

Parry, Sarah and Varese, Filippo (2020) Whispers, Echoes, Friends and Fears: Forms and Functions of Voice Hearing in Adolescence. Child and Adolescent Mental Health. ISSN 1475-357X

Downloaded from: https://e-space.mmu.ac.uk/625959/

Version: Accepted Version

Publisher: Wiley

DOI: https://doi.org/10.1111/camh.12403

Usage rights: Creative Commons: Attribution-Noncommercial-No Deriva-

tive Works 4.0

Please cite the published version

Title: Whispers, Echoes, Friends and Fears: Forms and Functions of Voice Hearing in Adolescence

Short title: Forms and Functions of Voice Hearing in Adolescence

Funding: Health Research Accelerator Award, University of Manchester and Manchester Metropolitan University

The authors have no conflict of interest to declare.

The authors do not have ethical permission to share original data sets due to the sensitive and personal nature of the accounts. However, requests for further information and anonymised aspects of the data are welcome, directed to the corresponding author.

Accepted 5th June 2020: Child and Adolescent Mental Health - Wiley

¹Dr Sarah Parry, ClinPsyD

²Dr Filippo Varese, PhD, ClinPsyD

¹Department of Psychology, Brooks Building, Manchester Metropolitan University, Manchester M15 6GX, UK, Email: s.parry@mmu.ac.uk, Tel: +44 (0)161 247 5796, @drSarahParry

² Division of Psychology & Mental Health, University of Manchester, UK

Abstract

Background Despite the high prevalence of voice-hearing in childhood, research with adolescents aged under 16 years is scarce. Theoretical connections between clinical and developmental conceptualisations of voice-hearing are limited, resulting in missed opportunities to explore unusual sensory experiences with young people.

Methods Demographic, contextual and qualitative data were collected through a web-based survey with 68 adolescents (M=14.91; SD=2.77) from Australia, Canada, Ireland, New Zealand, Spain, the United Kingdom, and United States of America. A Foucauldian-informed narrative analysis captured phenomenologically meaningful individual accounts and systemically informed narratives. Analytic layers attended specifically to the form and function of voices, including relational, protective, distressing and nuanced experiences, offering new insights into individual, systemic and cultural interpretative narratives surrounding voice hearing to inform research, policy and tailored support.

Results The average self-reported age of onset of voices was 9 years, 5 months. Reciprocal relationships with pleasant voices were evidenced through the narratives and characterization of voices, while distressing voices were described without reciprocity and the voices held greater power over the young person. Positive aspects of negative voices were discussed and are illustrated with a continuum matrix reflecting interpretation and related affect.

Conclusions Voice hearing is a heterogeneous and often complex relational experience for young people, with structural inequalities, relational traumas and social isolation attributed causes of voice hearing. Developing personal meaning making mitigated voice-related distress through contextualising the origin of the voices in past experiences, without attribution to mental illness. Recommendations are proposed for assessment, formulation and

relational interventions that recognise the potential impact of the voice-child-other relationship upon psychosocial functioning and wellbeing.

Key Practitioner Message

What is known?

Youth-led intervention initiatives and research surrounding the phenomenon of voice
hearing in childhood is scarce. Many of the existing treatment guidelines are based on
research with adults and it is generally recognised these approaches are not transferable
across younger age groups and phenomenological variances.

What is new?

- The unique narratives within this study offer insight into the diversity of experience of voice-hearing and other multisensory experiences for young people. Young people do not necessarily consider voice hearing as problematic or unwanted, with most participants reporting mixed experiences of nurturing and distressing voices, with some potentially distressing voices recognized as valuable in certain domains, such as creativity.
- Phenomenological parallels between nurturing voices and ICs were found, some of
 which could function as reciprocal relationships and voices that appeared to have a
 listening functionality that participants could talk to, as well as hear from. Further, voice
 hearing could reduce feelings of loneliness but made social relationships harder.

What is significant for clinical practice?

 This study demonstrates for the first time the range of differences in form and function of comforting and distressing voices. Recommendations for pre-assessment, assessment,

formulation and intervention design are made that recognize the complexities and

nuances within voice-child relationships.

• The diversity of experience and unique interpretations from participants with and without

clinical mental health histories offer a unique insight into how voices function as an

intrapersonal experience. Sociocultural narratives, whether fully internalised or not, may

influence the young person's appraisal of the voices as valued, useful or unwanted. The

clinical recommendations proposed have implications for community, educational and

clinical settings.

egositori Copy, child and habitation of the copy of th Key words: hearing voices, auditory hallucinations, adolescence, qualitative, narrative

4

Whispers, Echoes, Friends and Fears: Forms and Functions of Voice Hearing in Adolescence

Introduction

Auditory verbal hallucinations, often referred to as 'hearing voices', are most commonly understood as noises, voices or other audible perceptions with verbal content that others cannot hear. These occurrences appear in the absence of external stimuli that could account for the origins of those perceptions. Voice hearing is thought to be relatively common and transient in childhood, more so than in adult populations (Maijer, et al., 2019), although extremely little research has been conducted in this area with young people directly.

