

Hearing Nasty Voices: End of Study Report



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THANK YOU

Thank you very much to the 38 NHS Trusts that took part in the Hearing Nasty Voices (HNV) study for your support.

The HNV study ran from 18th February 2020 to 3rd December 2021. We recruited 595 NHS patients who hear derogatory and threatening voices.

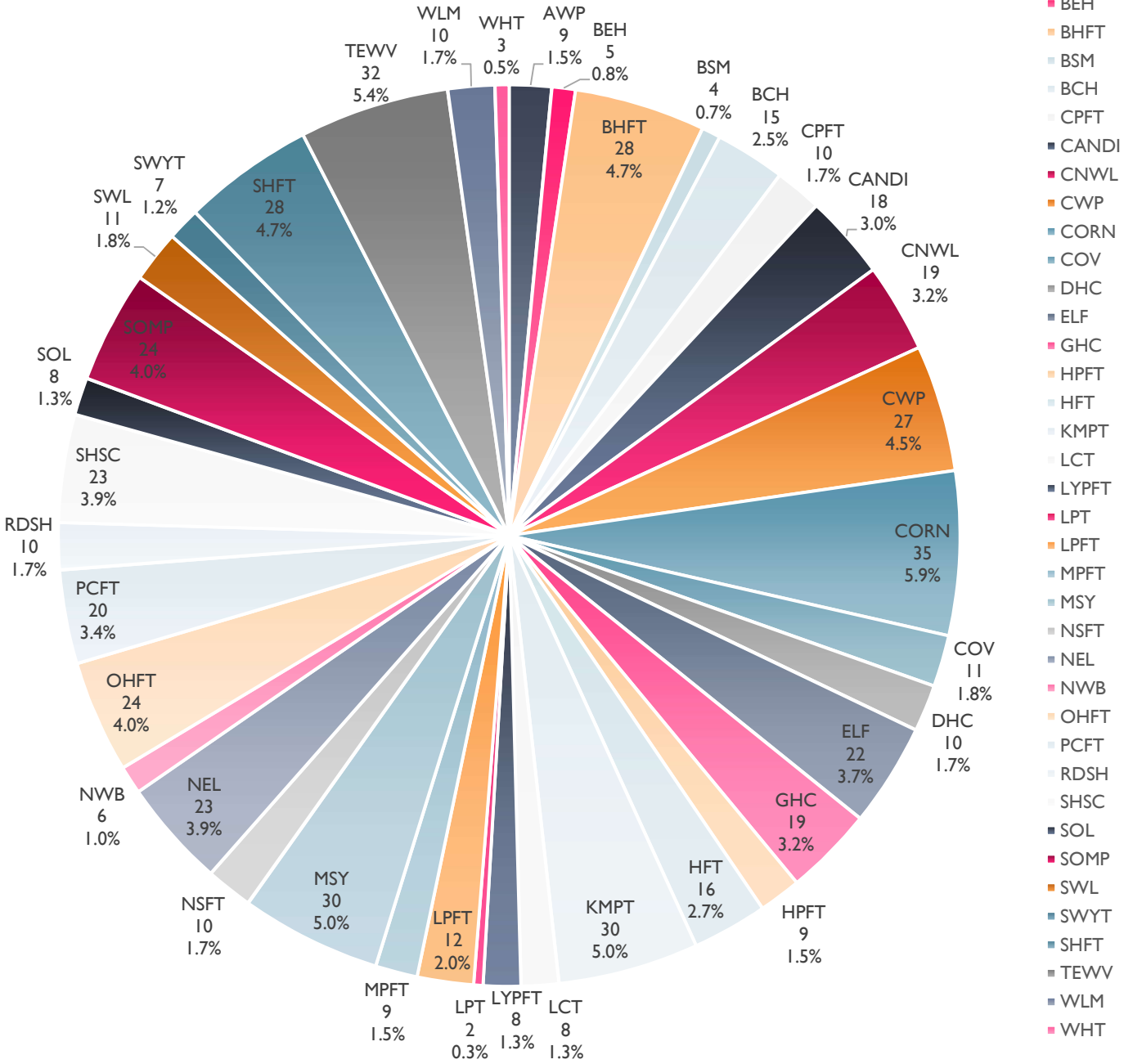
The rest of this end of study report outlines recruitment per site and key research findings. Additionally, there is a simplified information page that can be shared with participants who requested to know the results of the study. You will have already been sent this separately, and hence may have already sent this on to participants, but it is included here too for completeness.

