, M., Royston, P., Kenward, M. G., Wood, A. M., & Carpenter, J. R. (2009). Multiple imputation for missing data in epidemiological and clinical research: potential and pitfalls. *British Medical Journal*, *338*.
- Tarrier, N., Beckett, R., Harwood, S., Baker, a., Yusupoff, L., & Ugarteburu, I. (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*, 524–532.
- Tarrier, N., Yusupoff, L., Kinney, C., McCarthy, E., Gledhill, A., Haddock, G., & Morris, J. (1998). Randomised controlled trial of intensive cognitive behaviour therapy with chronic schizophrenia. *British Medical Journal*, *317*, 303–307.
- Turkington, D., Kingdon, D., & Turner, T. (2002). Effectiveness of a brief cognitive-behavioural therapy intervention in the treatment of schizophrenia. *British Journal of Psychiatry*, *180*, 523–7.
- Turkington, D., Kingdon, D., Rathod, S., Hammond, K., Pelton, J., & Mehta, R. (2006). Outcomes of an effectiveness trial of cognitive-behavioural intervention by mental health nurses in schizophrenia. *British Journal of Psychiatry*, *189*, 36–40.
- Van Lieshout, R. J., & Goldberg, J. O. (2007). Quantifying self-reports of auditory verbal hallucinations in persons with psychosis. *Canadian Journal of Behavioural Science*, *39*, 73–77.
- 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*, 30–37.
- Waller, H., Garety, P., Jolley, S., Fornells-Ambrojo, M., Kuipers, E., Onwumere, J., ... & Craig, T. (2015). Training frontline mental health staff to deliver 'low intensity' psychological therapy for psychosis: a qualitative analysis of therapist and service user views on the therapy and its future implementation. *Behavioural and Cognitive Psychotherapy*, *43*, 298–313.
- Waters, F., & Fernyhough, C. (2017). Hallucinations: a systematic review of points of similarity and difference across diagnostic classes. *Schizophrenia Bulletin*, *43*, 32–43.
- Webb, R., Bartl, G., James, B., Skan, R., Peters, E., Jones, A.-M., ... & Greenwood, K. (2020). Exploring the development, validity and utility of the Short Form version of the CHoice of Outcome In Cbt for psychosEs (CHOICE-SF): a patient reported outcome measure of psychological recovery. *Schizophrenia Bulletin*. <https://doi.org/10.1093/schbul/sbaa173>
- Wellek, S. (2010). *Testing Statistical Hypotheses of Equivalence and Noninferiority*. Chapman and Hall/CRC.
- White, I. R., Royston, P., & Wood, A. M. (2011). Multiple imputation using chained equations: issues and guidance for practice. *Statistics in Medicine*, *30*, 377–399.

---

**Cite this article:** Clarke P, Jones A-M, and Hayward M. Increasing access to brief Coping Strategy Enhancement for distressing voices: a service valuation exploring a possible role for briefly-trained therapists. *The Cognitive Behaviour Therapist*. <https://doi.org/10.1017/S1754470X21000143>