

**EARLY ATTACHMENT EXPERIENCE AND
INTERPERSONAL RELATIONSHIPS BETWEEN THE VOICES THAT
PEOPLE HEAR AND THE VOICE-HEARER**

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by

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ABSTRACT

Psychological research in the last three decades has led to considerable developments in the theoretical understanding of auditory hallucinations. Research into the experience of voice-hearers has attempted to identify the 'meaning' attached to voices and increased focus has been placed on the voice as an 'interpersonal other.' However, only limited research has focused on the relationship that exists between the voice and the voice-hearer. No studies appear to examine the influence past interpersonal experiences may have had upon this relationship.

The aim of this study was to investigate whether the relationship that exists between voice-hearers and their voices are influenced by early interpersonal experience. Specifically, it aimed to explore perceived parenting style during the first sixteen years of the individual's life and associations with the current relationship with the predominant voice.

Twenty-seven voice hearers were recruited to participate in the study. Individuals completed measures of 'relating' to the voice and 'being related to' by the voice as well as retrospective measures of perceived parenting. Findings suggest a tentative link between the perceived relating of parents and 'being related to' by the predominant voice. No associations were found between 'relating' to the voice and perceived parenting. Consistent with previous research most individuals related to the voice from a position of distance.

Results are discussed within attachment and interpersonal frameworks and findings are discussed in view of design limitations. Clinical implications are proposed with particular reference to assessment and intervention. Recommendations for future research are considered in light of the findings.

1. INTRODUCTION

1.1 Overview of Chapter 1

Auditory hallucinations or ‘hearing voices’ commonly occur in the psychiatric population and is a particular feature of psychotic disorders. Individuals experiencing psychotic symptoms experience high levels of distress and disability (Garety & Hemsley, 1987; Leudar, Thomas, McNally & Glinski, 1997; Nayani & David, 1996) and in addition to reduced life expectancy, there is an increased risk of suicide (Drake & Cotton, 1986). Psychiatry still considers voice hearing to be a first rank symptom of schizophrenia and treatment is usually limited to neuroleptic medication. However, it is estimated that 25% of individuals with a diagnosis of schizophrenia continue to experience psychotic symptoms despite the use of neuroleptic medication (Davis & Casper, 1997). Furthermore, the side effects of medication are often regarded as more distressing than the symptoms being treated.

Psychological research in the last three decades has led to considerable developments in the theoretical understanding of auditory hallucinations. Research into the experience of voice-hearers has attempted to identify the ‘meaning’ attached to voices. One aspect that is believed to mediate the response to voices is the concept of relationship with the voice. Evidence suggests that the development of personality styles and experience of relating to others may have a significant influence on a voice-hearer’s relationship with their voice and subsequent distress and coping (Birchwood, Meaden, Trower, Gilbert & Plaistow, 2000; Vaughan, 2000). Additionally, hearer-to-voice relationships have been found to be similar to

relationships in the 'real' world (Leudar et al., 1997; Nayani & David, 1996; Hayward, 2003).

Based on the emerging literature, more research is needed to investigate how development of early relationships can have an effect on the way in which individuals relate to their voices. The current research was a study that explored the association between early experience and current voice relating in a clinical sample of males and females aged between 18 and 64 years.

A comprehensive literature review will be presented critically discussing the literature available. As a means of providing necessary context the first section of this review will describe auditory hallucinations and the development of psychological intervention as an alternative to traditional medical treatments.

A discussion regarding the origins of attachment theory and its relevance to adult attachment will be presented. A model designed to explain a measure of retrospective parental bonding will then be described. Links between early attachment and voice relating will be discussed including the limited research that has recently been carried out in the field, as well as the relevance of attachment theory and relationship to voices.

Five core areas will then be reviewed concerning the investigation of theoretical approaches to voice relating: social empowerment (Romme & Escher, 1993), beliefs about voices (Chadwick & Birchwood, 1994), voices in relations to the self (Close & Garety, 1998; Birtchnell, 1993), voice content (Thomas, 1997), and position relating

to the voice (Benjamin, 1989). The key concept of this research involves attempts to investigate the relationship that the hearer has with the voice/s in relation to the interpersonal self.

A critique of attachment theory will be presented followed by a description of Birtchnell's (1993) interpersonal theory of relating as an alternative model within which the experience of voice hearing can be explored. This will be followed by a review of recent studies that have utilised relating theory.

Finally, rationale for the current research will be presented and hypotheses will be outlined.

1.2 Definition of Hearing Voices

Auditory hallucinations are defined as, *“any percept-like experience which a) occurs in the absence of an appropriate stimulus, b) has the full force or impact of the corresponding actual (real) perception, and c) is not amenable to direct and voluntary control by the experiencer”*(Slade & Bentall, 1988, p.23). Auditory hallucinations can range from primitive noises such as bangs, whistles, claps and screams to music, single words, phrases or whole conversations. Sometimes the person may recognise the voice as a family member or deceased friend and sometimes it may be the voice of a stranger, spiritual figure or famous person.

In the World Health Organisation’s International Pilot Study of Schizophrenia (WHO, 1973), auditory hallucinations were reported by 73% of people diagnosed as having an acute episode of schizophrenia. However, hearing voices can also be a feature of bereavement, manic-depressive illness, affective psychosis and sexual abuse.

Research suggests that a number of individuals in the normal population hear voices without evidence of psychopathology (Honig et al., 1998). Tien (1991) found that in a sample of 15,000 adults, 4.6% experienced hallucinations, mostly auditory, over a one-year period, and only 33% met the criteria for a psychiatric diagnosis. This suggests that it is the nature of perceived stress that is caused by the voices and the subsequent coping that determines whether individuals access psychiatric services. Haddock and Slade (1996) argue that the success of neuroleptic medication has

inhibited the development of psychological therapies for the symptoms of psychosis. It is the consideration of psychological intervention for voices that will now follow.

1.3 Psychological Intervention for Hearing Voices

Reviews of psychological treatments for auditory hallucinations (Shergill, Murray and McGuire, 1998; Haddock, Tarrier, Spaulding, Yusupoff, Kinney and McCarthy, 1998) show that early treatments for auditory hallucinations were derived from psychological theories based on the modification of symptoms using external reinforcers i.e. operant conditioning. The success of these procedures was demonstrated through the use of individual case studies and small case studies. However, larger controlled outcome studies were not carried out and a major criticism of this type of approach is the difficulty in generalising results outside the inpatient setting, where contingent reinforcement can be delivered consistently.

Over the last ten years there has been a move away from individual treatment strategies for hearing voices such as distraction and focusing, and cognitive behavioural treatments are now established using formulation-based approaches. This has led to individual tailoring of formulation including making links between past and current relationships, content, and beliefs about self and others.

However, there are wide differences in the mode of delivery of psychological interventions and it is not clear why these treatments work. A recent Cochrane review of cognitive behaviour therapy for schizophrenia (Jones, Cormac, Mota &

Campbell, 2000) identified only four comparable controlled trials. Cognitive behavioural treatment was defined as the establishment of links between thoughts, feelings and behaviour and correction of misinterpretations, irrational beliefs and reasoning biases related to the target behaviour. All studies included challenging and testing key beliefs, problem solving and enhancing coping strategies. Although several 'treatment manuals' (Kingdon & Turkington, 1994; Fowler, Garety & Kuipers, 1995; Chadwick, Birchwood & Trower, 1996) are now available there are no standardised cognitive behavioural treatments for hearing voices. Indeed, research has shown that the process by which people attribute meaning to the voice-hearing experience is complex and individual, but there is still scope for understanding aspects that affect ultimate coping and reduction in stress.

Recent studies of voice-hearers from the normal population has led to a greater focus on understanding why not all people are distressed by their voices or enter psychiatric services (Honig et al., 1998). Research with non-clinical populations suggests that voice-hearers cope with their voices not because of the content of the experience, but because of the nature of the relationship with the voices. Individuals who believed the voices to be in control were less able to cope, whereas those who believed they were stronger than the voices coped better. This has led to a move away from viewing voices as part of a disease syndrome. Instead, hearing voices can be regarded as an experience that is meaningful within the context of the individual's life, emotions and environment. For example, individuals experiencing distress as a consequence of abusive relationships with others often recognise their voices as those of their actual abuser (Birchwood, 1999). This may suggest a link between past and present relationships in respect to voices.

The following section will give an overview of attachment theory. Setting the context for attachment theory is important due to the crucial influence early experience has on the development of later relationships.