Trusts involved in the study

Avon and Wiltshire Mental Health Partnership NHS Trust; Barnet, Enfield & Haringey Mental Health NHS Trust; Berkshire Healthcare NHS Foundation Trust; Birmingham and Solihull Mental Health NHS Foundation Trust; Black Country Partnership NHS Foundation Trust; Cambridgeshire and Peterborough NHS Foundation Trust; Camden and Islington NHS Foundation Trust; Central and North West London NHS Foundation Trust; Cheshire and Wirral Partnership NHS Foundation Trust; Cornwall Partnership NHS Foundation Trust; Coventry and Warwickshire Partnership NHS Trust; Derbyshire Healthcare NHS Foundation Trust; East London NHS Foundation Trust; Gloucestershire Health and Care NHS Foundation Trust; Herefordshire & Worcestershire Health and Care NHS Trust; Hertfordshire Partnership University NHS Foundation Trust; Humber Teaching NHS Foundation Trust; Kent and Medway NHS and Social

Care Partnership Trust; Lancashire Care NHS Foundation Trust; Leeds and York Partnership NHS Foundation Trust; Leicestershire Partnership NHS Trust; Lincolnshire Partnership NHS Foundation Trust; Midlands Partnership NHS Foundation Trust; Mersey Care NHS Foundation Trust; Norfolk and Suffolk NHS Foundation Trust; North East London NHS Foundation Trust; North West Boroughs Healthcare NHS Foundation Trust; Oxford Health NHS Foundation Trust; Pennine Care NHS Foundation Trust; Rotherham Doncaster and South Humber NHS Foundation Trust; Sheffield Health & Social Care NHS Foundation Trust; Solent NHS Trust; Somerset Partnership NHS Foundation Trust; South West London and St George's Mental Health NHS Trust; South West Yorkshire Partnership NHS Foundation Trust; Southern Health NHS Foundation Trust; Tees, Esk and Wear Valleys NHS Foundation Trust; West London Mental Health NHS Trust.

Recruitment by Site



Key

Site code	→	AWP
Number recruited	→	9
% of total	→	1.5%

Overall purpose

To better understand the problem of hearing derogatory and threatening (nasty) voices

Further aims

- Understand, from a psychological perspective, why nasty voices can be so convincing and difficult to ignore
- Develop a questionnaire measure to assess the *degree* that patients listen to and believe the derogatory and threatening voices (DTVs) that they hear (Listening and Believing – Assessment scale, LB-A)
- Develop a questionnaire to assess the *reasons why* people listen to and believe the DTVs (Listening and Believing – Reasons scale, LB-R)

Methods

In Part A of the study, participants completed the LB-A and the LB-R scales. These versions of the questionnaires included much longer lists of questions than we wanted in the final questionnaires. We used the data to shorten the questionnaires and check that they were reliable measures.

In Part B of the study, participants completed the shortened questionnaires. We tested whether they were reliable and valid. We assessed the relationship between listening to and believing DTVs and how distressed patients felt, and also whether the reasons predicted the degree of listening and believing DTVs. A sub-sample of participants also completed the shortened questionnaires one week later in order to assess whether the questionnaires provide stable results over a short time period (test-retest reliability).

Some participants who took part in Part B (140) completed questionnaires to assess self-confidence, social connection, boredom and sleep disruption. We are currently analysing whether these variables predict the amount that people listen to and believe their voices.

The following publication addresses the above research aims using the HNV data:

Sheaves et al (2023) – Listening to and believing derogatory and threatening voices. *Schizophrenia Bulletin*. [LINK](#)

Listening and believing DTVs: the results

595 participants were recruited

To carry out the statistical analyses, only cases with very low levels of missing data were retained (less than or equal to 10% of the data missing in each questionnaire).

This left a group of 591 participants whose data was used in the analysis. For the demographics – see table I.

Demographic and clinical characteristics		Part A (N=308) n (%)	Part-B (N=283) n (%)
Age		M = 40.66 (SD = 13.11)	M = 40.95 (SD = 13.72)
Gender	Male	169 (55.23%)	162 (57.24%)
	Female	134 (43.79%)	118 (41.70%)
	Other	3 (0.98%)	3 (1.06%)
Ethnicity			
	Asian or Asian British	26 (8.64%)	8 (2.88%)
	Black, Black British, Caribbean or African	24 (7.97%)	16 (5.78%)
	Mixed or multiple ethnic groups	14 (4.65%)	4 (1.44%)
	White	228 (75.75%)	232 (83.76%)
	Other ethnic group	9 (2.99%)	17 (6.13%)
Age of onset of voices		M=22.98 (SD=11.83)	M= 25.23 (SD=13.21)
Care team			
	Adult mental health team	201 (65.26%)	174 (61.48%)
	Early intervention for psychosis service	62 (20.13%)	47 (16.61%)
	Inpatient unit	41 (13.31%)	60 (21.20%)
	Other	4 (1.30%)	2 (0.71%)
Diagnosis*			
	Schizophrenia	132 (42.86%)	120 (42.40%)
	Psychosis not otherwise specified	71 (23.06%)	69 (24.38%)
	Depressive episode / disorder	48 (15.58%)	46 (16.25%)
	Borderline personality disorder	32 (10.39%)	48 (16.96%)
	Schizoaffective disorder	29 (9.42%)	21 (7.45%)
	PTSD / Complex PTSD	22 (7.14%)	14 (4.95%)
	Other anxiety disorder	13 (4.22%)	14 (4.95%)
	Bipolar affective disorder	10 (3.25%)	13 (4.59%)
	Other	11 (3.57%)	15 (5.65%)

*Multiple diagnoses may have been endorsed, hence the percentage does not sum to 100

Table 1. Socio-demographic and clinical characteristics of participants (N = 591).



