The role of traumatic life events in the onset and content of auditory hallucinations : a qualitative case study approach

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The Role of Traumatic Life Events in the Onset and Content of Auditory Hallucinations:

A Qualitative Case Study Approach.

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Thesis Submitted in Partial Fulfilment of the Requirement of the Degree of

Doctorate in Clinical Psychology (D.Clin.Psy)

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ABSTRACT

Studies indicate a high prevalence of traumatic life experiences in the life histories of people with severe mental illnesses such as psychosis. High rates of posttraumatic stress disorder (PTSD) have also been found within these groups. Conversely, psychotic symptoms such as auditory hallucinations have been identified in cases of chronic PTSD suggesting a significant overlap between psychotic spectrum disorders and trauma disorders. To date however, few studies exist investigating the specific link between the onset and content of auditory hallucinations and traumatic life events. A dominant cognitive model within the clinical literature suggests that voices are intrusive thoughts that are misattributed to an external source because they are ego-dystonic. The content of intrusive voices may originate from traumatic life experiences that result in the formation of dysfunctional core beliefs. Examination of the compatibility of this account with cognitive models of PTSD, suggests the conceptualisation of a second account of voices where voices occur as flashbacks resulting from unresolved trauma. The current study aimed to investigate the link between trauma and voices by developing a method to collect in-depth qualitative data from a clinical sample of voice hearers diagnosed with psychotic spectrum disorders. A combined narrative and IPA approach was employed to guide data collection and analysis of five subjective accounts of voice and trauma experiences. Case vignettes were constructed based on clinical history, trauma history and voice content of participants and the data investigated for evidence of the two models of voices across accounts. Findings support both conceptual models, identifying a clear link between the onset and thematic content of voices and trauma. They also highlight the importance of taking a dual approach to treatment of psychotic symptoms and PTSD. The study also emphasises the need to collect data within a

therapeutic relationship in order to address the ethical and professional issues inherent in this area of research.

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Acknowledgements

I would like to thank my parents for all their emotional (and financial!) support. Without their love I'd never have made it this far. Thank you to all my friends for giving me the space and support I've needed to make deadlines, and special thanks to Sinead for her thoughtfulness, the ticket to South Africa and for making baby Harry for me to look forward to. Thanks to Katie Long and Dawn for their friendship over the last three years and for talking about the course with me. More importantly thanks to Katie Short for not mentioning it – our girly chats were blissful respite. Thank you to my old friend Steve for his broad shoulders and champagne at deadlines and last but not least, I'd like to thank Elsa – for keeping me company from start to finish.

I would also like to thank the voice hearers in my study for sharing such private experiences with me – it was an honour to hear your stories. Finally, many thanks to my supervisor Mike Jackson whose intelligence and good nature I made full use of, often at short notice.

I'd like to dedicate this study to my mother, for helping me to become strong.

SECTION 1

ETHICS PROPOSAL

Awdurdod Iechyd Gogledd Cymru
North Wales Health Authority
Research Ethics Committee
(West, Central & East sub-committees)

Important guidance notes accompany this form. Applicants MUST refer to the corresponding note before answering each question. Incomplete forms cannot be accepted.

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1. **Title of project :** An exploratory study of the relationship between life experiences and hearing voices.

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2. **Principal investigator :**

name :	Julie Baul
address :	North Wales Clinical Psychology Course School of Psychology University of Wales, Bangor 43 College Road Bangor Gwynedd LL57 2DG
job title:	Trainee Clinical Psychologist
telephone number:	07779 012625

3. Other investigators :

Dr Mike Jackson
Clinical Psychologist
North West Wales NHS Trust

Psychology Dept or: Hergest Unit Ysbyty Gwynedd Penrhosgarnedd LL57 2PW	Bodfaen Craig Y Don Road Upper Bangor Bangor LL57 2BG
Tel 01248 384251	01248 364553

Please address correspondence to Julie Baul

4. **Who is initiating this project?**

North Wales Clinical Psychology Course, University of Wales, Bangor
Julie Baul doctoral thesis under the supervision of Dr Mike Jackson (Research and Clinical Supervisor)

5. Where will the research take place?

At the clinical placement bases of the researchers: Bodfaen and/or the Hergest Unit, Ysbyty Gwynedd (addresses as above)

Ethical approval is sought from:

1. University of Wales, Bangor School of Psychology Research Ethics Committee
2. North Wales Health Authority Research Ethics Committee (West)

6. Objectives of the project :

This study is exploratory in nature and therefore will not involve explicit hypothesis testing. Its main objective is to explore the relationship between traumatic life experiences and auditory hallucinations in order to investigate whether emotional trauma may be an important variable in the development and content of voices. Previous studies have identified auditory hallucinations in people suffering from chronic post-traumatic stress disorder (PTSD) and people have been found to develop PTSD symptoms following psychotic episodes. The issue of whether hallucinations develop in some cases as a result of unresolved emotional trauma (which is reflected in their content) has yet to be firmly established and has important implications in terms of diagnoses and treatment of symptoms.

Explicit aims of the study are as follows:

i. To collect detailed qualitative data in a series of in-depth case studies on the content of auditory hallucinations. Data will be collected within a cognitive framework, focusing upon what is heard, beliefs about voices; identity of voices, perceived purpose and power over hearers.

ii. To collect detailed qualitative data about the life histories of voice hearers, focusing upon potentially emotionally traumatic life events.

iii. To examine the data collected within the case studies for potential links between the content of auditory hallucinations and trauma experienced by participants before and since developing voices.

iv. To examine the data for evidence of symptom co-morbidity between disorders in patients who have diagnoses of schizophrenia or PTSD.

v. To relate findings back to existing research findings in the area of PTSD and psychotic symptoms.

vi. To develop an effective qualitative methodology to explore this area of clinical research.

7. Scientific background to the project :

NB: An extended version of this literature review can be found in appendix one.

People suffering from psychotic disorders experience significant disturbances in thought, emotions and behaviour, suffering from faulty perception and attentional processes, disordered thinking and odd motor disturbances (Davison & Neale, 1994). One symptom that is commonly experienced in schizophrenia and other psychotic disorders is the experience of auditory hallucinations (hearing voices) (Birchwood and Jackson, 2001). This can be extremely distressing for sufferers and in addition there are significant problems with accurate diagnosis and effective treatment, as hallucinations have been found to exist in other disorders as well as schizophrenia (Bentall, 1990). Further research into the experiences of people who suffer from auditory hallucinations is therefore extremely important in order to increase our understanding of the illness.

One explanation of auditory hallucinations is that voices are actually inner speech during 'intrusive' thoughts that occur spontaneously in a person's mind outside of their control (Morrison & Baker, 2000). Although these are a normal experience within the general population, if the content of the thoughts considered unacceptable or morally abhorrent by the person they can be distressing. As a result they may be misattributed to external sources and heard as voices (Morrison, 1990). Evidence from many clinical cases suggests that the voices often relate to real life traumatic events and to ongoing emotional conflict and concerns (Fowler, 2000). Fowler et al (in press) for example found that in people with chronic "treatment-resistant" psychotic symptoms, 50% of cases demonstrated a relationship between the content of hallucinations and "key figures associated with trauma in individual lives" (Fowler, 2000, p.114). Another theory therefore, is that voices are the expression of unresolved emotional trauma similar to the experience of flashbacks in posttraumatic stress disorder (PTSD) where people feel like they are reliving a traumatic event (Butler et al, 1996). These two models make predictions about voices that can be explored further by examining the content of hallucinations and the beliefs people hold about them (Chadwick & Birchwood, 1995).

The cognitive model of PTSD suggests that a significant aspect of the disorder is the inability to effectively process traumatic sequelae into the autobiographical memory store. Harvey & Bryant (1999) found evidence that people suffering from acute trauma symptoms exhibit disorganised memory structure related to dissociation from the event that may function as a means of avoiding trauma related stimuli, thus preventing recovery. This has important implications for treatment of hallucinations. If it is the case that hallucinations sometimes result from traumatic life events similar to PTSD symptoms, then it may also be the case that they can be resolved using psychological therapies designed for treating PTSD. Preliminary evidence of this can be found in the literature (Waldfogel & Mueser, 1988). Such research findings highlight the need for further research into the relationship between hallucinations and PTSD symptoms.

Although a clear link has been found by researchers between the experience of auditory hallucinations and traumatic life events, the relationship is currently very much a 'grey area'. It therefore requires further investigation in order to better understand the overlap between PTSD and psychotic phenomena, both from a diagnostic and a treatment perspective. In addition when reviewing the literature, although hallucinations have been identified in sufferers of chronic PTSD (Butler et al, 1996), detailed qualitative research into the experiences of voice hearers in direct relation to their life experiences does not appear to have been undertaken. It is important to look deeper into the content of hallucinations in relation to trauma and we therefore intend to collect in-depth data in this area through a series of detailed case studies. These will be based upon semi-structured clinical interviews that will be carried out over a number of clinical sessions with voice hearers referred for treatment of their auditory hallucinations.

References

Bentall, R.P. (1990). Reconstructing Schizophrenia. London: Routledge.

Birchwood, M.J., & Jackson, C. (2001). Schizophrenia. Hove, East Sussex: Psychology Press.

Butler, R.W., Mueser, K.T., Sprock, J., & Braff, D.L. (1996). Positive symptoms of psychosis in posttraumatic stress disorder. Biological Psychiatry, 39, 10, 839-44.

Davison, G.C., & Neale, J.M. (1994). Abnormal Psychology (6th Edition). New York: John Wiley & Sons Inc

Fowler, D.G. (2000). Psychological Formulation of Early Episodes of Psychosis: A Cognitive Model. In M. Birchwood, D. Fowler & C. Jackson (Eds), Early Intervention in Psychosis: A Guide to Concepts, Evidence and Interventions. Chichester: John Wiley & Sons LTD.

Fowler, D.G., Hadley, C., Garety, P.A., Kuipers, E. & Freeman, D. (in press). The relationship between trauma and psychosis.

Harvey, A.G., & Bryant, R.A. (1999). Brief report: A qualitative investigation of the organization of traumatic memories. British Journal of Clinical Psychology, 38, 401-405.

Morrison, A.P., & Baker, C.A. (2000). Intrusive thoughts and auditory hallucinations: a comparative study of intrusions in psychosis. Behaviour Research and Therapy, 38, 1097-1106.

Waldfogel, S., & Mueser, K.T. (1988). Another case of chronic PTSD with auditory hallucinations. American Journal of Psychiatry, 145, 1314.

Literature Searches

Databases:
PsychINFO
Medline

TI: Title : Post traumatic stress disorder with psychotic features.
AU: Author: Bleich A; Moskowits L
SO: Source: Croatian medical journal, 2000 Dec, 41(4):442-5

TI: Title: Positive symptoms of psychosis in posttraumatic stress disorder.
AU: Author: Butler RW; Mueser KT; Sprock J; Braff DL
SO: Source: Biological psychiatry, 1996 May 15, 39(10):839-44

TI: Title: Psychotic features and illness severity in combat veterans with chronic posttraumatic stress disorder.
AU: Author: Hamner MB; Frueh BC; Ulmer HG; Arana GW
SO: Source: Biological psychiatry, 1999 Apr 1, 45(7):846-52

TI: Title: Psychotic features in chronic posttraumatic stress disorder and schizophrenia: comparative severity.
AU: Author: Hamner MB; Frueh BC; Ulmer HG; Huber MG; Twomey TJ; Tyson C; Arana GW
SO: Source: The Journal of nervous and mental disease, 2000 Apr, 188(4):217-21

TI: Title: Psychosis-induced posttraumatic stress disorder.
AU: Author: Lundy MS
SO: Source: American journal of psychotherapy, 1992 Jul, 46(3):485-91

TI: Title: Posttraumatic stress disorder symptoms related to psychosis and acute involuntary hospitalization in schizophrenic and delusional patients.
AU: Author: Meyer H; Taiminen T; Vuori T; Aijala A; Helenius H
SO: Source: The Journal of nervous and mental disease, 1999 Jun, 187(6):343-52

TI: Title: Psychometric evaluation of trauma and posttraumatic stress disorder assessments in persons with severe mental illness.
AU: Author: Mueser KT; Salyers MP; Rosenberg SD; Ford JD; Fox L; Carty P
SO: Source: Psychological assessment, 2001 Mar, 13(1):110-7

TI: Title: Trauma exposure and posttraumatic stress disorder in psychosis: findings from a first-admission cohort.
AU: Author: Neria Y; Bromet EJ; Sievers S; Lavelle J; Fochtmann LJ
SO: Source: Journal of consulting and clinical psychology, 2002 Feb, 70(1):246-51

TI: Title:Defining psychosis in PTSD.
AU: Author: Pies R
SO: Source: The Journal of clinical psychiatry, 1999 Aug, 60(8):555-6

TI: Title: PTSD and comorbid psychotic disorder: comparison with veterans diagnosed with PTSD or psychotic disorder.
AU: Author: Sautter FJ; Brailey K; Uddo MM; Hamilton MF; Beard MG; Borges AH
SO: Source: Journal of traumatic stress, 1999 Jan, 12(1):73-88

TI: Title: The phenomenology of traumatic reactions to psychotic illness.
AU: Author: Shaw K; McFarlane A; Bookless C
SO: Source: The Journal of nervous and mental disease, 1997 Jul, 185(7):434-41

TI: Title: The aetiology of postpsychotic posttraumatic stress disorder following a psychotic episode.
AU: Author: Shaw K; McFarlane AC; Bookless C; Air T
SO: Source: Journal of traumatic stress, 2002 Feb, 15(1):39-47

TI: Title: Chronology of comorbid and principal syndromes in first-episode psychosis.
AU: Author: Strakowski SM; Keck PE Jr; McElroy SL; Lonczak HS; West SA
SO: Source: Comprehensive psychiatry, 1995 Mar-Apr, 36(2):106-12

TI: Title: Psychological disorders in survivors of torture: exhaustion, impairment and depression.
AU: Author: Wenzel T; Griengl H; Stompe T; Mirzaei S; Kieffer W
SO: Source: Psychopathology, 2000 Nov-Dec, 33(6):292-6

8. Study design (incorporating randomisation and placebo details):

Design

The study is by nature exploratory and will not be testing hypotheses. It will consist of a series of detailed case studies undertaken with participants who suffer distress due to hearing voices. Qualitative data will be collected over a number of sessions based on semi-structured clinical interviews with participants. A small sample size will be used as it is considered that in order to collect rich data in this area, a strong rapport will need to be built between researcher and participants and substantial time spent working through their experiences in detail. A cognitive framework will be used to assess the content of hallucinations focusing upon what is heard and beliefs about the voices. For example, what does the participant hear? are the voices recognized by the person? are they hostile/benign? are they perceived as holding power over the person's life? What is their understanding of why they occur?

A detailed life history will then be undertaken, also in the format of a semi-structured interview focusing upon any traumatic life events experienced by the person, in order to examine potential links between life experiences and the development of auditory hallucinations. For example, are participants' voices related to specific traumatic life events? Do they hear the voice of persons involved in traumatic experiences? As the methodology is exploratory it will be developed and refined throughout the study as it becomes clear which areas of focus become prominent. Each participant will be taken onto the primary researcher's clinical caseload (if they so wish) and the material collected in the study used as the foundation for psychological formulation and treatment of their difficulties. It is anticipated therefore that participation in the study may be beneficial to individuals as they will receive clinical treatment and will not just be involved for data collection purposes.

Measures

Measures will be employed that are used in routine clinical practice.

Content of hallucinations:

Chadwick & Birchwood's (1994) 'Cognitive assessment of voices interview schedule' (appendix two) will be employed as a framework for the semi-structured interviews on the content of voices. This has been developed and used effectively in previous studies (Shaw et al, 2002) to gather information on the content of voices, antecedents to their occurrence, affect, behaviour of the person, identity, meaning, power and compliance.

Data identified using this interview schedule will then be discussed further with participants in relation to their beliefs about their voices using the Beliefs About Voices Questionnaire - Revised (BAVQ-R) (Chadwick & Birchwood, 2000) (appendix three). This is a standardized well-validated 30-item questionnaire that focuses on beliefs about benevolence, malevolence, resistance and engagement and power. By using this as a framework to examine these issues we believe we may uncover interesting findings concerning beliefs and behaviour that may be impeding recovery if the person is dissociating from a traumatic experience similar to sufferers of PTSD.

Traumatic life events:

The Clinician-Administered PTSD Scale (CAPS) (Blake et al, 1997) (appendix four) will be employed as a framework for the semi-structured clinical interview about participants' trauma histories. The CAPS is a standardised well-validated interview schedule designed to assess the 17 symptoms of PTSD outlined in DSM-IV. As well as screening for traumatic events that typically led to the development of PTSD e.g. sexual assault, natural disasters, it can also be used to assess severity and frequency of symptoms in some detail. It can also be used to assess current and lifetime PTSD and will be used as a framework in order to ensure data is collected in the same way for all participants.

Inclusion/exclusion criteria

Participants will be included on the basis of experiencing auditory hallucinations either at the present time or over the previous two months. There will be no diagnostic criteria used in recruiting subjects other than that they hear voices and are distressed by them. It is considered by the researchers that as the study is exploratory, tightly controlled diagnostic inclusion criteria would limit the range of experiences and clinical phenomena available for exploration. Participants must be considered by the researchers and their consultant psychiatrist to be capable of giving informed consent.

Exclusion criteria will include, patients who are considered by their consultant psychiatrist to be incapable of giving informed consent and those people showing significant organic features such as delirium, dementia, head injury or intellectual disability.

Procedure

All of the procedures involved in this study are embedded in routine clinical assessment. The study will involve asking people if we can record clinical sessions for purposes other than supervision i.e. for research. Data collection will consist of recording information from clinical assessments prior to psychological intervention.

Following liaisons between the researchers and local CMHTs to identify potential participants for the study (from existing case loads and new referrals), care managers will be asked to approach people confidentially to ascertain their interest in the study. They will be given information sheets to read (appendix five) and if interested in participating, the opportunity to discuss the research with the researchers in order to answer any outstanding questions they may have. Individuals will be contacted by telephone by the primary researcher once informed by care managers of their interest.

It is important to note, that individuals who do not wish to participate in the study but who request treatment for their voices will be offered support irrespective of their participation.

Following the collection of written and verbal consent (appendix six) data collection will undertaken by the primary researcher in the format of a typical clinical assessment, but will include administration of the above measures as a framework for guiding areas of focus. Issues initiated by the use of these measures will be explored in more detail as is comfortable for participants. The number of data collection sessions will be dependent on individual case dynamics and content but will involve a minimum of four meetings between participant and researcher. Following data collection, treatment will continue on the basis of routine clinical work and will be terminated on clinical judgement as is usual in clinical practice. Total number of clinical sessions with each person will be judged on clinical need by the primary researcher under the supervision of Dr Jackson. Data collection sessions only will be audiotaped (with participant's consent), alongside clinical session notes taken by the primary researcher.

Data analysis

Case vignettes that outline the relationship between participants' life experiences and hallucinations will be written from the content of sessions. Data analysis will be qualitative, based on examination and coding of audiotaped excerpts from sessions. The exact method of coding material will be developed and refined during the study, as one of its objectives is to develop an effective methodology for research of this type. Following coding, resultant data will be anonymised and divided into two separate lists for each participant containing information on content of hallucinations and on trauma reports. The researchers will then attempt to cross reference the lists for evidence of links between the two issues. One possible example may be that a history of childhood abuse may appear in the trauma list and be linked with the content of hallucinations list because a voice is identified as that of the abuser. Two trainee clinical psychologists (colleagues of the primary researcher) have agreed to carry out the same cross-referencing procedure for inter-rater reliability purposes in order to validate findings. They will remain blind to the identity of participants and other case details when analyzing the data.

Names of additional raters: Katie Haddock : NWCPC Dawn Owen: NWCPC

9. Have you had statistical advice in preparing your protocol? If so, from whom?

Statistical advice was not necessary as the design is qualitative and descriptive and will not involve statistical analysis. We did however request advice on developing our ideas and on trauma measures from Dr Matt Kimble (lecturer/research fellow UWB) whose specialist research area is PTSD.