1.4 Attachment Theory

This section describes the development of attachment theory and the nature of individual differences in infant-caregiver attachment as conceptualised by John Bowlby (1969) and Mary Ainsworth (Ainsworth, Blehar, Waters & Wall, 1978) in their theories of attachment. Mary Main (Main, Kaplan & Cassidy, 1985) later extended the concept of attachment to adulthood by linking early patterns of attachment to distinct patterns of adult attachment.

Establishing an attachment relationship with a caregiver in infancy is a normal experience. Most infants will develop a bond with a caregiver, and will attempt to use that caregiver as a source of comfort and reassurance when faced with environmental dangers. The nature of the bond and the effectiveness with which the caregiver can be used as a source of comfort, however, differ across infant-carer relationships. This creates individual differences in the quality of attachment relationships.

Attachment theory was developed by John Bowlby and Mary Ainsworth beginning in the 1930's with Bowlby's observations of children in hospital and his link between maternal loss or deprivation and the development of personality. Bowlby

began to formulate the main outline of the theory between 1958 and 1963, which culminated in the publication of the immensely influential *Attachment and loss Volume 1: Attachment* (1969). Ainsworth later used the ideas of Bowlby to identify different patterns of attachment using a reliable method of assessment in a laboratory 'strange situation' (Ainsworth, Blehar, Waters and Wall, 1978). The theory has gained respect as one of the leading frameworks in attachment theory because it addresses a wide range of issues of interest to psychologists. This includes the evolution and development of close relationships; the defensive regulation of thought, feeling and action; and the role of mental representations in interpersonal behaviour. Moreover, the basic tenets of the theory draw upon data and insights from a range of perspectives, including developmental, social, personality, cybernetic, evolutionary, and psychoanalytic.

Attachment theory denotes that we have an innate predisposition to form attachment relationships (Bowlby, 1973). Attachment behaviour is conceived as any form of behaviour that results in a person attaining proximity to a differentiated and preferred individual (Bowlby, 1980). Bowlby proposed that all human infants, however treated, become attached to persons who care for them (Bowlby, 1969). He argued that the attachment relationship is tied closely with personality development and that the quality of such attachment relationship varies, depending on the caregiver's emotional availability and responsiveness. The term attachment may refer to the relationship between the mother and infant, to the infant's behaviour towards the mother or to the more abstract theoretical construct of attachment to any caregiver. Ainsworth (1989) described an attachment bond as characteristic of the individual, 'entailing representation in the internal organisation of the individual' (p.711). Thus,

this bond is not one between two people; it is instead a bond that one individual has to another individual who is perceived as stronger and wiser (e.g. the bond of an infant to the mother).

Later developments identified secure and insecure attachment patterns in both children (Ainsworth et al., 1978) and adults (Main & Goldwyn, 1996). Ainsworth et al. developed a laboratory procedure lasting 20 minutes involving children aged 12 – 20 months, the children's mothers and an experimenter. The experiments focused on the response of the child to separation and reunion, and the individual differences elicited in the child's coping with the stress of separation. As a result three, and later four, patterns of behaviour were revealed which demonstrated attachment and exploratory behaviour in the children. The patterns were labelled: *secure*, *avoidant*, *ambivalent* and later *disorganised*. Sixty six percent of children were classified as securely attached, characterised by those who were distressed by separation, but greeted the mother on reunion, allowing themselves to be comforted if required, but then resuming play. Twenty percent of the children were classified as 'avoidant,' which was characterised by high distress on separation and an inability to be comforted on reunion. Twelve percent of the children were classified as 'ambivalent' characterised by contact seeking with the mother, which is then resisted and rejected, and little engagement in exploratory play. Disorganised attachment is characterised by a range of confused behaviours such as 'freezing' and 'stereotyped' behaviours following reunion with the mother. The acceptance of the procedure has been confirmed by a meta-analytic study in which replication occurred in more than 30 studies and the Strange Situation continues to be cited in attachment research (Ijzendoorn & Kroonenberg, 1988).

Bowlby's later addition to attachment theory (1969) was a goal-corrected system, which theorizes that attachment behaviour is determined by environmental cues, rather than being under the control of innate drives. According to the new theory, the mother is the most interesting cue in the environment, and proximity to her becomes the child's objective. This theory therefore places less emphasis on innate instincts, and attachment behaviour is instead seen to be independent on what occurs when the attachment systems are activated. Theoretically, this is because in the context of this developing relationship the infant forms initial expectations concerning self and other, or what Bowlby (1973; 1980) called 'inner working models.'

Main, Kaplan & Cassidy (1985) suggest that these early relationships with parental figures, siblings and friends result in the development of internal working models of relationships, which direct feelings, behaviour, attention, memory and cognition. Internal working models are believed to be dependent on the availability of others and the impact this has on the perceptions of the individual determines subsequent transactions within the environment, most particularly social relationships. It is also believed that internal working models of attachment in childhood are then carried through into adulthood, influencing the quality of later personal relationships (Feeney, 1996).

Indeed the basic assumption guiding attachment research is not that the relationship between mother and child affects later development, but that the child's initial relationship experience with the mother most likely predicts later social

development. This is due to the effect upon the child's expectations about self and others in relationships as well as social skills used in different social contexts.

“Relational styles that are learned in one situation are likely to be evoked in other situations of similar structure, especially in relatively ambiguous situations that can be structured to permit the pattern to be expressed. Moreover, when relational patterns are carried into new situations they typically elicit responses from others that support and validate that pattern”(Caspi & Elder, 1988, p.237).

Both Bowlby (1969, 1979) and Ainsworth (1989) have stressed attachment theory's predictions about relating applying principally to close relationships. Main (1990) proposed that each of the three principal attachment patterns, secure, avoidant and ambivalent reflects a particular attachment strategy. Each pattern in turn is believed to be linked to particular ways of behaving in close relationships. Secure infants are expected to form relationships in which attachment figures are used as a secure base. Avoidant children are hypothesized to form relationships in which their attachment behaviours are decreased and softened. Ambivalent infants are anticipated to form subsequent relationships in which their attachment behaviours are increased and heightened.

It is expected that the bond between parent and child might be influenced by the characteristics of the child (e.g., individual differences in attachment behaviour), the characteristics of the parent or care-giving system (e.g., psychological and cultural influences) and the reciprocal relationship between the child and the parent. Attachment behaviour is believed to be activated only under certain conditions. In

children this involves tiredness, anything frightening, or unavailability or unresponsiveness of the attachment figure. In adults, attachment behaviour is more commonly activated in times of illness, stress or old age (Bowlby, 1979).

The original focus of attachment theorists was the mother-child relationship and research has shown clear advances in understanding these relationships. During the last few decades, there has been a massive surge of both clinical and research interest in the field of adult attachment i.e. adult-adult relationships. The field of adult mental health has proved of immense interest to researchers exploring the causes and effects of insecure relationships and in terms of individual mental health problems. Bowlby (1980) also discovered that certain types of early experience predispose the individual to feelings of helplessness and depression.

A fundamental tenet of attachment theory is that the attachment style developed between parent and child influences future relationships. Although initial research focused on infants, Bowlby (1969) believed that individuals develop and use 'internal working models' of themselves in attachment relationships to guide social behaviour in later life. This idea has been used to examine attachment organisation and its relation to psychosocial functioning in adolescents and adults (Bowlby, 1980; Bretherton, 1985; Kobak & Sceery, 1988; Main et al., 1985). Adult's working models of attachment are seen as the organisation and integration by the adult of both abstract intimations and specific memories of attachment relationships (Main et al., 1985). Such integration, referred to as coherence, autonomy, or security, is seen as the adult equivalent to infant security in attachment relationships (Main & Goldwyn, 1996).

Mary Main's studies of adult attachment have proven as influential as those of Bowlby and Ainsworth. Main and her colleagues (Main et al., 1985) endeavoured to investigate associations between a parent's early relationship experiences and his or her infant's attachment status. The result of this research was the description of three patterns of adult attachment: *autonomous*, *dismissing* and *preoccupied*. Autonomous or securely attached adults described the experience of early attachment as coherent and flexible. In contrast dismissing adults idealized early relationships, describing painful events as detached and sometimes contradictory. Preoccupied adults seemed overwhelmed and flooded by the affect associated with early attachment. Main later suggested an additional category whereby thinking was disordered and disorganised in relation to discussion of trauma or mourning. This was classified as *unresolved/disorganised*. Indeed, attachment styles were found to be predictors of the child's subsequent bonding competence. Parents who were autonomous had children who were secure in the strange situation (Main et al., 1985). Those who were dismissing of attachment had avoidant children, and those who were preoccupied had resistant children. Parents who were disorganised in relation to loss and trauma had children who were disorganised in relation to attachment.

