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HEARING VOICES: A PSYCHOLOGICAL PERSPECTIVE

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PSYCHOLOGICAL ADJUSTMENT TO HEARING VOICES: A REVIEW

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ABSTRACT

This article focuses on the experience of living with auditory hallucinations, or hearing voices. Research findings from studies exploring emotional well being in people who hear voices are reviewed. Existing psychological theories of distress and coping are considered in an attempt to make sense of the findings and to question the notion that psychological processes involved in hearing voices are discontinuous from those that occur in the general population. Coping behaviour and distress in voice hearers appear to be linked to individuals' appraisals of voices and personal and environmental resources. Consistent with a cognitive model, beliefs about the identity, purpose and power of voices, perceived level of personal control, self-esteem and self-evaluation seem particularly salient. Individuals' social context also appears influential, with positive and negative aspects of relationships and individuals' broader experience of stigma influencing adjustment. The broad psychological frameworks of Gilbert's (1992) evolutionary theory and Lazarus and Folkman's (1984) cognitive-phenomenological theory are drawn upon to integrate empirical findings. Clinical implications are considered; holistic multi-level intervention is indicated.

PSYCHOLOGICAL ADJUSTMENT TO HEARING VOICES: A REVIEW

THE PHENOMENON OF HEARING VOICES

Auditory hallucinations of someone talking, often referred to as hearing voices, are considered a central feature in the diagnosis of schizophrenia. In the World Health Organisation's International Pilot Study (WHO 1973), auditory hallucinations were reported by 73% of people diagnosed as having an acute episode of schizophrenia. Hearing your own thoughts spoken aloud, hearing one or more voices commenting on your actions or hearing two or more voices having a discussion about you are all considered to be diagnostic criteria for schizophrenia. In recent years, the utility of the concept of schizophrenia has been questioned (Bentall, 1990; Boyle, 1990) and there has been an increased focus on individual symptoms of psychosis (Strauss, 1992). People with other clinical problems including manic depression and affective psychoses and those who have been sexually abused (Ensink,1992; 1993) or bereaved (Murray-Parkes, 1975; Thomas, 1997) can also experience forms of voices considered diagnostic for schizophrenia. In addition, various studies have suggested that auditory hallucinations may be experienced by people in the general population without any psychiatric diagnosis or indication of mental health problems. McKellar (1957) found that over 40% of college students described hearing voices while drifting off to sleep. Slade and Bentall (1988) demonstrated that under laboratory conditions many people show a tendency to report hearing sounds that are not there, suggesting that the predisposition to hallucinate may be spread across the general population (Strauss, 1969). This notion questions the previously held view that psychological processes

involved in the experience of hearing voices are discontinuous from those that occur in the general population (Jaspers, 1962).

The Dutch Study

In 1989, two Dutch workers reported findings from an innovative piece of research, which challenges reduction of 'hearing voices' to a pathological phenomenon of mental illness (Romme, Honig, Noorthoorn & Escher, 1992). Marius Romme, a psychiatrist, arranged for one of his clients, who had been troubled by voices for many years, to talk about her experiences on a television programme. Viewers who heard voices were asked to telephone after the show. 700 people responded to this appeal; 450 of them heard voices. On the basis of themes mentioned by those who made contact, Romme and colleagues (1992) designed a questionnaire consisting of thirty open-ended questions, exploring people's experiences and the effect of voices on their lives. Questionnaires were sent to 450 people. 254 replies were received of which 186 could be used for complete analysis. 13 respondents were excluded, as it was unclear whether they experienced true hallucinations. The remaining 173 respondents were divided into copers (34%) and non-copers (66%) on the basis of their replies to the question 'Are you able to cope with the voice or not?'. Significant differences were found between copers and non-copers. Non-copers felt significantly less in control of voices, experienced voices more negatively and had more imperative hallucinations. Copers used a broader range of coping strategies and communicated selectively with voices more frequently than non-copers; non-copers tried distracting themselves from voices more frequently. 97 of the 173 respondents were in psychiatric care; these respondents perceived significantly less support from others than people who were not

in psychiatric care. Some copers had never had contact with psychiatric services, did not appear to be disabled by their voices and did not view themselves as in any way ill.

Following this questionnaire study, Romme and colleagues organised a congress, at which people who were coping with voices spoke about their experiences. From these reports, Romme and Escher (1989) suggest that, in developing coping strategies, people pass through three stages, as they struggle to accommodate to hearing voices. These stages include: a startling phase, in which people generally experience onset of voices as frightening, a phase of organisation, in which people begin to select and communicate with voices, and a stabilisation phase, in which a more continuous way of handling voices is acquired. Romme found that the meaning attributed to voices was important in predicting whether people felt able to cope. He suggests that adoption of frames of reference, which discourage people from attempting to master voices, are less helpful than those encouraging active attempts at mastery.

This Dutch study has many limitations. The sample was self-selected and the attrition rate was too high for the study to be epidemiological. The questionnaire used to collect data was not studied for reliability and validity. The three-phase process described by Romme emerged as a general impression rather than from systematic analysis. Objective criteria were not applied to determine how many respondents met diagnostic criteria for mental illness according to formal standards such as the Present State Examination (Wing, Cooper & Sartorius, 1974). Despite these limitations, the finding that some people experience auditory hallucinations, have not sought help from mental health services and feel they are coping successfully, is of great clinical importance as it indicates that hearing voices does not always lead to distress and disability.

This study highlights the nature of voices, meaning attributed to voices and coping styles as factors that may differentiate between copers and non-copers and that warrant further exploration. Other workers have highlighted the role of each of these factors in adjustment to voices. Hustig and Hafner (1990) and Benjamin (1989) offer support for the widely held view that the experience of voices is intrinsically upsetting and that distress is associated with the content and form of the voice; readers are referred to these papers for further detail. This review focuses on findings related to coping style and attribution of meaning to voices, which suggest that reactions to voices are cognitively mediated.

VOICE HEARERS AS ACTIVE AGENTS IN COPING WITH VOICES

Several studies (eg. Falloon and Talbot, 1981) have explored naturalistic coping strategies of individuals with persistent auditory hallucinations; some of these studies (eg. Breier & Strauss, 1983; Tarrier, 1987; Carr, 1988) have included people with delusions and broader diagnoses of psychotic disorder. These studies have consistently found that individuals engage in attempts to cope with their difficulties. A range of coping strategies has been reported including cognitive and behavioural strategies and attempts to control sensory input. Findings suggest that strategies provide distraction from voices and reduction of arousal, and that individuals with a more favourable level of adjustment appear more able to identify triggers for voices, and more consistently use a broader range of coping strategies.

Early findings of naturalistic coping strategies prompted the development of Coping Strategy Enhancement (CSE) therapy (Tarrier, 1992). This therapy aims to maximise and enhance individuals' own naturalistic coping strategies for dealing with

hallucinations and delusions. The intervention includes identification of environmental triggers for the onset of symptoms. Tarrier and colleagues (1993) compared CSE with a problem-solving intervention, which was not aimed directly at psychotic symptoms but focused on a small number of key problems. Both treatments were found to significantly reduce anxiety and delusions compared to a waiting list control group, with CSE showing superiority over problem-solving. The treatments did not significantly reduce hallucinations, questioning the effectiveness of naturalistic coping strategies in controlling voices.

A qualitative study (McNally & Goldberg, 1997), using grounded theory to explore coping strategies in 10 people with a diagnosis of schizophrenia, suggests that, in addition to symptom specific strategies, individuals' general sense of mastery is important in coping success. McNally and Goldberg found a range of coping strategies and focused in detail on a major category of cognitive coping strategy, which they called 'reflexive self talk'. Both voice-specific coping self-talk, such as questioning the veracity of voices previously thought to be omnipotent, and more general statements intended to reassure the individual of their self-worth or broader capacity to cope were found. Participants described increased hope as a consequence of this strategy. Their reports indicated that they experienced increased confidence in their ability to talk themselves through a disturbing experience and to exert their will in the presence of disturbing auditory hallucinations as they began to use self-talk more frequently. The authors conclude that clients appear to be negotiating with their voices and their sense of mastery and goal-directedness is crucial in this negotiation. These findings are consistent with other researchers' emphasis on individuals' sense of mastery (Romme & Escher, 1989; Romme et al, 1992; Strauss, 1989; Estroff, 1989). This was an exploratory, cross-sectional study, with a small sample size, including a

range of psychotic symptoms. Individuals who were coping well and those who were struggling were not differentiated. The validity and conclusions of the study are, therefore, limited. However, clinically, it is interesting to note that self-generated cognitive strategies described by participants included statements, which challenged beliefs about voices and those, which boosted positive beliefs about the self. This is consistent with recent work by cognitive theorists, which will be discussed later.

The studies discussed above demonstrate that individuals actively attempt to cope with their voices but provide insufficient detail to indicate how specific coping strategies influence levels of adjustment or what factors influence use of different strategies. Recent studies have used the cognitive phenomenological stress and coping framework of Lazarus and Folkman (1984) to explore these issues. This framework proposes a transactional model in which coping strategies used by individuals relate to appraisal of the stressor (primary appraisal) and their available coping resources (secondary appraisal). Different situations will evoke different strategies and the effectiveness of coping strategies influences subsequent appraisals, in a dynamic process. Lazarus proposed that coping has two major functions: effecting change in the problematic situation by acting on the environment or on oneself to acquire necessary information or skills (problem-focused) and palliative regulation of distress or emotion (emotion-focused) (Lazarus, 1991). Subsequent work has suggested further subdivision of these categories (Carver, Weintraub & Scheier, 1989). Adaptive coping is thought to involve the flexible use of a range of coping strategies (Lazarus & Folkman, 1984). Problem-focused coping predominates when people feel that something useful can be done whereas emotion-focused coping predominates when individuals believe the situation is uncontrollable and must be endured (Folkman & Lazarus, 1980). Preliminary studies suggest that there is a preponderance of emotion-

focused coping in people with a diagnosis of schizophrenia (van den Bosch, van Asma, Rombouts & Lowerens, 1992). People, described as higher functioning, with less severe difficulties, are more likely to use problem-focused coping (Weidl & Schotter, 1991), which appears more likely to be successful (Weidl, 1992).

Farhall and Gehrke (1997), investigating coping strategies in people experiencing auditory hallucinations, used structured interviews to inquire about coping responses and elicit ratings of control of hallucinations, distress and overall coping in 81 individuals. Using a checklist of coping strategies devised on the basis of previous studies, hallucination specific strategies and more general coping strategies (Carver et al. 1989) were explored. A broad range of both general and hallucination-specific strategies was reported, suggesting that, in attempting to cope with voices, individuals apply the wide range of coping strategies observed in general populations as well as strategies relating specifically to hallucinations. Analysis of results considered hallucination control, distress reduction (emotion control) and overall coping. Factor analysis did not support problem- and emotion-focused grouping or a simple general and hallucination-specific division, suggesting that understanding of the relative efficacy of different coping methods is not yet clear. Three broad categories were identified through factor analysis: active acceptance (including items such as 'listen to the voice and accept what they say'); passive coping (including reliance on external sources of support such as 'trust in God'); and resistance coping (including attempts to shut out the voices such as 'sing to self'). Only hallucination control predicted overall level of coping. Some problem-focused coping methods aimed at resisting hallucinations appeared ineffective, failing to predict hallucination control and negatively predicting emotion control. This is consistent with Carver and colleagues' findings, indicating that coping strategies such as disengagement and

distancing tend to increase negative emotions (Carver et al, 1989). Passive coping appeared to be an effective emotion-focused strategy, linked to increased emotion control. Carver's work suggests that acceptance may be effective in situations appraised as uncontrollable. In this study, active acceptance approached significance for prediction of hallucination control. The authors conclude that the role of acceptance in hallucination and emotion control warrants further exploration. This emphasis on acceptance is consistent with Romme's suggestion that coping success entails some sort of accommodation and acceptance of voices. Further research is needed to explore this issue. Prospective studies using standardised measures of adjustment and exploring individuals' sense of control over voices would be informative. A recent study of coping in early psychosis also suggests that individuals' sense of control over symptoms is salient in coping behaviour.

MacDonald and colleagues explored the impact of self-efficacy and social support on coping strategies in fifty people in an early phase of psychosis and twenty-three matched controls, using the Folkman and Lazarus (1988) ways of coping questionnaire (MacDonald, Pica, McDonald, Hayes & Baglioni, 1998). They found that people with early psychosis used a narrower range of coping strategies compared to their peers. The most frequent coping strategies used by participants with psychosis were emotion-focused strategies. Successful coping in the clinical group was associated with problem solving and psychological self-care, including positive self-talk. Perception of social support and self-efficacy were found to predict use of problem-focused coping strategies. Participants were more likely to use problem-focused coping strategies when dealing with relationships than difficulties with symptoms or daily functioning. The authors suggest that this may be because participants perceived greater control in relationships. The study offers some support

for a transactional model of coping with voices. The cross-sectional nature of the study does not allow any conclusions to be drawn regarding causality. Reliance on self-reports also limits the study. As the authors note, participants' perceptions of self-efficacy, use of 'active' coping strategies and perception of social support may be influenced by their overall positive or negative appraisals of themselves or situations. However, this study is important in indicating that, consistent with Lazarus and Folkman's theoretical framework, coping strategies may be influenced by environmental and personal factors affecting both primary and secondary appraisals, rather than emerging through serendipity.

To summarise, studies of naturalistic coping strategies for dealing with voices suggest that a broad range of strategies are employed with varied success. There is some evidence that, consistent with Lazarus and Folkman's (1984) cognitive phenomenological theory, coping strategies may be influenced by individuals' appraisals of personal and environmental factors. Perceived control in relation to voices appears to be a particularly salient factor in predicting coping reactions. Recent work by cognitive theorists (Chadwick, Birchwood & Trower, 1996) supports the suggestion that coping strategies do not emerge through serendipity but are generated and constrained by individuals' beliefs. Chadwick and colleagues' empirical work has so far focused on beliefs about voices (primary appraisal); however, their theoretical and clinical work suggests that beliefs about the self (secondary appraisal) are central in coping with voices.