In attempts to define the experience of hearing voices for children and young people in non-clinical populations, the available literature attends to similarities and differences between fantasy play (Klausen & Passman, 2006) and imaginary companions (ICs; Burbach, Robert, Clinch & Wise, 2014) as a childhood interpretation of voice hearing or dissociation in typical development. However, despite these important possible connections, until very recently (e.g. Fernyhough, Watson, Bernini, Moseley & Alderson-Day, 2019), associations between voices and non-pathologised developmental experiences such as imaginary friends have been largely overlooked. Phenomenologically, ICs appear to serve a protective function, especially against loneliness and to help a young person cope with interpersonal trauma (Burbach, et al., 2014). Whilst the academic literature base surrounding ICs highlights many social and cognitive benefits of the presence of an IC (Majors & Baines, 2017), parents' negative appraisals of their child's ICs can lead to increased isolation and negative self-appraisal (Burbach, et al., 2014). Elsewhere in the literature, systemic dynamics and family functioning have been found to influence young people's self-esteem and self-perception

(Bhandari, Winter, Messer & Metcalfe, 2011); emphasizing the significance of relational dynamics for young people, perhaps also concerning voice hearing.

Recent reviews have highlighted the need for a more detailed, nuanced and phenomenological understanding of auditorial diversity and meaning making processes in relation to voice hearing, particularly regarding psychological factors (Maijer, et al., 2019) community samples (Luhrmann, et al., 2019), voice-related distress or comfort, and coping for young people to inform research and practice (Garralda, 2017). In 2015, Woods, et al. conducted an online survey to phenomenologically explore the subjective experiences of people aged 16-84 who hear a voice or voices. Woods et al. found heterogeneity in experience and that 31% of participants experienced positive emotions in relation to their voices; a perspective on voice hearing often overlooked in clinically oriented research. Importantly, the majority of participants reported their voices started before and during adolescence, suggesting research is needed with younger age groups.

Additional areas in need of further attention relate to characterological features of voices, relationships with voices, and how these features may influence relational interventions (Hayward, Berry & Ashton, 2011). A relational focus for psychosocial interventions is of particular importance for children as they are often reliant on their family and friends to help them interpret and formulate life experiences, alongside sociocultural factors tempering young people's initial appraisals of their hallucinations (Jardri, Larøi & Waters, 2019). Further, "involvement of voice-hearers in research and a greater use of narrative and qualitative approaches" have been identified as "essential" (Corstens, Longden, McCarthy-Jones, Waddingham & Thomas, 2014, p.285).

Therefore, the current study aimed to advance the theoretical and phenomenological understanding of voice hearing for an under-represented group of young people with the

objective of informing policy, research and practice guidelines. The study adopted a novel online approach to data collection and analysis, reducing participatory barriers, exploring qualitative reflections from young people on voice hearing, considering relational and societal influences upon their interpretations of their experiences and resulting appraisals of their voices and themselves.

Method

Participants and Ethical Procedures

Participants were invited to take part if they had direct experience of voice hearing and were aged 13-18 years old. Qualitative survey responses from 68 young people aged 13-18 years (M= 14.91; SD=2.77) were collected, of which 25% identified as male, 61% female, and 14% non-binary. Participants resided in Australia (5%), Canada (8%), Ireland (3%), New Zealand (1.5%), Spain (1.5%), the United Kingdom (30%), and the United States of America (47%; non-specified 4%). Ethnicities included American, Canadian, European, Maori/Australian, Australian, Hispanic, Metis, Armenian, and Korean. Participants were asked to opt-in to the study if they identified as hearing voices that others could not and were not required to have received a diagnosis or be connected to a mental health service. The study was available in the English language.

Ethics Committee (REC) and a pediatric REC within England's National Health Service (NHS). Participants could access follow-up support through Voice Collective online or by phone at any time. Based on the demonstration of Gillick competence (Fallon, 2003) through the consent process, both academic and NHS ethics committees approved data collection without parental consent as many young people do not tell parents directly that they hear voices. Although it is acknowledged that young people's lived experiences should guide

service design (Holt, 2004; Huang et al., 2016), limited literature exists to inform ethical recruitment practices with young people who may not be able to gain parental consent for their involvement in research (Finkelhor, Hamby, Turner, & Walsh, 2016). Consequently, a part of the expert-by-experience and ethical consultation process that developed this study focused upon developing an inclusive platform for young people to take part that did not involve jeopardizing their confidentiality (see Parry, Djabaeva, & Varese, 2018).

Materials

Alongside consultation with experts-by-experience of varying ages, we searched and reviewed qualitative articles written in English from PsycARTICLES, PsycINFO and PubMed: (voices AND child/youth/adolescen*; hallucinat* AND child/youth/adolescen*). These searches returned 58 articles that involved research with or about young people who hear voices, although generally aged 16+ years and in clinical samples. Cited references were searched to identify any additional relevant articles. To our knowledge, no study has specifically explored the individual and systemic subjective experiences of young adolescents who hear voices, without applying a clinical lens, through an inclusive online platform for a naturalistic sample. Based on the literature review and expert-by-experience guidance, a secure online platform was developed for data collection (see Parry, Djabaeva & Varese, 2018). This process also informed the development of an 18-item self-report questionnaire to explore interpretative features of voices, called the Manchester Voices Inventory for Children (MAVIC), and 17 qualitative questions ¹¹. Participants chose a pseudonym and could opt-in to receive a research summary and win a prize-draw participatory voucher.

Procedure

-

¹ A copy of the MAVIC is provided as a supplement.

The online survey was advertised through social media, designated NHS regional Trusts, and peer support groups. Young people completed the online survey following reading comprehensive information pages (also available as an audio file) and completing a consent form. These documents were reviewed by young people during the design process to critically consider language use and accessibility across the designated age range.

Analytic Approach

Descriptive data from the MAVIC offers contextual information regarding the participants' collective experiences of voice hearing. The Foucauldian-informed Narrative Analysis (FNA) of in-depth qualitative responses recognizes people use storytelling to develop understanding about their experiences, and to portray themselves to others (Frost, 2009). Interestingly, several participants offered comments about the process, "This survey helped me get my feelings out" (Zee, 13); "thank you for giving me a place to talk openly about my experiences!" (Fish, 18).