When a child reaches adolescence, they tend to seek independence away from the attachment relationship with their parents and rely more on peers as attachment figures. However, it is suggested that the relationship with parents does not become less important, rather that adolescents becomes less dependent on their parents. Weiss (1982) suggests that the transfer from parents to peers encourages their adult attachment styles to develop fully. Fraley and Davis (1997) found that the process of

transfer from parents as primary attachment figures to peers occurs in early adulthood. Secure working models of attachment and perceived security of the peer facilitate this transfer. In addition the authors found that relatively secure adults were more likely than insecure adults to have constructed an attachment relationship with peers.

Hazan & Shaver (1987, 1994) and Shaver, Hazan & Bradshaw (1988) noted that adult-adult relationships are similar to those of infant-caregiver attachment dynamics. For example, adult partners are more likely to explore the environment when the attachment figure to whom they are securely attached, is available and accessible. In addition, when adult partners are separated, they are likely to experience intense distress and seek comfort from one another (Simpson, Rholes & Nelligan, 1992). Hazan and Shaver (1994) propose that both secure childhood and adult attachment relationships are characterised by a) active proximity maintenance b) using the other as a safe haven c) utilising the other as a secure base.

Bowlby and Ainsworth have provided evidence of the crucial bond between mother (primary caregiver) and child, and the continuation of the origins of this relationship through to adulthood. It would therefore seem pertinent to attempt to make the same assumptions regarding relating in adulthood. Some researchers have found attachment style to be relatively stable across the lifespan (Bowlby, 1988; Rothbard & Shaver, 1994). Bowlby (1988) believed that over time working models of the self become stronger, more structured and increasingly resistant to change. Ainsworth et al., (1975) noted that infants are biased to leave the mother to explore the world as soon as they are able, and that the dynamic balance between that behaviour and care-

taking behaviour is subject to many shifts. Furthermore, research into romantic adult relationships has found marked similarities between the infant attachment patterns identified by Ainsworth et al. (1978) and adult attachment patterns (Collins & Read, 1990).

However, some research indicates that attachment style does not remain stable over time, with reports of 30% of individuals changing their attachment style over a 4-year period (Kirkpatrick & Hazan, 1994) and 40% changing over an 8-month period (Schafe & Bartholomew, 1994). Davila, Burge and Hammen (1997) found that some individuals are more prone to attachment style changes than others. However, even though this study investigated 155 female participants, 19% of participants aged 17 to 19 had never had a romantic relationship, casting doubt over the validity of such a study.

Most of the criticisms of attachment theory fall into two major categories. Firstly, there are concerns about the validity and utility of attachment theory itself. Secondly, there are concerns about the application of attachment theory to adult attachment relationships.

Contemporary research on adult attachment relationships has tended to focus on internal working models of relationships, hence cognitive rather than the interpersonal sources of attachment are highlighted (Cook, 2000). Consequently there is continuing debate regarding 'individual differences' versus 'the interpersonal nature of relating.' Cook tested three hypotheses regarding the interpersonal sources of adult attachment security. He concluded that greater emphasis should be placed

on the interpersonal nature of adult attachment. He suggests that internal working models of relationships may be considerably more dependent on social processes than originally assumed.

It is assumed that respectful, kind and honest parents will have respectful, kind and honest children. Conversely, parents who are disrespectful, rude and dishonest are predicted to have children with the same traits. Harris (1998) believes that parents do not shape their child's personality or character, instead believing that peers have more influence on them than their parents. For example, the child of immigrants will learn to speak the language in a new country without an accent whereas the parents' accents remain. Harris believes that children learn such things because they wish to fit in with their peers.

Harris (1998) also defines the concept of the *nurture assumption* whereby it is believed that parents are responsible for the influence of the child. Harris challenges this assumption by suggesting that nurture should not be a synonym for environment. She uses the example of identical twins who when separated at birth and brought up in different environments develop the same habits, hobbies and styles as identical twins raised in the same household.

Another limitation of the attachment model refers to behaviour that arises from momentary stressful situations, demonstrated by the Strange Situation observations (Ainsworth et al., 1978) compared to non-stressful situations. Field (1996) suggests that the interaction between mother and child when not stressed shows more of how the attachment model works than how the child responds when the mother leaves

and then returns.

Despite the significant expansion of research into adult attachment in recent years there has been concern that attachment theory is essentially a child-centred theory that is not easily adaptable to adult relationships. Birtchnell (1997) argued that comparisons of the attachment behaviour of animals and children are inadequate because for most animals, survival into adulthood depends not only on a period of attachment, but fundamentally upon '*an early and successful separation from the parent*' (Birtchnell, 1997, p.267). However, Bowlby's (1973) viewpoint on separation focused almost entirely on problems resulting from disruptions in the attachment process.

It is believed that the nature and quality of relationships in adulthood are strongly related to attachments in childhood, particularly the child-parent relationship (Collins & Read, 1990). Bowlby (1973) suggests that by late adolescence, early relating styles with attachment figures have become organised into *generalised* relating styles that are determined by the person's internal working model. Accordingly, many self-report measures of adult attachment examine close relationships in general, rather than relationships to specific others (Cook, 2000). Conversely, studies of infant attachments tend to consider *specific* attachments usually involving either the mother or father. Consequently, there is little evidence in the literature to confirm that such a process of generalisation occurs. Indeed, as demonstrated by Strange Situation observations (Ainsworth et al., 1978) the nature of the child's relationship to its mother and father can be significantly different (Bretherton, 1985).

A further criticism of research on adult attachment behaviour is the nature of the methodologies used for assessment. Childhood attachment research has historically originated from behavioural observations (Ainsworth et al., 1978), whilst adult attachment research has focused on language and perceptions through the use of interviews and self-report measures (Main et al., 1985). This may be a reflection of the different modes of communication and expression in children compared to adults. Consequently, there is little research to support the degree of congruence between the two methods.

In summary, it appears that previous research supports consistent transition of patterns of attachment from childhood to adulthood, despite some doubts over its validity. Further longitudinal research is required to determine the specific factors involved in this process. However, it appears that there is clearly scope to integrate the field of attachment theory. In particular, stronger links need to be forged between the areas of child and adult attachment. In addition, further links are required between fields such as the observation of child and adult attachment together with attachment theory within cognitive, personality and social psychology.

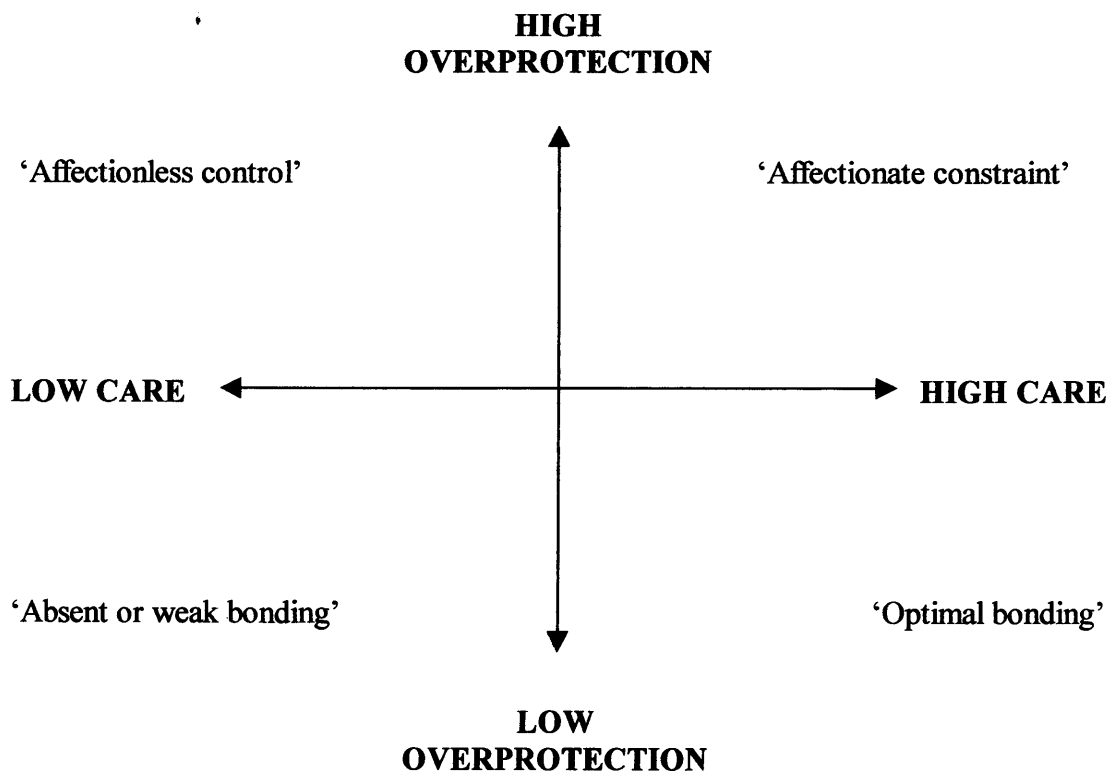
1.4.1 Parental Bonding

Previous attempts have been made to quantify the way in which parents relate to their children and the way in which this impacts on the subsequent development of the child. One way of determining parental contribution towards bonding is to measure parental behaviours and attitudes, as perceived retrospectively by adults.