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COGNITIVE MODEL OF VOICES

During the past thirty years there has been a proliferation of cognitive theories and therapies of emotional disorder (Kelly, 1955; Beck, 1967; Ellis, 1962). These theories propose, in varying ways, that mental processes mediate people's response to events (Brewin, 1988). Cognitive models of particular disorders have been developed (e.g. Beck, Rush, Shaw & Emery, 1979; Clark, 1986) alongside a variety of techniques designed to modify dysfunctional beliefs and faulty information-processing characteristic of each disorder (Salkovskis, 1996). Cognitive therapy has been shown to be efficacious for a range of disorders (Beck, 1993). Descriptions of cognitive behavioural therapy for psychosis (eg. Birchwood & Tarrier, 1994; Garety, Kuipers & Fowler, 1994) suggest that modification of certain cognitive processes is helpful in facilitating reduction of positive symptoms and associated distress. Chadwick and colleagues suggest that most recent advances in cognitive therapy for psychosis have not been guided by a specific model of psychotic symptoms but have relied on techniques and assumptions effective for other disorders. They propose a cognitive understanding of auditory hallucinations (Chadwick et al, 1996).

This cognitive model of emotional adjustment to voices integrates ideas from Beck's cognitive therapy (Beck, 1976; Beck et al, 1979; Beck, Emery & Greenberg, 1985), Ellis' rational-emotive therapy (Ellis, 1962) and preliminary cognitive conceptualisations of psychotic symptoms (Bentall, Kinderman & Kaney, 1994; Brett-Jones, Garety & Hemsley, 1987; Maher, 1988). The model developed from Chadwick and colleagues' clinical experience of working with people who hear voices and is concerned with maintenance of distress and behaviour associated with voices rather

than the genesis of voices. The voice-experience is viewed as an activating event, which individuals attempt to understand and give meaning to. Their associated emotional and behavioural responses are related to their beliefs about the experience rather than being a direct consequence of hallucinations themselves. This is consistent with Romme and Escher's (1989) conclusion that the frame of reference people use for making sense of their voices is important in their adjustment, and with Lazarus and Folkman's (1984) cognitive-phenomenological framework of adjustment in which appraisal is central. The model is contrary to the widely held view that the experience of voices is intrinsically upsetting (Benjamin, 1989). This latter view leads clinicians to try to eliminate voices or to directly ease distress, whereas the cognitive understanding highlights beliefs about voices as an appropriate target for intervention.

In their cognitive formulation of adjustment to voices, Chadwick and colleagues distinguish different levels of cognition, including inferences, based on external information, and evaluations and core beliefs, originating from early experiences. They highlight the particular importance of person evaluations in understanding distress in people with psychotic symptoms. These are stable, global and total judgements, usually condemnations, about a whole person. Chadwick and colleagues suggest that beliefs about voices (which can be viewed as secondary delusions) are inferences, related to evaluative beliefs about the self and others, and may be acting as psychological defences of positive self-concept (see Bentall, Haddock & Slade, 1994, for a similar proposal). They suggest that self-evaluations can be accessed through thought-chaining from beliefs about voices.

Emotional distress is thought to be intimately tied to both beliefs about voices and underlying self-evaluations and core beliefs. Chadwick and colleagues draw on the work of Blatt and Zuroff (1992) to suggest a young child's experiences of

attachment and autonomy are fundamental in the formation of core beliefs. Healthy psychological development is thought to occur if the child is able to attain a reasonable balance between attachment and autonomy. If this balance is disrupted, it is assumed the child forms certain beliefs, related to their need for control or attachment, which create vulnerability to negative self-evaluation and psychological difficulties. Chadwick speculates that self-appraisals and hence beliefs about voices reflect these concerns for control and attachment. It is suggested that identifying the individual's underlying self-evaluation and its origin in early psychological development can enable psychological meaning to be found in aspects of the voice-experience, such as voice content and the nature of cues that trigger voices (Chadwick et al, 1996).

Preliminary empirical investigation of a cognitive formulation of voices has focused on beliefs about voices.

Empirical findings

In their first study exploring the cognitive model, Chadwick and Birchwood (1994) used a semi-structured schedule to interview twenty-six people with chronic hallucinations. Interviews assessed content of voices, beliefs about voices, confirmatory evidence regarded as supporting beliefs, and individuals' sense of influence over voices. They found that beliefs fell into distinct categories. These included: beliefs about a voice's identity (whose voice is it?), meaning and intent (why am I hearing it? Is its purpose benevolent or malevolent?), power and beliefs about compliance. All participants believed voices were omnipotent and omniscient; individuals cited inability to control voices, content of voices, and concurrent occurrence of events as evidence that voices exerted great power and knew everything

about them. Voices were generally believed to be malevolent or benevolent, although a small number of participants held uncertain beliefs about their voices. Of the people holding malevolent beliefs, some believed that voices were a punishment for a previous misdemeanour and others believed they were an undeserved punishment. Voice content was often given as evidence for voices' identity, so, for example, a voice was believed to be malevolent if it gave evil commands. However, for thirty-one percent of participants, beliefs were apparently discrepant with voice content. For example, one participant believed his voice was benevolent although it told him he was a fool and should commit suicide. Predominant behavioural dispositions towards voices were found, although people's responses could vary. Beliefs about voices were found to be associated with behavioural dispositions and emotional responses. Voices construed as malevolent were resisted and evoked avoidance, anger and despair, whereas those construed as benevolent were often courted and evoked amusement and reassurance. People who were uncertain about their voices displayed no clear pattern between beliefs and behaviour, but tended to experience negative affect when they heard voices. Compliance with commands also appeared to be influenced by beliefs about power and authority, in addition to the nature of the command itself. A subsequent study has supported the importance of beliefs about voices in individuals' compliance to command hallucinations (Beck-Sander, Birchwood & Chadwick, 1997).

These findings offer preliminary support for a cognitive understanding. Conclusions are limited by small sample size and questionable reliability and validity of information gained using semi-structured interviews. Aware of these limitations, Chadwick and Birchwood have developed a 30-item Beliefs About Voices Questionnaire (BAVQ). This measure assesses cognitive, behavioural and affective reactions to people's dominant voice. Initial investigation, with a sample of sixty

people with chronic hallucinations, suggested reasonable psychometric properties (Chadwick & Birchwood, 1995). This questionnaire has been used in subsequent studies.

Birchwood and Chadwick (1997) investigated beliefs about voices, voice activity, mental state and mood in 62 voice hearers. Findings were consistent with the earlier study. A high level of belief in the power of voices was found. Coping behaviour and affect were related to belief in voices' intent; malevolent voices were associated with fear and anger and were resisted whereas benevolent voices were associated with positive affect and were engaged. Measures of voice form and topography did not show any link with behaviour or affect and neutral observers rated voice beliefs as following directly from voice content in only a quarter of cases, indicating cognitive mediation between the experience of voices and behavioural and emotional reactions. Benign voices were associated with greater diversity of coping strategy than malevolent or benevolent voices. The authors suggest, consistent with Nayani & David, 1996, that individuals who do not hold strong beliefs or delusions about their voices are not constrained by beliefs and so can demonstrate a wider range of coping behaviours. Some differences were found between this sample and the earlier study (Chadwick & Birchwood, 1994). In particular, omniscience was not as widely reported as previously and was higher in people with benevolent voices. Consistent with Romme and Escher (1993), Birchwood and Chadwick suggest that beliefs about voices may change over time as individuals develop a relationship with voices in order to find a way of living with them. Development of benevolent beliefs, production of positive voices to offset negative ones, reasoning and experimentation with voices and increased intimacy, reflected in beliefs about omniscience, may all be

involved in this adaptive process. Longitudinal studies are needed to explore these issues.

Soppitt and Birchwood (1997) explored associations between depression, voice content and beliefs about voices in twenty-one voice hearers. They found that depression was associated with malevolent beliefs and resistance, derogatory voice content and intrusiveness and loudness of voices. This association between depression and form and content of voices has been found in other studies (Hustig & Hafner, 1990). The correlational design of Soppitt and Birchwood's study does not enable conclusions to be drawn regarding causality or direction of influence. Consideration of recent views on the generation of voices renders the findings understandable within a cognitive framework. These views suggest that voices are internal events, such as intrusive thoughts, misattributed to an external source (Slade & Bentall, 1988; Morrison, Haddock & Tarrier, 1995). This suggestion is consistent with Chadwick and colleagues' proposal that psychological vulnerabilities emerge in voice content and triggers (Chadwick et al, 1996). Cognitive formulations of distress associated with intrusive thoughts in obsessive-compulsive disorder emphasise the importance of negative automatic thoughts and associated beliefs triggered by the experience of intrusive thoughts (Salkovskis, 1985; 1989; Van Oppen & Arntz, 1993). This formulation is consistent with a cognitive understanding of voices. Within this formulation, the frequency and intensity of voices can be seen as a reflection of individuals' distress and difficulty coping with voices.

Close and Garety (1998) attempted to replicate and extend Chadwick and Birchwood's (1994) original findings. They investigated beliefs about voices, self-esteem and appraisal of voices in relation to the self, in 30 voice hearers. Thought-chaining (Williams, 1992) was used to explore personal meaning of voices and to

uncover related self-appraisals. Differences emerged compared to previous studies. Fewer participants construed voices as powerful, although perception of personal control was low; only one participant felt able to control onset or termination of voices. Very few people construed voices as benevolent; more held uncertain beliefs and there was a predominance of negative affective response to voices regardless of beliefs about voices. None of the participants held beliefs, which were at odds with voice content. Malevolent voices were associated with resistance and benevolent voices with engagement, consistent with previous findings. Negative self-appraisals and low self-esteem were common with only two participants holding positive self-appraisals. Negative self-appraisal was associated with negative affective response to voices.

Close and Garety (1998) suggest sampling differences for these discrepancies, resulting from differences in service provision in the geographical areas of studies. Their sample almost exclusively contains individuals holding malevolent and uncertain beliefs and so their findings can tell us little about benevolent voices. Like Birchwood and Chadwick (1997), they suggest that beliefs may fluctuate over time, though, for their sample, the process of adaptation seemed to be one of resignation and withdrawal rather than development of more positive beliefs about voices. Consistent with a cognitive formulation, the authors suggest a reciprocal relationship in which voices, in a similar way to intrusive or negative automatic thoughts, activate core beliefs about the self that give rise to affective and behavioural responses, which in turn strengthen core beliefs about the self. It is speculated that negative consequences of a psychotic diagnosis, associated with hearing voices, and perception of lack of control (Birchwood, Mason, Macmillan & Healy, 1993) may influence negative self-appraisal and associated negative affect. The experience of hearing persistent

uncontrollable voices over many years may activate beliefs about the self, e.g. as useless, which lead to negative affect and low self-esteem, inducing resignation and a sense of helplessness, increasing a predominantly negative affective response to voices.

Consistent with Chadwick and colleagues' (1996) model, Close and Garety's findings suggest beliefs about voices and responses to them need to be understood within the broader context of beliefs about the self. The small sample size and limited number of participants with benevolent beliefs limits conclusions that can be drawn. Predominately low self-esteem and negative self-appraisal were associated with negative affect and negative voice-content. Chadwick and colleagues suggest beliefs about voices and aspects of voice experience such as voice-content can be understood with reference to self-evaluation. It is speculated that benevolent beliefs and beliefs that malevolent voices are undeserved punishment function as defences of positive self-concept and so are expected to be associated with higher levels of self-esteem. Belief in malevolent voices as deserved punishment is thought to be associated with negative self-evaluation and low self-esteem (Chadwick et al 1996). A larger community sample with a greater range of beliefs and including individuals without a psychiatric diagnosis and more detailed investigation of beliefs about the meaning of hearing voices to individuals is needed to explore these issues further. Longitudinal studies would enable investigation of changes in beliefs and adjustment over time. Within Lazarus and Folkman's (1984) framework, self-evaluation can be seen as a key factor in secondary appraisal. It could be speculated that negative self-evaluation would be associated with appraisal of voices as threatening, limited coping-attempts and further negative self-evaluation, creating a self-perpetuating dynamic process.

Summary of empirical investigation of a cognitive formulation

In summary, initial empirical investigation of a cognitive formulation of voices suggests that meaning is important phenomenologically. People do search for meaning in their experience of voices. Certain beliefs, such as those regarding power, control and purpose, appear critical to adjustment. There is some suggestion that emotion and behaviour may be more closely linked to beliefs about voices than voice topography and content (Birchwood & Chadwick, 1997), although there is some uncertainty about this (Soppitt & Birchwood, 1997). There appears to be agreement across studies that beliefs about voices and affective and behavioural responses are meaningfully related to beliefs about the self. Self-esteem and evaluative beliefs appear central. Individuals' general sense of power and influence may be particularly important. These themes of power and control resonate with reports of clinical work with people who experience auditory hallucinations (Bauer, 1979). Clinically a sense of mastery over voices seems significant in predicting people's level of distress (Birchwood, 1991). Several general psychological theories highlight the importance of perceived control and powerlessness in the experience of anxiety and depression (Rotter, 1966; Bandura, 1977; Seligman, 1975; Abramson, Seligman & Teasdale, 1978; Alloy, Abramson, Metalsky & Hartlage, 1988).

Working within an evolutionary framework, Gilbert (1992) has attempted to integrate findings from a wide range of psychological concepts to propose a comprehensive theory of human nature. This theory has power and belonging as its central themes and focuses on self-evaluation, within a social context as a fundamental process in human functioning. This theoretical framework offers an understanding of

the importance of power and control and their relationship to self-evaluation and psychological adjustment.

INVOLUNTARY SUBORDINATE STATUS, LOSS OF CONTROL AND DEPRESSION

Gilbert (1992) has integrated theories from sociobiology, ethology and psychology to develop a comprehensive theory of basic human nature within an evolutionary framework. Constraints of space limit discussion of this theory. Readers are referred to Gilbert's 1992 and 1997 texts for further information.

Gilbert's theory suggests that human evolution into a co-operative social species has modified our biological goals, creating biosocial goals or needs, including attachment (Bowlby, 1969), group living or alliance formation (Baumeister & Leary, 1995) and formation of social hierarchies (Gilbert, 1989). The human brain has evolved specialised, psychological processing systems, which enable us to be primed for these biosocial goals (Buss, 1995; Gilbert, 1989; 1995). Gilbert calls these systems mentalities. Mentalities include complex affective couplings, action tendencies, and cognitive and attentional structures. Gilbert proposes a range of social mentalities including: care giving, care eliciting, co-operation, and competition, and suggests that different styles of reasoning and evaluation of self and other are involved in each mentality. Linked to his concept of mentalities, Gilbert views anxiety and depression as psycho-biological response patterns serving protective functions.