10. What are the possible benefits and hazards of this research?

Possible benefits of the research are that it will further knowledge on the potential link between emotional trauma and subsequent development of psychotic symptoms, thus having important therapeutic implications for the treatment of voices. It may also further understanding of co-morbidity between symptoms of schizophrenia and PTSD, which has important implications for diagnosis as well as treatment. In addition the study may contribute to the development of an effective methodology in researching this area that can be replicated in future studies.

The research is considered potentially beneficial to participants as each person involved in recruitment will be offered psychological treatment by the primary researcher under the supervision of Dr Jackson irrespective of participation in the actual study.

The research is not considered potentially hazardous, as participants will only be required to undertake procedures that are already part of routine clinical practice i.e. psychological assessment and intervention.

11. Participants :

11.1 type of participant

Participants will be people that have been referred to local community mental health teams as a result of difficulties relating to the experience of auditory hallucinations. They will either already be on the caseload of team members and considered in need of psychological assessment and treatment of their voices, or be newly referred to the team.

11.2 method of recruitment

Both researchers will liaise with members of local community mental health teams and attend referral meetings to recruit potential participants. Those identified will then be approached by their care manager initially and asked if they would like to participate before then being contacted by telephone by the researchers to discuss participation.

11.3 numbers of participants involved

The researchers will aim to recruit a minimum of six participants for the study

11.4 age groups involved

Participants will be adults aged over eighteen years

11.5 do you intend to recruit 'vulnerable' participants? (if yes, please explain)

Yes.

By nature of their mental health problems and referral for treatment the client group may be considered vulnerable, however participants will not be included who are judged incapable of giving informed consent. Individual's mental health status at the time of data collection will be reviewed with the person's consultant psychiatrist to ensure individuals are considered competent to make the decision to participate.

11.6 will consent be written or oral, or both?

Both written and oral consent will be sought from each participant

11.7 are participants competent to give informed consent?

Yes (see 11.5)

11.8 how much time will be allowed between explaining the research and requesting consent?

Participants will be offered a minimum of one week to consider their decision.

11.9 who will witness the consent?

Consent will be witnessed by the participant's care manager

11.10 will individuals already participating in other research be excluded?

No

11.11 will participants be inconvenienced in any way as a result of taking part in the study?

No

11.12 will participants receive payment or reward for taking part? If so, please give details.

No

12. Disclosure of payment or reward to investigators :

12.1 will any payment be made to the investigators or department / unit in respect of this trial?

No

12.2 if yes, will the payment be a block grant,or will it be based on the number of participants recruited ?

N/A

12.2 if a block grant, please state amount awarded and explain how monies received will be spent.

N/A

12.4 if payment is based on number of participants recruited, please state total sum payable per capita, and number of participants agreed.

N/A

12.5 **will participants be informed if the investigator / department is receiving payment, and if so, will they be told the name of the sponsor?**

N/A

12.6 **do any of the investigators have a personal involvement in the sponsoring company? If so, please give details.**

N/A

13. Consent of others clinically involved :

13.1 **will the participant's GP be informed of their involvement in the project?**

Yes

13.2 **will the consent of others clinically involved be obtained?**

No but psychiatrists will be asked for their clinical judgement about participants' ability to give consent.

14. Resource / service implications :

14.1 **will your research have resource / service implications for the NHS?**

No

14.2 **if yes, please indicate the applicable areas**

N/A

14.3 **have you discussed any additional workload and / or financial consequences of your project with the departments and budget holders concerned?**

N/A

15. Extra substances to be given to the participants :

15.1 **additional drugs**

N/A

15.2 **dosage form and presentation of these drugs**

N/A

15.3 **route of administration of these drugs**

N/A

15.4 **amount**

N/A

15.5 **frequency**

N/A

15.6 **desired effect**

N/A

15.7 **possible side effects**

N/A

15.8 **precautions**

N/A

15.9 **does the study medicine to be used have a marketing authorisation (product licence)?**

N/A

15.10 **if yes, will the medicine be used in accordance with, and for the indications specified in, the licence?**

N/A

15.11 **if the medicine does not have a product licence, or it will not be used in accordance with a product licence, does it have a clinical trial certificate (CTC) or an exemption under either the CTX or DDX schemes?**

N/A

15.12 **is the clinical trial randomisation code to be held by pharmacy?**

N/A

15.13 **what procedures will be followed if the codes are to be broken in an emergency?**

N/A

15.14 **please give full details of any other extra (non-drug) ubstances to be given to participants**

N/A

16. Extra interventions :

16.1 will the project involve any extra venous samples? If so,please give details.

No

16.2 will the project involve any extra arterial samples? If so, please give details.

No

16.3 will the research involve extra x-rays, radiation, ultrasonics, scanning, ecg or other tests? If so, please give details.

No

16.4 will the research involve extra biopsies? If so, please give details.

No

16.5 will the research involve extra local or general anaesthesia? If so, please give details.

No

16.6 will the research involve any other extra invasive procedures such as cannulae, probes, catheters, internal examinations,endoscopies or lumbar punctures? If so, please give details.

No

16.7 will the research involve extra psychological tests? If so, please give details.

No

16.8 will the research involve extra questionnaires? If so, please give details.

No

16.9 will the research involve any other extra procedures not mentioned above, such as those using heat or electricity etc.? If so, please give details.

No

16.10 will the research necessitate any treatments or procedures being withheld which would otherwise be administered? If so,please give details.

No

17. Ionising radiation :

17.1 will subjects be exposed to ionising radiation as part of this study?

No

17.2 if so, specify the procedures which will be performed, and state the total effective dose in msv which will be received.

N/A

18. What problems may hinder successful completion of this study?

Problems in recruiting participants for the study may hinder completion as this depends upon the nature of referrals made to the local community mental health teams. Also if people are unwilling to participate.

19. What steps will be taken to safeguard confidentiality of the research records?

Following data collection, records from the study will be kept confidential in the case of standard clinical session notes as is routine practice. Coded data used in analysis will be anonymised and along with audiotapes stored in accordance with data protection act in locked filing cabinet in the psychology department at Hergest Unit, Ysbyty Gwynedd. Participants names will be omitted in the write-up and attempts made to remove all possible identifiers as is a standard requirement of all assignments submitted for the clinical psychology doctorate. Audiotapes will be destroyed on completion of the study.

20. Please explain any arrangements made for indemnity cover for participants.

N/A

21. Does the project comply with the requirements of the data protection act?

Yes

22. Please state the anticipated start and end dates for your study.

Start date for recruitment following ethical approval will be Dec 2002, start date for data collection will be approximately Jan 2003. End date will be July 2003 (deadline for submission of thesis).

23. Investigator's declaration :

The information provided above is to the best of my knowledge and belief accurate. I fully understand my obligations and the rights of the participant, particularly with regard to freely given informed consent.

Signed: **Print name:** **Date:**

24. Head of Department's endorsement :

I hereby endorse this research proposal with my approval.

Signed: **Print name:** **Date:**

APPENDIX ONE: EXTENDED LITERATURE REVIEW

Extended Literature Review

Schizophrenia and related psychotic disorders

People suffering from psychotic disorders (of which the central disorder is schizophrenia), experience significant disturbances in thought, emotions and behaviour. They also exhibit faulty perception and attentional processes, disordered thinking and odd motor disturbances (Davison & Neale, 1994). Symptoms are classified as 'positive' and 'negative' in an attempt to aid understanding of the disorder. Positive symptoms are "considered an addition to a person's repertoire" e.g. hallucinations (auditory: hearing voices, visual and tactile), delusions (bizarre, irrefutable beliefs that are not held by the person's peer group) and disorganised speech (also known as formal thought disorder) (Birchwood and Jackson, 2001, p.17). Negative symptoms in contrast are conceptualised as losses and involve reduced emotion, volition, reduction in interest in activities and anhedonia (the inability to experience pleasure). These difficulties may lead to social withdrawal, poverty of speech and self-neglect.

A wide array of symptoms are displayed in schizophrenia, which diagnostic systems such as DSM-IV (APA, 1994) have grouped into clusters to form sub-types of the disorder in an attempt to facilitate accurate diagnoses and effective treatment. However, it has been argued that the concept of schizophrenia is non-scientific and unreliable (Bentall, Jackson & Pilgrim, 1988) as correlations between symptoms and diagnoses are poor and symptoms found in schizophrenia exist in other disorders e.g. hallucinations in major depression (Bentall, 1990). Further research into the experiences of people who suffer from psychotic symptoms is therefore extremely important in order to increase understanding of the illness. To accommodate the conceptual disparities caused by the concept of schizophrenia, in recent years psychological research and clinical interventions have often been directed toward exploring and treating individual symptoms, e.g. developing coping strategies for those who experience auditory hallucinations (Chadwick, Birchwood & Trower, 1996).

Traditionally, schizophrenia has been perceived by psychiatry as a biological disorder whose resultant symptoms are considered part of a disease process (Jaspers, 1963). Psychotic symptoms have been explained as epiphenomena that are devoid of personal meaning to the person's life (Berrios, 1991). Evidence from many clinical cases however, suggests that the voices people hear and delusional beliefs they hold during psychotic episodes often relate to real life traumatic events they've experienced and to ongoing emotional conflict and concerns (Fowler, 2000). From a psychological perspective therefore, exploring the content of hallucinations and delusions is considered crucial in understanding how symptoms develop and are maintained, in order to help people recover from or learn to cope with their difficulties (Chadwick, Birchwood & Trower, 1996).

Cognitive approaches to auditory hallucinations

The onset of a first psychotic episode is extremely distressing and may be the beginning of long-term mental health problems. The wide range of symptoms with which people present during first episodes now tend to be explained within a biopsychosocial framework in the vulnerability-stress models (e.g. Zubin & Spring, 1977). These suggest that a biopsychosocial vulnerability interacts with environmental stimuli e.g. life events, that trigger the psychosis and disrupt cognitive process such as attention and perception (Fowler, Garety & Kuipers, 1995). "Understanding the factors associated with the onset and maintenance of the symptoms of acute psychosis is of critical importance" (Fowler, 2000, p101) as psychological formulation of these factors provides a foundation for intervention (Drury, 2000).

Crucial questions in the assessment of psychotic symptoms are identified by Fowler (2000) as:

- "How do these different factors converge to form the symptoms of psychosis?
- What drives and maintains the strange experiences, paranoid or deluded thinking, and voices?
- How are such problems maintained?" (p.104).

Although neuroleptics have been found to be somewhat effective in reducing positive psychotic symptoms (Freeman, 1978), in many cases symptoms are resistant to medication. In recent years psychological interventions (notably cognitive and cognitive-behavioural approaches) have demonstrated treatment efficacy, particularly in the treatment of delusions (Tarrier et al, 1993).

However, attempts to address auditory hallucinations have not been as successful, and further research is needed to understand the psychological processes involved in hearing voices in order to develop treatment approaches (Close & Garety, 1998).

One explanation of auditory hallucinations is that voices are actually inner speech during intrusive thoughts. Intrusive thoughts are thoughts and images that occur spontaneously in a person's mind usually outside of their control and although a normal experience within the general population, if the content of the thoughts are unacceptable or morally abhorrent to the person they can be distressing (Morrison, 1990). It is thought that ego dystonic thoughts (those that are at odds with the person's self view and social values) may be attributed to outside sources, and heard as external voices (Morrison, Haddock and Tarrier, 1995). Studies have shown that people who suffer from auditory hallucinations tend to experience more intrusive thoughts and find them more distressing than non-hallucinating controls (Morrison and Baker, 2000). People with negative meta-cognitive beliefs (beliefs about their thoughts) are also more likely to experience hallucinations (Baker and Morrison, 1998).

Another explanation of voices is that they are expressions of unresolved emotion due to trauma (Fowler, 2000). Careful examination both of an individual's life history and their emotional concerns and issues has shown clear links between hallucinatory material and life events. Fowler et al (in press) for example, found that in people with chronic "treatment-resistant" psychotic symptoms, 50% of cases demonstrated a relationship between the content of hallucinations and delusions and "key figures associated with trauma in individual lives" (Fowler, 2000, p.114). It was noted however that in some cases the voice hearer did not make the link between life traumas and voice content themselves and instead perceived them as related to ongoing threat rather than as a reflection of past trauma. It may be the case therefore that people dissociate from traumatic experiences, and unresolved emotional trauma is expressed as auditory hallucinations similar to flashbacks in PTSD where the person feels as if they are reliving the experience. These two models make different predictions about auditory hallucinations that can be explored by looking at the content of voices and the beliefs hearers hold about them.

Beliefs about voices

"There is considerable evidence that suggests that the interpretation of intrusions is central to the understanding of auditory hallucinations" (Morrison & Baker, 2000, p.1098-9). Therefore how a person interprets their intrusive thoughts will affect their reoccurrence and distress potential. The psychological effects of hallucinations on a person's mood and emotional well-being depends on cognitive appraisal. Studies have shown that people are more likely to try and resist voices that they perceive as malevolent causing increased distress, but more likely to engage with them if they believe that they are benevolent and harmless (Chadwick & Birchwood, 1995). It has also been found that attempts to banish intrusive thoughts from the mind makes them more likely to reoccur (Morrison and Baker, 2000).

Some research studies in recent years have focussed on patients' beliefs about their voices. Areas of focus have been on beliefs about the omnipotent quality of the voices, the identity of the voices, beliefs about whether they are benevolent or malevolent and people's reactions to them, i.e. whether they engage or try to resist them (Chadwick & Birchwood, 1994). Close and Garety (1998) for instance, looked at a group of people who had been hearing voices for a minimum of six months, had a diagnosis of schizophrenia and were on neuropletic medication. Using Chadwick and Birchwood's (1994) cognitive assessment of voices interview schedule they found that seventy percent of the sample were able to recognise the voices they heard while hallucinating. This again draws attention to the personal meaning involved in voices and supports the idea that they are generated by a person's own mind perhaps as a result of trauma.

The relationship between posttraumatic stress disorder (PTSD) and auditory hallucinations

DSM-IV defines Posttraumatic stress disorder as "Exposure to a traumatic event involving 1. experiencing or witnessing threatened or actual death or serious injury. 2. a response involving intense fear, helplessness, or horror." (APA, 1994). The main features include 1. re-experiencing the event through intrusive memories, dreams and flashbacks, 2. avoidance of stimuli associated with the trauma including thoughts, places and people and feelings of detachment and emotional numbing and 3. persistent symptoms of increased arousal such as irritability or sleep problems. Experiences that typically may result in PTSD symptoms include natural disasters, military combat, sexual assault, physical injury accidents and incarceration e.g. of hostages (Roth and Fonagy, 1996). Although in recent years understanding of PTSD has advanced, further research is required to properly understand the overlap between PTSD and other disorders (Butler, Mueser, Sprock and Braff, 1996).

The cognitive model of PTSD suggests that a significant aspect of the disorder is the inability to effectively process traumatic sequelae into the autobiographical memory store. "Cohesive organisation of traumatic memories may be necessary for the processing and resolution of post-trauma symptoms" (Harvey & Bryant, 1999, p.401). Harvey & Bryant found evidence that people suffering from acute trauma symptoms exhibit disorganised memory structure related to dissociation from the event that may function as a means of avoiding trauma related stimuli, thus preventing recovery. This has important implications for treatment of hallucinations. If it is the case that hallucinations sometimes result from traumatic life events in a way similar to PTSD, then it may also be the case that they can be resolved using psychological therapies designed for treating PTSD.

Hallucinations are not currently recognised by DSM-IV as part of the syndrome of PTSD, and a diagnosis of schizophrenia may be made without excluding the possibility of PTSD, however research evidence points to a significant overlap of symptomatology between the two disorders. Butler et al (1996) for example, compared a group of Vietnam veterans with and without a diagnosis of PTSD. It was found that those who met the diagnostic criteria for PTSD experienced significantly more positive psychotic symptoms in the form of hallucinations and delusions, yet they did not meet the diagnostic criteria for schizophrenia. It has therefore been suggested that some cases of diagnosed schizophrenia may actually be chronic PTSD (Waldfogel & Mueser, 1988).

The research literature in this area also shows evidence of the successful treatment of trauma related hallucinations using PTSD therapies. For example, in a case study described by Waldfogel & Mueser (1988) a male victim of sexual assault was given a diagnosis of schizophrenia following severe psychotic symptoms and placed on neuroleptic medication. Following no improvement in his condition he was then asked to focus on the traumatic events that preceded his first psychotic episode through the use of imaginal exposure therapy. (This technique focuses upon reliving images of traumatic events in the mind until the associated anxiety recedes). It was found that after initial short-term deterioration in his condition, that the hallucinations were completely eradicated and he was able to function normally once more. Such research findings highlight the need for further research into the relationship between hallucinations and PTSD symptoms.

In recent years researchers have conceptualised the experience of psychotic episodes as traumatic life events that may result in reactions that lead to symptoms of PTSD e.g. fear and helplessness during the experience (Shaw et al, 2002). Intensely real somatic symptoms and paranoid delusions can result in PTSD symptoms in the same way as actual events and therefore "make it extremely likely that psychotic patients will develop secondary psychological morbidity, which in itself may be extremely distressing" (Shaw et al, 2002, p. 39). The experience of being hospitalised during a psychotic episode may add to the trauma. For example in the case of patients who are placed in seclusion rooms or forcibly administered neuroleptic medication (Fisher, 1994). Intrusive memories and nightmares have remained with some patients over long-term periods (McColl & Hugh, 1989). A study by McGorry et al (1989) was conducted with patients who had a 2-3 year history of psychotic illness. They were studied over time and it was found that PTSD symptoms were diagnosed following an episode and remained at 11 months after the episode in 35% of the sample. This indicates that not only is this area interesting to research in terms of co-morbidity between schizophrenia and PTSD, but in addition the experience of psychotic episodes themselves may result in PTSD and help maintain symptoms.

The current study

It is clear from reviewing the literature that a link has been found by researchers between the experience of auditory hallucinations and traumatic life events, however the relationship is currently very much a 'grey area'. It therefore requires further investigation in order to better understand the overlap between PTSD and psychotic phenomena, both from a diagnostic and a treatment perspective. In addition when reviewing the literature, although hallucinations have been identified in sufferers of chronic PTSD, detailed qualitative research into the experiences of voice hearers in direct relation to their life experiences does not appear to have been undertaken. It is important then to look deeper into the content of hallucinations in relation to trauma and we therefore intend to collect in-depth data through a series of detailed case studies. These will be based upon semi-structured clinical interviews carried out over a number of clinical sessions with voice hearers.

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APPENDIX TWO: COGNITIVE ASSESSMENT OF VOICES INTERVIEW SCHEDULE

Cognitive assessment of voices : Interview schedule

(Chadwick & Birchwood, 1993)

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APPENDIX THREE: BAVQ-R

APPENDIX FOUR: CAPS

Clinician-Administered PTSD Scale for DSM-IV

(CAPS)

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APPENDIX FIVE: PARTICIPANT INFORMATION SHEET: ENGLISH VERSION

PARTICIPANT INFORMATION SHEET

An exploratory study of the relationship between life experiences and hearing voices.

By Julie Baul (Trainee Clinical Psychologist) under supervision of
Dr Mike Jackson (Clinical Psychologist)

You are being invited to take part in a research study. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with friends, relatives, your case manager, psychiatrist or GP if you wish. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

Thank you for reading this.

What is the purpose of the study?

The purpose of the study is to find out more about auditory hallucinations or 'hearing voices' as they are more commonly known. In order to help people who hear voices and find them frightening or distressing, we need to find out more about what causes them. This can be done by talking to people and exploring with them the content of what they hear and what they think about the voices.

It has been shown in other research studies that voices might sometimes be related to stressful life experiences and occur as a result of emotional trauma that is still worrying people. This is also something we would like to talk to participants about in the study.

The study should last for a minimum of four meetings, these will take place between myself and the people who agree to take part. It may take longer if people are happy to continue meeting with me to talk.

Why have I been chosen?

You are being asked to take part in the study because you (like many other people) have heard voices that upset you and have been referred to the community mental health team for help. We thought you might be someone who could tell us important information about your experiences in order to help us understand more about it. This is important so that better ways of helping people who hear voices can be developed. We are trying to find at least six people who are willing to help us with this work.

Do I have to take part?

It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and will be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time and without giving a reason. This will not affect the standard of care you receive and you will still be entitled to help with your voices.