Listening and believing was made up of **four constructs**: active listening (i.e. purposefully tuning into the DTVs), passive listening (listening without any intention of doing so), believing DTVs and a sub-scale designed to be the opposite of listening and believing: disregarding DTVs.

Listening to and believing nasty voices was **common**:

52% of participants believed their voices most or all of the time.

58% passively listened to them most or all of the time.

32% actively listened out for the derogatory and threatening voices most or all of the time, despite being all too aware that they were distressing experiences.

Higher levels of believing, active listening, and particularly passive listening were associated with higher levels of anxiety, depression and voice distress.

There were **seven groups of reasons for listening and believing DTVs**:

1. To better understand the threat
2. Being too worn down to resist the voice experience
3. To learn something insightful
4. Being alone with time to listen
5. Voices trying to capture attention
6. Voices sounding like real people
7. Voices sounding like known people

Each of the seven groups of reasons was individually associated with active listening, passive listening and believing.

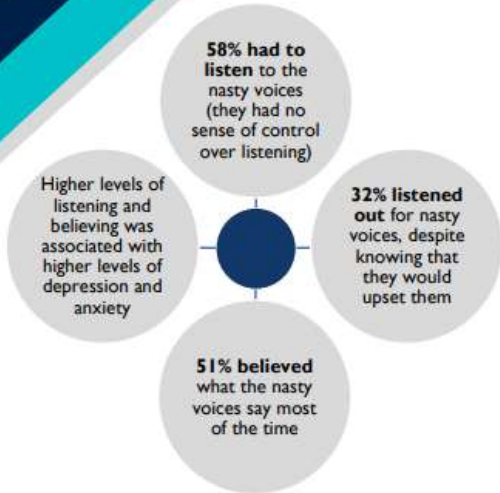
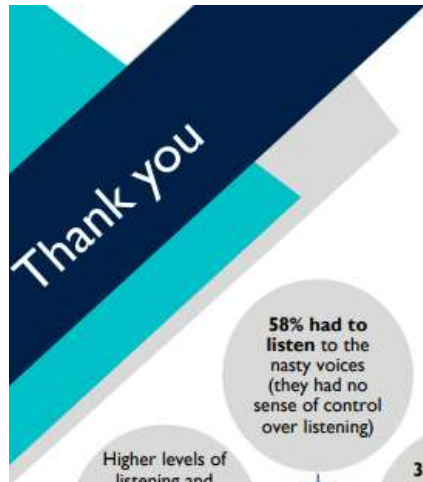
We used structural equation modelling to learn which of the reasons were the most important predictors of listening and believing whilst accounting for the fact that the reason groups are also related to each other to some degree. Feeling worn down in particular accounted for listening and believing.

A framework of listening and believing negative voices has the potential to inform the understanding and treatment of voice distress. We hope that this research informs treatment developments that help patients who hear derogatory and threatening voices to disengage from them and refocus their attention on things that leave them feeling better.

On the next page is a shorter version of the study summary that uses plain English.

This will have already been shared with participants (it was sent separately, several months ago).

Thank you.



In 2020 or 2021 you took part in a research study called

Hearing nasty voices: developing new ways to measure the experience.

We're contacting you because you asked to receive the study results.

591
participants took part. All heard voices that criticised or threatened them ('nasty voices')

There were seven groups of understandable reasons for listening to and believing the nasty voices.

Participants in the study said: "I pay attention to what the nasty voices say because..."

1. I'm too **WORN DOWN** to resist;
2. voices sound like **REAL PEOPLE**;
3. I'll be better able to **UNDERSTAND** the threat;
4. I might **LEARN** something insightful from the voices;
5. voices try to capture **ATTENTION**;
6. voices sound like **PEOPLE I KNOW** (e.g. family or a past bully);
7. I'm **ALONE** with time to listen."

Feeling **WORN DOWN** (feeling defeated, lacking confidence, and energy) was particularly important in determining whether or not participants believed the threats and criticisms that they heard voices make.

What are the next steps?
The next steps are to use the learning from this study to develop a talking therapy (a type of psychological treatment called cognitive behavioural therapy). For example, boosting people's confidence in their own views might help them to question whether the threats and criticisms made by voices are true. We will work alongside people with lived experience of hearing voices to develop the talking therapy.

QUESTIONS / COMMENTS?
Please do get in touch with me (Dr Bryony Sheaves, lead researcher, University of Oxford) for further information:
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