Evolutionary theory proposes social communication strategies developed in animals to enable establishment of hierarchies or ranks, which allow intra-species competition for mates while minimising risk of serious injury. Establishment of

hierarchies requires individuals to evaluate their position in the hierarchy to avoid inappropriate challenges. This suggests the central importance of self-evaluation and social comparison in human psychological functioning (Festinger, 1954; Tajfel & Turner, 1979). Ranking in non-human species tends to be based on demonstration of fighting ability (Archer, 1988). In humans, the process of ranking and self-evaluation has become complex; human ranking involves a balance between competition and co-operative behaviours, reflected in achievement of biosocial goals or mentalities. Although aggression continues to be a strategy used to gain resources in humans, social attractiveness has become the most salient strategy. Individuals strive to present themselves in ways that will gain positive attention and avoid negative attention and judgements, creating a positive image in the minds of others (Leary & Kowalski, 1990). Gilbert has called the ability to elicit positive attention and social rewards Social Attention Holding Power (SAHP) (Gilbert, 1989, 1992, 1993; Gilbert, Price & Allan, 1995).

Social psychological theories of identity are concerned with self-categorisation (Mead, 1934; Hewitt, 1979) and development of self-concept in order to anticipate reactions of others towards the self. Gilbert draws on these to suggest that an individual's sense of status is gained from varied sources of information. These include: internal judgements of self, partly originating from signals of attractiveness/acceptability given in the past (Kohut, 1977), judgements of what others think of self and how they behave towards self, and judgements of positive qualities and roles located in social and cultural values. Further explanation of how self-concept develops can be found in reviews of symbolic interactionist ideas (Hewitt, 1979) and social psychological theories (Markus & Kityama, 1991; Brewer & Gardner, 1996). The evaluative nature of identity is thought to involve affective elements and be

closely linked to self-esteem. Gilbert suggests that people's self-esteem and confidence are linked to their SAHP. He describes self-defence and safety systems of functioning (Gilbert, 1992). When an individual is feeling secure in their SAHP, the safety system enables exploration and problem solving, accompanied by positive affects such as curiousity and happiness. When an individual's SAHP is threatened the self-defence system inhibits exploration and negative affects, such as anxiety, depression and shame, are evoked. Gilbert suggests that strong emotions such as depression (Gilbert, 1992) and shame (Gilbert, 1997) originally evolved in humans as social communications, inhibiting competition and aggression in the face of a more powerful individual.

Anxiety is associated with threat to SAHP, triggering vigilance and avoidance of situations, which may lead to a lowering of perceived status. Depression is associated with unfavourable changes in one's social position or perceived occupation of a low social position (Price, Sloman, Gardner, Gilbert & Rohde, 1994). It is suggested that depression is a defensive response involving affects and behaviour which inhibit competition in a situation where winning is not possible. Depression may manifest as a response to loss of status or as a personality style in individuals who have never achieved desired status. Perceived lack of control is important in this understanding of depression. Voluntary yielding to a more powerful or influential individual, for example in admiration or respectful deference, is unlikely to cause negative affect. Involuntary subordinate self-perception or sense of entrapment in a subordinate position triggers internal inhibition, with associated depressive affects and behaviour. This inhibition then blocks coping options and exploratory behaviour, maintaining depression.

Global, stable negative self-evaluation appears to be involved in this understanding of depression. Disappointment can be viewed as a milder, more adaptive response to subordinate self-perception or negative social comparison, helping individuals to move from unobtainable aspirations, while maintaining some self-esteem. Gilbert suggests that depression prone individuals may have internal models of self that leave them vulnerable to experiencing defeat and hopelessness rather than disappointment in the face of unsuccessful experiences. Negative internal models of the self may result from being labelled as inferior or subordinate by parents, or living in a social world of criticisms or put downs, or occupying a position within economic structures that conveys a sense of inferiority (Gilbert, 1992).

Empirical support

Gilbert's work provides a comprehensive framework for understanding human motivation, behaviour and emotional adjustment. Preliminary investigation has produced findings that are consistent with aspects of the framework (eg. Allan & Gilbert, 1997); however, Gilbert's work remains mostly theoretical and the breadth and complexity of the theory pose methodological difficulties (Gilbert, 1992). Other cognitive models (Beck, 1976; Ellis, 1962) and psychological concepts, such as locus of control and self-efficacy, can be understood within the framework of ranking theory. Gilbert draws on a wide range of empirical findings generated by other models to support his theory. Consistent with Lazarus and Folkman (1984), Gilbert suggests a dynamic recursive process in which affect, cognitions, behaviour and appraisal of threat to valued goals all influence one another. His emphasis on self-evaluation and power in emotional adjustment is consistent with findings from preliminary

investigations of a cognitive formulation of voices discussed above. Close and Garety (1998) and Birchwood and Chadwick (1997) both draw on aspects of Gilbert's work to make sense of their findings. Relationships between distress and negative self-evaluation and social comparison, and loss of valued goals and aspirations suggested by Gilbert's theory emerge in studies of depression and suicide in people with a diagnosis of schizophrenia (e.g. Drake & Cotton, 1986; Caldewell & Gottesman, 1990; Birchwood et al, 1993). These issues have yet to be explored with particular reference to hearing voices. Future research exploring relationships between adjustment and the impact of hearing voices on social comparison and achievement of valued goals appears warranted.

Agency and social context

Gilbert's theory has a clearer emphasis on social influence than other cognitive theories (Ellis, 1962; Beck, 1976). He places self-evaluation and power within a social context. Self-concept is thought to be influenced by biographical history of relationships, by reactions and perception of reactions of others to the self, by social comparison and socially valued roles. These factors are intimately connected to social attractiveness, influence and power. The theory predicts that positive social relationships are related to a positive sense of self, a broader range of coping-behaviours and reduced vulnerability to emotional disturbance. These themes emerge from a qualitative study of recovery from psychosis by Davidson & Strauss (1992).

Davidson and Strauss (1992) used semi-structured interviews with sixty-six participants, to investigate the process of recovery from psychotic difficulties requiring hospitalisation. Individuals were interviewed during hospitalisation and at

intervals, following discharge, over a three-year period. Standard scales were used to make ratings of interview information. Thirty-two individuals showed significant improvement in overall functioning over the course of the study. These individuals all described development of a more active sense of self as central in the process of improvement. This process seemed to involve a shift from a global negative self-evaluation in the face of experience of dysfunction associated with psychotic symptoms to a more positive self-concept, enabling increased attempts at coping. Four aspects of the recovery process were outlined in the study. These include consideration of the possibility of and hope in a self-concept encompassing a sense of competence, specific appraisal of strengths and needs and possibilities of change, small attempts at utilising strengths and reflection on outcome, use of an emergent more positive sense of self in subsequent attempts to cope. The authors outline the impact of social context on each aspect of this recovery process. Belief in individuals' potential by significant others is thought to contribute to the awakening of hope and move away from a global negative self-evaluation. Appraisal of possibility for change and achievement of small goals may be influenced by others' views and responses, and the stability of a more positive self-concept is influenced by information from social relationships and societal norms. This study is descriptive and exploratory. More systematic investigation is required. However, consistent with Gilbert's ideas, the findings suggest that social relationships influence self-evaluation and emotional wellbeing in people with psychotic difficulties.

Consistent with a cognitive formulation of voices (Chadwick et al, 1996) and Lazarus and Folkman's (1984) broader framework of stress and coping, Davidson and Strauss' study highlights the importance of self-evaluation, perception of control and appraisal

processes in individuals' ability to cope with challenges involved in recovery from psychosis. In addition, the study is consistent with Gilbert's emphasis on individuals' social context. Social support has been shown to be relevant to emotional adjustment in the general population. A brief overview of this area is given below and empirical findings relevant to coping with hearing voices are reviewed.

SOCIAL SUPPORT AND EMOTIONAL ADJUSTMENT

A large body of empirical evidence indicates that social support is associated with a reduced risk of emotional disorder (e.g. Cohen & Wills, 1985; Brugha, 1995a). The concept of social support incorporates a variety of elements and psychosocial processes, including expression of positive affect, approval, advice and information giving and knowledge of belonging to a network of mutual obligation and reciprocal help. Studies suggest that individuals' perception of support is more important than actual availability. Methodological and conceptual difficulties emerge from exploration of processes linking social support and well-being (Kessler, Price & Wortman, 1985). Two major hypotheses exist. The first is that social support has a direct effect on adjustment through reducing stressors, increasing self-esteem, providing positive experiences and socially rewarding roles, reducing negative consequences and increasing control over the environment. Secondly social support may have an indirect or stress-buffering effect on emotional adjustment by insulating individuals from specific stressful events. This may occur by modifying individuals' perception of the experience, and increasing individuals' sense of mastery and adaptive behaviour in response to stress. Research findings have offered support for both hypotheses. Other issues complicate investigation of social support, including the

difficulty of disentangling the impact on social support of individuals' ability to seek out support, and the effect of psychiatric or emotional disorder on relationships and the perception of relationships (Henderson, Duncan-Jones, McAuley & Ritchie, 1978; Brugha, Conroy, Walsh, Delaney, O'Hanlon, Dedero, Daly, Hickey & Bourke, 1982). Many issues remain unresolved in the area of social support (Brugha, 1995a); however, extensive research findings indicate that social support is an important factor in emotional adjustment (Brugha, 1995b).

Social support and hearing voices

Investigation of social support in people who hear voices is sparse. In Romme and Escher's study, discussed earlier (Romme & Escher, 1989), 98% of people who were not mental health clients reported that they felt support was available compared to 49% of those who were in contact with mental health services. Non-patients also reported communicating more about their voices to other people than patients. Comments from voice hearers suggest that the presence of an accepting, confiding relationship in which voices can be discussed is an important factor in coping (Romme & Escher, 1993). The establishment of self-help networks in Holland and Britain (Baker, 1993) developed from Romme's work. Consistent with literature on self-help groups for other populations (Maton, 1988; Gartner & Riessman, 1985), individuals appear to greatly value opportunities to share with and learn from others and gain support offered by these networks. Further systematic investigation of the role of social support in coping with voices seems warranted.

Social support and relationship issues have been investigated in people with an undifferentiated diagnosis of schizophrenia or psychotic disorder. People with

psychosis have been found to have very narrow kin-based networks compared to the general population and people with other mental health difficulties (Kessler et al, 1985). Loss of social contacts has been found to occur early in psychotic difficulties (Lipton, Cohen, Fischer & Katz, 1981; McGorry, 1992). It has been suggested that individuals with psychosis may withdraw socially as a protective mechanism (Strauss, Rakfeldt, Harding & Lieberman, 1989). Conclusions regarding direction of influence cannot be drawn from these studies; however, they highlight possible social isolation of people with psychosis.

MacDonald et al (1998) found that successful coping was associated with social support in people with early psychosis. Other studies have explored links between social support and coping ability. Consistent with Brown and Harris (1978), Roy and colleagues (1981, 1983) found early parental loss and social isolation were associated with increased risk of depression in clients with a diagnosis of schizophrenia. Social isolation and limited non-family social contacts have been found to be associated with earlier psychotic relapse and poorer outcome (Thornicroft & Breakey, 1991; Johnstone, Frithcrow, Owen, Done, Baldwin & Charlette, 1992). Causal links are unclear from these cross-sectional studies. Further research is needed to clarify these issues.

Extensive research has focussed on deleterious effects of negative aspects of social relationships on people with psychosis. Research by Brown and Wing (1972) identified families characterised by high levels of expressed emotion (EE). These families show high levels of criticism and emotional over-involvement or signs of hostility directed towards the person with psychosis. Individuals returning to families high in expressed emotion after hospitalisation have been found to be at significantly greater risk of relapse within nine months of discharge (Falloon, 1988; Vaughn,

Snyder, Jones, Freeman & Falloon, 1984; Leff, Wig & Ghosh, 1987). Follow-up studies suggest that levels of EE in families can vary (Brown & Wing, 1972; Hogarty, Anderson & Reiss, 1986) and that high EE is related to levels of behavioural disturbance in individuals with psychosis (Brown & Wing, 1972). The emergence of psychotic difficulties is thought to trigger an ongoing dynamic interaction between the individual and their family, in which the family seek to comprehend and cope with the individual's change in behaviour and circumstances. High EE is construed as an indicator of stress in the relationship (Birchwood & Smith, 1987). Outcome studies of interventions aimed at reducing the level of intrafamilial stress, generally through increasing understanding of difficulties, problem solving and communication training, have been uniformly positive (Hogarty et al, 1986; Falloon & Pederson, 1985; Leff et al, 1987). This suggests that reduction in negative interaction and increase in supportive interactions increase individuals' ability to cope.

Breier and Strauss (1984) investigated positive aspects and longitudinal patterns in social relationships of twenty individuals, following hospitalisation for psychosis. Semi-structured interview schedules were used to collect information on social relationships during hospitalisation and then at intervals over a follow-up period of one year. All participants commented on the helpfulness of their social relationships. Twelve functions of relationships emerged from participants' reports. These were: ventilation of feelings, reality testing, material support, sense of social approval and integration, sense of constancy with their life before hospitalisation, motivation, modelling, symptom monitoring, problem solving, empathic understanding, reciprocal relating and insight about themselves. These functions reflect those found in social support studies in the general population plus some additional functions that appear to be related to managing symptoms. Systematic shifts

in people's social needs occurred over time, as recovery progressed. The authors suggested these formed two phases, convalescence and rebuilding. The first phase involved recovery from the experience of acute psychosis, while the second involved rebuilding one's life as the shock of psychosis subsided. The functions of relationships varied across these phases with social approval and integration decreasing, as a more secure sense of self developed, from convalescence to rebuilding, and empathic understanding and reciprocal relating increasing during rebuilding. The authors suggest on the basis of their findings that all participants had a wide variety of needs for social relationships. Small social networks are more likely to leave these needs unmet, resulting in higher levels of stress and greater possibility of further psychotic difficulties. This study was exploratory and descriptive and limited by small sample size and range of psychotic difficulties included in the sample. Attempts were not made to differentiate relationship factors predictive of better adjustment. However, the results suggest that social relationships have a range of significant functions in helping people cope with psychotic difficulties. This area warrants further systematic investigation.

In summary, very little information is available regarding the role of social support in adjustment to hearing voices. However, findings from studies of individuals with an undifferentiated diagnosis of psychosis suggest that social relationships can have both positive and negative influences on coping. This suggests that further investigation of the impact of social relationships on the experience of hearing voices is warranted.

Gilbert's theory suggests that self-evaluation occurs within intimate social relationships and the broader context of societal norms. One of the functions of relationships identified by Breier and Strauss in their study was provision of a sense of

social approval and integration. Many participants feared ostracism for being 'psychiatry patients'. Consistent with Gilbert's theory, Goffman (1963) has described the process of stigmatisation in which individuals fear or experience social rejection through being classified as different from and inferior to their peers.