Considering the ubiquitous sociocultural narratives and stigma that surround voice hearing in many Western countries where this research was based, FNA within a critical realist epistemological stance provided the most suitable framework for this analysis (Given, 2008). Based on Foucault's work, the researchers adopted an approach to "re-examine evidence and assumptions, to shake up habitual ways of working and thinking, to dissipate conventional familiarities, to re-evaluate rules and institutions" (1989, p.462). FNA recognizes the role of systemic powers and influences on researchers in the analytic process and the wider population, and thereby voice hearers in terms of their construction and interpretation of personal experience through internalizing the perspectives of systemic powers (Tamboukou & Love, 2013).

Based on existing healthcare and developmental narrative frameworks (Labov, 1972; Riessman & Quinney, 2005; Willig, 2013), a six-step analytic charter² was developed. In order to capture aspects of individual meaning making within multi-layered sociocultural stories, an ideographic phenomenological element was added to the charter, supported by recent connections between narrative analysis and phenomenology (Patterson, 2018). The charter consisted of the following six actions: (1) origins at the individual level; (2) orientation in relationships and construction; (3) language and power in relationships; (4) individuality and commonality; (5) constructing a resolution; (6) phenomenological and emancipatory narratives. To enhance the rigor and credibility of the analytic process, the researchers adopted a curious perspective (La Vasseur, 2003; Norlick & Harder, 2010), recognizing and bracketing ideographic preconceptions and challenging existing cultural narratives through the process of phenomenology within the FNA, while considering interpretations and the construction of emancipatory narratives. This process included discussions of the findings with experts-by-experience and service providers to explore aspects of the data from a range of perspectives.

Analysis and Discussion

The average age of onset of voices was reported to be 9.45 years (SD=3.48). Of the sample, 50% of participants reported not seeking state provided or private healthcare, or community-based support; 36% had accessed support and 14% 'preferred not to say'. Further, 20% of participants reported hearing one voice, 53% heard 2-4 voices, 10% heard 5-10 voices, 8% heard 11-20 voices, and 9% reported more than twenty voices. When asked 'How do you feel about the voice/voices' in the MAVIC, 56% of participants identified

² Available as a supplement with this publication.

negative emotions or worries about the voices, 23% reported only positive feelings or beliefs, and 21% reported mixed emotions. Table One provides an overview of the Likert Scale responses provided by the participants, with 52 complete data sets. Overall, participants reported voices caused greater negative than positive affect, although the contextual descriptive statistics also highlight that some participants recognized positive functions of voices and the companionship they could provide. These descriptive statistics are discussed in the context of the qualitative data to explore these factors from a nuanced first-person perspective.

<INSERT TABLE ONE>

Participants' perceptions within the qualitative data provide important novel nuanced discussion of the voice-hearing experience through adolescence. Across the accounts, the form and function of voice hearing for young people emerged through two narrative layers, illustrating forms and functions of voice hearing along a continuum matrix (Figure 1). Although many participants had conflicting experiences of distress and comfort caused by their voices and voice-related distress, some participants had only positive experiences, whereby they appeared to feel empowered by the voices, as illustrated in Figure One and Table One. However, the majority of participants felt as though they lost a degree of control in their day to day activities through the voice hearing experience, which greater voice-related distress negatively influencing their overall wellbeing.

<INSERT FIGURE ONE>

Figure 1: Continuum matrix for voice experience, interpretation and related affect

Chapter One: Voices as 'friends' and allies - "It is comforting to know I am never
alone" (Tris, 14)

Form

Narratives of comforting and positive voices were phenomenologically different to accounts from participants who only experienced negative voices. Nurturing voices were discussed in terms of having human personal qualities, pronouns, and motivations, similar to how young children describe ICs (Gleason, Sebanc & Hartup, 2000; Majors & Baines, 2017): "The voices I hear, they are very kind. They sound as though they want to help me. They talk like normal people would. With emotion" (T.J., 15). These narratives offer a new platform for conceptualizing the potential helpfulness and utility of voices during specific developmental stages, during which young people may feel particularly socially or emotionally vulnerable.

Function

Participants commonly attributed voice hearing to loneliness and social isolation, which is possibly why many participants discussed the relational functions of their voices and how voices met some social needs:

They were like special friends who I could confide in. They would all give me advice or comfort me when I felt bad. They would frequently all give me different advice but it was fun, like chatting with wacky friends.

(Fletcher, 18)

A reciprocal phenomenon arose for some participants through which voices could become a means to experience confiding in another, sharing thoughts and feelings, and feeling a sense of connectedness and safety. For example, Rincad (14) explains, "They keep me company. They are like close friends. People that I can trust. People that won't leave me". This aspect of 'closeness' was apparent in many accounts of voices viewed as benign or of value, although absent in accounts of only threatening voices, as illustrated in Figure One. Voices could also influence how participants appraised themselves: "Sometimes they make

me feel more happy about myself, like I matter and that people do care about me." (Gracie, 16); similarly, Alone (15) described, "At least with them I have someone to talk to". The listening function of voices seemed synonymous with perceived safety and friendship across this group of narratives, as Lilly (17) explained, "Because I don't have any friends and they keep me safe ... If I'm going through something bad, they mostly support me!"