What will happen to me if I take part/ what will I have to do?
If you decide to take part in the study you will be invited to meet with me at one of the local hospital buildings once a week for a minimum of four weeks. The time we spend together will be exactly the same as if we were meeting just for help with your voices, with you as the patient and myself as your therapist.

When we have got to know each other enough for you to feel comfortable talking to me, you will be asked some questions about your situation, the voices and your past life experiences. This is all routine practice in these sorts of clinical sessions. You may also be asked to fill in a simple questionnaire about the voices. You will not be made to discuss anything that you do not wish to talk about.

Each visit/session should take about an hour. The only difference between agreeing to participate in the research and normal treatment, is that I will tape record our sessions and listen to them again, along with other participants' tapes. This is so that I can look for patterns in people's experiences. This research work will be submitted as an important part of my clinical psychology training.

It is important to note, that our sessions will be tape-recorded and their content used for data analysis in the research study. However, everything we talk about will be confidential and noone else will listen to them apart from the psychologist who is supervising my research and clinical work. I may take notes in sessions, which is standard practice in treatment sessions, but these will also be kept confidential and locked away in a filing cabinet. At the end of the study (July 2003) the tapes will be destroyed and if you choose to drop out of the study during data collection, your tapes will be destroyed at that point if you so wish. When I write up the research your name will be removed so that you cannot be identified.

Everyone who takes part in the study will be given written information about the results of the study and offered the opportunity to discuss them with myself if they wish.

What are the alternatives for treatment?
If you do not want to take part in the study, you will still be offered the opportunity to meet with me for help with your voices. If however you decide you want to see someone else, you will be allocated to the caseload of another member of the community mental health team, although this may involve a short wait in some cases.

What are the possible disadvantages and risks of taking part?
There are no physical risks involved in taking part in the study and no medical procedures or medication will be involved; only talking about your experiences. What we discuss within the sessions will be entirely at your discretion and you are free to choose not to talk about certain issues if you wish. You can also talk to the psychologist who is supervising my work about any issues that are raised if you want to.

What are the possible benefits of taking part?
We hope that engaging in psychological treatment for your problems will help you to feel better, both through talking about your experiences and perhaps by taking steps to change things in your life e.g. by practising different ways of coping. However, this cannot be guaranteed. The information we get from this study may help us to treat future patients who hear voices more effectively.

What happens when the research study stops?
Your treatment will continue irrespective of the study for as long as you should need it. Or until you decide you do not wish to come anymore if this should occur first. Treatment needs are nothing to do with taking part in the study.

What if something goes wrong?
If you are unhappy about any aspect of taking part in the study either during or after participation you can write letters of complaint to the addresses below:

Professor Fergus Lowe, Head of School of Psychology, University of Wales, Bangor, LL57 2DG

Mr Keith Thomson, Chief Executive, North West Wales NHS Trust, Ysbyty Gwynedd, LL57 2PW.

Will my taking part in this study be kept confidential?
All information that is collected about you during the course of the research will be kept strictly confidential. Any information about you that leaves the hospital will have your name and address removed so that you cannot be recognised from it. It is important to note, that your GP will be informed if you decide to participate in the study and also your psychiatrist. For people who agree to take part this will be standard procedure.

Who has reviewed the study?
This study has been reviewed by the following ethics committees:

University of Wales, Bangor School of Psychology Research Ethics Committee

North Wales Health Authority Research Ethics Committee (West)

Contact for Further Information
You will be contacted by myself (usually by telephone) if you tell your care manager that you are interested in taking part in the study, so that I can answer any questions you may have. If you wish to discuss the study with me before this time I can be contacted at the address below:

Psychology Dept, Hergest unit, Ysbyty Gwynedd, Bangor, tel 01248 382451

Thank you for reading this sheet and for considering helping with this research study.

APPENDIX SIX: PARTICIPANT INFORMATION SHEET: WELSH VERSION

TAFLEN GWYBODAETH I'R UN SY'N CYMRYD RHAN

Astudiaeth ymchwiliol o'r berthynas rhwng profiadau bywyd a chlywed lleisiau.

Gan Julie Baul (Seicolegydd Clinigol dan hyfforddiant) o dan oruchwyliaeth
Dr Mike Jackson (Seicolegydd Clinigol)

Gwahoddir chi i gymryd rhan mewn astudiaeth ymchwil. Cyn i chi benderfynu, mae'n bwysig eich bod yn deall pam y gwneir yr ymchwil a beth fydd yn ei olygu. Cymerwch eich amser i ddarllen yr wybodaeth ganlynol yn ofalus a'i thrafod gyda ffrindiau, perthnasau, eich rheolwr achosion, seiciatrydd neu feddyg teulu os ydych chi'n dymuno. Gofynnwch inni os oes unrhyw beth nad yw'n glir neu os hoffech ragor o wybodaeth. Cymerwch amser i benderfynu a ydych chi'n dymuno cymryd rhan ai peidio.

Diolch am ddarllen hwn.

Beth ydy pwrpas yr astudiaeth?
Pwrpas yr astudiaeth yw canfod mwy am rithweledigaethau'r clyw neu 'glywed lleisiau' fel y maent yn cael eu galw. Er mwyn helpu pobl sy'n clywed lleisiau ac yn achosi dychryn neu ofid iddynt, mae arnom angen gwybod mwy am yr hyn sy'n eu hachosi. Mae modd gwneud hyn drwy siarad efo pobl ac ymchwilio efo hwy i gynnwys yr hyn y maent yn ei glywed a'r hyn y maent yn ei feddwl am y lleisiau .
Yn ôl astudiaethau ymchwil eraill gallai lleisiau weithiau fod yn gysylltiedig â phrofiadau ingol bywyd a digwydd o ganlyniad i drawma emosiynol sy'n dal i boeni pobl. Mae hyn hefyd yn rhywbeth yr hoffem siarad amdano â'r rhai sy'n cymryd rhan yn yr astudiaeth.

Dylai'r astudiaeth bara am o leiaf pedwar cyfarfod, bydd y rhain yn cael eu cynnal rhyngof fi a'r bobl sy'n cytuno i gymryd rhan. Efallai y bydd yn hirach os yw pobl yn fodlon dal ymlaen i gyfarfod â mi i siarad.

Pam ydw i wedi cael fy newis?
Rydym yn gofyn i chi gymryd rhan yn yr astudiaeth gan eich bod chi (fel llawer o bobl eraill) wedi clywed lleisiau sy'n eich cynhyrfu ac wedi'ch cyfeirio at y tîm iechyd meddwl cymuned am gymorth. Roeddem yn meddwl eich bod chi efallai'n rhywun a allai ddweud gwybodaeth bwysig wrthym am eich profiadau er mwyn ein helpu ni i ddeall mwy amdano. Mae hyn yn bwysig er mwyn datblygu ffyrdd gwell o helpu pobl sy'n clywed lleisiau. Rydym yn ceisio canfod o leiaf chwech o bobl sy'n fodlon ein helpu ni efo'r gwaith yma.

Oes rhaid imi gymryd rhan?
Chi sydd i benderfynu a ydych am gymryd rhan ai peidio. Os ydych chi'n penderfynu cymryd rhan, byddwch yn cael y daflen wybodaeth hon i'w chadw a gofynnir i chi arwyddo ffurflen gydsynio. Os ydych chi'n penderfynu cymryd rhan, rydych dal yn rhydd i dynnu'n ôl ar unrhyw adeg a heb roi rheswm. Fydd hyn ddim

yn effeithio ar safon y gofal a gewch chi a bydd dal gennych hawl i help gyda'ch lleisiau.

Beth fydd yn digwydd imi os byddaf yn cymryd rhan/ beth fydd rhaid imi ei wneud?
Os ydych chi'n penderfynu cymryd rhan yn yr astudiaeth byddwch yn cael eich gwahodd i gyfarfod â mi yn adeilad un o'r ysbytai lleol unwaith yr wythnos am bedair wythnos o leiaf. Bydd yr amser y byddwn yn ei wario efo'n gilydd yn union yr un fath â phe byddem yn cyfarfod am help efo'ch lleisiau, efo chi fel y claf a minnau fel eich therapydd.

Pan fyddwn wedi dod i nabod ein gilydd ddigon i chi deimlo'n gyfforddus yn siarad efo fi, byddaf yn gofyn cwestiynau i chi am eich sefyllfa, y lleisiau a phrofiadau'ch bywyd yn y gorffennol. Dyma'r drefn arferol yn y math yma o sesiynau clinigol. Efallai hefyd y bydd gofyn i chi lenwi holiadur syml am y lleisiau. Ni fyddwn yn eich gorfodi i drafod unrhyw beth nad ydych yn dymuno siarad amdano.

Dylai pob ymweliad/sesiwn bara tua awr. Yr unig wahaniaeth rhwng cytuno i gymryd rhan yn yr ymchwil a thriniaeth arferol yw y byddaf i'n recordio'n sesiynau ar dâp ac yn gwrando arnynt eto, yn ogystal â thapiau pobl eraill sy'n cymryd rhan. Mae hyn er mwyn imi allu edrych am batrymau ym mhrofiadau pobl. Cyflwynir y gwaith ymchwil yma fel rhan bwysig o'm hyfforddiant seicoleg clinigol.

Mae'n bwysig nodi y caiff ein sesiynau eu recordio ar dâp ac y defnyddir eu cynnwys i ddadansoddi data yn yr astudiaeth ymchwil. Ond, bydd popeth yr ydym yn siarad amdano yn gyfrinachol a bydd neb arall yn gwrando arnynt ar wahân i'r seicolegydd sy'n goruchwylio f'ymchwil a'm gwaith clinigol i. Efallai y byddaf yn cymryd nodiadau mewn sesiynau, sydd yn arferol mewn sesiynau triniaeth, ond bydd y rhain hefyd yn cael eu cadw'n gyfrinachol ac yn cael eu cloi mewn cwpwrdd ffeilio. Ar ddiwedd yr astudiaeth (Gorffennaf 2003) caiff y tapiau eu dinistrio ac os ydych chi'n dewis gadael yr astudiaeth yn ystod y cyfnod casglu data, caiff eich tapiau eu dinistrio bryd hynny os ydych chi'n dymuno. Pan fyddaf yn ysgrifennu f'ymchwil caiff eich enw ei dynnu allan fel nad oes modd eich adnabod.
Bydd pawb sy'n cymryd rhan yn yr astudiaeth yn cael gwybodaeth ysgrifenedig am ganlyniadau'r astudiaeth ac yn cael cynnig y cyfle i'w trafod efo fi os ydynt yn dymuno.

Pa ddewis arall sydd ar gyfer triniaeth?
Os nad ydych chi'n dymuno cymryd rhan yn yr astudiaeth, byddwch yn dal i gael cynnig y cyfle i gyfarfod efo fi am help gyda'ch lleisiau. Os fodd bynnag ydych chi'n penderfynu yr hoffech chi weld rhywun arall, byddwch yn cael eich rhoi i lwyth achosion aelod arall o'r tîm iechyd meddwl cymuned, er y gallai hyn mewn rhai achosion olygu aros am ychydig.

Beth ydy anfanteision posib a pheryglon cymryd rhan?
Does dim peryglon corfforol o gwbl wrth gymryd rhan yn yr astudiaeth ac ni fydd unrhyw driniaethau meddygol na meddyginiaethau'n gysylltiedig; dim ond siarad am eich profiadau. Chi fydd yn penderfynu'r hyn y byddwn ni'n ei drafod yn y sesiynau ac rydych yn rhydd i ddewis peidio â siarad am rai materion os ydych chi'n dymuno.

Gallwch hefyd siarad efo'r seicolegydd sy'n goruchwylio fy ngwaith am unrhyw faterion sy'n cael eu codi os ydych chi'n dymuno.

Beth ydy manteision posib cymryd rhan?
Rydym yn gobeithio y bydd derbyn triniaeth seicolegol at eich problemau yn eich helpu i'ch gwneud chi deimlo'n well, drwy siarad am eich profiadau ac efallai trwy gymryd camau i newid pethau yn eich bywyd e.e. trwy ymarfer gwahanol ffyrdd o ymdopi. Nid oes modd gwarantu hyn, fodd bynnag. Efallai y bydd yr wybodaeth a gawn ni o'r astudiaeth yn ein helpu i drin cleifion sy'n clywed lleisiau yn fwy effeithiol yn y dyfodol.

Beth sy'n digwydd pan daw'r astudiaeth ymchwil i ben?
Bydd eich triniaeth yn para ar wahân i'r astudiaeth cyhyd ag y bydd arnoch ei hangen. Neu nes y byddwch yn penderfynu nad ydych yn dymuno dod mwyach pe byddai hynny'n digwydd gyntaf. Does gan anghenion am driniaeth ddim oll i'w wneud â chymryd rhan yn yr astudiaeth.

Beth os aiff rhywbeth o'i le?
Os ydych chi'n anhapus am unrhyw agwedd o gymryd rhan yn yr astudiaeth un ai yn ystod neu ar ôl cymryd rhan gallwch ysgrifennu llythyrau cwyno at y cyfeiriadau isod:

Athro Fergus Lowe, Pennaeth Ysgol Seicoleg, Prifysgol Cymru, Bangor, LL57 2DG
Mr Keith Thomson, Prif Weithredwr, Ymddiriedolaeth GIG Gogledd Orllewin Cymru, Ysbyty Gwynedd, LL57 2PW.

Fydd cymryd rhan yn yr astudiaeth hon yn gyfrinachol?
Bydd pob gwybodaeth a gesglir amdanoch yn ystod yr ymchwil yn cael ei chadw'n gwbl gyfrinachol. Bydd eich enw a'ch cyfeiriad yn cael eu tynnu o unrhyw wybodaeth sy'n gadael yr ysbyty fel nad oes modd eich adnabod. Mae'n bwysig nodi y bydd eich meddyg teulu'n cael gwybod os ydych chi'n penderfynu cymryd rhan yn yr astudiaeth a hefyd eich seiciatrydd. I bobl sy'n cymryd rhan dyma fydd y drefn arferol.

Pwy sydd wedi arolygu'r astudiaeth?
Arolygwyd yr astudiaeth hon gan y pwyllgorau moeseg canlynol:

Prifysgol Cymru, Pwyllgor Moeseg Ymchwil Ysgol Seicoleg Bangor,

Pwyllgor Moeseg Ymchwil Awdurdod Iechyd Gogledd Cymru (Gorllewin)

Cyswllt am Ragor o Wybodaeth
Byddaf i'n cysylltu â chi (ar y ffôn fel arfer) os ydych chi'n dweud wrth eich rheolwr gofal fod gennych chi ddiddordeb yn cymryd rhan yn yr astudiaeth, fel y gallaf ateb unrhyw gwestiynau allai fod gennych. Os hoffech chi drafod yr astudiaeth efo fi cyn yr adeg honno mae modd cysylltu â fi yn y cyfeiriad isod.
Adran Seicoleg, Uned Hergest, Ysbyty Gwynedd, Bangor, Ffôn 01248 382451

Diolch am ddarllen y daflen hon ac am ystyried helpu efo'r astudiaeth ymchwil hon.

APPENDIX SEVEN: PARTICIPANT CONSENT FORM- ENGLISH VERSION

CONSENT FORM

Title of Project: **An exploratory study of the relationship between life experiences and hearing voices.**

Name of Researcher: Julie Baul (Trainee Clinical Psychologist) supervised by
Dr Mike Jackson (Clinical Psychologist).

Please initial box

1. I confirm that I have read and understand the information sheet dated .... for the above study and have had the opportunity to ask questions. ☐
2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, without my medical care or legal rights being affected. ☐
3. I agree to sessions being audio-taped for research purposes ☐
4. I agree to take part in the above study. ☐

Name of Patient	Date	Signature
Researcher	Date	Signature

APPENDIX EIGHT: PARTICIPANT CONSENT FORM-WELSH VERSION

FFURFLEN GYDSYNIO

Teitl y Project: **Astudiaeth ymchwiliol o'r berthynas rhwng profiadau bywyd a chlywed lleisiau.**

Enw'r Ymchwilydd: Julie Baul (Seicolegydd Clinigol dan Hyfforddiant) o dan oruchwyliaeth Dr Mike Jackson (Seicolegydd Clinigol).

Rhowch eich llythrennau
yn y bocs

1. Rwyf yn cadarnhau fy mod wedi darllen a'm bod yn deall y daflen wybodaeth ddyddiedig ....ar gyfer yr astudiaeth uchod a'm bod wedi cael y cyfle i ofyn cwestiynau. ☐

2. Rwyf yn deall fy mod yn cymryd rhan yn wirfoddol a'm bod yn rhydd i dynnu'n ôl ar unrhyw adeg, heb roi unrhyw reswm, heb effeithio ar fy ngofal meddygol na'm hawliau cyfreithiol. ☐

3. Rwyf yn cytuno i sesiynau gael eu recordio ar dâp ar gyfer ymchwil. ☐

4. Rwyf yn cytuno i gymryd rhan yn yr astudiaeth uchod. ☐

Enw'r claf	Dyddiad	Llofnod
Ymchwilydd	Dyddiad	Llofnod

APPENDIX NINE: PRIMARY RESEARCHER'S CV

APPENDIX TEN: LETTER OF ETHICAL APPROVAL-UNIVERSITY

Ysgol Seicoleg
Prifysgol Cymru, Bangor

Adeilad Brigantia, Ffordd Penrallt
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December 4, 2002

Dr. Mike Jackson, Julie Baul
North Wales Clinical Psychology Course
University of Wales
Bangor
Gwynedd
LL57 2DG

Dear Colleagues

An exploratory study of the relationship between life experiences and hearing voices

Your research proposal (referred to above and on the attached sheet) has been reviewed by the School of Psychology Research Ethics Committee and they are satisfied that the research proposed accords with the relevant ethical guidelines. If you wish to make any substantial modifications to the research project please inform the committee in writing before proceeding. Please also inform the committee as soon as possible if research participants experience any unanticipated harm as a result of participating in your research.

You should now forward the proposal to the appropriate Research Ethics Committees of the North Wales Health Authority. They expect one of the investigators to make an oral presentation in support of the proposal at their meeting. You will be contacted by their committee with details as to the date and place of the meeting at which your proposal will be considered.

You may not proceed with the research project until you are notified of the approval of the NWHA research ethics committee.

Yours sincerely

Kath Chitty

Kath Chitty
Coordinator - School of Psychology Research Ethics Committee

APPENDIX ELEVEN: LETTER OF ETHICAL APPROVAL-TRUST

Pwyllgor Moeseg Ymchwil
Awdurdod Iechyd Gogledd Cymru
(Is-bwyllgorau'r Gorllewin, y Canol a'r Dwyrain)

North Wales Health Authority
Research Ethics Committee
(West, Central & East sub-committees)

IS-BWYLLGOR Y GORLLEWIN
WEST SUB-COMMITTEE

Ffôn/Tel: (01248) 384 877 (llinell uniongyrchol/direct line)
Ffacs/Fax: (01248) 370 629
Llyth-el/E-mail: liz.james@nww-tr.wales.nhs.uk

Uned Cefnogi Rheolaeth Glinigol / Clinical Governance Support Unit
Ysbyty Gwynedd
Bangor
Gwynedd LL57 2PW

28.1.03

Julie Baul
North Wales Clinical Psychology Course
School of Psychology
University of Wales, Bangor
43 College Road
Bangor
Gwynedd LL57 2DG

Dear Ms Baul

CONFIRMATION OF FULL ETHICS APPROVAL

Re: An exploratory study of the relationship between life experiences and hearing voices

I confirm that the North Wales Health Authority Research Ethics Committee (West) is pleased to grant full ethics approval to the above, on condition that:

- the protocol is followed as agreed
- the project commences within 3 years of the date of this letter
- the committee is notified of all protocol amendments and serious adverse events as soon as possible
- the committee receives annual progress reports and/or a final report within 3 months of completion of the project.

Approval from host institutions must be sought separately.

The Committee reserves the right to audit local research records relating to the above study. Ethics approval is granted on this basis.

The Committee aims to be fully ICH/GCP compliant. Please find attached a copy of our working constitution and a list of members.