STIGMA, SOCIAL ROLES AND HEARING VOICES

Numerous naturalistic and experimental studies have shown that stigma affects social interactions (eg. Harris, Milich, Corbitt, Hoover, & Brady, 1992), social networks (Lennon, Link, Marbach & Dohrenwend, 1989; Link, Cullen, Struening, Shrout & Dohrenwend, 1989), employment opportunities, self-esteem, depression, and quality of life in general (Link, Cullen, Frank & Wozniak, 1987). Stigma has been shown to affect the lives of people with mental illness (Link et al, 1989). Link and colleagues suggest that receiving a diagnosis of mental illness triggers powerful expectations of rejection that erode confidence, disrupt social interaction and impair social and occupational functioning (Link, Struening, Rahav, Phelan & Nuttbrock, 1997). However, a psychiatric diagnosis provides access to professional help and some individuals find a medical conceptualisation of their difficulties helpful. In a recent study, Link and colleagues (1997) found that stigma continued to have negative effects on well-being for 84 men with a dual diagnosis of mental disorder and substance abuse, despite positive effects of receiving treatment within psychiatric services.

Stigma has not been specifically explored in voice hearers. Romme and Escher's (1989) study of voice hearers suggested that people were reluctant to discuss hearing voices for fear of a negative reaction from others; more successful coping was found in people without a psychiatric diagnosis. In their investigation of a cognitive

model of voices, Close and Garety (1998) suggested that negative affect and self-appraisal were linked to the experience of voices in conjunction with a psychiatric diagnosis.

The psychological literature on identity and coping with long-term mental illness explores individuals' reactions to diagnosis. This literature is reviewed by Birchwood et al (1993). Exploring depression in people with psychosis, Birchwood and colleagues' (1993) found acceptance of negative social stereotypes of mental illness was associated with higher levels of depression and lower perceived control over voices. Birchwood and colleagues are currently exploring links between perception of stigma, beliefs about voices and depression. Consistent with Gilbert's theory, preliminary results suggest that individuals, who perceive themselves as marginalised and having little social power, are more likely to believe their voices are of people far more powerful than themselves, to feel they have little control over voices and to be more vulnerable to depression (Birchwood, 1997). These findings suggest further exploration of relationships between stigma, negative social comparison and self-evaluation, beliefs about voices and distress is warranted.

SUMMARY OF EMPIRICAL FINDINGS

Commonalties emerge from this review of various strands of research. Study of a community sample demonstrated that distress is not inherent in the experience of hearing voices (Romme et al, 1992). Differing responses to voices are found across individuals. Investigations of clinical populations indicate that people strive to cope with voices; the range of coping strategies found in the general population can be seen in response to hearing voices. Acceptance of voices appears a more successful coping

strategy than resistance and denial. Preliminary investigation suggests that coping behaviour and distress are linked to the content of voices and individuals' appraisals of voices and personal and environmental resources. Beliefs about the identity, purpose and power of voices, perceived level of personal control, self-esteem and self-evaluation seem particularly salient. Individuals' social context is influential. Findings indicate that aspects of relationships may exert positive or negative effects on self-appraisal and adjustment to voices. Stigma associated with psychiatric diagnosis can contribute to negative self-evaluation and poor adjustment.

Many limitations exist within the body of research reviewed. The study of individual symptoms of psychosis is a recent development. Many studies include a broad range of psychotic problems, creating difficulty in interpretation of results. Many studies have small samples, are exploratory, cross-sectional and correlational and do not allow conclusions about causal links or processes. Methodological difficulties include problems operationalising and measuring certain concepts, such as mastery, social support, self-appraisal and automatic cognitions, and challenges involved in exploring multi-factorial dynamic models. It seems that both detailed qualitative studies providing further information on relevant factors, and larger studies, including community samples and enabling exploration of multi-factorial models, are required. Longitudinal investigations are needed to explore processes of change.

CONCLUSIONS

Studies reviewed in this paper suggest that emotional adjustment in voice hearers can be understood within existing psychological theories, supporting the notion that the experience of hearing voices is not discontinuous from normal experience. Two broad

psychological frameworks appear helpful in integrating empirical findings. These are Gilbert's evolutionary theory and Lazarus and Folkman's cognitive-phenomenological theory of stress and coping. Gilbert's theory underlines human motivation for social acceptance and influence and suggests areas of achievement influencing status. Lazarus and Folkman outline a transactional process of emotional functioning. Both theories are nebulous in aspects and pose methodological difficulties for empirical investigation. However, these frameworks may provide helpful paradigms to guide research and generate specific models, such as recent cognitive formulations.

Consistent with these holistic theories, research findings reviewed here suggest a complex interplay of factors influence adjustment in voice hearers. Stated simply, these factors concern the content and form of voices, beliefs about voices, impact of voices on everyday functioning and achievement of valued goals, the sense people make of why they hear voices, including reactions to diagnosis, and response of others to voice hearing and associated psychiatric diagnosis. Central to these concerns are individuals' self-concept and sense of control. High levels of distress are associated with negative self-evaluation and perceived powerlessness. These findings suggest that multiple level intervention, aimed at development of a positive identity and sense of empowerment, is required. Intervention packages may include individual and group cognitive therapy, family and relationship therapy, support in developing socially valued roles, reduction of stigma through public education, development of supportive self-help networks, and early intervention strategies. This multi-level approach requires development and co-ordination of broad service structures. Existing literature on intervention for psychosis reflects these issues (Birchwood, McGorry & Jackson, 1997; Haddock, Morrison, Hopkins, Lewis & Tarrier, 1998; Jackson & Birchwood, 1996; Birchwood & Preston, 1991).

Research in this area is at an embryonic stage and refinements in methodology and design are required. Preliminary investigation of both psychological models and interventions are encouraging and appear to be generating increased enthusiasm and excitement for clinicians, working with a previously neglected population, in an area traditionally dominated by pessimism.

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OMNIPOTENCE REVISITED: FURTHER INVESTIGATION OF A COGNITIVE UNDERSTANDING OF VOICES

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ABSTRACT

Objectives: This study considers a broad cognitive formulation of voices. It investigates a new omnipotence scale in the Beliefs About Voices Questionnaire – Revised and explores levels of distress, beliefs about voices, coping behaviour, social support and general expectancies of control in a clinical sample of voice hearers.

Design: A cross-sectional correlational design is used to explore associations. Control expectancies are compared with an independent general population sample.

Methods: Twenty-three participants completed self-report questionnaires.

Results: Using new scoring methods on the BAVQ-R, an association between malevolent beliefs and resistance and benevolent beliefs and engagement was found, consistent with a cognitive formulation. The omnipotence scale of the BAVQ-R was shown to have good internal reliability. High scores on the omnipotence scale were associated with depression. Most participants believed their voice was very powerful. This sample had significantly stronger general expectancies of external control and reduced expectancies of internal control than a general population sample. Clinical levels of anxiety symptoms were very common and 44% of the sample showed moderate – severe levels of depressive symptoms.

Conclusions: The BAVQ-R appears to provide a useful summary of people's beliefs about voices and may be useful clinically to highlight areas of concern and to identify individuals at risk of depression. Limitations and clinical implications of the study are discussed with reference to a cognitive understanding of voices. Themes of power and control appear particularly salient.

OMNIPOTENCE REVISITED: FURTHER INVESTIGATION OF A COGNITIVE UNDERSTANDING OF VOICES.

The experience of auditory hallucinations of someone talking, or hearing voices, has traditionally been considered to be a diagnostic symptom of schizophrenia. In recent years, the diagnostic value of the concept of schizophrenia has been questioned (Asaad & Shapiro, 1986) and researchers are increasingly studying individual symptoms of psychosis. The phenomenon of hearing voices can occur in a range of clinical disorders, including manic depression and affective psychosis, and in people, who do not fulfil diagnostic criteria for any clinical disorder, but who have experienced trauma such as sexual abuse (Ensink, 1993) or bereavement (Murray-Parkes, 1975). In addition, it has been suggested that, under certain conditions such as sleep deprivation, voices can be experienced by people in the general population without any indication of mental health problems, leading workers to conclude that predisposition to hear voices lies on a continuum in the general population (Strauss, 1969).

Varying levels of distress and coping have been found in voice hearers. Research indicates that individuals actively strive to cope with voices, achieving varying degrees of success (Breier & Strauss, 1983). For most people presenting to clinical services, voices are associated with distress and disability (Falloon & Talbot, 1981). However, findings from a community sample of voice hearers demonstrated that some individuals cope successfully with voices without contact with mental health services (Romme & Escher, 1989). This finding indicates that voices need not be intrinsically upsetting. When voices are problematic, difficulty appears to lie in people's emotional and behavioural responses to them. Romme and Escher suggest

that the meaning attributed to voices is an important factor in adjustment to voices. For people who do experience distress associated with voices, emotional and behavioural difficulties may include depression, self-harm, suicide, guilt and anxiety (e.g. Drake & Cotton, 1986; Caldewell & Gottesman, 1990). For many people neuroleptic medication does not eliminate voices or distress (Curson, Barnes, Bamber, Platt, Hirsch & Duffy, 1985) and residual symptoms continue to present considerable difficulty. Psychological interventions for coping with voices have developed in recent years (e.g. Tarrier, 1992; Kingdon, Turkington & John, 1994), prompting exploration of adjustment to hearing voices from a psychological perspective.

Research within a cognitive framework has focused on individuals' beliefs about voices. In a preliminary study using semi-structured interviews, Chadwick and Birchwood (1994) found that reactions to voices were mediated by beliefs about voices' identity, meaning and purpose. Belief in the omnipotence of voices was ubiquitous. Voices construed as malevolent were resisted and evoked avoidance, anger and despair; voices construed as benevolent were engaged and often evoked amusement and reassurance. Subsequent to this study, Chadwick and Birchwood (1995) developed a thirty-item Beliefs About Voices Questionnaire which assesses cognitive, behavioural and affective reactions to voices. Initial investigation using this assessment tool replicated findings of widespread belief in the power of voices and association between malevolence and resistance, and benevolence and engagement.

Recent investigation of voice beliefs in a larger sample of voice hearers produced consistent results and further evidence of cognitive mediation (Birchwood & Chadwick, 1997). A high level of belief in the omnipotence of voices and an association between malevolence and resistance and benevolence and engagement

were found. Voice beliefs were found to be directly linked to voice content in only one quarter of participants, with beliefs either being at odds with voice content or requiring an inference from voice content in the remaining participants. Levels of depression were linked to beliefs about malevolence and power and the level of positive symptoms experienced. Soppitt and Birchwood (1997) also linked depression to malevolent beliefs and resistance, in addition to derogatory voice content and intrusiveness and loudness of voices.

On the basis of initial empirical findings and clinical experience of voice hearers, Chadwick, Birchwood and Trower (1996) propose a cognitive formulation of voices, concerned with maintenance of distress and behaviour associated with voices. Consistent with recent suggestions of the involvement of normal psychological processes in the formation of delusions (Maher, 1988), the voice-experience is viewed as an activating event, which individuals attempt to understand and give meaning to. Emotional and behavioural responses are related to individuals' beliefs about the experience rather than being a direct consequence of voices. Beliefs about voices are thought to be inferences which are related to evaluative beliefs about the self and others and may be acting as psychological defences of positive self-concept (Bentall, Haddock & Slade, 1994).

Close and Garety (1998) explored self-esteem, self-appraisal, and cognitive, behavioural and affective reactions to voices, in a sample of thirty voice hearers. Consistent with Birchwood and Chadwick (1997), they found that malevolent voices and resistance and benevolent voices and engagement were linked. Very few people in their clinical sample construed voices as benevolent and a number of people appeared uncertain about their voices. There was a preponderance of negative affect, low self-esteem and negative self-appraisal. Perception of personal control over the

voices was low, although belief in the omnipotence of voices was not as widespread as in previous studies. It is unclear how beliefs in omnipotence were measured in Close and Garety's report. Measurement differences may explain discrepancy with previous studies. Close and Garety (1998) suggest that the experience of hearing persistent uncontrollable voices over a number of years, in association with the negative consequences of having a psychiatric diagnosis, is likely to activate negative beliefs about the self e.g. as useless, which maintain low self-esteem and negative affect.

These preliminary investigations offer some support for a cognitive model of adjustment to voices, suggesting that individuals do search for meaning in their experience of voices. Certain beliefs, especially those regarding power and control, seem critical. Attempts to measure omnipotence have so far been limited and have not enabled different aspects of power and control to be differentiated. Further investigation of individuals' beliefs about the omnipotence of their voices is, therefore, required. Previous work also suggests beliefs about voices and behavioural and affective responses seem to be linked to beliefs about the self. With the exception of Close and Garety's study, empirical work has not yet explored beliefs about the self in relation to beliefs about voices.

The phenomenon of hearing voices perceived as external to oneself frequently seems to lead individuals to imbue the voices with power. Belief in the power of the voices appears to be partly based on individuals' experience of being unable to control the onset and termination of voices. In addition, the concept of power pervades individuals' construction of meaning regarding the purpose and identity of voices. The concepts of both malevolence and benevolence contain the constructs of power and influence. Experience of hearing a voice which is appraised as powerful and over

which the individual feels they have no control would seem likely to be associated with a strong external general expectancy of control. To date, there have been no investigations of general expectancies of control in voice hearers. However, general expectancies of control and influence have been explored in broader samples of individuals likely to contain voice hearers, such as those with psychotic difficulties and diagnoses of schizophrenia. Davidson & Strauss (1992) found that development of a sense of control or agency was an important factor in recovery from psychotic breakdown. Levenson (1973) found that people who had been admitted to hospital with an undifferentiated diagnosis of schizophrenia had high levels of belief in control by chance and powerful others compared to a general population sample and that belief in internal control increased over the duration of hospitalisation. Belief in control by chance or powerful others has been associated with anxiety and depression (Levenson, 1981; Ganellen & Blaney, 1984).

Gilbert (1992; 1993; 1997) has proposed a comprehensive theory of basic human nature, which places power and self-evaluation within a social context. Self-concept is thought to be influenced by biographical history of relationships, by reactions and perceptions of reactions of others to the self, by social comparison and socially valued roles. Self-esteem and emotional wellbeing are closely connected to social attractiveness, influence and power. Consistent with Birchwood and Chadwick's (1997) finding that powerful, malevolent voices were associated with depression, the theory predicts that involuntary subordinate status is associated with depression. In addition, it suggests that positive social relationships are related to a positive sense of self or status and better adjustment. A large body of empirical evidence indicates that social support is associated with a reduced risk of emotional disorder in the general population (e.g. Cohen & Wills, 1985; Brugha, 1995). The

presence of positive social support has been implicated in better coping with and recovery from psychotic difficulties (MacDonald, Pica, McDonald, Hayes & Baglioni, 1998; Breier & Strauss, 1984). Lack of social support and negative aspects of social relationships have been linked to increased depression and greater risk of relapse in people with a diagnosis of schizophrenia (Roy, 1981; Roy, Thompson & Kennedy, 1983; Falloon, 1988; Leff, Wig & Ghosh, 1987). The impact of social support on adjustment to hearing voices has yet to be investigated.