Descriptions of companionship detailed how voices offered emotional and practical support. For example, James (14) explained, "They help me with problems I'm having and have actually helped me in school as well!" For others, the voices appeared to compensate for absent others and losses: "I feel like I have a family again" (T.J., 15). Some participants also described how their voices nurtured their creativity: "them speaking to me can help me somewhat, with my art and aspirations, they can inspire a lot" (Veruca, 17). Participants who heard both positive and frightening voices discussed how the voices might influence one another too: "one of them is nice and defends me to the other" (Orange, 17).

Overall, participants discussed a range of relational processes and experiences, child-to-voices and voice-to-voice. The key functions of voices identified across many of the narratives included decision-making, company, reassurance, motivation and emotional connection, as outlined in Table Two. Most participants stated they started to hear a voice(s) between eight and eleven years old, during which time many children transition from childhood to adolescence and to new educational settings. Transitions often involve significant neurodevelopmental, social and environmental change and stress (Goldstein, Boxer & Rudolph, 2015), which may be another factor in developing voice hearing as a functional coping strategy.

Although positive aspects of voices have been identified within adult populations (Corstens & Longden, 2013) and the IC literature (Majors & Baines, 2017), our data

identifies specific functions of voices that lead to positive appraisals. This parallels previous quantitative and qualitative research on voice-hearing for adults, indicating that voices can often have important functional aspects (Jenner, Rutten, Beuckens, Boonstra & Sytema, 2018). Just as connections have been found between executive function development, fantasy play and ICs (Thibodeau & Gilpin, 2016); perhaps, supportive voices also have a role to play, due to the similarities of the 'hallucination-like' experience (Fernyhough, Watson, Bernini, Moseley & Alderson-Day, 2019). If cognitions differing significantly from the everyday may involve greater demands upon executive functioning (Thibodeau & Gilpin, 2016), tentatively, the same may apply for people with voices, especially if contending with multiple voices simultaneously. Therefore, the presence of voices could have developmental advantages, providing voice-related distress was allayed with acceptance and support.

<INSERT TABLE TWO>

Chapter Two: Voices as commanders, echoes, and fears – "The way it made me feel physically, emotionally and mentally would drain me and make me lose the plot" (Aria, 16)

Form

Language used to describe negative voices generally captured a commanding experience, with statements such as "they make me...", "they tell me...", "they want me to..." sounding like "ghosts" or "whispers". For instance, as Katy (14) explained, "they would be talking so fast I would feel trapped and they would make me do whatever I'm doing really fast and I can't control it". In this sense, although the strength and depth of the relationship with the voice(s) was more fragile than for participants with only positive voices, the negative voices appeared to have greater power over the young person's cognitions and actions. Participants described how the voices could influence how they felt about themselves and other people,

"They want me to do stuff I don't like for example argue with my family" (Gracie, 16); alongside having less control over their presence, "They're haunting, I get nightmares and most of the time they linger throughout the day" (Pierce, 15). Conversely, participants with positive voices described feeling more in control, for example, "I like talking to them and I have control when they enter my head" (Milly, 15).

The sense of having less control over one's actions and emotions due to the voices led participants to describe feelings of anxiety, difficulties with concentration, and fears for the future, with many highlighting ways in which the voices would undermine them. For example, Madilyn (16) explained, "I feel like I am not in control of my life when he is around. I get so visibly upset when I hear him, usually hysterically crying, terrified of what he is or about to tell me to do". Similarly, just as some participants described the "haunting" nature of the voices, Alexis described the voices as "echoes", which other participants stated reminded them of past instances, also seen in adult-based research (Moernaut, Vanheule & Feyaerts, 2018). The metaphorical description of such voices was also described with a sense of relational distance, with participants 'hearing from' the voices, rather than experiencing a reciprocal relationship with them; as Freddy (14) describes, "Sounds like a growl and like a Pennywise kind of voice". Interestingly, across all accounts, negative voices were more often discussed without pronouns (e.g. "it"), or using male pronouns, for example, "the female is nice... the male is mean" (Alexis), "he is mean to me and hurts me a lot, he hates me and I hate him" (Madilyn, 16).

Similar gender differences have been found in research with adult voice hearers, reflecting sociocultural inequalities (Haarmans, Vass & Bentall, 2016). For participants who heard only negative voices, they often found connections between the sound and tone of the voices and people they knew in their lives, as found in research with adults who hear voices (Hayward, Bogen-Johnston & Deamer, 2018); often connected to difficult experiences. Such findings

further connect adverse childhood experiences (Varese, et al., 2012) to voice hearing and structural power imbalances (Haarmans, Vass & Bentall, 2016).

He used to show affection to the other kids by being kind or giving them sweets - but never me. Ever. It kind of reflected how I was treated in school. I didn't have any friends and I was labelled "liar" and "troublemaker" by my teachers. No one listened to me when I tried to tell them a big secret. A secret no child should have to keep. This voice would reiterate what everyone thought about me - until I believed it myself.

(Aria, 16)

Formulating the origin of the voices and attributing them to past experiences or personal qualities seemed to lessen voice-related distress, reducing the power of the voice(s).

Function

Most participants described distressing voices as having a largely unsettling and destabilizing function, which appeared unpredictable, often adding to their voice-related distress. Participants also seemed to find it more difficult to describe the presence or purpose of distressing voices, making the process of understanding them more complex.

Scared, worried, I want them to stop but don't know how I fear them and they make me feel uncomfortable and unsafe they make me self continuous and tell me I'm not good enough and that I'm I waste of space.

SAT3, 15

Consequently, when participants were able to identify the origins of their voices, such as in Aria's case, it was more likely they could find a way to assert more control over the voices. However, as illustrated in Figure One, participants who experienced greater distress as a result of their voices found gaining power over the voices more challenging.