Yours sincerely

Dr P Barry
Chairman, Ethics Committee (West)

Minor refinements made to the study design following ethical approval

As data collection began and the study developed over time, it became clear that the use of a structured PTSD measure would be inappropriate. This was in terms of the questions being too general and formal for this type of work where the emphasis was on participants telling their stories in an unstructured manner. It was also considered that to work through a formal questionnaire that covered many areas irrelevant to their experiences might be detrimental to establishing and maintaining rapport. It was decided upon reflection to abandon the use of the CAPs rating scale. The other two measures (voices schedule and BAVQ-R) were used loosely as a prompt for the researcher if necessary. As no formal tools were used to measure symptomatology it was therefore not possible to directly investigate co-morbidity within the study. Further analysis of the research literature in areas of trauma, PTSD and auditory hallucinations led to the refinement of the original aims to the following:

i) To elicit detailed narrative data on voice content and trauma histories based upon the subjective accounts of a clinical sample of voice hearers.

ii) To use this data to contrast two cognitive theories of voices:
   1. Voices as ego-dystonic intrusive thoughts (e.g. situation specific negative undermining comments)
   2. Voices as 'flashbacks' or SAMs (repetitive comments echoing a specific traumatic event, with accompanying trauma related sensory phenomena)

iii) To contribute to the development of a method for future research in this area.

SECTION 2

LITERATURE REVIEW

Running head: TRAUMA AND AUDITORY HALLUCINATIONS

The Role of Traumatic Life Events in the Onset and Content of Auditory Hallucinations: A Review of the Related Literature

Julie A. Baul* and Mike Jackson

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Abstract

A review of the theoretical and research literature was undertaken that aimed to investigate the relationship between the onset and content of auditory hallucinations and traumatic life events. As few studies have directly addressed this issue the review focussed upon drawing together related strands of literature to consider the evidence. Research studies investigating the overlap between psychosis, trauma and posttraumatic stress disorder (PTSD) were reviewed, and cognitive models of auditory hallucinations and PTSD contrasted to consider their utility in providing an explanation of different types of voices. Findings were that the literature supports an overlap between psychotic symptoms such as auditory hallucinations and trauma and highlights the need for integrated treatment approaches to psychosis and PTSD. Consideration of cognitive models of voices and PTSD suggested two theoretical accounts of voices. The first was an intrusive thought model related to core beliefs originating from traumatic life experiences and the second a flashback model of voices occurring as a result of situationally accessible memories (SAMs) following trauma. The review concluded that future in-depth research is needed to investigate these concepts further. It recommended the development of a qualitative narrative approach in order to elicit detailed data from the subjective accounts of a clinical sample of voice hearers within a therapeutic relationship.

Introduction and overview of the issues

Auditory hallucinations are defined in DSM IV (APA, 1994) as "a sensory perception that have the compelling sense of reality of a true perception but that occur without external stimulation of the relevant sensory organ" (p.767). Key features are that they are perceptual experiences occurring without the presence of an external stimulus while having the same impact as a true event. They also occur typically outside of the person's voluntary control (Slade & Bentall, 1988). Traditionally they have been considered a primary symptom of psychotic disorders (e.g. schizophrenia) but have also been found in a range of other clinical and non-clinical samples, for example following bereavement (Grimby, 1993), and sexual abuse (Heins, Gray & Tennant, 1990). They have also been reported in non-clinical populations (Honig et al, 1998; Tien, 1991). It has therefore been considered important to research the experience as a discrete phenomenon (Bentall, 1990), however the majority of research has been conducted with clinical samples of voice hearers (such as people with psychosis spectrum disorders) where the experience causes emotional distress and impedes social function.

Traditional biological theories of psychosis have suggested that psychotic symptoms (e.g. auditory hallucinations and delusions) are part of an underlying hypothetical disease process (Jasper, 1963), the content of which are difficult to understand in context of individuals' lives (Berrios, 1991). In recent years however, the experience of psychosis has been thought to exist on a continuum with normal experience, with the discovery that thematic content within symptoms often relate to sufferers' emotional concerns and life experiences (Fowler et al, in press; Morrison, 2001). In clinical practice therefore, it is considered important to develop individualised formulations incorporating factors that relate to the onset and content of voices as a basis for therapy (Fowler, 2000). A cognitive perspective suggests that distress experienced as a result of hearing voices relates not to the presence of hallucinations per se, but to the hearer's interpretation of them (Chadwick & Birchwood, 1996). Therefore researchers have also emphasised the importance of exploring the role of beliefs and cognitions in the experience (Morrison 1998; 2001).

Bentall (1990) describes auditory hallucinations as "among the most severe and puzzling forms of psychopathology" (p.82) due in part to their "inaccessibility to direct observation" (Birchwood, Hallett & Preston, 1989, p.214). Researchers have attempted to access the experiences of voice hearers using structured questionnaires (Morrison, Wells & Nothard, 2000) and semi-structured interviews where responses are quantified into categories (Chadwick & Birchwood, 1994). Such quantitative approaches have been used to investigate beliefs about voices and subsequent affective, behavioural, cognitive and metacognitive responses (Morrison & Wells, 2003). There is now a degree of consensus that voice hearers' cognitive appraisals influence their responses to voices and contribute to their maintenance (Morrison, 1998).

Although such research has been useful in investigating the cognitive mechanisms underlying the development and maintenance of auditory hallucinations, there has been little consideration of the life variables that contribute to the initial onset of voices and their thematic content i.e. why do people hear what they hear? One cognitive perspective dominant in the clinical literature is that voices are actually normal intrusive thoughts that are misattributed to an external source as they are ego-dystonic and create cognitive dissonance (Bentall, Haddock & Slade, 1994). It is only very recently however, that consideration has been paid within cognitive accounts to the origins of these intrusive thoughts and their relation to life experiences (Morrison, 2001).

In reviewing the literature on the role of life events in psychosis, it appears that studies have focused primarily on the identification of stressors occurring immediately prior to the onset of a psychotic episode (Birley & Brown, 1970). They have also examined the impact of emotional stress within the familial environment on relapse rates (Barrowclough & Tarrier, 1984; Leff et al.,1983). The main focus of these studies was on the impact of physiological arousal on decline into psychosis by monitoring the frequency and type of events experienced and by examining familial interactions and expressed emotion. As a primary aim of this paper is to investigate cognitive theories of voices focussing on the role of beliefs, this area of research will not be included in the main body of the review.

A substantial body of research evidence has demonstrated the high prevalence of emotionally traumatic life events in the histories of people suffering from severe mental illness (SMI) (Goodman et al., 1997; Read et al., 2003; Rosenberg et al., 2002). The research literature highlights in particular a strong correlation between experiences of sexual or physical abuse in childhood and serious psychiatric problems in adulthood (Bryer et al., 1987; Read et al, 2003). These problems include disorders of which auditory hallucinations are commonly symptomatic, e.g. psychosis (Read & Argyle, 1999) and dissociative disorders (Solomon & Solomon, 1982; Fraser, 1994). However, in searching the available literature to investigate the potential link between such traumas and the content of auditory hallucinations there appears to be a dearth of studies. These are limited to clinical case studies found within the psychodynamic literature (Heins et al, 1990; Graham & Thavasotby,

1993) and reports of the hallucinatory experiences of combat veterans within the posttraumatic stress disorder (PTSD) literature (Mueser & Butler, 1987).

Mainstream research in this area has focused almost exclusively on the overlap between psychotic symptoms, trauma and PTSD. This appears to be due to the discovery that people with chronic PTSD often exhibit psychotic symptoms and may form a subgroup of the disorder (Hamner et al., 1999). More recently, research has shown that the experience of a psychotic episode itself can result in PTSD symptoms due to the perceptual reality of symptoms and the trauma of (often involuntary) hospital admissions (Shaw et al., 1997; 2002). Within the psychodynamic literature attention has also been drawn to the development of voices following emotional trauma. This has been historically termed "hysterical psychosis" of which a key feature is dissociation. Retrospective studies of clinical cases have in recent years led to the re-conceptualisation of this phenomenon by authors as a type of PTSD (Witzum & van der Hart, 1993; van der Hart et al, 1993).

The interplay between PTSD and psychosis raises both diagnostic and treatment issues. For instance PTSD is not routinely assessed for and considered as a possible explanation for psychotic symptoms (Rosenberg et al., 2002), and the DSM-IV classification of PTSD as an anxiety disorder (APA, 1994) does not in turn encompass psychotic symptoms (meaning they may be overlooked in cases of PTSD (Lindley et al., 2000)). Both of these issues impede accurate diagnosis and subsequent effective treatment of the sequelae, as clinical approaches to the two areas differ in both theoretical foundations and clinical application. These issues therefore highlight the need for further research into the overlap between the two types of disorders and the need for a conceptual model incorporating both the role of beliefs in the experience of auditory hallucinations and the role of emotional trauma sequelae.

The aim of this review therefore, is to draw together the different strands of literature by briefly reviewing relevant studies, in order to investigate evidence of a link between trauma and auditory hallucinations with special reference to onset and thematic content. The review involves the following specific aims:

(i) To explore studies that focus on the overlap between psychotic symptoms (such as auditory hallucinations), trauma and PTSD

(ii) To explore and contrast cognitive theories of auditory hallucinations and PTSD in an attempt to investigate their utility in conceptualising the experience of voices.

(iii) Within this, to explore evidence of the link between the onset and content of auditory hallucinations and traumatic life events.

The overlap between psychotic symptoms, trauma and PTSD

Trauma is defined by van der Kolk & Fisler (1995) as "the experience of an inescapable stressful event that overwhelms one's existing coping mechanisms" (p.506). Many studies have now documented the high prevalence of traumatic life events experienced by people with severe mental illness (SMI), particularly physical or sexual abuse in childhood. For instance, Beck & van der Kolk (1987) found that 46% of a sample of female inpatients suffering from psychosis reported histories of childhood incest. In a related study Goff et al (1991) found that within a group of 61 chronically psychotic outpatients of both sexes 44% described sexual or physical abuse in childhood. In a review examining prevalence rates of physical and sexual assault in the life histories of women with SMI, Goodman et al (1997) found evidence that between 51 and 97% had been assaulted, many of whom had been traumatised on multiple occasions, suffering several forms of abuse.

The experience of childhood sexual abuse clearly appears to precede the development of clinical problems including psychotic phenomena such as auditory hallucinations. Read et al (2003) recently investigated rates of auditory hallucinations in a sample of 200 community psychiatric patients, 92 of which reported physical or sexual abuse. It was found that patients who had been abused in childhood were almost twice as likely (35%) to have positive symptoms of schizophrenia than those who had not been abused (19%). They were also significantly more likely to experience auditory or tactile hallucinations.

Studies have also specifically investigated the prevalence of PTSD among SMI sufferers. DSM-IV defines criteria for its development as the experience of serious injury or threats to the self or the witnessing of serious injury or death in others (APA, 1994). The main features of the disorder include re-experiencing the event through intrusive memories, dreams and flashbacks, avoidance of stimuli associated with the event (due to anxiety), feelings of detachment and emotional numbing and persistent symptoms of increased arousal. Experiences that typically may result in PTSD symptoms include military combat, sexual assault, physical injury and natural disasters (Roth and Fonagy, 1996).

Mueser et al (1998) looked at the prevalence of traumatic life events in relation to current PTSD diagnoses in a sample of 275 patients receiving psychiatric treatment for illnesses such as schizophrenia and bipolar disorder. It was found that 98% of patients reported one or more traumatic life events and that 43% met diagnostic criteria for PTSD. Interestingly, only 2% of the sample had been previously diagnosed with the disorder. The tendency to exhibit PTSD symptoms was correlated positively with exposure to multiple forms of trauma and childhood abuse. These findings substantiate those of an earlier study by Astin et al (1995) who found higher PTSD rates in domestic violence victims if they had also experienced childhood sexual abuse.

Studies suggest that risk factors within SMI populations increase the likelihood of co-morbid symptoms of PTSD through victimisation (Rosenberg et al., 2002). Goodman et al (1997; 2001) for example found that illness related variables such as drug use, homelessness and increases in psychiatric symptoms significantly correlated with future victimisation and trauma levels. This finding highlights the importance of considering the overlap between psychiatric conditions such as psychosis and trauma symptoms so that co-morbid PTSD can be routinely assessed and treated (Mueser et al., 1998).

A conceptual model was recently developed (Mueser et al., 2002) attempting to explain the interplay between PTSD, trauma and SMI. This model suggests that PTSD impacts on severe mental illness by mediating the effect of trauma; both directly due to primary PTSD symptoms (e.g. re-experiencing the event) and indirectly through secondary problems such as the use of dysfunctional coping strategies e.g. drug and alcohol abuse.

Another area of study within the research literature has been the investigation of co-morbid psychotic symptoms in groups diagnosed with PTSD. Over the past two decades, the majority of studies have been conducted on samples of combat veterans suffering from chronic PTSD. For instance Mueser and Butler (1987) found that in a sample of 36 male combat veterans being treated for PTSD, 5 of them reported hearing auditory hallucinations. Veterans hearing voices had experienced significantly more combat exposure "suggesting that severe or prolonged trauma contributes to the development of hallucinations in some persons" (p.302). When comparing Vietnam veterans with and without a diagnosis of PTSD, Butler et al (1996) found that those meeting the diagnostic criteria for PTSD were more likely to experience psychotic symptoms (e.g. hallucinations) but did not meet criteria for schizophrenia. The fact that PTSD is not routinely screened for in psychosis has led researchers to reflect that some cases of schizophrenia may actually be misdiagnosed cases of chronic PTSD (Waldfogel & Mueser, 1988).

In an attempt to separate primary disorders diagnostically, Hamner et al (1999) investigated psychotic symptoms within a group of 45 Vietnam veterans with PTSD who were selected on the grounds of not meeting criteria for a co-morbid primary psychotic disorder. Half of the sample exhibited psychotic symptoms, all of which presented with auditory hallucinations. Hamner et al (2000) suggest there may be a definite subcategory of PTSD that includes psychotic phenomena, which should be identified and treated appropriately. However as the studies in this area focus primarily on combat veterans, attention has been drawn to the need for further research in noncombat-related PTSD populations "before findings can be generalized to all individuals with PTSD" (Lindley et al., 2000, p.52).

In recent years studies have also emphasised the traumatic impact of the experience of psychosis. Intensely real sensory experiences involved in psychotic episodes can lead to feelings of fear and helplessness, creating similar patterns of trauma symptoms as real events and leading to the development of PTSD (Shaw et al, 2002). In addition, findings from several studies examining the impact of hospitalisation on psychotic patients have suggested "traumatic experiences in schizophrenia may be caused by symptoms of the psychotic illness, by treatment measures, or by a combination of both" (Priebe, Broker & Gunkel, 1998, p.220).

Traumatic treatment experiences reported by patients include forced sedation, seclusion or involuntary admission under section (Binder & McCoy, 1983; Fisher, 1994; Jeffries, 1977).

McGorry et al (1989) for example found a PTSD prevalence rate of 46% in a sample of 24 patients with schizophrenia hospitalised due to a psychotic episode. Priebe et al (1998) found similar a similar rate (51%) in a sample of 105 community patients with schizophrenia. 57% of these cases had a history of involuntary hospital admissions. Mueser and Rosenberg (2003) suggest therefore, that the psychosocial treatment of recent onset psychosis may be more effective if PTSD issues are addressed using "evidence-based strategies from PTSD research and proven cognitive interventions for psychosis" (2003, p.104).

The compatibility of cognitive models of voices and PTSD

Morrison, Haddock and Tarrier's (1995) heuristic model of auditory hallucinations suggests that people experience intrusive thoughts (i.e. thoughts and images that occur spontaneously), which they then "attribute to an external source" (p.266) because they are ego-dystonic, (i.e. incompatible with the person's self view). Cognitive dissonance relating to the content of intrusive thoughts is reduced by making an external attribution about their origin leading to the maintenance of auditory hallucinations.

These theoretical ideas have been substantiated in studies examining the cognitions of voice hearers accessed through structured questionnaires. Morrison and Baker (2000) for example investigated the frequency of intrusive thoughts and people's responses to them in three groups; one of voice hearers with a diagnosis of schizophrenia, a psychiatric control group and a non-patient control group. Patients with auditory hallucinations had more intrusive thoughts than controls and found them more "distressing, uncontrollable and unacceptable" (p.1097). Morrison and Wells (2003) examining metacognitive beliefs as a vulnerability factor for psychological disorder, found that participants with auditory hallucinations exhibited higher levels of dysfunctional metacognitive beliefs.

Studies have demonstrated how the metacognitive beliefs people hold about their voices determine how they respond to them, i.e. how they try to cope and whether they attempt to interact with or banish them (Chadwick & Birchwood, 1994). Findings indicate that people are more likely to try and resist voices if they are perceived as malevolent causing increased distress, but are more likely to engage with them if they believe that they are benevolent and harmless (Chadwick & Birchwood, 1995). Morrison (1998) likens the maintenance of auditory hallucinations to Clark's (1986) model of panic where "it is the catastrophic misinterpretation of bodily sensations that is central to the cycle of a panic attack" (p.293). This model proposes that auditory hallucinations are normal phenomena that become a clinical problem due to the misinterpretation of voices as threatening to the self. If a person catastrophically interprets a voice as evidence of madness for example, this will lead to responses that may contribute to their maintenance such as an increase in negative mood and physiological arousal.

These cognitive models attempt to conceptualise auditory hallucinations in terms of the cognitive mechanisms underlying them i.e. misinterpreting the experience of normal intrusive thoughts, and in turn focus upon how they are maintained i.e. through responses determined by metacognitions. However there is no explicit consideration of how the hallucinations originate, i.e. of the experiences that led to the intrusive thoughts, nor to examining the thematic content of hallucinations in relation to real life events.

In considering anecdotal experiences from clinical cases authors have drawn attention to the importance for clients of extracting personal meaning from their experiences in order to reduce confusion and distress; " a critical component of CT for voices is often that of drawing out the personal significance of the voices, that is, tentatively making a connection between voice content and beliefs on one the one hand, and the individual's history on the other." (Chadwick & Birchwood, 1996, p.81). This may have important clinical implications for identifying underlying emotional concerns. However it is only in the last few years that attention has been directed within the cognitive accounts to the role played by life experiences in the onset of auditory hallucinations.

Morrison (2001) raises the issue that "it is generally accepted that beliefs develop as a result of experience" and examines the "speculative" idea that "it is likely that such experiences will contribute to the development of faulty self and social knowledge and the nature of interpretations of intrusions" (p.264). Fowler (2000) highlights the clinical importance of making individual psychological formulations by identifying the factors involved in developing and maintaining auditory hallucinations. He also emphasises the role of "schematic ideas about the self (beliefs that the self is vulnerable or weak, that one is unworthy, that one is bad or needs to be good)" (p.110) in voices formed from life experiences. He particularly draws attention to the role of emotional processes in the content of malevolent voices. "Because people with critical and abusive voices tend to regard these experiences as a set of independent external events, voices may serve as "evidence" to compound negative beliefs about self in the absence of any current real external events." (Fowler, 2000, p.117).

Such theoretical ideas suggest that the onset and resultant content of auditory hallucinations may be related to traumatic life events as they contribute to the formation of schematic beliefs about the self and the world. In short, a theoretical cognitive model can be identified from the literature conceptualising voices as intrusive thoughts (involving self-referential critical and negative material) initiated from core beliefs that are formed through life experiences. As previously reviewed studies have suggested a clear overlap between auditory hallucinations and PTSD it may also be useful to contrast the intrusive thought model with a cognitive perspective on trauma.

This intrusive thought model appears to be consistent with a cognitive model of PTSD presented by Brewin, Dalgleish and Joseph (1996). Brewin et al propose that following traumatic events, people experience verbally accessible memories (VAMs) that provide intentionally retrievable information from the long-term memory store. These memories contain sensory data about traumatic events and information concerning emotional and physiological reactions to experiences. This information then influences the creation of beliefs about the self and semantic understanding of the world. VAMs impact upon the processing of traumata as they determine the integration of new experiences into existing "verbally accessible constructs and categories". The successful resolution of trauma is thought to depend upon a person's ability to integrate new beliefs about traumatic events into existing belief systems (Ehlers & Clark, 2000). This model can be used to explain the onset of voices. Appraisals of traumatic events are based on information from VAMs, which then influence the development of core beliefs and dysfunctional assumptions about the world. These beliefs then initiate intrusive thoughts as implicated in cognitive models of auditory hallucinations.