This study uses a correlational design to investigate a broad cognitive formulation of voices, exploring in further detail beliefs about power and control and taking into account individuals' social context. General beliefs about control are compared with an independent general population sample. The aims and hypotheses of the study are as follows.

Aims:

This study has two broad aims: firstly to investigate the reliability and utility of a revised version of the Beliefs About Voices Questionnaire, offering more adequate measure of power beliefs and greater sensitivity to variations in strength of beliefs; secondly to explore levels of distress in voice hearers, beliefs about voices, coping behaviour, social support and locus of control and investigate associations between these factors.

Hypotheses:

a) Voice hearers will have strong general expectancies of external control and low general expectancies of internal control compared to a general population sample.
b) The omnipotence scale of the BAVQ-R will be shown to have acceptable internal reliability; high scores on this scale will be associated with increased symptoms of depression and strong general expectancy of control by powerful others.
c) Beliefs about the voice's identity and purpose will be linked to individuals' affective and behavioural responses. Specifically malevolence will be associated with resistance and benevolence will be associated with engagement.
d) High scores on the malevolence scale of the BAVQ-R will be associated with increased symptoms of depression.
e) Higher levels of social support and satisfaction with support will be associated with lower levels of anxiety and depression.

Method

Participants

Thirty-four individuals were identified; of whom, twenty-three agreed to participate (68%). Information on refusers is not available.

The participants were ten women and thirteen men (43 and 57 per cent respectively), aged between 26 – 69 years. All participants reported that they had been

hearing voices for at least six months. Romme & Escher's (1989) work suggests that diagnosis is not the key issue in investigation of auditory hallucinations; however, all participants had been diagnosed as having schizophrenia or schizo-affective disorder by a Consultant Psychiatrist and were maintained on neuroleptic medication. Participants were recruited from the continuing care and community mental health teams in the Eastbourne and Southampton areas. The author presented the study to teams and then approached staff within the service, who made individual referrals.

Measures

Beliefs About Voices Questionnaire-revised (BAVQ-R): The BAVQ is a self-report measure of how people understand and respond emotionally and behaviourally to their voices. The original BAVQ measure contained six items for malevolence, six for benevolence, eight for engagement and nine for resistance; one free-floating item assessed voices' power (omnipotence). Items required simple yes/no responses, scoring 0-1 for each item. The measure has been shown to have reasonable psychometric properties. Cut-off scores of 4 or more for malevolence and 3 or more for benevolence were derived on the basis of distribution of scores (Chadwick & Birchwood, 1995). Subsequent clinical use of this measure has highlighted two deficiencies: inadequate measurement of power, and poor sensitivity of measurement of individual differences and change over time in the strength of beliefs.

A revised version of the Beliefs About Voices Questionnaire (BAVQ-R) has been developed and was used in this study. This measure contains five scales: malevolence, benevolence, omnipotence, resistance and engagement. Five additional items have been included to create the omnipotence scale. These additional items

emerged from pilot work in a clinical setting, over a thirty-month period. The response format for the BAVQ-R is dimensional, enabling people to rate their beliefs on a four-point scale from disagree through to strongly agree. Each item is scored from 0-3, giving ranges for each scale of: 0-18 for malevolence, benevolence and omnipotence, 0-24 for engagement and 0-27 for resistance. The reliability over time and validity of this revised form of the questionnaire are currently being investigated.

Measure of affect. The Hospital Anxiety and Depression Scale (HAD) (Zigmond & Snaith, 1983) was used to measure levels of anxiety and depression. This measure was chosen for its ability to detect anxiety and depression without contamination by reports of physical symptomatology, which may be associated with neuroleptic medication.

Measure of social support. The Short Form Social Support Questionnaire (SSQ6) (Sarason, Levine, Basham & Sarason, 1983) was used to assess the perceived extent of and satisfaction with social support. This self-administered scale provides a measure of perceived number of supports and a separate measure of satisfaction with support. The measure was used as it can be completed in a few minutes and has been shown to have reasonable psychometric properties and to correlate with other measures of social support (eg. Sarason, Shearin, Pierce & Sarason, 1987).

Measure of locus of control. The General Multi-dimensional Locus of Control Scale (LOC) (Levenson, 1974) was used to investigate locus of control. This questionnaire contains three scales: internal, external powerful others and external chance. It has

been psychometrically validated (Levenson, 1974; Lefcourt, 1991) and has been widely used in previous research.

Procedure

A professional known by the participant (eg. community psychiatric nurse) initially gave individuals information about the study. Participants were assured that information disclosed would not influence their medication or be entered into case notes and that they could withdraw from the study at any time. Participants chose either to complete the questionnaires and return them by post or to meet with the author to complete questionnaires. Nine participants (39%) chose to meet with the author to complete the questionnaires.

Results

Descriptive Data

Descriptive data are summarised in Table 1.The mean age of the sample was 42.9 years (S.D. 11.5, range 26 – 69).

On average, the sample showed mild to moderate depressive symptoms (mean 10, SD 5.3, range 2 – 21) and a moderate level of anxiety symptoms (mean 14.8, SD 4.7, range 7 – 21). 44% were found to have a probable classification of clinical depression on the HAD, with 13% falling into the mild range for depression, 22% scoring in the moderate range and 22% having symptoms indicative of severe depression. This level of depression is consistent with that found in previous studies

(eg. Siris, 1991, Birchwood, Mason, MacMillan & Healy, 1993). 96% of the sample had levels of anxiety indicating possible clinical disorder on the HAD, with 74% having anxiety levels consistent with probable clinical disorder. 22% scored in the mild range for anxiety, 13% in the moderate range and 61% showed symptoms consistent with severe levels of anxiety. This is consistent with a recent study that found moderate levels of anxiety in a clinical sample of voice hearers (Close & Garety, 1998).

On average the sample reported few social supports. A mean of 1.78 supports for each item on the SSQ6 was reported, with a range of 0 – 6 supports. The mean number of persons listed for the entire SSQ6 was 10.7 (S.D. 5.2, range 0 – 20). Satisfaction scores for each item ranged from 1 – 6, with a mean of 4.73. The mean overall satisfaction with social support was 28.4 (S.D. 6.8, range 13 – 36).

Locus of Control:

Locus of control data are shown in Table 2. The sample in this study, as a whole, had similar expectancies of control by chance (mean 30.7, S.D. 13.9, range 2 – 46), powerful others (mean 30.6, S.D. 16.7, range 12 – 45) and internal control (mean 28.5, S.D. 12.1, range 0 – 45). As predicted, Student's t test indicated that voice hearers in this sample had significantly higher levels of belief in external control by powerful others and chance than individuals from a general population sample ($t = 5.8$, $p < .0005$, $t = 7.9$, $p < .0005$, respectively) and lower levels of belief in internal control ($t = 3.9$, $p < .0005$). Scores from the undifferentiated schizophrenia sample appeared to be intermediate between the general population and voice hearing samples. However, differences in scores between voice hearers and the undifferentiated schizophrenia sample did not reach significance at the $p < .05$ level.

Beliefs about Voices:

Information concerning beliefs about voices was available for twenty-two participants. A predominance of high scores on the malevolence scale was found, with very few people scoring highly on the benevolence scale. Only 9% (2 people) scored above the halfway point of 9 on the benevolence scale, compared with 68% (15 people) scoring above 9 on the malevolence scale.

Omnipotence:

The Cronbach α coefficient was calculated as a measure of the internal reliability of the omnipotence scale (Guttman, 1945). The scale was found to have reasonable reliability, with a Cronbach α score of .73 (Table 1.). This suggests that the omnipotence scale is measuring a clear aspect of people's beliefs about voices. Scores on the omnipotence scale tended to be normally distributed, suggesting that beliefs about different aspects of power and control form a continuum in this sample. Separate consideration of each item of the omnipotence scale revealed that scores on item 3, "My voice is very powerful", were distributed towards the top of the scale (mean 2.6, S.D. 0.8). Distribution of scores on items concerned with compliance, 9, "my voice makes me do things I really don't want to do", and consequences of compliance, 15, "my voice will harm me if I disobey or resist it" were skewed towards lower scores (mean 0.95, S.Ds. 1.1, 1.2). 77% of participants strongly agreed that their voice was very powerful and 91% slightly agreed.

As predicted, scores on the omnipotence scale were associated with measures of depression on the HAD, as shown in Table 3. (Spearman's correlation coefficient = .38, $p < .05$). Anxiety was not associated with omnipotence. Previous studies have

suggested that power is orthogonal to belief in malevolence and benevolence. In this study, power was associated with high scores on the malevolence scale (Spearman r = .68, $p < .01$) but not on the benevolence scale. The generally low scores on the benevolence scale makes this finding difficult to interpret. Contrary to expectation, high scores on the malevolence scale were not associated with depression. This suggests that the power scale is measuring an aspect of people's beliefs about voices, which is separate from malevolence.

Voice beliefs and coping style:

Using new scoring methods on the BAVQ, this study replicated previously found associations between beliefs about voices and coping style. High scores on the malevolence scale were associated with resistance (Spearman r = .67, $p < .01$); higher scores on the benevolence scale were associated with engagement (Spearman r = .49, $p < .01$). Negative correlations were found between scores on the malevolence scale and engagement and between scores on the benevolence scale and resistance (Table 3.).

Influence of locus of control beliefs and social support

Social support and locus of control beliefs were not associated with mood disturbance or with beliefs about voices (Table 3.).

Discussion

Only two people in this sample of voice hearers scored above the halfway point on the benevolence scale of the BAVQ-R. Close and Garety (1998) found that only one person, in their sample of thirty voice-hearers, construed their voices as purely benevolent. It can be speculated that these findings reflect clinical populations generally. Belief in voices' malevolent purpose and uncertainty about voices has been linked with negative affect; individuals holding these beliefs are more likely to have contact with mental health services than individuals' believing voices have a benevolent purpose. Studies undertaken in the Birmingham area (Birchwood & Chadwick, 1997; Chadwick & Birchwood, 1994) drew their sample from a large population of voice hearers, including individuals known to mental health services but not requesting support with voices (Chadwick, personal communication). Higher levels of belief in benevolent voices were found in these studies. It seems that individuals presenting clinically with high levels of distress are likely to hold malevolent or uncertain beliefs about voices and limited conclusions regarding adjustment in people holding benevolent beliefs about voices will be possible from investigations of clinical samples. Studies of community samples are needed for wider exploration of benevolent voices.

This is the first study to use the revised version of the BAVQ with new methods of scoring and additional omnipotence scale. The full range of possible responses for items appeared to be used and scores on several scales tended toward a normal distribution, suggesting that beliefs about voices vary in strength across individuals. Unlike previous research with the BAVQ (Chadwick & Birchwood,

1995; Birchwood & Chadwick, 1997), cut-off scores were not used. The BAVQ-R seems to provide a sketch of individuals' beliefs about voices, with scores on sub-scales summarising information rather than providing definitive categories. Clinically the BAVQ-R sub-scales may enable clinicians to identify particular areas of people's beliefs that warrant further investigation. Consideration of individual items within each sub-scale may then yield further important information, as was demonstrated here in investigation of the omnipotence scale.

Using dimensional methods of scoring on the BAVQ-R, this study replicated previous findings of a link between beliefs about voices, and affective and behavioural responses to voices. High scores on the malevolence scale were associated with high levels of resistance and high scores on the benevolence scale were associated with high levels of engagement. This is consistent with a cognitive formulation. However, voice content and topography were not investigated, leaving open the possibility that beliefs, affect and behaviour follow directly from voice content (Benjamin, 1989; Hustig & Hafner, 1990).

This study explored broader concepts of power and control in voice hearers than previous studies. The omnipotence scale of the BAVQ-R was shown to have good internal reliability and seems to be measuring a clear aspect of voices. In addition, consistent with Gilbert's theory (Gilbert, 1992), high scores on the omnipotence scale were associated with depression. Conclusions cannot be drawn regarding causality or direction of influence. Depression may trigger beliefs about the self as powerless and voices as omnipotent. However, this finding suggests the omnipotence scale may have clinical value in identifying individuals at risk of depression.

The literature on theories of power and control lack operational definitions (Gilbert, 1992; Milgram, 1974). The omnipotence scale includes items concerned with the voice's identity, aspects of compliance, omniscience, impact on life and personal control over the voice. Consistent with previous studies (Chadwick & Birchwood, 1994; Birchwood & Chadwick, 1997), belief in the power of the voice was widespread, with 77% of people strongly agreeing with the statement 'my voice is very powerful' and 91% slightly agreeing. Scores on items concerning compliance were generally lower than other items in the scale. Previous investigation of compliance to commands from voices suggests that a complex range of factors, including purpose of the voice, severity of command, beliefs about the social acceptability of behaviour and appeasement of voices, influences compliance (Beck-Sander, Birchwood & Chadwick, 1997). It may be that items concerning compliance represent broader beliefs than those about power and control alone. Further research with a larger sample would enable use of factor analysis to investigate whether the omnipotence scale is measuring a single factor or contains a sub-scale of compliance. Investigation of the scale's reliability over time and exploration of its concurrent validity is currently being undertaken and will provide further information about the scale's utility. This preliminary investigation suggests that the omnipotence scale is a useful addition to the BAVQ-R and may be helpful in predicting individuals at risk of developing depression.

As predicted, average expectancies of control by powerful others and chance were significantly higher in this sample than those of a general population sample; average belief in internal control was significantly lower, suggesting that voice hearers have a reduced general sense of mastery or agency. Prospective studies are needed to investigate whether the powerful experience of hearing voices reduces

people's general sense of control or whether individuals with strong general expectancies of external control have a greater predisposition to hear voices. Consistent with clinical reports (Bauer, 1979; Birchwood, 1991), these findings suggest that clinically interventions challenging the power of the voices and empowering voice-hearers are needed.