Taking my control and power back. Due to a previous experience I had no power or control ... all you need is a way of calming down carry a notebook around with lots of positive thoughts about yourself in and read and repeat that whilst taking deep breaths or count colours ... Take baby steps in giving yourself the power it's taking from you.

Aria, 16

Similar processes around meaning making from difficult experiences have been found to underpin the positive mental health of adolescents more generally, with personal meaningmaking and formulation sharing features of the Self-as-Context construct (Moran, Almada & McHugh, 2018). In the current study, participants who were able to connect the content of past relationships or experiences to their voices could often find an explanation for their current experiences that did not involve attributions of voices to illness or pathology. These participants could then focus on change within the relationship with the voice(s) to enhance their wellbeing. Research with adult voice hearers into voice dialogue (Pérez-Álvarez, García-Montes, Vallina-Fernández & Perona-Garcelán, 2016), sense-making in community samples (Iudici, Quarato & Neri, 2018) and more recently virtual reality therapy (Dellazizzo, et al., 2018), have also reflected the importance of helping the individual connect past experiences and relationships with the voices they hear to give the voice context. This may be more complex for distressing voices as they appear to have a less tangible form and fewer functions for young people to identify by themselves, as seen in Table Three. Further, the functions of the voices could interfere with optimum cognitive functioning due to interference and lack of sleep or rest, with the majority of participants finding the voices were difficult to ignore (M=7.22, SD=3.01; Table 1): "It's makes it hard to sleep, distracting" (Milly, 15). Therefore, the overall wellbeing of the young person could be affected, reducing their resiliency against distressing voices.

<INSERT TABLE THREE>

Concluding Discussion

Summary

The current study identified key features about the forms and functions of comforting and distressing voices for adolescents, illustrating some common themes and challenges.

Participants identified pleasant experiences of voice hearing through personification, reciprocal relationships, companionship, and recognised beneficial motivations in the voice's functions. Conversely, participants described negative voice hearing experiences through metaphor, mirroring sociocultural or personal oppressions, often feeling disempowered and frightened by the experience. Many young people had positive and negative experiences of voice hearing, and the ability to formulate the experience, contextualise the voice(s), and regain control appeared more important in terms of wellbeing than the nature of the voices themselves.

Clinical Recommendations - "Change the stigma of hearing voices and educate or make young people aware of this" (Orange, 17)

In support of recent recommendations for a stepwise approach for clinicians (Maijer, et al., 2019), we strongly recommend the availability of psychoeducation beyond normalizing and destigmatizing messages, regardless of whether a mental health diagnosis is made.

Offering precise coping strategies and information through public health and education settings could reduce general anxiety and stigma, providing a developmental and cultural framework within which to understand voice hearing as a relatively common childhood phenomenon. Specifically, psychoeducation needs to include information about the useful functions of voices and reassurance that voices can take many forms, some of which can be comforting. Such an approach would act as a preventative public health intervention against

avoidable voice-related distress and could also serve as a pre-assessment measure as young people and families often look online for information prior to, or in place of, seeking formal mental health support.

The current study highlights the importance for families, services and wider society to have greater understanding as to some of the positive elements and protective functions of voice hearing. Tailored age-appropriate protocols, appreciative of the relationship the young person may have with their voice(s) and their wider support network, could reflect the phenomenological influences found, without necessarily focusing on reducing the occurrence of voice hearing. The reported 'closeness' (Hayward, 2003) of voices to the child also appears important to assess as this may indicate whether child-voice relational approaches to intervention would be beneficial. For instance, if a reciprocal relationship with the voice(s) is already present, this may facilitate relational approaches and expedite the initial phases of psychological support. However, if the voice feels difficult to control and distant (Fig 1), there may be an initial need to focus upon establishing a connection between the young person and voice(s). Additionally, if a young person recognizes many helpful functions of a voice, they may experience anxiety in seeking help if they perceive the motivation of services and pharmacology as eradicating the voice(s).

For some participants, their voices fulfilled a relational need, so if voices change significantly or disappear, this could be experienced as a bereavement, leading to reduced overall wellbeing. Consequently, assessing the form and function of voices, particularly in relation to intervention design, is essential for the young person's agency, trust and confidence in the proposed treatment plan.

Within the current study, participants explained that formulating the origin and context of voices mediated voice-related distress, so nurturing formulation abilities with

young people seems crucial for effective intervention. This may be particularly important and difficult for young people with only distressing voices as these young people seemed to find it harder to identify functions of negative voices. Specifically, formulating the agent behind the voice appeared to reduce the power held by the voice(s), meaning this aspect of assessment and formulation could be a helpful brief intervention in itself.

Taking into account structural inequalities, abuses of power in relationships, transitional stressors and social isolation could provide young people and care providers with a developmental framework within which to explore and understand the young person's reactions to past experiences and resulting voices. Such hypotheses have been proposed to be beneficial for adult voice-hearers engaging in Relating Therapy for Voices and Avatar Therapy (Deamer & Wilkinson, 2015) and would appear to be of great value for young people too. Additionally, young people who attributed their voices to social need and past experiences, rather than pathology, described less overall distress. Therefore, supporting personal meaning-making through a person-centred developmental assessment and formulation might also nurture positive prognoses and acceptance.

Finally, two other areas critical to formulation and intervention design relate to the young person's strengths and needs. For instance, if a young person values the companionship and comfort they experience with their voice(s), consideration will need to be given to who else could provide relational support. Young people may have learnt complex cognitive skills in order to manage multiple voices occurring concurrently when engaging with other people. Consequently, sensitive attention around sensory processing, social interactions and cognitive wellbeing is likely to be necessary to incorporate into an intervention designed to reduce voice hearing.