The Parental Bonding Instrument (PBI) purports to measure perceived parenting style and several studies have demonstrated good validity and reliability of the instrument (Parker, Tupling & Brown, 1979; Parker, Fairley, Greenwood, Jurd & Silove, 1982).

Figure 1 shows the two axes of the Parental Bonding Instrument: care and protection, as well as the conceptualised parental bonding possibilities, which take the form of four bonding quadrants: optimal bonding; neglectful parenting; affectionless control; affectionate constraint.

Figure 1: The two axes of the Parental Bonding Instrument showing the conceptualised parental bonding possibilities (Parker et al., 1979, p.8.)



Parker et al. (1979) draw on the research of Roe and Siegelman (1963) who factor analysed responses of children and adults to parents' behaviour in their childhood. Roe and Siegelman reviewed nine studies and found a common factor of affection and warmth versus coldness and rejection. This is supported by the research of Ainsworth, Bell and Stayton (1975) who proposed that mothers respond in a way that is species-characteristic, reflected by the balance of attachment and exploratory behaviour of the child. This research forms the well-defined care dimension on the PBI. The high care dimension is characterised by affection, warmth, empathy and closeness. Low care is characterised by emotional coldness, indifference and neglect. High overprotection is characterised by control and intrusion, versus low protection of autonomy and encouragement of independence. This second, less defined dimension concerns psychological control of the child by the parent and is derived from research by Schaefer (1965) and Raskin, Boothe, Reatig, Schulterbrandt & Odle (1971). However, some researchers have suggested that the PBI would be best reflected by two or three constructs, as the original overprotection factor appeared to contain two distinct dimensions (Kendler, Sham & Maclean, 1997; Murphy, Brewin & Silka, 1997).

1.5 Early Attachment and Voice Relating

Since evidence suggests that voice-hearer's relationship with the voices mirrors relationships in the real world (Leudar et al., 1997; Nayani & David, 1996; Leudar & Thomas, 2000) it would seem logical to attempt to make links between voice relating and those of the main caregivers i.e. parents.

Drayton, Birchwood and Trower (1998) carried out two studies investigating early attachment experience and recovery from psychosis. The first study explored McGlashan, Levy and Carpenter's (1975) concept of recovery style. The second investigated the relationship between styles of recovery, depression and early attachment experience. Participants with a diagnosis of schizophrenia were recruited from community psychiatric services.

In the first study, data was drawn from 56 participants who completed the Recovery Style Questionnaire (RSQ: McGlashan et al., 1975), which examined an individual's attitudes towards their disorder. The RSQ is a 39-item self report questionnaire and was used to rate attitudes such as 'I am curious about my illness.' On the basis of responses, each participant was assigned to either an *integration* or *sealing over* category. These two distinct concepts were originally defined by McGlashan, Doherty & Siris, (1976). An *integrative* recovery style was characterised by continuing awareness in mental activity and personality prior to, during and following a psychotic illness. In addition, the individual takes responsibility during the psychotic experience, is flexible, seeks help from others and uses it as a source of information regarding relationships and behaviour. In contrast, *sealing over* recovery style is characterised by disengagement from the psychotic experience, an unwillingness to investigate symptoms and separation of the experience from personal difficulties. The individual continues to acknowledge the negative aspects of the experience adopting a 'denial' stance with no exploration with others. Recovery style was also independently rated by an observer using the Integration Sealing Over Scale (ISOS: McGlashan, 1987; McGlashan et al., 1976). The authors

found that the two measures demonstrated good reliability and validity. Twenty-nine individuals were categorized within the integration group and 27 within the sealing over group.

The second study involved a sample of 36 participants who completed the RSQ. Depression was measured using the Calgary Depression Scale for Schizophrenia (CDS; Addington, Addington & Maticka-Tyndall, 1993), which rates scores of depression comparable to the Beck Depression Inventory (BDI; Beck, Rush, Shaw & Emery, 1979). The Evaluative Beliefs Scale (EBS; Chadwick, Trower & Dagnan, 1999) was used to assess negative interpersonal evaluative beliefs. Perceived parental characteristics were assessed using the Parental Bonding Instrument (PBI; Parker et al., 1979).

The study aimed to explore the link between recovery styles of *integration* and *sealing over*, depression and early attachment experience in people recovering from psychosis. The hypothesis was supported as they found that individuals who had insecure attachments in childhood, characterised by controlling and affectionless parenting, were more likely to adopt a 'sealing over' (denial) style of recovery. Those who perceived themselves as experiencing secure attachments in childhood reported lower levels of depression. They conclude by suggesting that disturbed family relationships in childhood threaten the development of a secure sense of self, leading to negative self evaluation and poor coping mechanisms. The authors suggest that in order to defend against the threat to self, the individual is forced to disengage from the psychotic experience. This study is the only one utilising the attachment experience in relation to psychosis and the authors themselves suggest

caution in interpreting results. This study has important implications for treatment as individuals with insecure attachments may respond better to treatments that do not focus on the meaning of the illness, rather those that emphasise behavioural or skills training aimed at reducing stress.

Further evidence of the link between early experience and recovery from psychosis is provided in a study by Parker et al. (1982). The authors utilised the Parental Bonding Instrument (PBI) and parents were assigned to one of two scales termed 'care' and 'overprotection.' In a study involving 72 individuals with a diagnosis of schizophrenia they found that compared to controls, individuals with schizophrenia experienced both parents as being significantly less caring and their fathers as being significantly more overprotective. Individuals who perceived their parents as providing low care and high protection during childhood had an earlier age of initial hospitalisation, and was more likely to be readmitted within nine months of hospital discharge.

1.6 Voices as an Interpersonal Other

In order to set the context for voice relating as relating to an interpersonal other, the following section describes five key areas whereby meaning is attached to voices. This will fall into two areas: content/meaning and relationship to voices. These are all factors that are considered to mediate the response to voices.

1.6.1 Content and Meaning of Voices

1.6.1.1 Social Empowerment

Dutch Psychiatrist Marius Romme was one of the first authors to attempt to investigate the ‘meaning’ of voices through his comparison of patients and non-patients. His decision to engage in a dialogue with his patients about their experience of voices arose when medication failed to help one of his patients. Through a nationwide appeal on Dutch television, investigations began into the experience of non-patient voice hearers in an attempt to gain insight into successful coping strategies. This led to the questioning of the assumption that auditory hallucinations were a symptom of a psychiatric disorder. The following quotation describes a conversation between Romme and one of his female patients.

the only positive note in our conversation at that time was provided by the theory she had developed about the nature of the voice.....based on a book by the American psychologist Julian Jaynes – The Origin of Consciousness in the Breakdown of the Bicameral Mind, (1976) (Romme and Escher, 1993, p.12).

Jaynes (1976) proposed an evolutionary model that prior to consciousness, human conduct was governed by ‘hallucinated’ voices operating from the right-side brain hemispheres, giving instructions to the individual, particularly in times of stress. Romme recognised that the woman’s knowledge of Jayne’s theory enabled her to make sense of, and give meaning to her voices. Subsequent research has also found that the personal interpretation of the experience of hearing voices plays an

important role in the use of coping and self-management (Romme & Escher, 1989).

“Unless some meaning is attributed to the voices, it is very difficult to begin the phase of organising one’s relationship with them in order to reduce anxiety” (Romme and Escher, 1993, p.25).

In looking at differences between patients and non-patients the authors found that non-patients were more often married, perceived they had more support and were able to communicate about their voices.