The finding that general beliefs about control were not related to beliefs about the power of voices was contrary to expectation. It may be that there was too little variation in beliefs regarding power and control for relationships to emerge. In addition, concern about the ecological validity of the general locus of control measure for this population emerged during the study. Levenson's (1974) measure of locus of control was devised for use with the general population. Although detailed data was not collected, discussion with some of the participants and referrers indicated that individuals taking part in this study generally had a longstanding psychiatric diagnosis and had been receiving mental health services for many years. It can be speculated that, following years of difficulties, individuals had developed an identity as a psychiatric patient and come to hold limited goals and aspirations in their lives. Of the individuals who completed the locus of control questionnaires with the author, several commented on the irrelevance of some of the items (eg. whether or not I get to be a leader..,) to their lives. Research with the locus of control has highlighted the importance of the value of the outcome for the participant in measuring control expectancies (Furnham & Steele, 1993). In addition, investigators have noted that the concept of locus of control lacks an evaluative element and so may not be the most pertinent cognition in understanding emotional wellbeing (Brewin, 1988). Despite these limitations, the expected picture of strong expectancies of external control was found in this sample. Further research in this area would benefit from the

development of an ecologically valid measure of general expectancies of control, which enables exploration of links with beliefs about voices and self-evaluation.

Contrary to expectation, levels of social support were not associated with emotional wellbeing. Individuals, in this study, may have resigned themselves to limited social contacts. Previous studies have suggested that social support is an important factor in predicting successful coping in early psychosis (MacDonald et al, 1998) and that the role of relationships in adjustment to psychotic difficulties may vary over time (Breier & Strauss, 1984). Different models of influence for social support suggest that social support may not have a direct effect on adjustment but may moderate the impact of stressful events (Cohen & Wills, 1986). Longitudinal studies are needed to explore changes, over time, in the importance of social support in dealing with voices. In addition, qualitative methods, a larger community sample, with greater variation in levels of social support, and different methods of analysis would enable investigation of varied ways in which different aspects of social support may influence emotional adjustment (Alloway & Bebbington, 1987).

At this stage, our understanding of the possible role of social relationships in adjustment to hearing voices is very limited and the design and measures used in this study enabled only a very cursory investigation of social support. Conclusions cannot therefore be drawn from the lack of an association between social support and adjustment in this study and further research in this area, addressing the limitations of this study, would be justified.

High levels of anxiety symptoms were found in this sample. 96% of the sample were rated as having anxiety symptoms consistent with possible clinical disorder, 74% with probable clinical disorder. Considering the widespread experience of anxiety in this sample, it is perhaps unsurprising that none of the factors explored,

in the study, were differentially associated with anxiety. Investigation of a larger community sample of voice hearers is more likely to include a greater range of beliefs and affect and may highlight factors associated with anxiety in voice hearers.

Gilbert (1992) proposes that anxiety is associated with a threat to status and self-concept. Other workers also suggest anxiety is linked with threat to sense of identity (e. g. Lazarus, 1991). The many terms used to describe what appears to be a single construct concerning self-evaluation and lack of operationalised definitions present problems to researchers. Chadwick, Trower and Dagnan (in press) have developed a self-report measure of person evaluations, the Evaluative Beliefs Scale, and are currently investigating associations between anxiety and person evaluations. Clinically, findings from this study highlight a need for interventions which reduce levels of anxiety. Such interventions may include general anxiety management techniques, challenging beliefs associated with anxiety and identifying triggers for the onset of voices enabling increased predictability of the experience and greater sense of control.

Recent cognitive formulations concerning the generation of voices suggest voices are internal events, such as intrusive or negative automatic thoughts, that are misattributed to an external source (Slade & Bentall, 1988; Morrison, Haddock & Tarrier, 1995). Consistent with cognitive formulations of other difficulties (e.g. Beck, 1976; Salkovskis, 1989) it is suggested these 'misattributed automatic thoughts' lead to inferences, which trigger core beliefs about the self, related to individuals' developmental experiences. A dynamic process is then set in motion in which affect, coping behaviour, content and topography of voices, core beliefs and beliefs about voices influence one another. This complex interplay of factors occurs within a social context in which societal reactions to hearing voices and, the often-associated

psychiatric diagnosis, are thought to influence the process through their impact on self-concept and core beliefs (Birchwood et al 1993; Close and Garety, 1998). Beliefs about voices and reactions to them are thought to change over time (Romme & Escher, 1993; Benjamin, 1989; Birchwood & Chadwick, 1997), as individuals struggle to find a way of living with them. The cross-sectional correlational design of this study and the small sample size do not allow investigation of these complex processes. Longitudinal studies, detailed case studies and larger investigations, enabling exploration of multi-factorial models and including community samples, are needed to further investigate these issues.

Despite many limitations, this study produced some interesting findings. In summary, this group of voice hearers held strong general beliefs in control by external factors, believed that their voices were very powerful, had a reduced sense of personal control and high levels of anxiety. The BAVQ-R appeared to be a useful assessment tool, though further exploration of operational definitions of power and control is warranted, both in regard to voices and generally. Consistent with a cognitive formulation, an association between beliefs about voices and affect emerged. In particular, the importance of beliefs about the omnipotence of voices in depression was highlighted.

Psychological investigation of adjustment to voices is in its infancy. This study offers encouraging support for a cognitive conceptualisation of voices, and indicates the value of psychological intervention with voice hearers.

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Table 1. Descriptive statistics

Measure	Mean	SD	Range	Cronbach's alpha
Age	42.9	11.5	26 - 69	-
HAD				
Anxiety	14.8	4.7	7 - 21	-
Depression	10	5.3	2 - 21	-
Beliefs About Voices				
Power	10.6	4.6	3 - 18	0.73
Malevolence	10.7	5.4	1 - 18	0.83
Benevolence	3.0	4.7	0 - 16	0.90
Resistance	20.9	6.4	2 - 27	0.86
Engagement	3.4	6.0	0 - 20	0.93
Social Support Questionnaire				
Number of supports	10.7	5.2	0 - 20	-
Satisfaction	28.4	6.8	13 - 36	-

Table 2. Means and standard deviations of locus of control scale scores across different groups

Group	N	Internal	Powerful others	Chance
*General Population	96	35.5 (6.3)	16.7 (7.6)	13.9 (8.4)
*Schizophrenia	51	32.7 (9.7)	25.6 (12.6)	24.8 (11.3)
Voice hearers	21	28.5 (12.1)	30.6 (16.7)	30.7 (13.9)

* figures from Levenson (1973).

Table 3. Spearman's correlation coefficients

	BAVQP	*BAVQM*	*BAVQB*	*BAVQE*	*BAVQR*	*HADAN*	*HADDEP*	*SSQN*	*SSQS*	*LOCPO*
BAVQ										
Power	-	**.68	-.34	-.42	.40	.22	*.38	.26	.27	.26
Malevolence		-	**-.55	**-.68	**.67	.16	.33	.19	.18	.37
Benevolence			-	**.49	**-.60	-.06	.01	.06	.13	-.25
Engagement				-	**-.66	-.13	-.35	-.19	-.16	*-.47
Resistance					–	.11	.23	.31	-.17	*.39
HAD										
Anxiety										
Depression						–	**.59	-.01	.10	-.01
							–	.11	-.04	.23
SSQ6										
Number										
Satisfaction								–	*.46	-.09
									–	.05
LOC										
Powerful others										–

Note: N= 20 – 23. BAVQ = Beliefs About Voices Questionnaire. HAD = Hospital Anxiety and Depression Scale. SSQ6 = Short form of the Social Support Questionnaire. LOC = Locus of Control.

* $p < .05$, ** $p < .01$, all significance levels are two-tailed unless hypotheses predict direction.

APPENDIX I

EAST SUSSEX, BRIGHTON AND HOVE
Health Authority

30 October 1997

Our ref: **(E) 97/44**

Ms B O'Neill
Trainee Clinical Psychologist
Department of Psychiatry
Eastbourne Hospitals NHS Trust
Eastbourne District General Hospital
Kings Drive
EASTBOURNE
East Sussex BN21 2UD

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Dear Ms O'Neill

Study title: Omnipotent Voices Revisited: The Role of Agency in Coping with Auditory Hallucinations

The above study was reviewed by the Eastbourne Local Research Ethics Committee at their meeting on 29 October 1997.

The study was **approved**.

It would be appreciated if, on its conclusion, you would supply a brief report to the Committee, with your findings and conclusions.

Yours sincerely

KMLonghurst

Kerry Longhurst (Mrs)
Ethics Committee Administrator

APPENDIX II

Information Sheet and Consent Form

I am:

Bridgette O'Neill
Trainee Clinical Psychologist
Department of Psychiatry,
Eastbourne District General Hospital,
Kings Drive, Eastbourne, BN21 2UD
Telephone: 01323 - 417400 extension 4519

I am undertaking a study to find out about the experiences of people who hear voices. The study is looking at individuals':
a, emotional well-being
b, beliefs about their voices
c, views about events and control in their life
d, experience of social relationships.

It is hoped that information gained from the study will be helpful for professionals in the Eastbourne area who work with people who hear voices. I hope to collect this information from the self-report questionnaires enclosed with this information sheet.

If you decide to take part in the study by completing the enclosed questionnaires, any information that you provide is for research purposes only, will be treated confidentially, and will not affect any current treatment you are receiving. You are free to withdraw from the study at any time, without having to give a reason for withdrawing and without affecting your future treatment. The general findings of the study will be included in a final report but any information that may identify you will not be included. I am happy to meet with you to discuss your scores on the questionnaires and the meaning of the different measures. If you feel this would be helpful, please contact me on the above number to arrange an appointment, after returning your questionnaires, so that I can score them before we meet. In addition, a summary report of the outcome of the completed study will be sent to you if you indicate below that you would like one.

If you would like any further information about the study or have any queries, please do not hesitate to contact me on the number above.

Many thanks for your time in reading this information sheet. I do hope that you decide to take part in this study.

Consent Form

I have read the above information sheet and agree to take part in this study

Signed ..... Date .....

I give my permission for information relevant to the study to be obtained from my CPN or Psychiatrist

Signed ..... Date .....

Please delete as appropriate:
I would / would not like a copy of the summary report of the completed study.

Date 1998

Invitation to Participate

Dear ,

I am a trainee clinical psychologist working with Catherine O'Shea, Principal Clinical Psychologist in Eastbourne, and studying with the University of Southampton training course in clinical psychology. I am doing a project to try to find out about the experiences of people who hear voices and your name has been suggested as someone who may be interested in helping with this study.

Please find enclosed two copies of an information and consent form giving details about the study and four questionnaires. If you decide to take part in the study, once you have read this information, please sign one copy of the consent form, indicating whether you are happy for me to gain information relevant to the study from your CPN or Psychiatrist, and whether you would like me to send you a summary report of the outcome of the completed study. Then complete the enclosed questionnaires and send the questionnaires and signed consent form back to me in the stamped addressed envelope provided. The other copy of the information sheet is for you to keep for your information.

I do hope that you decide to take part in this study and look forward to hearing from you.

Yours sincerely

Bridgette O'Neill
Trainee Clinical Psychologist.

APPENDIX III

BAVQ - R

There are many people who hear voices. It would help us to find out how you are feeling about your voices by completing this questionnaire. Please read each statement and tick the box which best describes the way you have been feeling in the *past week*.

If you hear more than one voice, please complete the form for the voice which is dominant.

Thank you for your help.

Name: .....
Age: .....

		Disagree	Unsure	Slightly Agree	Strongly Agree
1	My voice is punishing me for something I have done				
2	My voice wants to help me				
3	My voice is very powerful				
4	My voice is persecuting me for no good reason				
5	My voice wants to protect me				
6	My voice seems to know everything about me				
7	My voice is evil				
8	My voice is helping to keep me sane				
9	My voice makes me do things I really don't want to do				
10	My voice wants to harm me				
11	My voice is helping me to develop my special powers or abilities				
12	I cannot control my voices				
13	My voice wants me to do bad things				
14	My voice is helping me to achieve my goal in life				
15	My voice will harm or kill me if I disobey or resist it				

		Disagree	Unsure	Slightly Agree	Strongly Agree
16	My voice is trying to corrupt or destroy me				
17	I am grateful for my voice				
18	My voice rules my life				
19	My voice reassures me				
20	My voice frightens me				
21	My voice makes me happy				
22	My voice makes me feel down				
23	My voice makes me feel angry				
24	My voice makes me feel calm				
25	My voice makes me feel anxious				
26	My voice makes me feel confident				

When I hear my voice, usually ...

		Disagree	Unsure	Slightly Agree	Strongly Agree
27	I tell it to leave me alone				
28	I try and take my mind off it				
29	I try and stop it				
30	I do things to prevent it talking				
31	I am reluctant to obey it				
32	I listen to it because I want to				
33	I willingly follow what my voice tells me to do				
34	I have done things to start to get in contact with my voice				
35	I seek the advice of my voice				

APPENDIX IV

HAD Scale

Name:

Date:

This questionnaire is designed to help us find out how you feel. Read each item and place a firm tick in the box opposite the reply which comes closest to how you have been feeling in the past week.
Don't take too long over your replies: your immediate reaction to each item will probably be more accurate than a long thought-out response.

Tick only one box in each section

I feel tense or 'wound up':
- Most of the time
- A lot of the time
- Time to time, Occasionally
- Not at all

I still enjoy the things I used to enjoy:
- Definitely as much
- Not quite so much
- Only a little
- Hardly at all

I get a sort of frightened feeling as if something awful is about to happen:
- Very definitely and quite badly
- Yes, but not too badly
- A little, but it doesn't worry me
- Not at all

I can laugh and see the funny side of things:
- As much as I always could
- Not quite so much now
- Definitely not so much now
- Not at all

Worrying thoughts go through my mind:
- A great deal of the time
- A lot of the time
- From time to time but not too often
- Only occasionally

I feel cheerful:
- Not at all
- Not often
- Sometimes
- Most of the time

I can sit at ease and feel relaxed:
- Definitely
- Usually
- Not often
- Not at all

I feel as if I am slowed down:
- Nearly all the time
- Very often
- Sometimes
- Not at all

I get a sort of frightened feeling like 'butterflies' in the stomach:
- Not at all
- Occasionally
- Quite often
- Very often

I have lost interest in my appearance:
- Definitely
- I don't take so much care as I should
- I may not take quite as much care
- I take just as much care as ever

I feel restless as if I have to be on the move:
- Very much indeed
- Quite a lot
- Not very much
- Not at all

I look forward with enjoyment to things:
- As much as ever I did
- Rather less than I used to
- Definitely less than I used to
- Hardly at all

I get sudden feelings of panic:
- Very often indeed
- Quite often
- Not very often
- Not at all

I can enjoy a good book or radio or TV programme:
- Often
- Sometimes
- Not often
- Very seldom

Do not write below this line

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226DUK

APPENDIX V

This is a questionnaire designed to determine the way in which different people view possible happenings in their lives. Each item is a belief statement with which you may agree or disagree. For each statement, using the scale below, please circle the number that represents the extent to which you disagree or agree with the statement.