Case studies on hallucinations preceded by experiences of child sexual abuse support these ideas. For example Heins, Gray and Tennant (1990) describe the case of a 55-year-old woman who since adolescence had heard an unidentified male voice calling her a "slut" and telling her she'd "never make it" (p.562). It may be suggested that VAMs of the original trauma led to the formation of negative beliefs about her self-worth and cognitions of guilt, which were then reflected in the content of her voices.

Brewin et al (1996) also conceptualise a second memory process in PTSD. In addition to experiencing VAMs following trauma, people report intrusive memories that occur rapidly and spontaneously. These consist of "images accompanied by high levels of physiological arousal" (p.671), which are experienced as flashbacks. They cannot be retrieved intentionally but may be triggered by contextual cues in situations reminiscent of the trauma i.e. physical cues or thoughts. Brewin et al refer to these as situationally accessible memories (SAMs). Case studies presenting narrative data on the content of voices in relation to life experiences provide tentative evidence for a second model of voices based on this concept.

David et al (1999) when examining the content of auditory hallucinations in Korean war veterans reported that some participants heard the voices of dead comrades calling "help" or "medic" (p.30) reminiscent of combat experiences. Similarly Mueser and Butler (1987) described several case studies including one of a 50-year-old Korean war veteran who heard voices that he recognised as those of people he had killed and others who heard the groans and moans of wounded soldiers similar to those heard during battle. These findings suggest that some voices may be a type of flashback following the development of SAMs after a traumatic event.

Additional support for the idea of voices occurring as SAMs is provided by accounts of visual flashbacks. Morrison et al (2002) looked at mental imagery associated with psychotic symptoms in a sample of 35 people with schizophrenia spectrum disorders and found that 26 of them (74%) "were able to identify an image in relation to psychotic symptoms" and that out of those, 18 (69%) experienced these as flashbacks. 17 of them (71%) were able to link these images to real life events such as bereavements or assaults. This indicates that if other SAMs related sequelae are experienced (visual hallucinations) then voices may be part of the same memory process. Hallucinations of other sensory modalities have also been reported in the literature. Graham and Thavasotby (1995) described the case of a woman who had experienced a sexual assault at the age of thirteen and years later could hear auditory flashbacks of the man laughing, saw visual hallucinations of him exposing his genitals to her and in addition experienced olfactory (urine smells) and gustatory hallucinations (the taste of semen).

A second model of auditory hallucinations can be conceptualised therefore, that is compatible with cognitive models of PTSD i.e. of voices as flashbacks or SAMs. These voices show characteristics of SAMs as they occur spontaneously, reflect the content of a traumatic event and are accompanied by related sensory and physiological phenomena such as visual hallucinations and feelings of increased arousal.

Considering auditory hallucinations from a PTSD perspective has important clinical implications. The type of voices heard should therefore determine the type of therapeutic approach taken. For example if voices occur as intrusive thoughts resulting from VAMs, a CBT approach based upon an individualised formulation of their development incorporating the role of trauma may be inappropriate (Fowler, 2000). However, if clients present with voices that occur as SAMs in accordance with a flashback account, then trauma approaches to therapy may be more effective e.g. a narrative approach (Meichenbaum, 1994). A related consideration is that it may be difficult to distinguish between the two types of voices highlighting a grey area between the two accounts. Voices that occur as SAMs may be initiated as intrusive flashback memories of trauma but also influenced by the person's appraisal of them and subsequent responses similar to the VAMs/ intrusive thought account.

There may be only subtle differences between SAMs in flashbacks and voices that are closely related in thematic content but are based on VAMs. For example, Mueser and Butler (1987) reported the case of a 55-year-old war veteran whose auditory hallucinations focused upon one specific event where he shot a wounded soldier. A week after the incident he began to hear the man's voice repeatedly telling him to kill himself. The voice may not be a precise reflection of the event, but said to take the form of a flashback. This may be related to VAMs initiating intrusive thoughts to kill himself based on perceptions of guilt about the incident.

Existing literature has not to date investigated these concepts and future research is required to explore them further. Studies on the experiences of voice hearers have historically tended to be quantitative (e.g. Morrison et al., 2000), however it can be argued that these methods would not offer the scope to collect detailed data in this area. The development of a qualitative approach may be preferable, involving narrative data collection based on subjective accounts both of voice experiences and trauma histories. Studies have reported inherent difficulties in accessing data about psychotic symptoms due to the reluctance of participants to disclose their experiences (David et al., 1999). It may therefore be necessary to approach this type of research within a therapeutic relationship so that participants feel secure, particularly when discussing experiences of abuse (Heins et al., 1990). This raises ethical and professional issues concerning the dual role of researcher and clinician and should be carefully considered before undertaking this type of research.

Conclusions

In reviewing the available literature on the relationship between voice content and trauma it is clear that there is an overlap between psychotic symptoms, trauma and PTSD (Mueser et al., 2002). This is evident from studies that report a high prevalence of trauma in the lives of people with SMI (particularly sexual abuse) (Read et al., 2003), high rates of PTSD found in people with psychotic symptoms (Rosenberg et al., 2002) and from studies that have reported the presence of hallucinations in combat veterans with chronic PTSD (Hamner et al., 1999).

The overlap between psychotic disorders and PTSD has important clinical implications as it may be necessary to adapt assessment and treatment approaches both to auditory hallucinations and trauma (Mueser et al., 2002). In addition, studies addressing the overlap have to date been conducted with combat veterans which may not be representative of clinical cases encountered in community mental health teams. Future research may be directed towards investigating these issues in clinical samples of voices hearers who are referred to teams for help with voices.

There have been few studies examining directly the link between the onset and content of voices and traumatic life events. Findings from case studies however (Graham & Thavasotby, 1995), appear to support both an intrusive thought model of hallucinations and a trauma flashback model originating from trauma. This suggests the compatibility of cognitive models of voices (Morrison et al., 1995) and PTSD (Brewin et al., 1996) and the utility of combining theoretical approaches. Further research is needed in order to investigate these conceptual accounts directly. It may be effective to develop a method based on a qualitative narrative approach, as quantitative methods would restrict the scope for in-depth data collection. Such research should be conducted within a therapeutic relationship to promote disclosure of personal and emotive experiences (Heins et al., 1990) and related ethical and professional issues should be considered a priority within this type of research.

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APPENDIX TWELVE: JOURNAL NOTES FOR CONTRIBUTORS

Psychology and Psychotherapy: Theory, Research and Practice

Notes for Contributors

Psychology and Psychotherapy: Theory Research and Practice (formerly the *British Journal of Medical Psychology*) is an international journal with a focus on the psychological aspects of mental health, psychological problems and their psychotherapeutic treatments. Its aim has been to bring together the psychiatric and psychological disciplines and this is reflected in the composition of the Editorial Team. Nevertheless we welcome submissions from mental health professionals and researchers from all relevant professional backgrounds. The traditional orientation of the Journal has been towards psychodynamic and interpersonal approaches, which have defined its core identity, but we now additionally welcome submissions of original theoretical and research-based papers of any theoretical provenance provided they have a bearing upon vulnerability to, adjustment to, assessment of, and recovery (assisted or otherwise) from psychological disorders. The Journal thus aims to promote theoretical and research developments in the fields of subjective psychological states and dispositions, interpersonal attitudes, behaviour and relationships and psychological therapies (including both process and outcome research) where mental health is concerned. Submission of systematic reviews and other research reports which support evidence-based practice is also welcomed. Clinical or case studies will be considered only if they illustrate particularly unusual forms of psychopathology or innovative forms of therapy which carry important theoretical implications.

Counselling Psychology: A special section on counselling psychology has been created in the journal in recognition of the importance of this area within psychology and psychotherapy. This section aims to promote theoretical and research developments in the field of counselling psychology. Authors who wish to submit their papers for consideration in this section should state this in their covering letter.

1. Circulation

The circulation of the Journal is worldwide. There is no restriction to British authors; papers are invited and encouraged from authors throughout the world.

2. Length

Pressure on Journal space is considerable and papers should be as short as is consistent with clear presentation of the subject matter. Papers should normally be no more than 5,000 words, although the Editor retains discretion to publish papers beyond this length.

3. Refereeing

The journal operates a policy of anonymous peer review. Papers will normally be scrutinised and commented on by at least two independent expert referees (in addition to the Editor) although the Editor may process a paper at his or her discretion. The referees will not be made aware of the identity of the author. All information about authorship including personal acknowledgements and institutional affiliations should be confined to a removable front page (and the text should be free of such clues as identifiable self-citations ('In our earlier work...')).

4. Submission requirements

- Four copies of the manuscript should be sent to the Editor (Professor Phil Richardson, Journals Department, The British Psychological Society, St. Andrews House, 48 Princess Road East, Leicester, LE1 7DR, UK). Submission of a paper implies that it has not been published elsewhere and that it is not being considered for publication in another journal. Papers should be accompanied by a signed letter indicating that all named authors have agreed to the submission. One author should be identified as the correspondent and that person's title, name and address supplied.

- Contributions must be typed in double spacing with wide margins and on only one side of each sheet. All sheets must be numbered.
- Tables should be typed in double spacing, each on a separate piece of paper with a self-explanatory title. Tables should be comprehensible without reference to the text. They should be placed at the end of the manuscript with their approximate locations indicated in the text.
- Figures are usually produced direct from authors' originals and should be presented as good black or white images preferably on high contrast glossy paper, carefully labelled in initial capital/lower case lettering with symbols in a form consistent with text use. Unnecessary background patterns, lines and shading should be avoided. Paper clips leave damaging indentations and should be avoided. Any necessary instructions should be written on an accompanying photocopy. Captions should be listed on a separate sheet.
- All articles should be preceded by an Abstract of 200 words, giving a concise statement of the intention and results or conclusions of the article.
- Bibliographic references in the text should quote the author's name and the date of publication thus: Smith (1994). Multiple citations should be given alphabetically rather than chronologically: (Jones, 1998; King, 1996; Parker, 1997). If a work has two authors, cite both names in the text throughout: Page and White (1995). In the case of reference to three or more authors, use all names on the first mention and et al. thereafter except in the reference list.
- References cited in the text must appear in the list at the end of the article. The list should be typed in double spacing in the following format:
  Herbert, M. (1993). *Working with children and the Children Act* (pp. 76-106). Leicester: The British Psychological Society.
  a) Neeleman, J., & Persaud, R. (1995). Why do psychiatrists neglect religion? *British Journal of Medical Psychology*, *68*, 169-178.
- Particular care should be taken to ensure that references are accurate and complete. Give all journal titles in full.
- SI units must be used for all measurements, rounded off to practical values if appropriate, with the Imperial equivalent in parentheses
- In normal circumstances, effect size should be incorporated.
- Authors are requested to avoid the use of sexist language.
- Authors are responsible for acquiring written permission to publish lengthy quotations, illustrations etc for which they do not own copyright.

For more information on submission requirements, please refer to the online Guide to Preparing Manuscripts for Journal Publication at: http://www.bps.org.uk/publications/jAuthorGuide.cfm or conatct the BPS Journals Department. For guidelines on editorial style, please consult APA Publication Manual published by the American Psychological Association, Washington DC, USA (http://www.apastyle.org).

5. E-mail and Web submissions

Manuscripts may be submitted via e-mail and the BPS website (http://www.bps.org.uk/publications/jsubmission.cfm). The main text of the manuscript, including any tables or figures, should be saved as a Word 6.0/95 compatible file. The file must be sent as a MIME-compatible attachment. E-mails should be addressed to journals@bps.org.uk with 'Manuscript submission' in the subject line. The main body of the e-mail should include the following: title of journal to which the paper is being submitted; name, address and e-mail of the corresponding author; and a statement that the paper is not currently under consideration elsewhere. Web and e-mail submissions will receive an e-mail acknowledgement of receipt.

6. Brief reports

These should be limited to 1000 words and may include research studies and theoretical, critical or review comments whose essential contribution can be made briefly. A summary of not more than 50 words should be provided.

7. Ethical considerations

The code of conduct of The British Psychological Society requires psychologists 'Not to allow their professional responsibilities or standards of practice to be diminished by consideration of religion, sex, race, age, nationality, party politics, social standing, class or other extraneous factors. The Society resolves to avoid all links with psychologists and psychological organizations and their formal representatives that do not affirm and adhere to the principles in the clause of its Code of Conduct. In cases of doubt, authors may be asked to sign a document confirming the adherence to these principles. Any study published in this journal must pay due respect to the well-being and dignity of research participants. The British Psychological Society's Ethical Guidelines on Conducting Research with Human Participants must be shown to have been scrupulously followed. These guidelines are available at http://www.bps.org.uk/about/rules5.cfm

8. Supplementary data

Supplementary data too expensive for publication may be deposited with the British Library Document Supply Centre. Such material includes numerical data, computer programs, fuller details of case studies and experimental techniques. The material should be submitted to the Editor together with the article, for simultaneous refereeing.

9. Proofs

Proofs are sent to authors for correction of print but not for rewriting or the introduction of new material. Fifty complimentary copies of each paper are supplied to the senior author, but further copies may be ordered on a form accompanying the proofs.

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11. Checklist of requirements:

- A signed submission letter
- Correspondent's title/name/address
- A cover page with title/author(s)/affiliation
- Double spacing with wide margins
- Tables/figures at the end
- Complete reference list in APA format
- Four good copies of the manuscript (or an e-mail attachment)

SECTION 3

RESEARCH PAPER

Running head: TRAUMA AND AUDITORY HALLUCINATIONS

The Role of Traumatic Life Events in the Onset and Content of Auditory Hallucinations: A Qualitative Case Study Approach

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Abstract

Aims: The current study aimed to investigate the link between trauma and voices by collecting detailed data on the experiences of a clinical sample of voice hearers diagnosed with psychotic spectrum disorders. It also aimed to examine data for evidence of two cognitive accounts of voices: 1. An intrusive thoughts model and 2. A flashback model. Both were conceptualised from cognitive theories of voices and PTSD that suggest auditory hallucinations are influenced directly by traumatic life experiences through the formation of core beliefs and by memory processes. Finally, it aimed to contribute toward the development of a qualitative method.

Methods: A qualitative approach was employed based on narrative and IPA principles. Data was collected in flexible unstructured interviews in accordance with clinical considerations. Accounts were transcribed and case vignettes used to reproduce narratives. Vignettes were then analysed for evidence of the models.

Findings: A clear link was demonstrated within accounts between the experience of trauma and the onset and content of auditory hallucinations. The overlap between psychosis, trauma and PTSD was emphasised, supporting findings from previous studies. Evidence was found of both models of voices and the approach considered appropriate for this type of research.

Conclusions: The need for a dual approach to formulation and treatment of voices based on CBT for psychosis and PTSD approaches was identified. This area of research poses significant logistic and ethical considerations and collection of data within a therapeutic relationship was considered essential. Future research may involve larger sample sizes excluding abuse survivors to compare findings. Further development of the method should include attempts to validate accounts.

Introduction

Auditory hallucinations are defined as sensory perceptions that have the same sense of reality and impact as a true event, but which occur without the presence of an external stimulus (APA, 1994). They have been found in non-clinical populations (Honig et al., 1998) but research into their causes, functional mechanisms and psychological impact has mainly focused upon clinical samples of people with psychotic illnesses (e.g. schizophrenia)(Bentall, 1990). In recent years cognitive approaches to auditory hallucinations have developed the perspective that psychotic experiences exist on a continuum with normal experience (Fowler, 2000) and that the content of psychotic symptoms are often related to sufferers' real life concerns and experiences (Morrison, 2001). The aim of the current study was to investigate the relationship between life experiences and the onset and content of auditory hallucinations.

A dominant cognitive model of auditory hallucinations suggests that auditory hallucinations are intrusive thoughts (similar to those experienced in anxiety), which are misattributed to an external source as they are ego dystonic, (i.e. dissonant with existing beliefs about themselves and the world) (Bentall, Haddock & Slade, 1994). Questionnaire studies have shown that the beliefs people have about their voices determine the degree of distress experienced (Chadwick and Birchwood, 1995), and that they are maintained by subsequent cognitive, behavioural and affective responses (Morrison, 2002). These studies have typically focussed upon the cognitive mechanisms underlying hallucinations and on the processes that maintain them and it is only in very recent years that theorists have considered the factors that influence the onset and thematic content of hallucinations (Fowler, 2000).

A high prevalence rate of emotional trauma (in particular, childhood sexual abuse) has been found in the lives of people with severe mental illness (Read et al., 2003). High rates of posttraumatic stress disorder (PTSD) have been found within these groups (Mueser et al., 1998) and conversely that psychotic symptoms are experienced in some cases of chronic PTSD (Hamner et al., 1999). These studies highlight the importance of considering the overlap between psychosis, trauma and PTSD from a clinical perspective, as approaches to assessment and treatment of psychosis and PTSD are not currently compatible (Mueser et al., 2002). For example if it is determined that auditory hallucinations relate to trauma then this raises the issue of needing to explore traumatic experiences in therapy.

Honig et al (1998) found that the onset of auditory hallucinations is often preceded by a traumatic life event and Fowler et al (in preparation) reported that the content of voices often relates to trauma figures such as abusers or bullies. In recent years therefore, theorists have begun to draw attention to the impact of life experiences on the development and content of auditory hallucinations. Morrison (2001, p.257) suggests that voices are influenced by "faulty self and social knowledge" acknowledging that core beliefs people form through life experiences lead to the intrusive thoughts implicated in this account of voices. Fowler (2000) draws attention to the need for individualised formulations that take into account schematic beliefs about the self in order to develop effective psychological interventions for the cognitive treatment of voices. "Helping voice hearers to become aware of the relationship between their voice content and past experience… can be an important aspect of cognitive therapy" (Fowler, 2000, p.115).

When trying to understand the impact of trauma upon the development of auditory hallucinations, it may also be useful to consider the compatibility of models of auditory hallucinations and cognitive models of PTSD that attempt to explain how traumatic experiences are processed. Brewin et al (1996) suggest that following traumatic events, people experience verbally accessible memories (VAMs) that provide them with intentionally retrievable information about the trauma and influence their semantic understanding of the world. This may be likened to the cognitive model of voices as intrusive thoughts based on trauma related core beliefs.

Brewin et al (1996) conceptualise a second memory process in PTSD called situationally accessible memories (SAMs). These memories are spontaneous, intrusive and experienced as reliving the traumatic experience in the form of flashbacks. Such memories are not under a person's control, triggered by contextual cues or thoughts related to event and are difficult to articulate. They also involve other sensory phenomena such as hyper-arousal and acute anxiety and may be maintained by attempts at cognitive avoidance. Findings from case reports of combat veterans hearing the voices of dead comrades (Mueser & Butler, 1987) suggest that some cases of auditory hallucinations may occur as flashbacks as a result of SAMs. Clinical case studies of abuse survivors also suggest auditory, tactile, and olfactory hallucinations that are strongly reminiscent of abusive events (Graham & Thavasotby, 1995) suggesting voices may be a related phenomenon.

These theoretical accounts of voices suggest two different cognitive accounts of voices. One is that they may be misattributed intrusive thoughts based on VAMs, the other as SAMs occurring as flashbacks. This highlights the need for research into this area to see if the two processes can be distinguished within voice hearers accounts. Previous papers reporting findings on the link between voices and trauma have been case reports on combat veterans (Haberman, 1986) or anecdotal clinical case studies from the psychodynamic literature (Heins, Gray & Tennant, 1990). Clinical cognitive research on the experience of voices has been restricted to accessing the cognitions and beliefs of voice hearers using quantitative methods such as structured interview questionnaires (Chadwick & Birchwood, 1994). These approaches offer only limited scope for collecting informative data on the relationship between trauma and voices.

To investigate the two accounts of voices it may be necessary to accumulate narrative data about life experiences and related beliefs using qualitative methods. Because of the sensitive and personal nature of the subject area it is notoriously difficult to achieve this. Sufferers are often reluctant to report psychotic phenomena (David et al, 1999) and studies indicate that in order to retrieve and disclose memories of traumatic events (such as sexual abuse) respondents need to feel safe to do so within trusting therapeutic relationships (Phelps, Friedlander & Zerbe-Enns, 1997).