Romme and Escher tentatively conclude, *“active coping with voices is a more effective strategy than trying to get rid of them by passive strategies such as taking medication, seeking distraction, and other avoidance behaviour”* (Rose, 1992, p.9).

1.6.1.2 Beliefs about Voices

Chadwick and Birchwood (1994) have also demonstrated that it is beliefs about voices that are meaningfully related to their emotional and behavioural consequences, not just voice content. In this study the authors draw on the work of Milgram (1974) who found that an individual’s choice of whether to administer what they thought was a lethal electric shock was determined by their beliefs about the experimenter’s power, degree of own control and perceived consequences of disobedience. In terms of Beck’s cognitive model of depression (Beck et al., 1979) it is believed that behavioural and affective consequences are determined by negative beliefs. Chadwick and Birchwood hypothesize that it is the attribution of events to

external factors that produces negative consequences such as fear and compliance with the voices. In their study of 26 subjects they found that level of distress was determined by the voices' power, identity and purpose. Voices perceived as malevolent provoked fear and were resisted. Voices perceived as benevolent were felt to be reassuring and willingly engaged with. They also found that voice belief was linked to affect rather than content or characteristics of the voice.

Birchwood and Chadwick (1997) obtained further data from 62 subjects in support of their previous study. They found that distress was understood in the context of the relationship to the voice rather than the voice form and topography or voice content alone. In addition, only one-quarter of cases rated voice beliefs as 'following directly' from voice content. Drawing on the work of Benjamin (1989) the authors propose that 'meaning' may be linked to cognitive schemata that develop from the individual's past experience of interpersonal relationships and self-worth, especially early relationships with powerful caregivers. Meaning also appeared to be influenced by whether the voice is perceived as malevolent or benevolent. This provides further evidence that schemata influencing the development of relationships in the 'real' world are also likely to influence the way in which individuals relate to their voices.

1.6.1.3 Beliefs about Self

The beliefs that an individual has about the self in relation to others are believed to have a significant impact on the nature of the relationship they have with their

voices. Indeed, Romme, Honig, Noorthoorn and Escher (1992) and Birchwood et al., (2000) have suggested that interpersonal power structures may be relevant to the relationship between voice and hearer.

Close and Garety (1998) attempted to replicate the findings of Chadwick and Birchwood (1994). Data was collected from thirty patients on appraisals of voices in relation to the self. However, Close and Garety found that participants were significantly less likely to perceive their voices as powerful, and more likely to display a positive affective response to benevolent voices compared to the previous study. The authors reformulate the cognitive model of voices by suggesting that voices may be construed as an event that activates and strengthens negative beliefs about the self. Hopelessness, associated with the inability to control the voices, leads to feelings of worthlessness, depression and low self-esteem. Close and Garety therefore assume that there is a close relationship between content and beliefs about voices.

1.6.1.4 Voice Content

Thomas (1997) also stressed that the 'meaning' of the voices was particularly important in coping mechanisms. Consistent with other research in the area, individuals who coped well with their voices had more supportive social environments compared to those who had more threatening social environments. Thomas draws attention to the possibility that many researchers fail to examine the significance of the relationship between the individual and the social world around

them. He suggests that 'individual' treatment does not take into account the cultural, historical and institutional contexts that make up human mental processes. Thomas then goes on to draw on the work of Mead (1934) cited in Thomas (1997), "*Mead is concerned with the relationship between society and the individual self, arguing that we can only understand the development of self through the processes of socialisation that occur in childhood, and in which language plays a central role*" (Thomas, 1997, p.192).

Mead was concerned with reflexivity, whereby the self can take the position of both subject and object. Mead suggested that we participate in social acts with other selves and that others mirror the self in our social world. Language plays a vital role as it is directed both at self and others. Thomas suggests that voices are a form of inner speech, which is related to daily activities that individuals can understand within the context of life experience. He also argues that if voices were dialogically organised then it would be expected that they would be aligned to significant individuals in the voice-hearers' social and interpersonal world.

Research also suggests that voices are often aligned to people in the voice-hearer's 'real world' and this influences the response to that voice (Leudar et al., 1997; Nayani & David, 1996; Leudar & Thomas, 2000). Leudar et al. examined the pragmatic properties of auditory hallucinations of fourteen individuals from a psychiatric population and fourteen from a non-psychiatric population. In support of their hypothesis that verbal hallucinations are inner speech with pragmatics, they found that voices were usually aligned to significant individuals in the voice-hearer's lives. Leudar et al., found similarities between the ordinary speech of voice hearers

and that of their voices. This led them to propose that voices are essentially 'inner speech' and that the 'inner voice' has been split from the voice hearer. They also provide evidence that voices are based on the planning and regulation of everyday activities. Clinically, the authors suggest engagement with the voices using cognitive models that focus on planning of actions in order to help the patient understand the significance of the meaning of the voices within everyday life experience.

1.6.2 Relationship to Voices

1.6.2.1 Position relating to Voice

Although much of the research so far suggests a link to early experience and similarities between interpersonal relationships and relationship to voices, there has been little use of interpersonal theory and the nature in which individuals relate to their voices.

Until the late 1980's it was assumed that the content of voices was a symptom of illness, a consequence or manifestation of biochemical changes in the brain. Indeed, the medical model today may still support this theory, hence the continued use of neuroleptic medication as first line of treatment for psychotic symptoms (Haddock et al., 1998). Benjamin (1989) was the first to suggest a link between the relationship that exists between the voice-hearer and similarities to interpersonal relationships with others. Benjamin interviewed thirty psychiatric inpatients using the Structural

Analysis of Social Behavior (SASB; Benjamin, 1974), a model purported to measure social interactions in clinical populations such as schizophrenia. The Intrex questionnaire was also used as a way of measuring perceptions of others and the rater's view of self in relation to those others. The questionnaires reflect relating on two axes, love versus hate and enmeshment versus differentiation. The aim of the study was to investigate similarities between the voice-hearer's relationship with the voice and family social interactions. Benjamin concluded that all subjects had a meaningful, integrated and interpersonally coherent relationship with their voice as well as *complementarity* i.e. certain interpersonal positions maximise or *draw for* others. For example, voices experienced as nurturing and protective would be trusted and relied upon, whereas voices experienced as controlling would be deferred and submitted to. However, three of the eleven participants with a diagnosis of schizophrenia responded in a loving and approaching manner despite experiencing the voice as attacking and rejecting. This study also provided evidence that different diagnostic groups may have qualitatively different relationships with their voices. This is also supported by Leudar et al. (1997) and is consistent with the observations of Chadwick & Birchwood (1994) and Birchwood and Chadwick (1997) regarding the possibility of incongruence between beliefs about and response to the voices.

Benjamin (1989) suggests that the social 'relationship' with the voices may serve an adaptive function resulting in a more intractable and chronic illness. Benjamin's research raises the question that if interpersonal relationships are related to voices that the individual hears, then improving relationships of that individual may improve outcome or prevent the development of schizophrenia. Indeed Benjamin suggests that assessing whether family interactional patterns precede and correspond

to the voices may promote the possibility of changing these family interactional patterns. Therefore treatment should take into account the hearer's social network and confront the function of the hallucination. Benjamin effectively suggests that the way in which an individual relates to their voices has an effect on the way in which they respond to it.

Birchwood et al. (2000) used 'ranking' theory to extend the concept of voice relating to reflect on the extent to which the relationship with voices is a paradigm of social relationships in general. This is a continuation of research by Birchwood and Chadwick (1997) that suggested it was the nature of the relationship with the voices that predicted distress rather than simply voice content, topography or illness characteristics.

Birchwood et al. (2000) suggest that the relationship to voices is a result of involuntary subordination to a powerful and omnipotent other. In evolutionary terms, such stimuli provided by so-called 'malevolent' voices would be perceived as threatening, thus activating defensive and self-protective responses. They hypothesised that individuals would perceive their voices as higher in social rank and power, relative to themselves. In contrast, voices perceived as 'benevolent' were thought to elicit biological responses such as cooperation, care and dependence. Whether the voice was perceived as malevolent or benevolent would be determined by core interpersonal cognitive schemata derived from the individual's past and current interpersonal relationships, in particular powerful caregivers. They therefore hypothesised that differences in social rank would be influenced by perceived difference in social rank and power between self and others in their social world.

Power and social rank differences in relationship to the voices, and in relation to wider social relationships, were measured using a sample of 59 voices hearers with a diagnosis of schizophrenia or schizoaffective disorder. The authors found that subordination to voices was closely linked to subordination and marginalisation in other social relationships. Individuals perceived their voices as higher in rank than themselves and often took a subordinate position in relation to their voice. This was also found to be a predictor of distress.