1	2	3	4	5	6
Strongly disagree	*Moderately disagree*	*Slightly disagree*	*Slightly agree*	*Moderately agree*	*Strongly agree*

The more strongly you agree with a statement then the higher will be the number you circle. The more strongly you disagree with a statement then the lower will be the number you circle. Please make sure that you answer every item and that you circle only one number per item. This questionnaire is a measure of your personal beliefs; there are no right or wrong answers.

Thank you for your help.

Name: .....

Date: .....

1. Whether or not I get to be a leader depends mostly on my ability.

1 2 3 4 5 6

2. To a great extent my life is controlled by accidental happenings.

1 2 3 4 5 6

3. I feel like what happens in my life is mostly determined by powerful others.

1 2 3 4 5 6

4. Whether or not I get into an accident depends mostly on how good a driver I am.

1 2 3 4 5 6

5. When I make plans I am almost certain to make them work.

1 2 3 4 5 6

6. Often there is no chance of protecting my personal interests from bad luck happenings.

1 2 3 4 5 6

7. When I get what I want, it's usually because I'm lucky.

1 2 3 4 5 6

8. Although I might have good ability, I will not be given leadership responsibility without appealing to those in positions of power.

1 2 3 4 5 6

9. How many friends I have depends on how nice a person I am.

1 2 3 4 5 6

10. I have often found that what is going to happen will happen.

1 2 3 4 5 6

11. My life is chiefly controlled by powerful others.

1 2 3 4 5 6

12. Whether or not I get into a car accident is mostly a matter of luck.

1 2 3 4 5 6

13. People like myself have very little chance of protecting our personal interests when they conflict with those of strong pressure groups.

1 2 3 4 5 6

14. It's not always wise for me to plan too far ahead because many things turn out to be a matter of good or bad fortune.

1 2 3 4 5 6

15. Getting what I want requires pleasing those people above me.

1 2 3 4 5 6

16. Whether or not I get to be a leader depends whether I'm lucky enough to be in the right place at the right time.

1 2 3 4 5 6

17. If important people were to decide they didn't like me, I probably wouldn't make many friends.

1 2 3 4 5 6

18. I can pretty much determine what will happen in my life.

1 2 3 4 5 6

19. I am usually able to protect my personal interests.

1 2 3 4 5 6

20. Whether or not I get into a car accident depends mostly on the other driver.

1 2 3 4 5 6

21. When I get what I want it's usually because I worked hard for it.

1 2 3 4 5 6

22. In order to have my plans work, I make sure that they fit in with the desires of people who have power over me.

1 2 3 4 5 6

23. My life is determined by my own actions.

1 2 3 4 5 6

24. It's chiefly a matter of fate whether or not I have a few friends or many friends.

1 2 3 4 5 6

APPENDIX VI

SHORT FORM SOCIAL SUPPORT QUESTIONNAIRE (SSQ6)

Name:.....

Date:..... Age:..... Sex: M F

Instructions

The following questions ask about people in your environment who provide you with help or support. Each question has two parts. For the first part, list all the people you know, excluding yourself, whom you can count on for help or support in the manner described. Give each person's initials and their relationship to you (see example). Do not list more than one person next to each of the numbers beneath each question. Do not list more than nine people per question.

For the second part, using the scale below, circle how satisfied you are with the overall support you have.

6	5	4	3	2	1
Very satisfied	*Fairly satisfied*	*A little satisfied*	*A little dissatisfied*	*Fairly dissatisfied*	*Very dissatisfied*

If you have no support for a question, tick the words 'No one', but still rate your level of satisfaction. The example below has been completed to help you. All your responses will be kept confidential.

Example

Who do you know whom you can trust with information that could get you in trouble?

(a) No one
1) TEN (Brother)
2) LM (Friend)
3) ASS (Friend)
4) PEN (Father)
5) LM (Employer)
6)
7)
8)
9)

(b) How satisfied? 6 5 (4) 3 2 1

(1) Whom can you really count on to distract you from your worries when you feel under stress?

(a) No one 3) 6) 9)
1) 4) 7)
2) 5) 8)

(b) How satisfied? 6 5 4 3 2 1

(2) Whom can you really count on to help you feel more relaxed when you are under pressure or tense?

(a) No one 3) 6) 9)
1) 4) 7)
2) 5) 8)

(b) How satisfied? 6 5 4 3 2 1

(3) Who accepts you totally, including both your worst and best points?

(a) No one 3) 6) 9)
1) 4) 7)
2) 5) 8)

(b) How satisfied? 6 5 4 3 2 1

(4) Whom can you really count on to care about you, regardless of what is happening to you?

(a) No one 3) 6) 9)
1) 4) 7)
2) 5) 8)

(b) How satisfied? 6 5 4 3 2 1

(5) Whom can you really count on to help you feel better when you are feeling generally down-in-the-dumps?

(a) No one 3) 6) 9)
1) 4) 7)
2) 5) 8)

(b) How satisfied? 6 5 4 3 2 1

(6) Whom can you count on to console you when you are very upset?

(a) No one 3) 6) 9)
1) 4) 7)
2) 5) 8)

(b) How satisfied? 6 5 4 3 2 1

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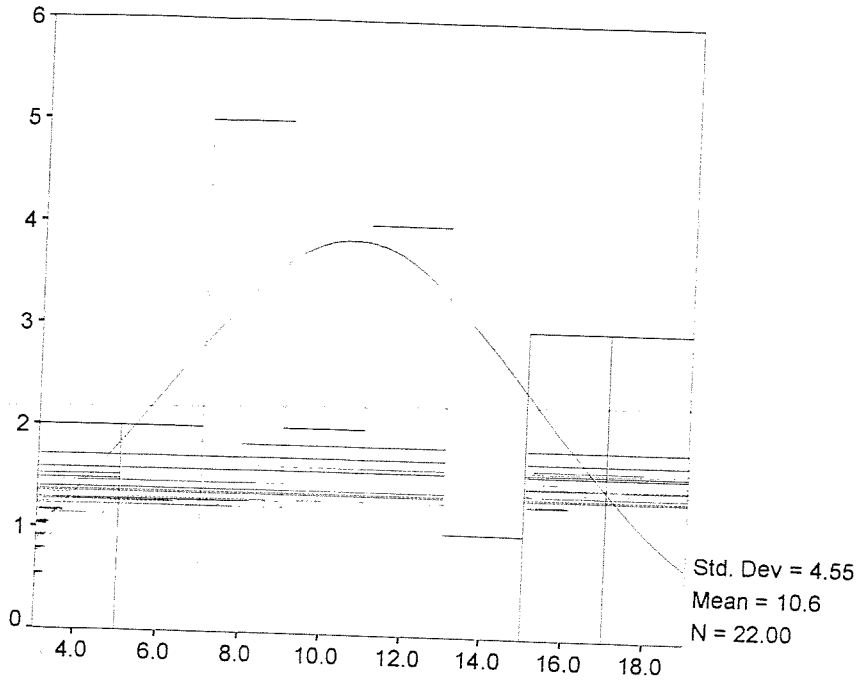
Code 4920 05 4

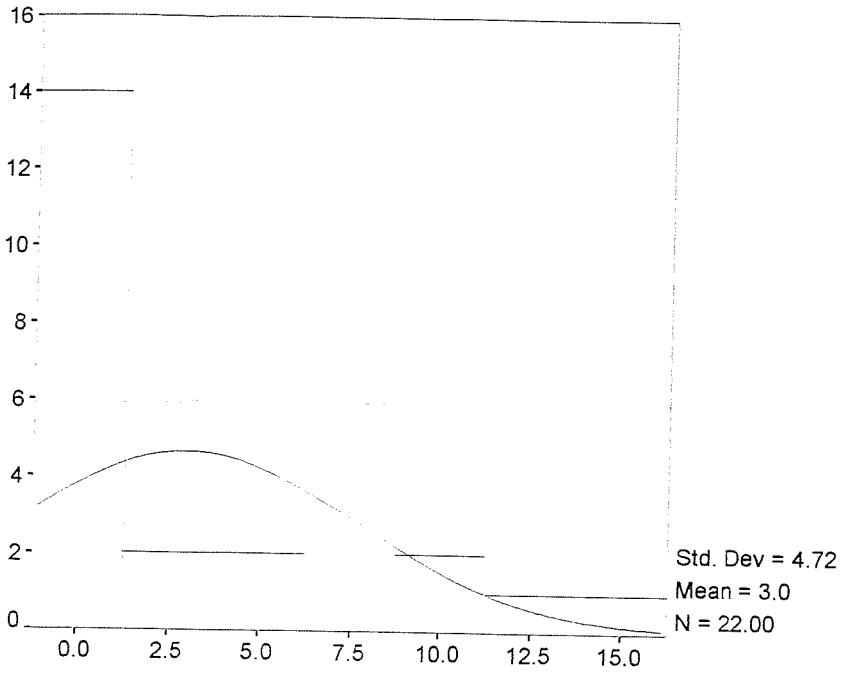
APPENDIX VII

Graph



BAVQPOW

Graph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14
12
10
8
6
4
2
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0.0
2.5
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10.0
12.5
15.0
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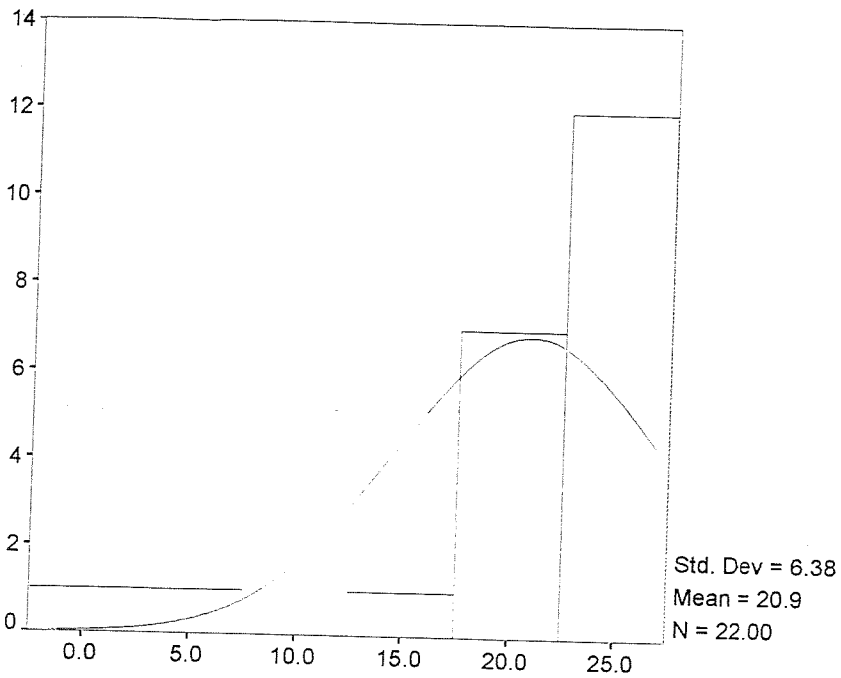
Mean = 3.0
N = 22.00
BAVQBEN

Graph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12
10
8
6
4
2
0
0.0
5.0
10.0
15.0
20.0
25.0
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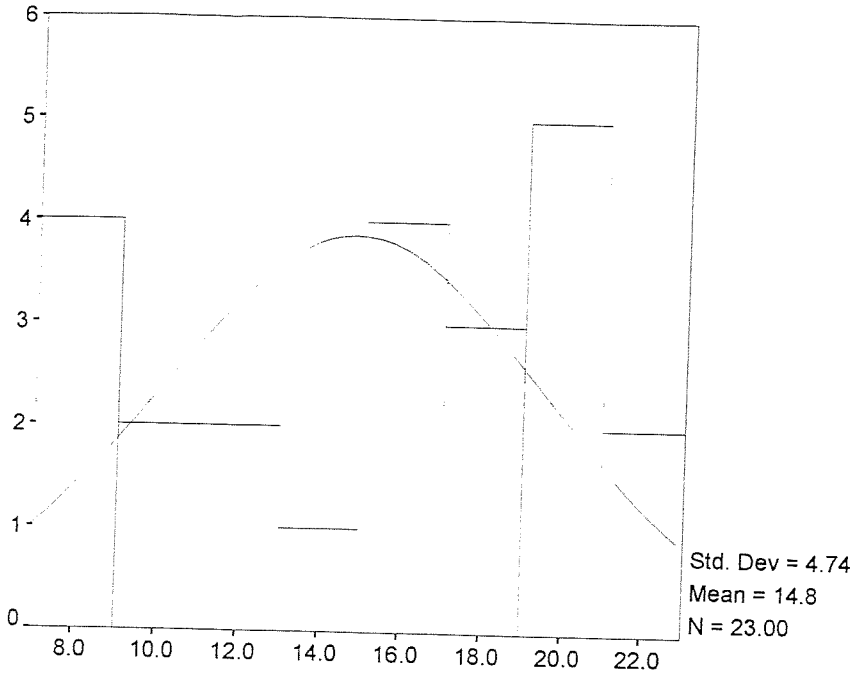
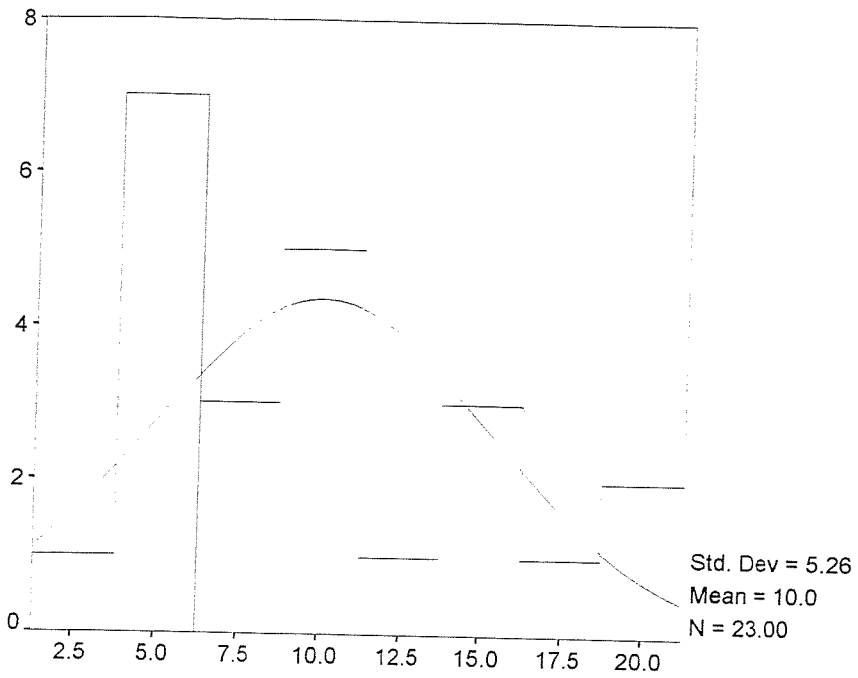
Mean = 20.9
N = 22.00
BAVQRES