Strengths, Limitations and Recommendations for Future Research

A methodological strength of this study was the online platform available for young people to share their experiences, which appeared preferable to face-to-face discussion through the recruitment process. This study indicates that digital platforms could be a helpful medium through which to conduct further research and deliver psychoeducation and a community space to reduce isolation, enhance engagement with services and promote inclusivity. Although only 36% of participants reported accessing services in this study, this may be a relatively high percentage within voice hearing populations due to the role of Voice Collective and the NHS in participant recruitment. However, our approach to recruitment and participation also meant it was not possible to know how many young people the survey reached to contextualize the repetition of the sample. This would be an aspect for development in future work. Further, there was not an opportunity to ask follow-up questions about some of the interesting features that arose through the narratives, as there may have been during an interview. Therefore, live discussions through interviews, focus groups or online audio forums would be a beneficial next step.

Future research could also extend some areas for further assessment, which the MAVIC implied are important to young people. For example, the role of creativity, control and empowerment, and reciprocal relationships with voices warrant further study. It would also be advantageous to explore the mechanisms that reduce distress and nurture acceptance of voices, which this study demonstrated are nuanced and complex, although important to support the overall wellbeing and resilience of young people.

Further, despite the instructions within the survey around inclusion criteria, around 40 people who completed the survey were outside of the 13-18 year age group. Their data could not be included in the analysis due to the parameters of the ethical approval, although have contributed to dissemination and knowledge exchange initiatives. As the younger children who took part stated they did so with the support of their parents, another recommendation

for future research would be to include younger children with parental support. Further research is needed with younger children, specifically around systemic influences within ate amilies in to a second and the sent plant and had be sent plan families upon voice hearing, similarities and differences between voices and ICs, and to

References

- Bamberg, M. (2012). *Narrative analysis*. In H. Cooper, P. M. Camic, D. L. Long, A. T. Panter, D. Rindskopf, & K. J. Sher (Eds.), *APA handbook of research methods in psychology, Research designs: Quantitative, qualitative, neuropsychological, and biological*, 2, 85-102. doi: 10.1037/13620-000
- Bhandari, S., Winter, D., Messer, D., & Metcalfe, C. (2011). Family characteristics and long-term effects of childhood sexual abuse. *British Journal of Clinical Psychology*, *50*(4), 435-451. https://doi.org/10.1111/j.2044-8260.2010.02006.
- Burbach, F., Roberts, G., Clinch, C. & Wise, N. (2014). Exploring the links between childhood imaginary companions and auditory hallucinations. *Psychosis: Psychological, Social and Integrative Approaches*, 6(1), 38-49, doi: 10.1080/17522439.2012.753934
- Corstens, D. & Longden, E. (2013). The origins of voices: Links between life history and voice hearing in a survey of 100 cases. *Psychosis: Psychological, Social and Integrative Approaches*, *5*(3), 270-285. doi: 10.1080/17522439.2013.816337
- Corstens, D., Longden, E., McCarthy-Jones, S., Waddingham, R., & Thomas, N. (2014). Emerging perspectives from the hearing voices movement: Implications for research and practice. *Schizophrenia Bulletin*, 40(Suppl 4), S285-S294. doi:10.1093/schbul/sbu007
- Deamer, F., & Wilkinson, S. (2015). The speaker behind the voice: Therapeutic practice from the perspective of pragmatic theory. *Frontiers in Psychology*, *6*, 817. doi: 10.3389/fpsyg.2015.00817
- Dellazizzo, L., Percie du Sert, O., Phraxayavong, K., Potvin, S., O'Connor, K., & Dumais, A. (2018). Exploration of the dialogue components in avatar therapy for schizophrenia

patients with refractory auditory hallucinations: A content analysis. *Clinical Psychology* & *Psychotherapy*, 25(6), 878-885. doi:10.1002/cpp.2322

RUNNING HEAD: Forms and Functions of Voice Hearing in Adolescence

- Fernyhough, C., Watson, A., Bernini, M., Moseley, P., & Alderson-Day, B. (2019).

 Imaginary companions, inner speech, and auditory verbal hallucinations: What are the relations? *Frontiers in Psychology, 10.* doi:10.3389/fpsyg.2019.01665
- Finkelhor, D., Hamby, S., Turner, H., & Walsh, W. (2016). Ethical issues in surveys about children's exposure to violence and sexual abuse. In C. A. Cuevas & C. M. Rennison (Eds.), *The Wiley handbook on the psychology of violence* (pp. 24-48). Chichester, UK: John Wiley. doi:10.1002/9781118303092.ch2
- Foucault M. Interview: The Concern for Truth. Foucault Live. New York: Semiotext 1989; p. 462
- Frost, N. (2009). 'Do you know what I mean?': the use of a pluralistic narrative analysis approach in the interpretation of an interview. *Qualitative Research*, *9*(1), 9–29. https://doi.org/10.1177/1468794108094867
- Garralda, M. E. (2016). Research into hallucinations and psychotic-like symptoms in children: Implications for child psychiatric practice. *The British Journal of Psychiatry: The Journal of Mental Science*, 208(1), 4-6. doi:10.1192/bjp.bp.114.160002
- Given, L. M. (2008). *The SAGE encyclopedia of qualitative research methods* (Vols. 1-0). Thousand Oaks, CA: SAGE Publications, Inc. doi: 10.4135/9781412963909
- Gleason, T. R., Sebanc, A. M., & Hartup, W. W. (2000). Imaginary companions of preschool children. *Developmental Psychology*, *36*(4), 419-428. doi:10.1037/0012-1649.36.4.419
- Goldstein, S. E., Boxer, P., & Rudolph, E. (2015). Middle school transition stress: Links with academic performance, motivation, and school experiences. *Contemporary School Psychology*, 19(1), 21-29. doi:10.1007/s40688-014-0044-4