The following section will discuss links between attachment and interpersonal theory including a critique of attachment theory.

1.7 Attachment and Interpersonal Theory

Birtchnell (1997) proposes that the concept of attachment is ultimately one of a form of relating which fits neatly into interpersonal theory (Freedman, Leary, Ossorio & Coffee, 1951). Birtchnell draws on the work of Horney (1937) who proposed that children experiencing inadequate parenting grew up with 'basic anxiety.' She described four ways in which individuals protect themselves against this. Securing affection (closeness), withdrawing (distance), gaining power (upperness) and adopting a submissive attitude (lowerness). It appears that the present theories of relating have been derived from these original ideas.

According to Birtchnell the essential feature of interpersonal theory is the proposition that:

'relating takes place along two orthogonal axes: a horizontal one, which represents warm versus cold, loving versus hating, or friendly versus hostile: and a vertical one, which represents active versus passive, powerful versus weak, or dominant versus submitting.' (p.265).

Birtchnell suggests that as attachment is a form of relating, it must fit somewhere within these axes. He defines dependence (Birtchnell, 1988) as concerning both closeness seeking and inferiority or weakness, placing each style of relating at opposite poles of the positive-negative continuum. He therefore proposes that negative dependence is the (adult) equivalent of Bowlby's (1977) insecure attachment, and positive dependence is the equivalent of secure attachment.

Birtchnell also recognises Bowlby's failure to acknowledge that both attachment and detachment (separation) can represent security. Birtchnell proposes that all states of relatedness can be held either securely or insecurely. For example, secure closeness is feeling safely separate from others, whereas insecure closeness is fearing that the other will break away. He also recognises that desperation does not feature in attachment theory, concluding that this is because it is more relevant to adults than to children. He suggests that desperation gives rise to understanding an adult individual's need to attain a particular state of relatedness to another. For example, desperate closeness is being possessive, imprisoning and intrusive, whereas desperate distance is withdrawing and shutting someone out.

Birtchnell's emphasis on the interpersonal nature of attachment theory has been increasingly investigated by contemporary researchers (Cook, 2000). However, it

could also be argued that many highly social animals do not endeavour to separate from the parents, but continue to relate closely in order for the group to survive. Similarly for man, it may be in his interest to retain such relationships, remaining attached rather than separate.

1.8 A New Interpersonal Theory

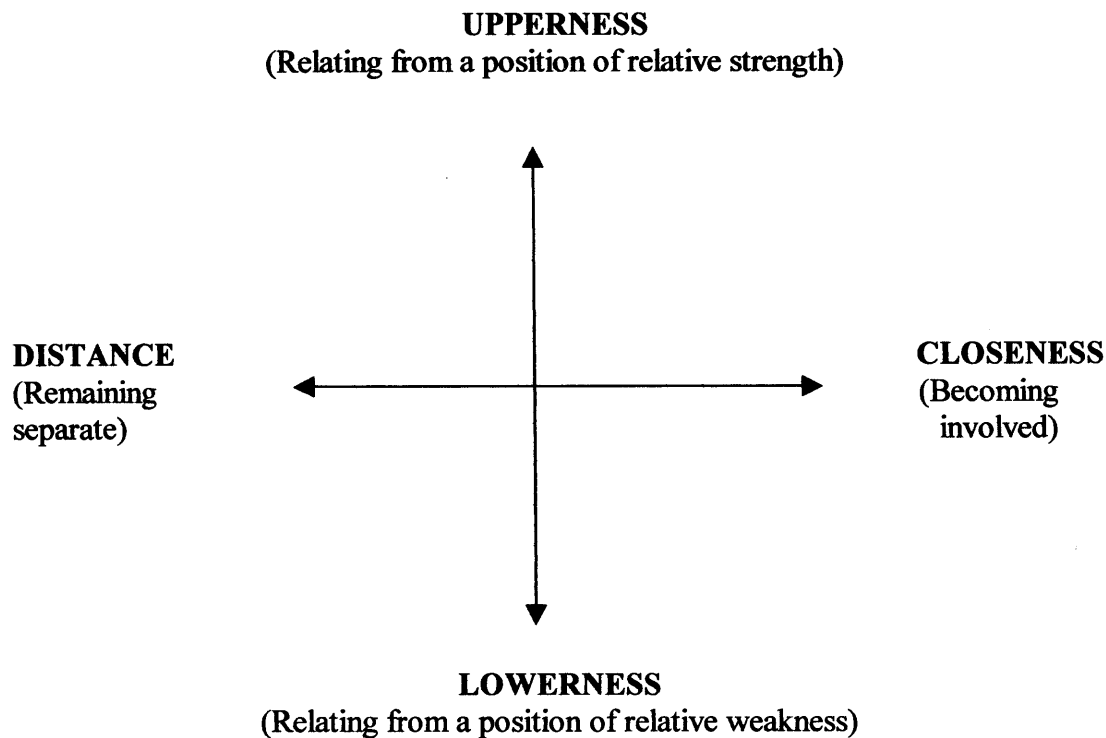
Birtchnell's (1993) theory of 'relating' offers a new way to explore styles of relating and is derived from his work with individuals, couples and families. Birtchnell developed questionnaires designed to measure maladaptive patterns of relating between couples based on issues of power and proximity, a concept developed by Leary (1957). Birtchnell's theory of relating proposes that humans relate in order to gain advantageous states of relatedness. From an ethological view the child relates in ways that ensure survival. Crying, smiling and cooing are all examples that help to keep the parent close to them. Birtchnell proposes that the ability to relate from different interpersonal positions is determined by early experiences of relationships with others.

Birtchnell (1999) suggests that during a child's development the child becomes acquainted with each of the four main positions of relating, as mentioned earlier, and develops competence in them. During this time the child becomes exposed to varying states of relatedness and learns to feel comfortable within each one. Birtchnell argues that this can only be done if the parent themselves feels comfortable in each position of relatedness. If a parent feels uncomfortable with

closeness or distance then the parent will be reluctant to allow this for the child. This will be modelled through the parent's behaviour by withdrawing when they should be providing closeness and interfering when they should be encouraging distance. Birtchnell therefore suggests that it is the negative relating of the parent that results in negative relating in the child.

Birtchnell's theory of relating represents two classes of behaviour on two intersecting axes (close versus distant and upper versus lower), which are represented in Figure 2.

Figure 2. The Two Axes of Relating (Birtchnell, 1993, p.40)



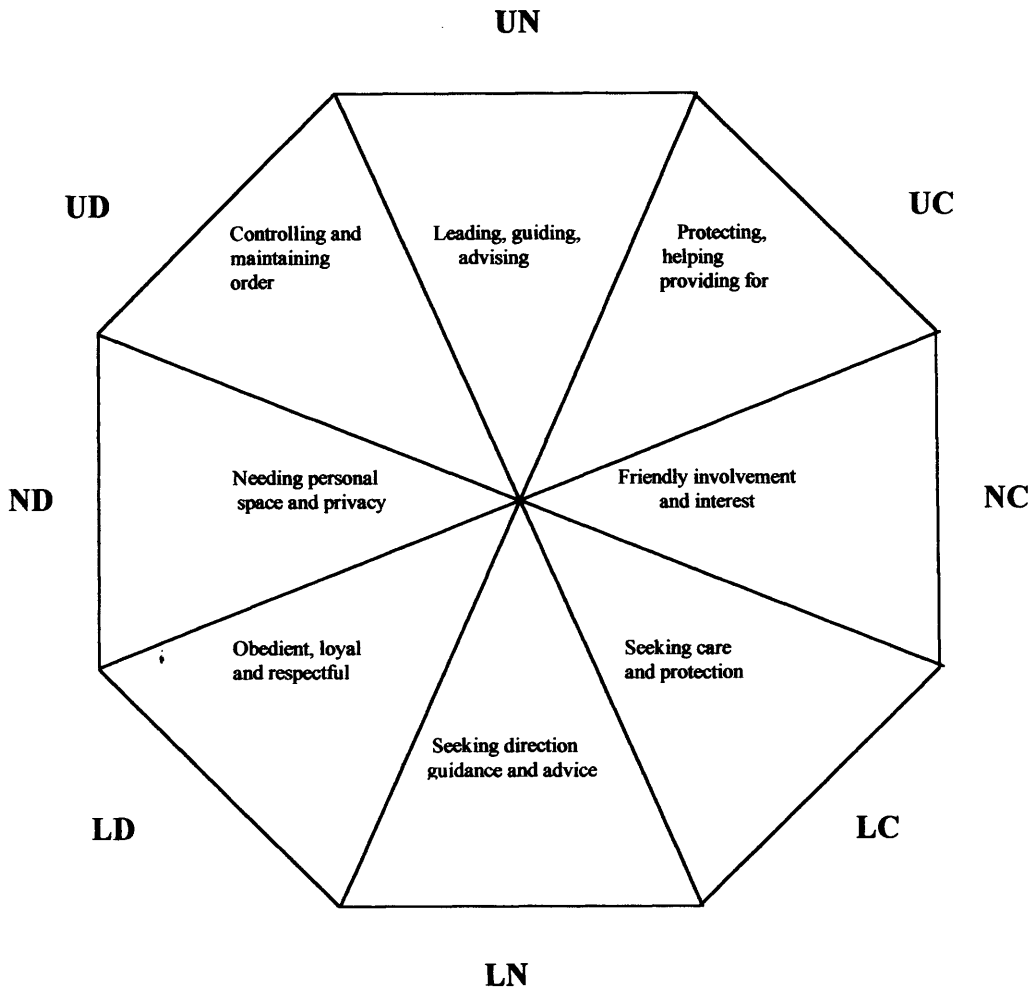
Birtchnell (1997) subsequently blended the characteristics on either side of the two intersecting axes to create the intermediate positions of the ‘interpersonal octagon’ (see Figure 3 (page 38) and Figure 4 (page 39)). The ‘interpersonal octagon’ therefore demonstrates the intermediate positions of upper close, lower close, upper distant and lower distant, each of which is referred to as a ‘state of relatedness.’ He differentiates between positive relating and negative relating describing the former as adaptive and the latter as maladaptive. Subscales of power (upperness and lowerness in relation to others) and proximity (closeness-seeking versus distance-seeking behaviour) are used to determine ‘negative’ styles of relating as shown in Figure 3. In terms of negative relating, upperness describes being in a position of superiority in relation to another and having the power to influence them. The scale measures