The current study aimed to undertake such a piece of research in order to investigate the relationship between traumatic life experiences and the onset and thematic content of auditory hallucinations. It had the following specific aims:

i) To elicit detailed narrative data on voice content and trauma histories based upon the subjective accounts of a clinical sample of voice hearers.

ii) To use this data to contrast two cognitive theories of voices:

   1. Voices as ego-dystonic intrusive thoughts (e.g. situation specific negative undermining comments)

2. Voices as 'flashbacks' or SAMs (repetitive comments echoing a specific traumatic event, with accompanying trauma related sensory phenomena)

iii) To contribute to the development of a method for future research in this area.

Method

Participants

Five participants were recruited from the caseloads of key workers in local community mental health teams. Inclusion criteria were that participants heard voices that they found distressing, had been referred to CMHTs and had a psychosis spectrum diagnosis. They were not recruited on the basis of having experienced traumatic life events. Each of them had received clinical input for a number of years but were offered the opportunity to work with the primary researcher therapeutically following participation. They were approached initially by key-workers several weeks in advance to participation and given time to consider the implications of involvement i.e. the potential emotional impact of talking about their experiences. All were considered able to give informed consent through discussion with clinicians involved in their care.

Procedure

A qualitative approach was taken that aimed to access the subjective narrative accounts of respondents within a therapeutic relationship, as this was considered crucial both from an ethical standpoint and in order to collect sufficiently rich data (Phelps et al., 1997). This approach generates large volumes of research data (transcripts from multiple sessions) placing a practical constraint on the potential for detailed analysis. Yardley's (2000) pragmatic criteria for qualitative methods were used to guide the approach: sensitivity to context, in-depth engagement with the topic and the use of transparent and reflexive methods.

Taking a grounded theory approach was not considered appropriate as this is based upon developing new theories from the data without prior hypotheses or ideas (Chamberlain, 1999). Nor was it suitable to follow strictly an interpretative phenomenological analysis (IPA) approach (Smith, Jarman & Osborn, 1999). This was because although the study aimed to gain insight into the personal worlds of respondents in a similar way to IPA, the main purpose was not to search for emerging subjective themes based upon the "participant's view of the topic under investigation" (p.218), but to specifically consider predetermined theoretical concepts from the literature in context of their experiences.

The fact that the process of data collection and analysis would be interpretative was also considered an important factor therefore the aim was to take a largely unstructured narrative approach (Plummer, 1995). This would allow participants to tell their stories without being overly directive, so that they controlled which life experiences to disclose. The objective was also to compare participants' narratives focussing on the conceptual themes of voice experience characteristics (as described in the aims section), therefore it would not be sufficient to merely edit and attempt to reproduce their stories. The approach taken was a combination between IPA and a narrative approach. Respondents were encouraged to tell their life stories but in context of their voices i.e. they were asked general questions about the content of their voices and their beliefs about their origins.

Data Collection

Data was collected within semi-structured interviews, which were audiotaped. Participants were interviewed over several sessions ranging from 4 to 10 meetings dependent on the individual. It was found that participants' ability to cope with sessions and give coherent accounts was related to current level of functioning. Session lengths ranged from 30 minutes to 2 hours and flexible approaches taken to interviewing depending on current emotional issues and ability to communicate their stories.

An emphasis was placed upon building rapport prior to data collection and sessions were not audiotaped until participants felt comfortable. Questions regarding content of voices and related beliefs were prompted when necessary based on the Cognitive Assessment of Voices Interview Schedule (Chadwick & Birchwood, 1994) and the Beliefs about Voices Questionnaire Revised (BAVQ-R) (Chadwick & Birchwood, 2000). A standardised trauma history measure was not used as this was considered overly directive and potentially intrusive. Participants were able to decide naturally which events from their lives they felt were relevant to their voice experiences. They were not pressurised to disclose specific events and were monitored for their emotional reactions after and between interviews. Further therapeutic work was undertaken as appropriate.

Analysis

The data was transcribed in full from audiotapes for three participants and partially transcribed for the other two due to time constraints. Transcripts were read several times and analysed for key pieces of data relating to the three areas of interest: *clinical history*, *trauma history* and *voices*. The data was analysed thus to reflect the main aims of the study which were to elicit data on voice content and trauma histories in context of the person's overall clinical history. Sections from the transcripts were organised based upon relevance to these areas. Case vignettes were then written within the structure of these sections, unfolding their narratives using verbatim quotes to illustrate key information. This level of organisation was necessary as the interviews were largely unstructured.

The case vignettes were then used to search for patterns across respondents' narratives with reference to the two accounts of auditory hallucinations (i.e. as intrusive thoughts or flashbacks). The two accounts were used as themes within which to organise the data and examples of each process were identified and compared. This enabled an examination of how far it was possible to make this distinction based on people's narrative accounts. The following distinctions of the two voice models were used:

a) Intrusive thoughts (VAMs) model: voices that reflected the person's apparent core beliefs, events reported from memory, and containing self-referential critical and negative material. These may not be direct representations of words spoken by recognisable voices heard in the past.

b) Flashback (SAMs) model: voices occurring spontaneously, reflecting the content of a specific traumatic event e.g. a recognisable voice of a real person speaking words heard in the past, often accompanied by related sensory and physiological phenomena such as visual hallucinations and hyper-arousal.

Results

Case vignettes taken from participants' verbatim accounts.

Rebecca

Clinical History

Rebecca was forty-five and reported a long history of mental health problems. She was severely and chronically sexually abused in childhood and suffered significantly with depression. She made the first of many suicide attempts at seventeen and was admitted to a long-stay psychiatric institution. She began hearing voices ten years ago, following her mother's death and her own marital problems. She also developed anorexia and was hospitalised repeatedly in subsequent years. She had been diagnosed at different times with borderline personality disorder (BPD) with psychotic features and schizophrenia. Although currently still experiencing hallucinations and intermittently self-harming, she worked, took care of her family and hadn't attempted suicide for two years. She was interviewed over four sessions and was willing to talk openly having engaged in long-term therapy for six years.

Trauma History

Rebecca was violently sexually abused by her mother, uncle and grandfather from five-years-old and forced into child prostitution. From age nine, men paid to have sex with her mother and herself while her siblings were at school. She was desperately frightened on these occasions:

> *I used to think in the end that they would kill me and one day I wouldn't be coming downstairs again.*

She believed it was her responsibility to endure the abuse to protect her younger siblings:

> *I was the eldest girl you see? so.. it was up to me – til the day she died.*

She still experienced severe guilt about not being able to save them from their mother's uncontrollable *"time bomb"* anger when they were beaten, locked in cupboards and starved. Rebecca was constantly criticised by her mother for *"not bringing enough money in"* and being *"a useless waste of space"*. She reported how the only physical affection she received was when her mother was sexually abusing her, recalling experiencing:

> *A total feeling of being useless.. of being in the way.*

By seventeen she realised how abusive her maternal relationship was, precipitating an emotional crisis and an attempt to cut her wrists. Her mother beat her and telephoned her abusive uncle (of whom she was terrified) to *"control"* her:

> *I was going mad you know? throwing things and.. I just, completely lost it.. and he came didn't he?/ He was trying to take the knife off me and I just went for him.*

The abuse continued after Rebecca got married at twenty-seven. She often returned home in an attempt to deflect the abuse from her sister and her own children. This caused problems with her husband and a two-year separation ensued. During this time her mother died of a heart attack when Rebecca was thirty-two. Although she felt relief Rebecca never felt her mother's death was the end of the abuse:

> *Mam always said she'd come back to haunt me / It never felt final - I know she's dead.. but yet she isn't if you see what I mean? She hasn't gone forever, never to be seen or heard of..*

Hallucinations

Rebecca heard the voices of her abusers (her mother, grandfather and uncle), the most dominant of which was her mother's. This voice constantly criticised her, commenting negatively on the way she led her daily life and brought up her children. The voice told her she was spoiling the children and commanded her to abuse them:

> *The voices tell me that I should.. lock them away.. that I'm giving them too much of their own way.*

A particularly difficult issue concerned orders to sexually abuse them. Rebecca felt strongly protective towards her children and responded to command hallucinations by cutting and burning herself to appease the voices:

> *If she tells me to stab myself I will.. but I'm not touching my kids no bloody way.*

She constantly feared for their safety believing her mother had the power to send her elderly (living) uncle to kidnap them and force them into prostitution. This caused intolerable anxiety and led to numerous safety behaviours. She also heard threats from her uncle:

> *He's gonna come here and he's gonna use {daughter} the same as like he used me.. that he hadn't finished with me yet. Cos he might be old, but he can still control me.*

Rebecca also experienced visual and tactile hallucinations:

> *I see them coming out of these walls and out of the ceiling and.. and what I do, I just turn right round and close my eyes and turn on my belly [mm]. But that's no good either cos then I can feel my grandfather whipping my back.*

She saw images of being abused when she closed her eyes and re-experienced specific events:

> *It's just pictures um... my mother and these men and, just like a.. movie camera in your head and you see these visions and.. they are as clear as – it's like when you're dreaming, something like that but... but, when you wake up it doesn't go.*

She reported feelings of apprehension and hyper-arousal, sensing their presence as if about to her attack her and saw her mother dressed in clothes she had worn in real life. Rebecca could hear footsteps following her when she tried to escape them:

> *I see the three of them.. just standing there you know? behind me or whatever – when I go for a walk.. oh, I can literally hear the footsteps behind me. Especially when I go in the middle of the night, it's so quiet...*

Believing they retained the power to harm her led to hyper-vigilance reminiscent of how she felt in her mother's presence:

> *I'm on pins and needles with them – I don't know if they're gonna attack me, or attack my kids or whatever.. I don't know – I can't be everywhere... I can't look after my kids and me, you know?.. being in the house with my mother was like.. waiting for a time bomb to explode you know? and that's what it feels like now. It's a terrible feeling – you're walking on eggshells. So I'm just waiting – she's just there, well they're just there.. just waiting and, I don't know what they're waiting for... but they're just waiting – making my life a misery, until they finally do something about it.*

Rebecca couldn't imagine life without the voices, believing she needed her mother's opinion as she had no sense of her own identity and judgment:

> *I've always been controlled so I don't know what it is to step back and just.. do it, myself / Even though I'd like to be without them, the thought of it is uh! it's like me standing alone in this great big field you know? It's there for me to take control of.. and I don't know if I could / I don't trust my own judgement... that's why it's so difficult to let her go.*

Nick

Clinical History

Nick was thirty-seven and lived at home with his mother and two brothers. He became chronically depressed after the death of his father sixteen years ago and developed panic attacks while at work. He began to hear voices, experiencing recurrent episodes of severe depression and intensification of command hallucinations to harm himself. Multiple suicide attempts resulted in several involuntary hospital admissions. Nick also had a history of anorexia and had been diagnosed with psychotic depression and BPD. Data was collected intermittently over ten sessions whilst working therapeutically, dependent upon clinical considerations.

Trauma History

Nick reported having been physically and sexually assaulted by two men, once at twelve by a stranger on a beach who tied his hands. He continued to feel heavy guilt about being on the beach that day, believing he deserved to be punished:

> *I should hurt myself, for going there / cos it's my fault that I went there, and nobody can understand that.*

His abuser forbade him from disclosing the incident and therefore he had never talked to his family about it:

> *It's a secret that I have to take with me to the grave / I know it's his fault, deep down for what he did.. but I can't.. come to terms with it you know? I've never talked about it, openly, I don't bring it up at home. I think if it ever came out – if my family ever knew I would commit suicide.. you know?*

Nick became extremely anxious and depressed when ruminating about the incident:

> *I'm ugly.. I don't think I want to live – it's not worth it. I don't look at myself in the mirror you see. Cos I see nothing there you know? only a horrible person that doesn't deserve to live.*

When his voices subsequently intensified he sometimes reached crisis point and was unable to control his emotions:

> *They knew something was up on Saturday, you know? I was hoovering up, and I just lost it you know?/ I just came downstairs screaming and shouting / That things aren't fair anymore.*

He emphasised the importance of being able to talk openly in the context of therapy:

> *It's important to me, that I build up trust with somebody that I can go to.. that I can talk to.. and say things that are.. on my mind that I've never ever said before to anybody.*

When Nick was fifteen a local man also tried to sexually assault him, locking him in the house and physically assaulting him when he tried to escape:

> *I ran, but I couldn't get out cos the doors were locked, and everything. And then he turned round – punched me, grabbed me, threw me, dragged me upstairs but he didn't do anything cos I screamed – I threw something through the window, like a crate and he ran.. out of the house.*

Another significant trauma was experienced when Nick's father died unexpectedly of a heart attack. He reported how he had not recovered from the bereavement:

> *I miss my father dreadfully. I cry at night / I used to go to the cemetery every day... I know it's sixteen years but I'll never get over it...*

He believed his father was lonely and described how he'd sat up all night with his coffin before he was buried. When he was depressed he believed he deserved to die and should join his father:

> *I'm going to be cremated and my ashes buried with my father, that's what I want you know? They should put me in the fire really shouldn't they? Burn me.. for all the sin that I've done and everything.*

After the bereavement Nick became extremely anxious and preoccupied with death when witnessing dead bodies at work:

> *I had images of me.. in the coffin you know.*

Having lost his job due to the deterioration in his mental health he experienced significant feelings of loss and worthlessness:

> *I'm just not worth anything anymore... it's not worth living. I've lost everything in life.. my job, I had everything. I've lost everything.*

Nick also reported having been traumatised by being involuntarily hospitalised. He reported feeling useless because attempts to kill himself resulted in hospitalisation:

> *If I try to take my life I always fail you see and then they would put me in hospital wouldn't they?*

He isolated himself when ill incase his psychiatrist initiated a section:

> *She's got a lot of power see? she can do whatever she wants to do... she can put you on a section in two minutes.*

When depressed he began to believe there was a conspiracy to keep him in hospital:

> *I think they are trying to plot to keep me here you know?*

Voices

Nick heard the voices of both his abusers. Predominantly he heard the man from the beach ordering him not to disclose the assault:

> *It says to me its got to be a secret.. if you tell anybody then you commit suicide.*

He also experienced command hallucinations to self-harm:

> *It's the voices telling me that I've sinned / They tell me to end my life/ I could hear them you know?- go for the razor, go for the razor, go for the razor*

When depressed the voices became unbearably loud and he wanted to die to escape them:

I feel like my head's going to explode – I feel like screaming / I don't want to live you know?/ I just wish people would understand.. what I'm going through. These voices are controlling me every day and I don't know how much longer I can take/ All I can see is darkness as if I'm in, as if I'm in a hole and, there's no light. I don't think I'll ever get better you know?

It was at these times he ruminated about his father thinking death would be preferable if his father was waiting for him, a belief exacerbated by the voices:

The only time I'll get better is when I'm six foot under with my father... / It's telling me it's time to go now, you should go with your father now.

Nick believed his voices held immense power over him and could make him harm and starve himself:

Yeah.. they can punish me by not eating / they tell me not to eat / what I would like to do is starve myself, not drink, not eat and just go to bed to die.

He heard the voices telling him that he was unsafe when in hospital:

I don't like the bloody place – it's a torture chamber, that's what I – it's what the voices tell me / They're saying {CPN}, {psychiatrist} and the doctor are trying to.. lock me up.

Laura

Clinical History

Laura was thirty-six and had heard voices since she was eleven. She was chronically sexually abused by her father from four-years-old and later by her stepfather. She became anorexic by nineteen and was admitted to hospital. In her twenties she began to self-harm and later took overdoses to escape her voices. Over the years she was diagnosed with BPD and an unspecified psychotic illness. She was unable to take anti-psychotic medication due to severe side effects, but had spent several years in therapy addressing both the abuse and her voices. It was two years since she had selfharmed and she was currently a student. She spoke candidly about her life over three sessions.

Trauma history

Laura's father had sexually abused her from a young age:

> *I was sexually abused by my father from, four years old and he actually started raping me from the age of five, and I think everything really can be traced back to that.*

She was told by her father this was normal and to keep it a secret:

> *While my dad was abusing me he used to say, either...it was because I was special.. and this is why he did it and it had to be a secret cos I was so special - all the usual stuff. And then the other half of the time when that wasn't working and I was trying to fend him off he'd, he'd say well it was because I'd been so naughty I deserved it.*

although she didn't understand it, she knew she hated it happening:

> *When my dad said that this happens to all girls when they're special to their daddy, I had nothing to compare that with, so I presumed it was normal, I knew I couldn't tell anybody partly because I felt bad about it, in my mind I didn't reflect that back onto him, that was because I was evil.*

The abuse continued for many years despite her mother discovering it. Laura had experienced years of bitterness toward her for not protecting her:

> *she came in and wiped the floor with him –she went into the kitchen and I could hear her rowing with him and I was just told to go to bed. And nothing was ever said about it again.*

By age ten she had an eating disorder:

> *I just couldn't be bothered eating - it just seemed pointless, er I think it was partly due to the abuse that I didn't like going to the toilet because it reminded me of everything that happens when you are undressed. So I just didn't want to go, so therefore if I didn't drink and I didn't eat I wouldn't have to...strip off and see this hideous body that does these awful things.*

Her mother divorced her father when she was twelve and soon remarried. Her stepfather coerced sexual contact by threatening to sexually assault her baby sister:

I refused and he just calmly just walked over to the cot and took her nappy off / so I just let it carry on because I was terrified of him starting on my sister.

She felt guilty and angry about the abuse, questioning why it had happened to her instead of other girls:

I hated myself so much for having let it gone on / I had an awful lot of guilt over why did I let it happen? And what did I do that he sort of picked on me, instead of, some girl walking down the street?

She began to self-harm in response to command hallucinations and found cutting her arms with glass gave her emotional release:

When I actually saw it bleed. .it made me feel better. It was almost like all the badness was coming out I suppose.

Laura didn't tell anybody about her voices until she was eighteen. She experienced strong feelings of self-hatred, finding it hard to build trusting friendships believing people would reject her because of the abuse:

I felt they couldn't see what I was really like and how bad a person I really was /I didn't trust anybody. Everybody that tried to get close to me in my mind there was an ulterior motive for it. Nobody was doing it cos they really cared.

Voices

Laura began to hear two unfamiliar male voices when she was eleven:

It didn't make any sense it used to terrify me [I bet it did] it was just like some sort of abject fear. It was almost like.. I mean I kept looking around expecting people to come out of the walls.

As a child the voices told her she was a bad person and would die:

I mean they used to say other stuff, that I'm so bad I'm gonna die. I'm not gonna grow up.

She blamed herself for anything that went wrong including world disasters:

> *It could be something like a plane crash in East Africa or something [mm] but I was told in my head that it was my fault and that it was because I was so evil so I was permanently trying to be good.*

She believed the voices were a punishment because of the abuse:

> *I didn't tell anyone about it for a long time cos I kind of knew somewhere deep inside that other people couldn't hear them... I felt that it was some sort of punishment I was getting for being such an evil child.*

Command hallucinations began at fifteen ordering her to cut herself and telling her she was a coward for not having the abuse stopped:

> *If I happened to see a piece of glass on the floor, all I could hear was all these people screaming at me go on then - cut yourself / You're too scared, you've got no bloody guts. You've proved that over the years by letting all this carry on, rather than kick up a fuss about it and get something done and stop it / go on then you deserve it, you're useless you'll never make anything of yourself, this is all you're fit for.*

Laura became anorexic because the voices told her she was to blame for the abuse:

> *I'd just not eat for months on end.. partly because.. the voices were telling me everything that had happened was my fault – I was the one that was evil - you know - my dad had no choice, my step dad had no choice, they did it cos they had to cos I was so evil.*

Anger and frustration in recent years led her to shouting back at them and challenging what they said, giving her a sense of control over her life:

> *If I can convince myself that they're bloody useless and not worth listening to then maybe I won't listen to them. You know, so I just throw it all back at them and just challenge them with it if they start throwing up stuff from the past.*

After she began to challenge the voices they stopped temporarily leaving her with feelings of apprehension as if they were waiting to pounce and attack her:

> *That scared me more than them being there / I thought no they're planning something.. they've gone quiet for a while but they'll be back and they'll be ten times worse.*

Laura believed her voices were a reflection of her worries and experiences replaying like a *"tape-recorder"*:

> *Something that I've not liked or have been happy with has happened whether it's a car crash, whether it's abuse, whether it's.. a war whatever. I've found that difficult to cope with.. I've felt insecure about that, I've felt.. maybe guilty, – so almost like the voices are just picking up on the negative, emotions and thoughts that I've already got. And then the voices just reinforce that.*

Jessica

<u>*Clinical History*</u>

Jessica was twenty-one and had heard voices since she was eighteen. Her father's death when she was ten preceded chronic depression during adolescence. She developed an eating disorder at fifteen and interpersonal problems at home. She developed paranoid beliefs and was hospitalised after an attempt to cut her wrists at eighteen, and was diagnosed with a 'stress psychosis'. Anti-psychotic medication had a positive effect on her symptoms and she was currently back at work and functioning well. She had previously found therapy for her voices helpful and was keen to participate. She was seen on five occasions but sessions were kept brief as she found the process emotionally draining.