- Haarmans, M., Vass, V. & Bentall, R.P. (2016) Voices' use of gender, race and other social categories to undermine female voice-hearers: Implications for incorporating intersectionality within CBT for psychosis. *Psychosis*, 8(3), 203-213. doi: 10.1080/17522439.2015.1131323
- Hayward, M. (2003). Interpersonal relating and voice hearing: To what extent does relating to the voice reflect social relating? *Psychology and Psychotherapy*, 76(Pt 4), 369-383. doi:10.1348/147608303770584737
- Hayward, M., Berry, K., & Ashton, A. (2011). Applying interpersonal theories to the understanding of and therapy for auditory hallucinations: A review of the literature and directions for further research. *Clinical Psychology Review*, 31(8), 1313-1323. doi:10.1016/j.cpr.2011.09.001
- Hayward, M., Bogen-Johnston, L. & Deamer, F. (2018). Relating Therapy for distressing voices: Who, or what, is changing? *Psychosis*, 10(2), 132-141. doi: 10.1080/17522439.2018.1469037
- Holt, L. (2004). The "voices" of children: De-centring empowering research relations. *Children's Geographies*, 2, 13-27.
- Huang, X., O'Connor, M., Ke, L., & Lee, S. (2016). Ethical and methodological issues in qualitative health research involving children: A systematic review. *Nursing Ethics*, 23, 339-356.
- Iudici, A., Quarato, M., & Neri, J. (2019). The phenomenon of "Hearing voices": Not just psychotic Hallucinations—A psychological literature review and a reflection on clinical and social health. *Community Mental Health Journal*, 55(5), 811-818.
 doi:10.1007/s10597-018-0359-0

- Jardri, R., Larøi, F., & Waters, F. (2019). International Consortium on HallucinationResearch. Hallucination research: Into the future, and beyond. *Schizophrenia Bull, 45*, 1-4.
- Jenner, J. A., Rutten, S., Beuckens, J., Boonstra, N., & Sytema, S. (2008). Positive and useful auditory vocal hallucinations: Prevalence, characteristics, attributions, and implications for treatment. *Acta Psychiatrica Scandinavica*, 118(3), 238-245. doi:10.1111/j.1600-0447.2008.01226.x
- Klausen, E., & Passman, R. H. (2006). Pretend companions (imaginary playmates): The emergence of a field. *The Journal of Genetic Psychology*, *167*(4), 349.
- LeVasseur, J. J. (2003) The problem of bracketing in phenomenology. *Qualitative Health Research*, 13(3), 408-420.
- Luhrmann, T. M., Alderson-Day, B., Bell, V., Bless, J. J., Corlett, P., Hugdahl, K., et al., Waters, F. (2019). Beyond trauma: A multiple pathways approach to auditory hallucinations in clinical and nonclinical populations. *Schizophrenia Bulletin*, 45(Supplement_1), S24-S31. doi:10.1093/schbul/sby110
- Maijer, K., Hayward, M., Fernyhough, C., Calkins, M. E., Debbané, M., Jardri, R. et al.,
 Bartels-Velthuis, A. A. (2019). Hallucinations in children and adolescents: An updated review and practical recommendations for clinicians. *Schizophrenia Bulletin*,
 45(Supplement 1), S5-S23. doi:10.1093/schbul/sby119
- Majors, K. & Baines, E. (2017). Children's play with their imaginary companions: Parent experiences and perceptions of the characteristics of the imaginary companions and purposes served. *Education Child Psychology*, *34*(3), 37-56.

- RUNNING HEAD: Forms and Functions of Voice Hearing in Adolescence
- Moernaut, N., Vanheule, S., & Feyaerts, J. (2018). Content matters, a qualitative analysis of verbal hallucinations. *Frontiers in Psychology*, 9, 1958-1958. doi:10.3389/fpsyg.2018.01958
- Moran, O., Almada, P., & McHugh, L. (2018). An investigation into the relationship between the three selves (self-as-content, self-as-process and self-as-context) and mental health in adolescents. *Journal of Contextual Behavioral Science*, 7, 55-62. doi:10.1016/j.jcbs.2018.01.002
- Norlyk, A. & Harder, I. (2010). What makes a phenomenological study phenomenological?

 An analysis of peer-reviewed empirical nursing studies. *Qualitative Health Research*.

 20(3), 420-431.
- Parry, S., Djabaeva, R., & Varese, F. (2018). Engaging young people who hear voices in online mixed-methods research. *SAGE Research Methods Cases*. doi: 10.4135/9781526457783
- Patterson, C. (2018). Constructing narrative and phenomenological meaning within one study. *Qualitative Research Journal*, 18(3), 223-237. doi:10.1108/QRJ-D-17-00033
- Pérez-Álvarez, M., García-Montes, J. M., Vallina-Fernández, O., & Perona-Garcelán, S. (2016). Rethinking schizophrenia in the context of the person and their circumstances: Seven reasons. *Frontiers in Psychology*, 7, 1650-1650. doi:10.3389/fpsyg.2016.01650
- Tamboukou, M. (2013). Love, narratives, politics: Encounters between Hannah Arendt and Rosa Luxemburg. *Theory, Culture & Society, 30*(1), 35-56. doi:10.1177/0263276412456563
- Thibodeau, R. B., Gilpin, A. T., Brown, M. M., & Meyer, B. A. (2016). The effects of fantastical pretend-play on the development of executive functions: An intervention