bullying, criticism, intimidation and humiliation. Lowerness involves helplessness, and fear of rejection and disapproval. Distancing is represented by suspiciousness, withdrawal and excessive self-reliance. Closeness is characterised by intrusiveness, possessiveness, the discouragement of other close relationships and fear of separation and being alone.

Positive relating is represented in Figure 4 and is defined as competence and confidence in a particular sphere of relating. Therefore the person is more likely to relate positively within that sphere of relating. Birtchnell (2001) suggests that individuals who relate from a positive position are more likely to fluctuate their style of relating compared to those who tend to relate from a negative position. *“Versatile people vary their relating styles much more than do non-versatile people, being close or distant, upper or lower as and when the situation requires it of them. Because non-versatile people cannot, or are disinclined, to relate in certain ways, they vary their relating less”* (Birtchnell, 2001, p.65).

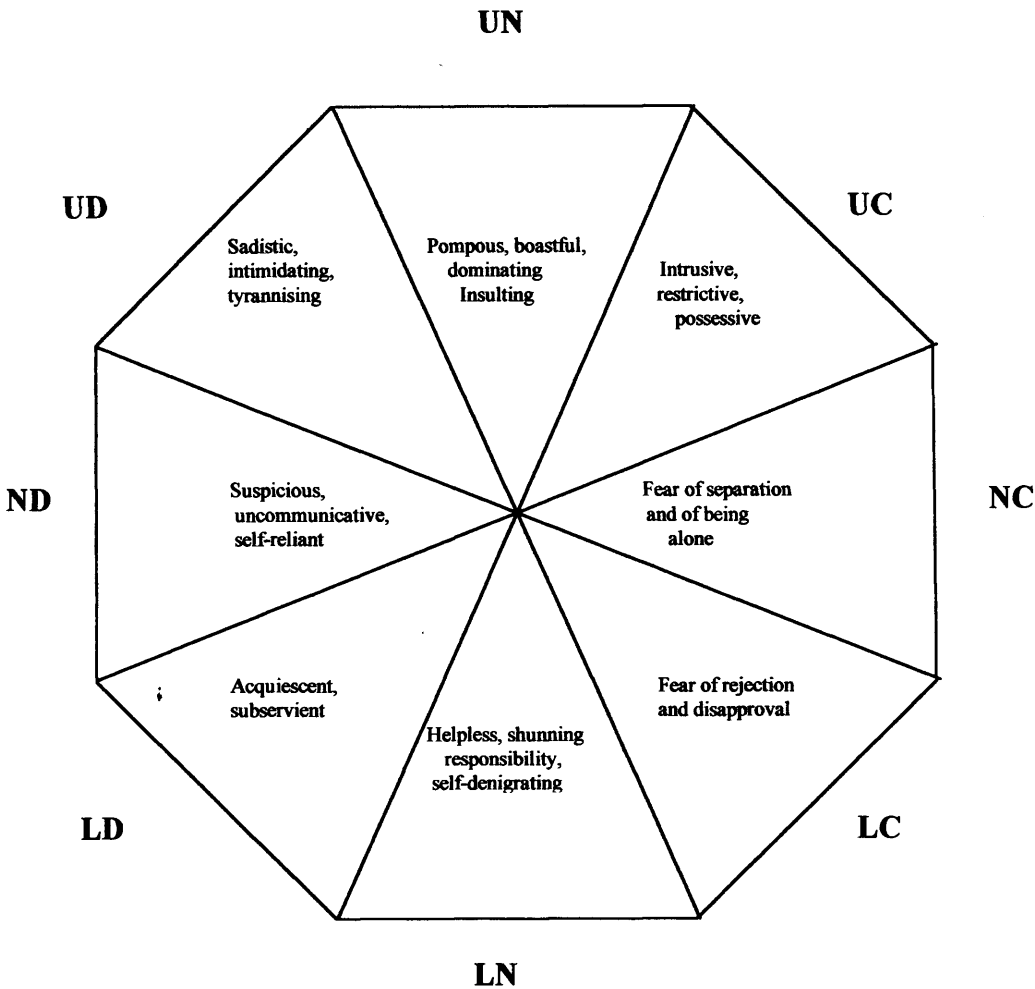
Birtchnell (1990) attempts to relate psychiatric diagnosis to positions within the interpersonal octagon. He suggests that depression and schizophrenia are associated with distance because individuals relate negatively from a position of lowerness and distance. With reference to the hearer to voice relationship, the hearer tends to relate to the voice from a position of negative lowerness and negative distance. This is in response to the position of the voice that is perceived as powerful (relating from negative upperness).

Figure 3: The Interpersonal Octagon, Positive Relating (Birtchnell, 1997, p.272)



| KEY | |
|-----|-----------------|
| UN | upper/neutral |
| UC | upper/close |
| NC | neutral/close |
| LC | lower/close |
| LN | lower/neutral |
| LD | lower/distant |
| ND | neutral/distant |
| UD | upper/distant |

Figure 4: The Interpersonal Octagon, Negative Relating (Birtchnell, 1997, p.272)



| KEY | |
|-----|-----------------|
| UN | upper/neutral |
| UC | upper/close |
| NC | neutral/close |
| LC | lower/close |
| LN | lower/neutral |
| LD | lower/distant |
| ND | neutral/distant |
| UD | upper/distant |

1.8.1 Interrelating

The process of interaction between two individuals implies a reciprocal relationship whereby both adopt a particular role within the relationship. Birtchnell (1999) describes interrelating as a process by which 'two people relate to each other' (p.14). The outcome by each person during interrelating is described as a *state of relatedness*. Relating may consist of short interactions lasting a few seconds or relationships spanning a lifetime. It may take place in one direction whereby one person leads and the other always follows. Alternatively, it may take place in two directions whereby sometimes one leads and sometimes the other leads. The desired outcome for each person is to meet their relating needs equally. In other situations, one meets their relating needs as the extent of the other. Compromises may be achieved whereby one person allows the other to achieve their preferred state of relating because they feel that it is something they desperately need.

Relating compatibility describes the possible outcome on each of the axes of relating. On the horizontal axis, forms of relating are compatible if they are from the same pole. For example, if two people both want closeness or both want distance, their relating is compatible. If one wants closeness and the other wants distance, it is incompatible. On the vertical axis, forms of relating are compatible if they are from opposite poles. If one wants upperness and the other wants lowerness, it is compatible whereas if both want upperness or both want lowerness it is incompatible.