<u>*Trauma History*</u>

Jessica had been shy and withdrawn since childhood but this was exacerbated after her father died. She became overly attached to her mother (fearing her death), avoided mixing with peers and became increasingly depressed:

> *I used to get ill around my dad's anniversary.*

She ruminated about the loss of her father and struggled to cope with school, often finding it hard to concentrate and hold a conversation. She felt lonely, often cried and was bullied about her appearance. She worried excessively about her weight, leading to a reluctance to eat and social anxiety:

> *I didn't want to face people / I've always been paranoid about what people think of and say about me.*

At seventeen a friend's disclosure of an abusive experience triggered a memory of being sexually assaulted as a small child. Shortly afterward her depression increased and she began to hear voices, attempting suicide in response to command hallucinations:

> *I felt like a waste of space nobody needed me... everything was negative.*

While in hospital she developed paranoid beliefs:

> *I was in a world of my own.. I thought I'd been drugged on cocaine, I could see white crystals in my nose so I plucked all the hairs out and couldn't even feel it.*

She felt mistrustful, thinking the nurses were talking critically about her, believing it was their voices she heard. Her voices improved after she took anti-psychotic medication, and engaged in therapy to address the abuse memory. As she recovered from the psychotic episode her voices became benevolent reducing her distress.

Voices

When Jessica was first admitted to hospital she heard the voices of many people that she knew, discussing her critically:

> *I was stupid and they wanted me to die. I believed that and that's when I tried to slit my wrists.*

The voices commanded her to hang herself:

> *You're useless – why don't you just go and kill yourself?*

Because she believed they were real and felt frightened this reinforced her suicidal ideation:

> *I thought they were real people, I thought they were going to come into {hospital} and kill me.*

Her voices became largely benevolent after engaging in therapy led to the belief that they were her own thoughts and not of external origin. She heard a female voice however that was sometimes critical and appeared to reflect her own self-doubts:

> *{Name of voice}'s a lot to do with my emotions... so really what she says could be my thoughts.*

The content of what this voice said changed according to how positive or critical Jessica felt about herself at different times:

> *If I feel bad she'll say you're fat and I go and exercise. When I feel good I'm a nice girl and will do well in life.*

Jessica described how her voices evolved into clear roles that provided companionship, emotional support, social reassurance and help with decision making. She believed the voices were a reflection of her own thoughts, memories and needs:

> *Maybe I was lonely so I wanted friends more, so the people that I like, I can hear their voices like memories / I valued their friendship in a way.*

Catherine

Clinical History

Catherine was twenty-five and had heard voices since she was seventeen. This followed a period of excessive cannabis use when she became psychotic, was hospitalised and diagnosed with paranoid schizophrenia. She still presented with delusional beliefs about physical and sexual abuse by teachers but had learned to cope to a limited extent with her hallucinations. She currently spent much of her time at home and experienced debilitating anxiety attacks. She was interviewed over four sessions, however her account was often incoherent (limiting data collection) as she found it difficult to articulate the content of her voices.

Trauma History

Catherine had a history of bullying classmates, including a serious incident that led to a police caution after causing a head injury, which she still felt guilty about. She also said teachers had been violent towards her, banging her head on the desk. She said one teacher had told her she was unhygienic when menstruating and had sexually assaulted her by rubbing cream on her genitals. This was thought by her CPN and GP to be part of a long-standing delusional belief system (when investigated), as she also believed the teacher had hypnotised her, forcibly put *"liquid contact lenses"* in her eyes and defecated on the classroom floor.

She talked about an unhappy relationship with a man who had allegedly forced sexual intercourse upon her. He had later humiliated her by throwing her out of their home to be with another woman. She blamed him for her problems as he introduced her to cannabis, causing her mother to ban her from the family home:

> *I blank it out you know? I don't want to remember it.*

She suffered anxiety attacks when she passed places that evoked bad memories:

> *Like butterflies inside me flapping away and then your mind starts to think oh the journey – I've got to pass that place.. what if I collapse or something?*

When she first became ill she thought she heard his voice saying he would rape her:

> *He said I'm gonna rape Catherine tonight and I panicked and I said sod it - I phoned my dad and I was in tears... and my dad came and picked me up... and when I came here I was really delusional you know? I didn't know what I was doing.*

She experienced a psychotic breakdown and was hospitalised:

> *I was bad in myself you know I was hearing voices constantly that wouldn't go away / It was so realistic I went to the cops because of it .*

Her family were supportive and allowed her to return home, however she remained significantly debilitated by her voices believing they were real people who she could feel inside her. She believed they could see through her eyes and read her mind.

Voices

Catherine heard two dominant voices of the teachers at school, one of whom she believed had assaulted her. She heard their voices telling her she had seriously injured a schoolmate who they would bring back to see her:

> *I remember when you were in school / they tell keep telling me I've hurt someone, that I've gone and hurt someone who's really in pain, and um... he keeps trying to get the person I've hurt to come here and talk to me.*

They told her she was *"thick"* and *"smelly"* making her feel bad about herself. She also heard the voice of a policeman talking about her drug use:

> *They can look in the past, and they've seen me through the ages, seen my bad points.*

She saw visual hallucinations of three *"ghosts" "nesting"* in the walls of her lounge who followed her around the house, criticising, commenting on her behaviour and telling her they wanted rid of her from the house:

> *They were saying they were never gonna leave me alone, that they were here to stay and they didn't care about how I felt.*

She believed one of the ghosts was evil:

> *It's cos he hates me and wants me dead / he just keeps telling me you've killed someone, and that's why he's here to have revenge and he'll never leave me alone and he can't wait until I'm dead.*

She perceived the voices had power over her, as they would tell people about the things she was ashamed of:

> *They say that they'll show me.. in court, see through my eyes and stuff.*

The voices threatened that the only way they would leave her alone would be if she went to court and told everyone the truth about her past behaviour.

Discussion

The aim of the study was to collect in-depth narrative data from a clinical sample of voice hearers in order to investigate the relationship between onset and content of voices and traumatic life events. It aimed to use the data to contrast two cognitive theories of voices (intrusive thoughts versus flashbacks) and to contribute to developing a method for research in this area.

Level of trauma and diagnoses

It was possible to collect a large volume of narrative data from participants concerning trauma and voice experiences and evidence was suggested within each narrative account of traumatic events preceding the onset of voices. There was a predominant theme of childhood sexual abuse, supporting findings from existing case study literature in this area (Heins et al., 1990). For Rebecca and Laura this was chronic periods of abuse through childhood and for Nick, Jessica and Catherine, isolated incidents of sexual assault. Catherine also reported traumatic experiences relating to bullying and apparent delusional beliefs about sexual and physical assault, supporting findings that the experience of psychotic symptoms themselves can result in trauma symptoms without the presence of an actual event (Shaw et al., 2002).

Periods of severe depression often preceded the onset of voices involving perceptions of loss through bereavement. This was evident in the cases of Nick and

Jessica, supporting findings on the presence of hallucinations following the loss of loved ones (Grimby, 1993). There was also a high prevalence of suicide attempts, often as response to beliefs that voices were inescapable. Similarly eating disorders developed in response to command hallucinations. These findings are consistent with research findings that metacognitions determine responses (Chadwick & Birchwood, 1994). Diagnoses within the sample reflected both psychotic spectrum disorders and BPD demonstrating the diagnostic overlap and difficulties inherent in diagnosis within this clinical group (Mueser et al, 1998) as it was common for participants to have been given more than one diagnosis over the years.

Voice experiences and the intrusive thought model

Consistent with previous work by Fowler (2000) and Morrison (2001) participants' experiences clearly demonstrated the role of traumatic life events in the formation of dysfunctional core beliefs about the self and the world. Beliefs formed at the time of abuse about being evil, and to blame for sexual abuse were reflected in the content of Rebecca, Nick and Laura's auditory hallucinations. This is also consistent with the concept of VAMs impacting upon schemata. Rebecca felt a strong sense of responsibility to protect her siblings by submitting to the abuse. This belief had continued into adulthood and was reflected in the content of her voices when they commanded her to self-harm in order to protect her children. Nick's core belief appeared to be that he was to blame for being on the beach on the day of the assault and he retained cognitions of guilt reflected in his voices and reinforced by their presence.

Laura saw herself as an evil person following her abuse experiences perhaps relating to VAMs formed from the experience and her abusers comments. This belief continued into adulthood when she was reluctant to form close relationships because she thought people would find out the 'truth' about her. She blamed herself for not exposing her abusers, a belief reflected in the content of voices i.e. that her father and stepfather had to abuse her because she was evil and deserved it. It was not until she began to consider the situation from a normalising approach in therapy that she could look back on herself as an innocent child and modify her cognitions. This led to her challenging the voices and retrieving a sense of control over her life helping her to cope.

The beliefs people held about their voices were also consistent with existing literature that suggests how people appraise their voices determines the degree of fear experienced and subsequent responses (Chadwick & Birchwood, 1994). It was clear that meta-cognitive beliefs about perceptions of power and control influenced the responses of hearers. For instance Nick strongly believed his voices could force him to commit suicide if he disclosed the assaults to his family and did he not trust himself not to submit to the commands. His voices also caused him to fear hospitalisation as they told him he would be locked up and tortured (reminiscent of perceptions of the assaults). This led to the behavioural response of isolating himself for fear of being sectioned, hence helping maintain the voices by increasing engagement when alone (Morrison, 1998).

Rebecca believed her mother was so powerful in life that she could still harm her. This belief in the power of her mother's voice led to intense feelings of anxiety and behavioural safety behaviours such as taking her children out of school to protect them from her uncle. It also helped maintain her voices when she submitted to commands to burn and cut herself, as this reinforced feelings of helplessness. Memories of her bullying behaviour and drug use led Catherine to feel guilty and ashamed, believing it would lead to her being socially rejected if her past was known. This was evident in her voices, which held power over her by threatening to expose her behaviour. Passivity delusions led her to respond to the voices by obeying their orders to listen to them and staying in the house due to fears they could ostracise her, hence helping maintain them as her fears were not being faced and overcome.

From a PTSD perspective negative appraisals of these experiences relating to VAMs can be said to have prevented the resolution of trauma. This was because participants were unable to integrate a post-trauma negative version of the world and self with existing schemas (Ehlers & Clark, 2000). This idea is compatible with the cognitive intrusive thoughts model as it explains the beginning of a process of dysfunctional beliefs leading to intrusive thoughts that are misattributed as external voices because of such cognitive dissonance (Morrison et al., 1995). They present themselves as negative, critical comments and direct the actions of hearers through perceptions of power i.e. through threats of physical harm, or omnipotence (as they appear to have knowledge of the person's faults and weaknesses) (Chadwick & Birchwood, 1995). The current study therefore supports the intrusive thought model of auditory hallucinations and emphasises the need for exploring links between voice content and trauma in therapy in order to identify and address long-standing emotional concerns and dysfunctional beliefs (Fowler, 2000).

Voice experiences and the SAMs/flashback model

The most interesting finding of the study was that the content of voices sometimes reflected both beliefs about the self (related to the experience of trauma) *and* the actual content of traumatic events. This was evident within accounts as some participants reported hearing verbatim words and phrases expressed by trauma figures in real life, as if reliving past events. This supports findings from studies on combat veterans (Mueser & Butler (1987) and provides preliminary support for the flashback model of voices..

Rebecca, Nick and Catherine all heard the voices of their abusers making criticisms, threats and giving commands reflecting true experiences. Similarly Laura heard male voices that were not recognised as those of her abusers but were reminiscent of what was said during the time of the abuse. This may be indicative of a grey area between the two processes as it may sometimes be unclear which type of voices are heard. Nick heard the voice of one of his abusers ordering him to keep the assault a secret reminiscent of the actual event, leading to fears of the consequences if he talked openly to his family. Respondents often found it difficult to articulate exactly what their voices said, a difficulty associated with the experience of SAMs. In some cases when asked for examples of voice content they were able only to paraphrase rather than reporting exact speech. This was particularly evident in Rebecca's interviews.

Rebecca heard the voice of her mother criticising her and attempting to control her through commands to abuse her children. Beliefs about her mother's power appeared to be reinforced by experiencing her voice as if in the present tense. Further evidence of flashback experiences were evident in her account of visual hallucinations and intrusive images that she said re-occurred as if on a video camera as part of a 'waking dream'. These findings support previous findings of Graham and Thavasotby (1995) who reported hallucinations in all modalities in an abuse survivor and those of Morrison et al (2002) who found people with psychotic symptoms reported visual flashbacks of traumatic events.

Rebecca also experienced tactile hallucinations of her uncle whipping her as he had done in real life and other sensory phenomena relating to SAMs, such as feelings of apprehension and fear of impending attack from her abusers. This was evident in the fact she sensed their presence, watching and following her. Feelings of hyper-arousal and acute anxiety reinforced beliefs about their power to harm her. In turn, behavioural and cognitive avoidance responses (e.g. walking miles through the night to try and escape them, trying to reason with them and self-harming to placate them) reinforced the SAMs.

Catherine reported perceptions of ongoing danger that may have been reflective of SAMs, describing sensations of her 'ghosts' inside her body and apprehension that she was about to be attacked. She heard the voices of her teachers calling her 'stupid' and 'smelly' reminiscent of specific incidents she recalled, but which were thought to be delusional. It was unclear however, to what extent they were based on pure delusion or true-life events and suggests that the experience of psychotic symptoms may constitute a significant trauma leading to the development of SAMs.

Other symptoms indicative of PTSD (APA, 1994) were also present within accounts highlighting the need to combine assessment and treatment approaches for trauma and psychosis (Rosenberg et al., 2002). Reported symptoms included intense emotional outbursts when memories were triggered of traumatic events (e.g. Nick, and Jessica) and feelings of acute anxiety when confronted with trauma related stimuli (e.g. Catherine when passing places connected with traumatic memories) leading to avoidance behaviours that may have maintained them.

Findings from the study demonstrate the utility of conceptualising voices using both of the models. Several issues were raised however concerning grey areas between the two processes. Clearly trauma-related beliefs impact upon the onset and content of voices with or without the presence of SAMs, so why do they occur in some people and not others? Does this depend on their ability to adjust over time? Is that why cases of these within the sample reflected severity of current difficulties (i.e. Rebecca, Nick and Catherine)? Laura and Jessica were both functioning well now and did not report clear examples of this phenomenon. They both showed evidence of being able to modify their beliefs, so does resolution of SAMs then depend in part upon psychological mindedness and the ability to engage in therapy? All of these questions require further exploration.

Findings also have important therapeutic implications. For example voices that are intrusive thoughts might be effectively addressed using CBT approaches for psychosis (e.g. Fowler, Garety & Kuipers, 1995), incorporating exploration of trauma links in individualised formulations (Fowler, 2000). In comparison, voices that are flashbacks may be better treated using PTSD treatments such a narrative approaches (e.g. Meichenbaum, 1994). These issues suggest the utility of developing assessment and treatment models that take into consideration the overlap between psychosis, trauma and PTSD (Rosenberg et al., 2002) and suggest potential areas for future research.

Methodological considerations and future research directions

Overall it was considered appropriate for the purposes of the study to collect data within largely unstructured interviews, over several sessions. This allowed time for a supportive relationship to be formed between the primary researcher and participants, enabling collection of in-depth, rich data that would not be possible in quantitative research. In addition, it can be argued that quantitative methods would not address the emotional issues raised by the study.

The employment of a narrative approach was considered efficacious as some respondents reported that they found it therapeutic to be able to tell their stories and reflect upon their experiences (e.g. Rebecca, Laura and Jessica). This supports previous findings that have shown its research and clinical utility in working with both abuse survivors (Etherington, 2000) and people with psychosis (Holma & Aaltonen, 1997). It was also considered an ethical way of engaging with the topic while considering the emotional needs of participants (Yardley, 2000) as well as being essential to obtain sufficiently detailed data. Taking an IPA-based approach afforded scope to try and distinguish between the two voice types across accounts. However future research may extend this approach perhaps by comparing the judgements of different raters.

In terms of analysis of accounts it was found beneficial (though time consuming) to transcribe accounts as this allowed the researchers to re-construct the narratives and select key data pieces directly from the text. However it could be argued that in a strict narrative approach, this would be considered dismembering accounts threatening validity (Murray, 1999). As findings were based upon the researcher's interpretation a future step towards validation would be to ask participants for feedback on the accuracy of vignettes.

Many process issues arose within the research due to the sensitive subject area. These concerned recruitment (ability to consent to and cope with participation) and data collection (emotional reactions, fluctuations in clinical difficulties). It also raised ethical and professional issues due to the dual role involved as clinician and researcher. It is necessary and ethical to form a therapeutic relationship, but there may be potentially conflicting interests between the researcher as therapist prioritising clinical needs and as a researcher with an agenda to collect data. The study therefore can be said to highlight the need to work ethically, reflexively and flexibly both in the treatment of participants and their accounts. Future research directions may involve examination of a wider range of cases as findings cannot be generalised from such a small sample. It may also be interesting to exclude cases of sexual abuse and comparing findings.

Conclusions

The study suggested a link between the content and onset of auditory hallucinations and traumatic life experiences and reflected the overlap between psychotic symptoms, trauma and PTSD (Mueser et al., 1998). It also emphasised the inherent diagnostic difficulties in this clinical group identified in previous studies (Hamner et al., 2000) and supported findings from the literature that sexual abuse in childhood is a prominent theme within trauma histories of people with psychotic spectrum disorders (Read et al., 1993). Findings highlighted the importance of adopting a dual approach to psychological treatment based on individualised formulations integrating CBT approaches to psychosis (Fowler, 2000) with trauma approaches (Meichenbaum, 1994).

Evidence was found within accounts of both models of voices suggesting the compatibility of cognitive models of voices and PTSD and the utility of conceptualising voice experiences within both theoretical accounts. Examples were identified of voices as intrusive thoughts based on core beliefs influenced by VAMs following traumatic events. Examples were also evident of voices as SAMs/flashbacks supporting findings from case studies in the literature (Graham & Thavasotby, 1995). However it also raised questions about a grey area between the two accounts and the need for future research to clarify the models.

The qualitative approach taken was considered appropriate as it enabled the collection of detailed data based on the subjective experiences and beliefs of voice hearers in a way that may not have been possible using quantitative methods. It was also found important to conduct the research within a therapeutic relationship in order to address various clinical issues relevant to the type of research (Phelps et al., 1997). However the study also emphasised logistic, ethical and professional issues regarding the dual role necessitated by the approach, that of researcher versus clinician.

Although advocated as an effective methodological approach to this area of research the need for expansion of the method was acknowledged in order to validate participants' accounts through inter-rating and obtaining feedback from respondents. Future research directions for research were identified in order to investigate the relationship between voices and trauma further, for example by increasing sample size and comparing results if participants with sexual abuse histories were excluded.

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APPENDIX THIRTEEN: JOURNAL NOTES FOR CONTRIBUTORS

Psychology and Psychotherapy: Theory, Research and Practice

Notes for Contributors

Psychology and Psychotherapy: Theory Research and Practice (formerly the *British Journal of Medical Psychology*) is an international journal with a focus on the psychological aspects of mental health, psychological problems and their psychotherapeutic treatments. Its aim has been to bring together the psychiatric and psychological disciplines and this is reflected in the composition of the Editorial Team. Nevertheless we welcome submissions from mental health professionals and researchers from all relevant professional backgrounds. The traditional orientation of the Journal has been towards psychodynamic and interpersonal approaches, which have defined its core identity, but we now additionally welcome submissions of original theoretical and research-based papers of any theoretical provenance provided they have a bearing upon vulnerability to, adjustment to, assessment of, and recovery (assisted or otherwise) from psychological disorders. The Journal thus aims to promote theoretical and research developments in the fields of subjective psychological states and dispositions, interpersonal attitudes, behaviour and relationships and psychological therapies (including both process and outcome research) where mental health is concerned. Submission of systematic reviews and other research reports which support evidence-based practice is also welcomed. Clinical or case studies will be considered only if they illustrate particularly unusual forms of psychopathology or innovative forms of therapy which carry important theoretical implications.