RUNNING HEAD: Forms and Functions of Voice Hearing in Adolescence study. *Journal of Experimental Child Psychology*, 145, 120-138.

doi:10.1016/j.jecp.2016.01.001

Varese, F., Smeets, F., kker, M., Lieverse, R., Lataster, T., Viechtbauer, W., . . . Bentall, R. P. (2012). Childhood adversities increase the risk of psychosis: A meta-analysis of patient-control, prospective- and cross-sectional cohort studies. *Schizophrenia Bulletin*, 38(4), 661-671. doi:10.1093/schbul/sbs050

Woods, A., Jones, N., Alderson-Day, B., Callard, F., & Fernyhough, C. (2015). Experiences Repository Copy. Child and Idolescent Mental of hearing voices: Analysis of a novel phenomenological survey. The Lancet. Psychiatry,

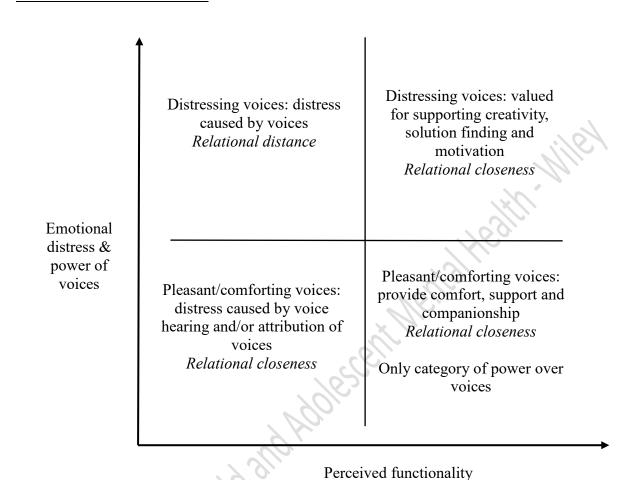


Figure 1: Continuum matrix for voice experience, interpretation and related affect

Items Grouped by Characteristics	Mean	Standard deviation
Negative Affect		
The voices say upsetting, hurtful and bad things to me	5.95	3.59
The voices make me feel upset	6.40	3.21
The voices make me feel frightened	5.46	3.10
Positive Affect		
The voices make me feel happy	2.59	2.99
The voices make me feel special	2.71	3.10
The voices keep me company	3.92	3.90
Voice Form		
The voices speak very clearly	5.80	2.62
The voices are difficult to ignore	7.22	3.01
The voices are difficult to understand	3.96	2.70
Control		
The voices get in the way of things I want to do	5.36	2.76
The voices help me feel more in control	2.10	2.81
The voices tell me to do things	4.71	3.49
I always do as the voices say	3.18	2.66
Supportive Functions		
The voices protect me	3.33	3.64
The voices give me helpful advice	3.10	3.43
The voices help me look after myself	2.71	3.36
The voices help me look after other people I care about	2.84	3.29
The voices encourage me	3.04	3.35

*68 participants, 52 complete data sets

Table One: Characteristics of Voices Recorded in the MAVIC

Form	Trustworthy, reliable, safe, characterised with personal qualitie	
	described with pronouns (often gender neutral or female), with	
2/2	agency, kind, "talk like normal people"	
"it was a relief to kno	ow that people have helping voices too" John, 14	
"Because I don't have	e any friends and they keep me safe" Lily, 17	
"the female one she a	almost protective she makes me safe" Rincad, 14	
Function	Advice, support, safety, companionship, listening, social	
	connection, creative inspiration, decision-making, reassurance,	
	motivation, helpful	
"they would all give	me advice or comfort me when I felt bad" Fish, 18	

"Creatively, my voices help a lot. Socially, I am held back tremendously" Veruca, 17

"I consider them to be friends" Justin, 18

"They help ground me and sometimes help me to function" Finch, 15

"They help me with school and remind me to take care of myself. They help me through bad situations. We do fun things together in our free time, like singing, drawing, and playing games." A, 14

Table Two: Forms and Functions of Pleasant and Agreeable Voices

Form	Commanding, ghost-like, haunting, fast speaking, controlling,		
	antagonistic		
"They make me uncomfortable, unconfident in my self and are very manipulative and			
controlling" SAT3, 15	49/62		
"They constantly tell me to harm myself" Ami, 15			
"They make me feel bad and tear me down" Joey, 13			
"They are all different and consistent to themselves. Some don't actually speak, they			
communicate by sharing memories and emotions with me. A few of them can make noise			
but not like humans, they make noises like animals or machines and pair it with emotions			
to help clarify what they mean." A, 14			
Function	Anxiety provoking, interfere with concentration, disturb sleep,		
Sec	represent past people and/or experiences, nurture self-doubt		
"Sometimes it actually gives me advice, but it is more mean than helpful" Zee, 13			
"It makes every day life harder but can make doing tasks or making decisions easier.			
However I find it hard to concentrate when they talk a lot as I get pulled into what they are			
saying and find it hard to hear people around me." Orange, 17			

Table Three: Forms and Functions of Threatening and Critical Voices

Acknowledgements

Immense thanks to all the young people who took part in the Young Voices Study and the individuals and organizations who have helped share information. Special thanks to the Voice we and gu.

...se and gu. Collective for their support of the study and participants involved. Additionally, we are