Graph



HADANX

Graph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6
4
2
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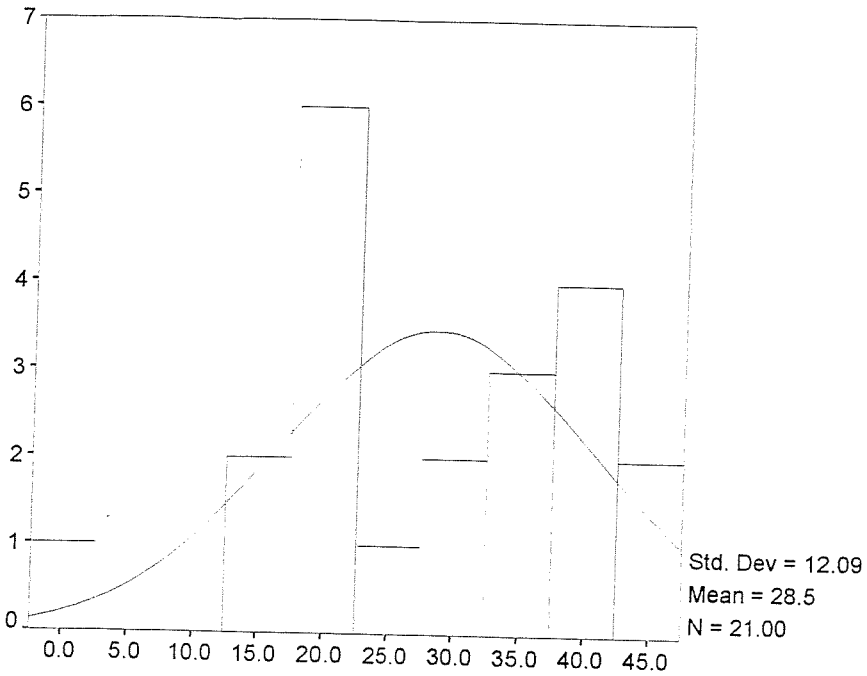
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
Std. Dev = 5.26
Mean = 10.0
N = 23.00
HADDEP

Graph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6
5
4
3
2
1
0
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
40.0
45.0
Std. Dev = 12.09
Mean = 28.5
N = 21.00
LOCINT

APPENDIX VIII

CLINICAL PSYCHOLOGY REVIEW

INSTRUCTIONS TO AUTHORS

AIMS AND SCOPE: *Clinical Psychology Review* publishes substantive reviews of topics germane to clinical psychology. Its purpose is to help clinical psychologists keep up-to-date on relevant issues outside of their immediate areas of expertise by publishing scholarly but readable reviews. Papers cover diverse issues, including: psychopathology, psychotherapy, behavior therapy, behavioral medicine, community mental health, assessment, and child development.

Reviews on other topics, such as psychophysiology, learning therapy, and social psychology, often appear if they have a clear relationship to research or practice in clinical psychology. Integrative literature reviews and summary reports of innovative ongoing clinical research programs are also sometimes published. Reports on individual research studies are not appropriate.

SUBMISSION REQUIREMENTS: All manuscripts should be submitted to Alan S. Bellack, Department of Psychiatry, The University of Maryland at Baltimore, School of Medicine, 685 West Baltimore Street, Suite 618, Baltimore, MD 21201-1549, USA. Submit three (3) high-quality copies of the entire manuscript; the original is not required. Allow ample margins and type double-space throughout. Papers should not exceed 50 pages (including references). One of the paper's authors should enclose a letter to the Editor, requesting review and possible publication; the letter must also state that the manuscript has not been previously published and has not been submitted elsewhere. One author's address (as well as any upcoming address change), telephone and FAX numbers, and **E-mail address** (if available) should be included; this individual will receive all correspondence from the Editor and Publisher.

Papers accepted for *Clinical Psychology Review* may not be published elsewhere in any language without written permission from the author(s) and publishers. Upon acceptance for publication, the author(s) must complete a Transfer of Copyright Agreement form.

COMPUTER DISKS: Authors are encouraged to submit a 3.5" HD/DD computer disk to the editorial office. Please observe the following criteria: (1) Send only hard copy when first submitting your paper. (2) When your paper has been refereed, revised if necessary, and accepted, send a disk containing the final version with the final hard copy. If the disk cannot be converted, the hard copy will be used. (3) Specify what software was used, including which release, e.g., WordPerfect 6.0a. (4) Specify what computer was used (IBM compatible PC, Apple Macintosh, etc.). (5) The article file should include all textual material (text, references, tables, figure captions, etc.) and separate illustration files, if available. (6) The file should follow the general instructions on style/arrangement and, in particular, the reference style of this journal as given in the Instructions to Contributors. (7) The file should be single-spaced and should use the wrap-around end-of-line feature, i.e., returns at the end of paragraphs only. Place two returns after every element such as title, headings, paragraphs, figure and table call-outs. (8) Keep a back-up disk for reference and safety.

TITLE PAGE: The title page should list (1) the article; (2) the authors' names and affiliations at the time the work was conducted; (3) a concise running title; and (4) an unnumbered footnote giving an address for reprint requests and acknowledgments.

ABSTRACT: An abstract should be submitted that does not exceed 200 words in length. This should be typed on a separate page following the title page.

STYLE AND REFERENCES: Manuscripts should be carefully prepared using the *Publication Manual of the American Psychological Association*, 4th ed., 1994, for style. The reference section must be double spaced, and all works cited must be listed. Avoid abbreviations of journal titles and incomplete information.

Reference Style for Journals:

Raymond, M. J. (1964). The treatment of addiction by aversion conditioning with apomorphine. *Behavior Research and Therapy, 3*, 287–290.

For Books:

Barlow, D. H., Hayes, S. C., & Nelson, R. O. (1984). *The scientist practitioner: Research and accountability in clinical and educational settings*. Elmsford, NY: Pergamon.

TABLES AND FIGURES: Do not send glossy prints, photographs or original artwork until acceptance. Copies of all tables and figures should be included with each copy of the manuscript. Upon acceptance of a manuscript for publication, original, camera-ready photographs and artwork must be submitted, unmounted and on glossy paper. Photocopies, blue ink or pencil are not acceptable. Use black india ink and type figure legends on a separate sheet. Write the article title and figure number lightly in pencil on the back of each.

PAGE PROOFS AND OFFPRINTS: Page proofs of the article will be sent to the corresponding author. These should be carefully proofread. Except for typographical errors, corrections should be minimal, and rewriting the text is not permitted. Corrected page proofs must be returned within 48 hours of receipt. Along with the page proofs, the corresponding author will receive a form for ordering offprints and full copies of the issue in which the article appears. Twenty-five (25) free offprints are provided; orders for additional offprints must be received before printing in order to qualify for lower publication rates. All coauthor offprint requirements should be included on the offprint order form.

APPENDIX IX

NOTES FOR CONTRIBUTORS

1. The *British Journal of Clinical Psychology* publishes original contributions to scientific knowledge in clinical psychology. This includes descriptive comparisons, as well as studies of the assessment, aetiology and treatment of people with a wide range of psychological problems in all age groups and settings. The level of analysis of studies ranges from biological influences on individual behaviour, e.g. neuropsychology, age associated CNS changes and pharmacological (in the later case an explicit psychological analysis is also required), through studies of psychological interventions and treatments on individuals, dyads, families and groups, to investigations of the relationships between explicity social and psychological levels of analysis. The general focus of studies in an abnormal behaviour such as that described and classfied by current diagnostic systems (ICD-10, DSM-IV) but it is not bound by the exclusive use of such diagnostic systems. The Journal is catholic with respect to the range of theories and methods used to answer substantive scientific problems. Studies of samples with no current psychological disorder will only be considered if they have a direct bearing on clinical theory or practice.

2. The following types of paper are invited:

(*a*) Papers reporting original empirical investigations.

(*b*) Theoretical papers, provided that these are sufficiently related to empirical data.

(*c*) Review articles which need not be exhaustive, but which should give an interpretation of the state of research in a given field and, where appropriate, identify its clinical implications.

(*d*) Brief Reports and Comments (see paragraph 6).

Case studies are normally published only as Brief Reports. Papers are evaluated in terms of their theoretical importance, contributions to knowledge, relevance to the concerns of practising clinical psychologists, and readability. Papers generally appear in order of acceptance, except for the priority given to Brief Reports and Comments.

3. The circulation of the Journal is worldwide, and papers are reviewed by colleagues in many countries. There is no restriction to British authors, and papers are invited from authors throughout the world.

4. The editors will reject papers which evidence discriminatory, unethical or unprofessional practices.

5. Papers should be prepared in accordance with The British Psychological Society's *Style Guide*, available at £3.50 per copy from The British Psychological Society, St. Andrews House, 48 Princess Road East, Leicester LE1 7DR, England. Contributions should be kept as concise as clarity permits, and illustrations kept as few as possible. Papers should not normally exceed 5000 words. A structured abstract of up to 250 words should be provided (see Volume 35(2), pp. 323 (1996), for details). The title should indicate exactly but as briefly as possible the subject of the article, bearing in mind its use in abstracting and indexing systems.

(*a*) Contributions should be typed in double spacing with wide margins and only on one side of each sheet. Sheets should be numbered. The top copy and at least three good duplicates should be submitted and a copy should be retained by the author.

(*b*) This journal operates a policy of blind peer review. Papers will normally be scrutinized and commented on by at least two independent expert referees as well as by the editor or by an associate editor. 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 indentifiable self-citations ('In our earlier work...'). The paper's title should be repeated on the first page of the text.

(*c*) Tables should be typed in double spacing on separate sheets. Each should have a self-explanatory title and should be comprehensible without reference to the text. They should be referred to in the text by arabic numerals. Data given should be checked for accuracy and must agree with mentions in the text.

(*d*) Figures, i.e. diagrams, graphs or other illustrations, should be on separate sheets numbered sequentially 'Fig. 1', etc., and each identified on the back with the title of the paper. They should be carefully drawn, larger than their intended size, suitable for photographic reproduction and clear when reduced in size. Special care is needed with symbols: correction at proof stage may not be possible. Lettering must not be put on the original drawing but upon a copy to guide the printer. Captions should be listed on a separate sheet.

(*e*) Bibliographical references in the text should quote the author's name and the date of publication thus; Hunt (1993). They should be listed alphabetically by author at the end of the article according to the following format:

Moore, R. G. & Blackburn, I.-M. (1993). Sociotrophy, autonomy and personal memories in depression. *British Journal of Clinical Psychology*, 32, 460–462.

Steptoe, A. & Wardle, J. Cognitive predictors of health behaviour in contrasting regions of Europe. In C. R. Brewin, A. Steptoe & J. Wardle (Eds), *European Perspectives in Clinical and Health Psychology*, pp. 101–118. Leicester: The British Psychological Society.

Particular care should be taken to ensure that references are accurate and complete. Give all journal titles in full.

(*f*) SI units must be used for all measurements, rounded off to practical values if appropriate, with the Imperial equivalent in parentheses (see BPS *Style Guide*).

(*g*) Authors are requested to avoid the use of sexist language.

(*h*) Supplementary data too extensive 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 materials should be submitted to the Editor together with the article, for simultaneous refereeing.

6. Brief Reports and Comments are limited to two printed pages. These are subject to an accelerated review process to afford rapid publication of research studies, and theoretical, critical or review comments whose essential contribution can be made within a small space. They also include research studies whose importance or breadth of interest is insufficient to warrant publication as full articles, and case reports making a distinctive contribution to theory or method. Authors are encouraged to append an extended report to assist in the evaluation of the submission and to be made available to interested readers on request to the author. To ensure that the two-page limit is not exceeded, set typewriter margins to 66 characters maximum per line and limit the text, including references and a 100-word abstract, to 150 lines. Figures and tables should be avoided. Title, author and name and address for reprints and date of receipt are not included in the allowance. However deduct three lines from the text each and every time any of the following occur:

(*a*) title longer than 70 characters,

(*b*) author names longer than 70 characters,

(*c*) each address after the first address,

(*d*) each text heading (these should normally be avoided).

A character is a letter or space. A punctuation mark counts as two characters (character plus space) and a space must be allowed on each side of a mathematical operator.

7. Proofs are sent to authors for correction of print, but not for introduction of new or different material. They should be returned to the Journals Manager as soon as possible. Fifty complimentary copies of each paper are supplied to the senior author on request: further copies may be ordered on a form supplied with the proofs.

8. Authors should consult the Journal editor concerning prior publication in any form or in any language of all or part of their article.

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British Journal of Clinical Psychology (1996), 35, 323 *Printed in Great Britain*

Editorial announcement

Structured abstracts

Intending contributors should note that the *British Journal of Clinical Psychology* is changing the format of the summary of each paper to that of a structured abstract. This change will operate with immediate effect. All new and resubmitted papers should contain a structured abstract in the format outlined below. This change is being made in line with evidence that structured abstracts contain more accessible information than non-structured ones.

Stephen Morley
Editor

All papers submitted to the *British Journal of Clinical Psychology* should include a structured abstract of no more than 250 words.

Articles containing original scientific research should include a structured abstract with the following headings and information:

Objectives: State the primary objective of the paper and the major hypothesis tested (if appropriate).

Design: Describe the design of the study and describe the principal reasoning for the procedures adopted.

Methods: State the procedures used, including the selection and numbers of participants, the interventions or experimental manipulations, and the primary outcome measures.

Results: State the main results of the study. Numerical data may be included but should be kept to a minimum.

Conclusions: State the conclusions that can be drawn from the data provided, and their clinical implications (if appropriate).

Review articles should include an abstract which may be structured under the following headings:

Purpose: State the primary objectives of the review.

Methods: State the methods used to select studies for the review, the criteria for inclusion, and the way in which the material was analysed.

Results: State the main results of the review.

Conclusions: State the conclusions that can be drawn from the review, and their clinical implications (if appropriate).