Counselling Psychology: A special section on counselling psychology has been created in the journal in recognition of the importance of this area within psychology and psychotherapy. This section aims to promote theoretical and research developments in the field of counselling psychology. Authors who wish to submit their papers for consideration in this section should state this in their covering letter.

1. Circulation

The circulation of the Journal is worldwide. There is no restriction to British authors; papers are invited and encouraged from authors throughout the world.

2. Length

Pressure on Journal space is considerable and papers should be as short as is consistent with clear presentation of the subject matter. Papers should normally be no more than 5,000 words, although the Editor retains discretion to publish papers beyond this length.

3. Refereeing

The journal operates a policy of anonymous peer review. Papers will normally be scrutinised and commented on by at least two independent expert referees (in addition to the Editor) although the Editor may process a paper at his or her discretion. The referees will not be made aware of the identity of the author. All information about authorship including personal acknowledgements and institutional affiliations should be confined to a removable front page (and the text should be free of such clues as identifiable self-citations ('In our earlier work...')).

4. Submission requirements

- Four copies of the manuscript should be sent to the Editor (Professor Phil Richardson, Journals Department, The British Psychological Society, St. Andrews House, 48 Princess Road East, Leicester, LE1 7DR, UK). Submission of a paper implies that it has not been published elsewhere and that it is not being considered for publication in another journal. Papers should be accompanied by a signed letter indicating that all named authors have agreed to the submission. One author should be identified as the correspondent and that person's title, name and address supplied.

- Contributions must be typed in double spacing with wide margins and on only one side of each sheet. All sheets must be numbered.
- Tables should be typed in double spacing, each on a separate piece of paper with a self-explanatory title. Tables should be comprehensible without reference to the text. They should be placed at the end of the manuscript with their approximate locations indicated in the text.
- Figures are usually produced direct from authors' originals and should be presented as good black or white images preferably on high contrast glossy paper, carefully labelled in initial capital/lower case lettering with symbols in a form consistent with text use. Unnecessary background patterns, lines and shading should be avoided. Paper clips leave damaging indentations and should be avoided. Any necessary instructions should be written on an accompanying photocopy. Captions should be listed on a separate sheet.
- All articles should be preceded by an Abstract of 200 words, giving a concise statement of the intention and results or conclusions of the article.
- Bibliographic references in the text should quote the author's name and the date of publication thus: Smith (1994). Multiple citations should be given alphabetically rather than chronologically: (Jones, 1998; King, 1996; Parker, 1997). If a work has two authors, cite both names in the text throughout: Page and White (1995). In the case of reference to three or more authors, use all names on the first mention and et al. thereafter except in the reference list.
- References cited in the text must appear in the list at the end of the article. The list should be typed in double spacing in the following format:
  Herbert, M. (1993). *Working with children and the Children Act* (pp. 76-106). Leicester: The British Psychological Society.
  a) Neeleman, J., & Persaud, R. (1995). Why do psychiatrists neglect religion? *British Journal of Medical Psychology*, *68*, 169-178.
- Particular care should be taken to ensure that references are accurate and complete. Give all journal titles in full.
- SI units must be used for all measurements, rounded off to practical values if appropriate, with the Imperial equivalent in parentheses
- In normal circumstances, effect size should be incorporated.
- Authors are requested to avoid the use of sexist language.
- Authors are responsible for acquiring written permission to publish lengthy quotations, illustrations etc for which they do not own copyright.

For more information on submission requirements, please refer to the online Guide to Preparing Manuscripts for Journal Publication at: http://www.bps.org.uk/publications/jAuthorGuide.cfm or conatct the BPS Journals Department. For guidelines on editorial style, please consult APA Publication Manual published by the American Psychological Association, Washington DC, USA (http://www.apastyle.org).

5. E-mail and Web submissions

Manuscripts may be submitted via e-mail and the BPS website (http://www.bps.org.uk/publications/jsubmission.cfm). The main text of the manuscript, including any tables or figures, should be saved as a Word 6.0/95 compatible file. The file must be sent as a MIME-compatible attachment. E-mails should be addressed to journals@bps.org.uk with 'Manuscript submission' in the subject line. The main body of the e-mail should include the following: title of journal to which the paper is being submitted; name, address and e-mail of the corresponding author; and a statement that the paper is not currently under consideration elsewhere. Web and e-mail submissions will receive an e-mail acknowledgement of receipt.

6. Brief reports

These should be limited to 1000 words and may include research studies and theoretical, critical or review comments whose essential contribution can be made briefly. A summary of not more than 50 words should be provided.

7. Ethical considerations

The code of conduct of The British Psychological Society requires psychologists 'Not to allow their professional responsibilities or standards of practice to be diminished by consideration of religion, sex, race, age, nationality, party politics, social standing, class or other extraneous factors. The Society resolves to avoid all links with psychologists and psychological organizations and their formal representatives that do not affirm and adhere to the principles in the clause of its Code of Conduct. In cases of doubt, authors may be asked to sign a document confirming the adherence to these principles. Any study published in this journal must pay due respect to the well-being and dignity of research participants. The British Psychological Society's Ethical Guidelines on Conducting Research with Human Participants must be shown to have been scrupulously followed. These guidelines are available at http://www.bps.org.uk/about/rules5.cfm

8. Supplementary data

Supplementary data too expensive for publication may be deposited with the British Library Document Supply Centre. Such material includes numerical data, computer programs, fuller details of case studies and experimental techniques. The material should be submitted to the Editor together with the article, for simultaneous refereeing.

9. Proofs

Proofs are sent to authors for correction of print but not for rewriting or the introduction of new material. Fifty complimentary copies of each paper are supplied to the senior author, but further copies may be ordered on a form accompanying the proofs.

10. Copyright

To protect authors and journals against unauthorised reproduction of articles, The British Psychological Society requires copyright to be assigned to itself as publisher, on the express condition that authors may use their own material at any time without permission. On acceptance of a paper submitted to a journal, authors will be requested to sign an appropriate assignment of copyright form.

11. Checklist of requirements:

- A signed submission letter
- Correspondent's title/name/address
- A cover page with title/author(s)/affiliation
- Double spacing with wide margins
- Tables/figures at the end
- Complete reference list in APA format
- Four good copies of the manuscript (or an e-mail attachment)

SECTION 4

CRITICAL REVIEW

Critical Review

Background

This study was initiated due to an existing interest of the researcher in the experience of hearing voices, particularly as she was about to begin a specialist placement in psychosis. The main motivation was to gain insight from a clinical perspective and a fascination with the idea of accessing people's life histories to look at factors involved in the development of voices. This also overlapped with her supervisor's interest in the trauma accounts of psychotic clients from his clinical caseload as he had observed a strong prevalence (particularly in female clients) of histories of childhood sexual abuse apparently reflected in their voices. Undertaking an LSRP in this field was also considered logistically sensible as clinical and research interests could overlap.

A preliminary exploration of the literature in this area was daunting as early database searches using key terms such as 'trauma' and 'auditory hallucinations' or 'psychosis' identified mainly studies on the overlap between chronic PTSD and psychotic symptoms found in combat veterans (Mueser & Butler, 1987). There appeared to be no existing research relating directly to experience of trauma in relation to accounts of voice content in psychosis. This was helpful however as it drew attention conceptually to the importance of investigating the literature from both theoretical perspectives which later became part of the foundation of the empirical paper.

As the literature was very disparate, formulating and constructing a structure for collating papers from different bodies of research identified, in order to review the literature was a lengthy and confusing process. For instance there were studies on general findings of the prevalence of trauma in clients with SMI, (notably of childhood sexual abuse) (Read et al., 2003), studies on the high prevalence of PTSD in these samples (Mueser et al., 1998) and studies on the presentation of psychotic symptoms in chronic PTSD (Hamner et al., 1999), but apparently no studies looking at voice content in relation to trauma. Anecdotal studies that indirectly addressed this matter were identified eventually within the psychodynamic literature by exploring research that focussed more on dissociative phenomena rather than psychosis (Heins et al., 1990). This again highlighted an overlap between trauma research and psychosis based studies and led to examination of cognitive accounts of both voices and PTSD.

It was considered interesting to see how far this overlap had been addressed in cognitive accounts of voices to investigate whether there had been relevant studies considered from this angle rather than just the ones predominantly concerned with PTSD and trauma. This confirmed a gap in the research literature by identifying a gap in the theoretical literature. These theories seemed to pay more attention to how voices are developed and maintained by intrusive negative thoughts than to how the thoughts originate. This appeared to be an important oversight, particularly as approaches to depression and anxiety (Beck, 1976) give significant consideration to the role of core beliefs in the development of subsequent psychopathology.

Comparison of cognitive accounts of voices and cognitive theories of PTSD led to the idea (eventually) of investigating compatibility of the two perspectives to address factors arising from trauma within models of voices. This provided a structure for the review (as a dearth of studies specific to the research question eliminated the prospect of conducting a systematic review) and a much narrower focus for the study. Unfortunately this clarity did not present itself until after the ethics application and until data collection was almost complete! At the time of ethics application the study had evolved as far as having broad aims, which were to find a method of collecting detailed in-depth data in order to investigate in a very exploratory way the relationship between voices and trauma.

Procedure

Perceived pressure to make the study as scientific as possible (as it seemed very vague at this stage) led to the researcher considering the use of a structured trauma inventory in order to try and standardise data collection and obtain data on co-morbid PTSD symptoms. This idea was later abandoned as once the researcher began working with participants it became clear that this would impede data collection by being intrusive and overly directive. One design issue considered important by the researcher was to allow trauma accounts to emerge naturally within participants' stories to ensure that they were meaningful, a principle considered important in qualitative approaches such as IPA (Smith et al., 1999). Adopting this approach in retrospect was considered advantageous as it afforded insight into beliefs about voices (Chadwick & Birchwood, 1994) as well as literal collation of voice content and trauma.

Another issue pertinent to the design of the study (and raised within the ethics application) was the need to collect in-depth data within the context of a therapeutic relationship. An ethical issue relating to the potentially traumatising effect of talking about voices and past trauma was identified. It was initially decided that a good way to approach this might be through combining data collection with the researcher's clinical work. This way the potentially disturbing effect of talking about voices and trauma could be addressed concurrently within a trusting relationship established prior to participation during therapy. However based on this idea, this meant that all participants who considered entry into the study should really be offered the opportunity for therapy irrespective of decisions to participate. This meant that the researcher might accumulate an excess of clinical cases i.e. her own caseload and extra cases generated by CMHT members as a result of approaching clients to request participation. This may (at worst) have resulted in a lot of clinical work and no data.

Participants

The situation in reality was that for several months during the data collection phase there was only one participant, creating considerable anxiety in terms of deadline issues. New cases referred and taken on by the researcher on placement tended by chance to be delusional disorders (without the presence of voices), nor were there any new cases referred to local CMHTs considered suitable. Often this was because severe clinical problems precluded even asking clients to participate, as this was felt inappropriate and intrusive. Sometimes people declined because they were approached initially by key workers in order not to pressurise them. This meant that they did not get to know the researcher beforehand and were deterred by the idea of engaging with a new person. In other cases clients believed they would not be able to cope with participation due to the severity of their current problems.

In the case of one client, his key worker identified him as potentially suitable for the study and he remains in therapy with the researcher to date. However he declined to participate due to the belief that excessive data was already held on him in the hospital system. This belief was related to past trauma experiences when he was involuntarily hospitalised. It appeared ironic to reflect that further research into the experience of psychosis as a traumatic event was actually obstructed due to that very phenomenon itself occurring.

In the case of the person who did agree to participate early on in the study, his situation also raised important ethical and professional issues in this area of research. Soon after meeting him he became severely depressed and suicidal as a result of an intensification of command hallucinations to harm himself. He consented to the use of material from clinical sessions when functioning fairly well and reiterated this perspective several times during data collection. However this identified a potential conflict in interests between the researcher as his clinician and as data collector. His clinical needs were of course prioritised, but him being the only participant at the time put the researcher under considerable pressure to accumulate some form of data from clinical work on his voices.

Data was difficult to collect as the majority of time in sessions was spent addressing the client's depression rather than the voices directly as he could not cope with structured sessions focusing on his voices when they were significantly intrusive. The situation also raised the concern that participation may be contributing to his problems by encouraging him to focus on distressing trauma memories. However this appeared unlikely as he had not been asked to discuss specific trauma incidents as part of the research, but were disclosed by choice of the client in the context of therapy.

Borderline personality characteristics presented by the client were exacerbated when he was depressed and he presented with secondary delusional beliefs relating to the content of his voices. Such significant presenting problems meant the case was extremely complex, however as sessions were being audiotaped this made the researcher feel pressurised to perform at an unrealistically high standard therapeutically (bearing in mind it was near the start of placement and she had no prior therapy experience in this area). Returning home after work and spending hours listening to the tapes and transcribing them led to a strong perception of feeling deskilled. Perceptions of entrapment were being created by the research due to the demands to collect data from 'perfect' clinical sessions.

Fortunately after many weeks of considering the study's information sheet, one of the supervisor's clients agreed to participate. The length of time required by some participants to make a decision on entering the study highlights another difficulty inherent in this type of research. Time pressures created by the LSRP deadline meant that although this was considered appropriate clinically pressure existed to collect the data as quickly as possible. Three other participants were recruited by liasing with key workers in local CMHTs and able to begin reasonably quickly after this stage. This was extremely fortunate as otherwise it may have led to considerable problems for the researcher in meeting the deadline. As it was, data was collected over the next two months, however it put the researcher well behind in terms of her research schedule. The method of analysis chosen also contributed to this problem in terms of the time needed to transcribe the data.

Data Collection

It was decided that a combined narrative/IPA approach would be employed to guide data collection and analysis, in order to allow respondents the opportunity to talk freely and in detail about their voice and trauma experiences. In retrospective analysis of the study this was considered effective as a method for collecting data as the researcher felt she got to know the participants quite well and they were (for the most part) directing the interviews, which aided rapport. This factor also seemed to redress the imbalance of power naturally created between participants and researchers from the standpoint that the researcher is imposing their own data requirements upon the respondent who may feel pressured to perform and meet their expectations.

Following initial apprehension about the researcher's own skills and ability in creating trusting relationships within this client group (due to the perception of a lack of knowledge of psychosis), it was found that data collection was easier than expected. Although approaches to interviewing needed to be flexible (depending on individuals' current level of functioning, ability to express themselves and willingness to talk), it was felt that as a rapport developed participants were increasingly able to talk at length about their experiences and beliefs. The researcher's interviewing skills appeared to improve significantly during the process with practice and increased knowledge of the subject area. As conversations flowed more smoothly and information was produced naturally, this often negated the need to prompt from semi-structured interview schedules (Chadwick & Birchwood, 1994; 2000).

However, the lack of structure necessary within this approach meant that topics were often touched upon, abandoned and returned to at different times. This meant that the disorganised presentation of information led to difficulties for the researcher in keeping track of what had already been covered and what might still be useful to discuss. This resulted in a lot of time being spent re-listening to tapes between sessions to remind the researcher of what had been discussed previously. As the (eventual) explicit target phenomena of the study hadn't yet emerged (i.e. the two specific voice accounts), this led to the perception that as much data should be collected as possible relating to content, development, beliefs and responses to voices and perhaps the tendency to return to topics as a result of being over cautious. In addition, participants reported finding it therapeutic to tell their stories (although emotionally draining at times) thus resulting in the generation of vast amounts of audiotaped data.

Data Analysis

The transcription phase of the analysis was incredibly time consuming and only three accounts could be transcribed in full verbatim from tapes. This took more than two months to complete, totalling almost 90,000 words despite attempts being made to exclude sections of the interviews when participants digressed to unrelated topics. In retrospect it may have been better to investigate the prospect of funding for secretarial support in transcribing early on in the study, as this volume of work seemed to go far beyond what would have been expected in a quantitative study. However when this was considered at one stage due to fears of not having enough time remaining to write the study up, it was felt by the researcher that this had serious ethical considerations. As the data was so personal and participants had already contributed so much by allowing the researcher (and supervisor) access to their first hand accounts, it was felt unethical to request their consent to administrative staff also hearing the tapes. The researcher on reflection felt strongly protective toward both the participants and their accounts.

Although time consuming, the transcription process proved fruitful in terms of helping her to become familiar with the data. However compiling the case vignettes from such a large volume of data was also a very lengthy process. This consisted of reading transcripts several times (or listening to tapes for two participants) and then cutting and pasting key pieces of information into three headings of *clinical history, trauma history,* and *voices.* These were then used to reproduce the participants' narratives.

The use of vignettes appeared to be an effective method of presenting the data and to subsequently use them to investigate the two accounts of voices. They were initially rich in detail and created emotionally powerful reading. At times the process of writing and re-writing them had more of an emotional impact upon the researcher than when listening to the stories firsthand. This may have been because at the time of data collection many other variables affected the ability of the researcher to focus fully on the emotional content of the accounts e.g. thinking of subsequent questions, worrying about how respondents were coping, considering timing issues, trying to be consistently supportive and attempting to appear calm and emotionally balanced (!) following disclosures of explicitly traumatic abuse. It was a very tiring process with respect to the afore mentioned factors, (much like some therapy sessions) however also similar to the process of therapy it was fascinating, challenging and rewarding and certainly not to be regretted.

One disappointing facet of the research however was in the restrictions placed upon presentation of the data findings. Vignettes were rewritten several times; gradually paring down the length and content from approximately 2000 words each to 500 (excluding verbatim quotes). It was necessary to pare the accounts down to (what were considered) key pieces of information relevant to investigating themes of the two voice models across accounts without losing sense of the person's narrative. This was a difficult feat, and the researcher was aware that this felt wasteful in view of the fact participants had invested so much time and emotional effort in talking about their experiences as hardly any of the data was included the write-up. It also seemed misrepresentative of the depth of findings as there was not enough room within the word count to discuss the different accounts thoroughly and many more points could have been made about specific examples of voice phenomena. It can be suggested that the course guidelines on word counts may benefit from adaptation for the purposes of writing up qualitative research.

Discussion

The study was considered a positive experience by the researcher as it allowed opportunities for the creation of trusting safe relationships in order to investigate a topic that she found fascinating. Most importantly it allowed this to take place in an ethical, reflexive manner consistent with Yardley's (2000) criteria for qualitative research. It was an extremely rewarding experience in terms of gaining insight into voice hearers' experiences and also in creating a sense of personal achievement in managing to collect such rich data. Findings from the study provided evidence of both of the conceptual accounts of voices suggested by a review of the literature. The process of narrowing the focus of the study by considering the overlap between voices and trauma had been complicated and long-winded. As a result it felt rewarding to clarify these ideas by the end of the write-up, giving the researcher a sense of satisfaction similar to that of working out a complicated clinical formulation.

The study's method appeared effective in collecting detailed data on voices and trauma but was also challenging in terms of recruitment of participants and transcription demands. These difficulties arose out of time pressures however rather than the method itself and should not be considered a reason to limit this type of research in the future. It was regretted that time constraints prevented the opportunity (before write-up) to elicit feedback from participants on the accuracy of case vignettes for the purpose of validity. Nor was there time to involve other raters in the analysis. The former will be attempted in the near future as some participants have requested feedback on the results of the study. Presentation of case vignettes will be dependent on individual clinical considerations.

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APPENDIX FOURTEEN: STATEMENT OF WORD COUNT

Statement of Word Count

Thesis Component	**Words**
Title	19
Main Abstract (summary)	308
Ethics Proposal	3850
Literature Review	4860
Research Paper	6853
Critical Review	2996
Total	18885
Components of Appendices	**Words**
Contents Section (excluding abstract)	224
References:	
Ethics Proposal	635
Literature Review	1483
Research Paper	940
Critical Review	191
Total:	3473

Plus transcripts submitted separately and ethics appendices count unknown