On each axis of relating, a person may obtain the relating objective themselves, or it may be achieved through an attempt by another to gain that state of relatedness in

relation to them. This suggests that in some cases, a state of relatedness may be forced upon someone by the relating of another. In social relationships, Birtchnell suggests that this is most likely to occur when a person lacks versatility because they are incompetent in one or more forms of relating. Similarly, with respect to voices, a voice-hearer may be forced into a position that they do not want. The following section describes studies that have applied Birtchnell's theory of relating to interpersonal relating between voice hearer and voice.

1.8.2 Application of Birtchnell's Interpersonal Theory to Voice Relating

Vaughan (2000) utilised Birtchnell's model of interpersonal relating to explore 'negative' styles of relating between voice-hearer and voice. It was hypothesised that the relationship an individual had with their predominant voice would be similar to those experienced with people in the 'real world.' In particular it was thought that dominance and intrusiveness by the predominant voice and submissiveness and distancing by the voice-hearer would be a predictor of emotional distress.

The Couple's Relating to Each Other Questionnaire (Birtchnell & Spicer, 1994) was adapted and abbreviated for the purpose of the study to provide two questionnaires. The You to Voice (YTV; Vaughan & Fowler, in press) measures the way in which the hearer relates to the predominant voice and the Voice to You (VTY; Vaughan & Fowler, in press) is a measure of the hearer's perception of the way in which the predominant voice relates to him/her (details of the reliability and validity of these measures are provided in the appendix). 30 individuals who had heard voices for at

least six months, irrespective of diagnosis, completed both questionnaires. Data was also collected concerning voice topography (PSYRATS; Haddock, McCarron, Tarrier & Farragher, 1999), beliefs about voices (BAVQ; Chadwick & Birchwood, 1995), depression (BDI-II; Beck, Steer & Brown, 1996) and distress (measured on a five point likert scale).

Vaughan (2000) found that individuals whose predominant voice related in a dominating, insulting manner (voice upperness) were more distressed. Individuals who reacted with suspicion and lack of communication (hearer distance) were also more distressed. In addition, the more distressing the voice-hearing experience was, the less likely they were to relate from a position of relative weakness. This finding was somewhat unexpected and Vaughan suggests that if the voice cannot be escaped from, this may lead to submission by the hearer of a voice that may have previously been resisted. Relating from a position of relative lowerness may be of benefit to the voice-hearer due to the reduction of resistance and associated negative affect. However, Vaughan also suggests that the perceived inability to change the relationship with the voice may lead to beliefs of the self as useless, resulting in helplessness and depression.

Hayward (2001) extended the notion of voice relating mirroring relationships in the real world with the use of a series of measures designed to investigate voice relating, depression and distress. Twenty-seven individuals who had heard voices for at least six months provided data. It was hypothesised that there would be positive correlations for negative styles of relating between both the predominant voice and general relationships in terms of upperness, lowerness, distance and closeness. The

hypotheses for upperness and closeness were supported, with lowerness approaching significance. Hayward suggests that this provides evidence that individuals relate similarly to both the voices and social relationships in terms of dominance, submissiveness and closeness, independently of beliefs about voices and mood-linked appraisals. Consistent with Vaughan (2000), findings concluded that participants related to their predominant voices primarily from a position of distance. However, unlike Vaughan, the study did not find that distance from the predominant voice was associated with increasing emotional distress.

1.9 Summary of Literature Review

In an attempt to better understand the nature of the relationship between voice and voice-hearer, research has more recently focused on the 'meaning' an individual attaches to their experiences. Efforts aimed at understanding the relationship between the voice-hearer and their voices has led to attempts to integrate social and cognitive models (Birchwood et al., 2000; Vaughan & Fowler (in press); Hayward, 2003). This has led to increased understanding of the relationship the voice-hearer has with their voices and the impact that power differentials have on levels of depression, self-esteem and coping. Research suggests that relationships with voices are not fixed and static, but tend to change over time (Benjamin, 1989; Romme et al., 1992). However, there have been no longitudinal studies investigating the nature of the changing relationship to the voices. Power and control also have a significant effect on the way in which individuals experience distress and coping (Birchwood &

Chadwick, 1997; Chadwick & Birchwood, 1994; Close & Garety, 1998; Thomas, 1997).

Bowlby (1973) argued that the nature of the early relationship becomes a model for later relationships, leading to expectations and beliefs about oneself and others that influence social competence and well being throughout life. Both Birtchnell (1999) and Birchwood et al., (2000) suggest that social relationships are linked to early experiences. There is also evidence to suggest that the relationship an individual has with their voices originates from their experience of social relationships in the 'real world.' (Nayani & David, 1996; Leudar et al., 1997; Birchwood et al., 2000; Vaughan, 2000; Hayward, 2001). Research using interpersonal models of relating to voices is limited. Benjamin (1989) was the first to directly apply interpersonal theory to the area of voice relating. The lack of development of Benjamin's ideas may be due to the inaccessibility of the measure used to assess patients as well as unwillingness by researchers to focus on the idea that the parental relationship may have a distinct function in the development of psychotic illness. Birtchnell's (1993) interpersonal theory of relating may be a useful way of exploring the findings of Birchwood and Chadwick (1997), that the ability to control and cope with the voices was explained by the 'meaning' attributed to it rather than voice activity itself.

Romme and Escher's (2000) work with non-clinical populations has made an important contribution towards normalising the experience of voice-hearing by focusing on acceptance as well as understanding the nature of how these individuals cope. It has also led to an opening of dialogue about voices, from which has developed further interest in the need to explore the nature of the relationship.

However, McGlashan et al. (1975) and Drayton et al. (1998) argue that treatment should be more specific and tailored depending on the recovery style of the individual. For example, *integrating* patients may prefer a treatment package that encourages dialogue with the voices and exploration of its meaning. In contrast, patients who *seal over* may respond better to treatments that do not focus on the meaning of illness, such as behavioural or skills training. Indeed, Birchwood et al. (2000) suggest the use of assertiveness skills as a possible intervention for those who perceive themselves as relatively lower in rank to their voice and to others in their social world. However, Vaughan and Fowler (in press) argue that if voices are internal and perceived as a part of the self (Thomas, 1997), then suggestions for hearers to distance themselves from the voices may be counterproductive. More evidence is needed to support the findings of Drayton et al. in order to inform treatment approaches.

1.10 Recommendations for Future Clinical Research

Recent research suggests that voice-hearing may be understood within the context of interpersonal relationships. However, the current literature review revealed limited research exploring early experience and how this influences relationships to voices. Future research is required integrating social and cognitive models to provide an additional way of understanding the relationship an individual has with their voices.

1.11 Research Question and Hypotheses

The aim of this study was to extend previous research by exploring the relationship between voices and voice-hearers. Specifically, it aimed to explore whether the types of relationship that exist between voice-hearers and their voices are influenced by past experiences. An additional objective was to further assess properties of two measure of relating to voices (YTV-revised; Hayward & Dorey, 2003) and being related to by the voices (VTY; Vaughan & Fowler, in press) and replicate previous research findings with relation to topography of voices.

It is hypothesised that negative styles of relating between the voice and the voice-hearer will be associated with low care and overprotection by parents during the first sixteen years. The hypothesised correlations were as follows:

1.11.1 Relating to the Voice and being Related to by Parents

1.11.1.1 Hypothesis One

Bowlby (1973) proposed that early relationships become a model for later relationships. There is also evidence to suggest that the relationship an individual has with their voices is similar to the interpersonal relationships they have with others (Leuder et al., 1997; Nayani & Davis, 1996). Birtchnell (1988) proposed that negative dependence is the adult equivalent of Bowlby's (1977) insecure attachment. Therefore it is hypothesised that a positive correlation will be found between

(negative) dependence (submissive and clinging) scores in relation to the voice (YTV-revised) and high overprotection by parents (PBI).

1.11.1.2 Hypothesis Two

Research suggests that individuals who adopt a ‘sealing over’ recovery style from psychosis, perceive their parents to be significantly less caring than those who engage or *integrate* with the experience (Drayton et al., 1998). There is also evidence to suggest that some voice-hearers attempt to resist, avoid and remain distant from voices that are perceived to be more powerful than themselves (Birchwood & Chadwick, 1997; Chadwick & Birchwood, 1994; Close & Garety, 1998) and that the power differential is mirrored within social relationships (Birchwood et al., 2000; Vaughan, 2000; Hayward, 2001). Therefore it is hypothesised that a negative correlation will be found between (negative) distance scores (remaining separate) in relation to the voice (YTV-revised) and low care by parents (PBI).

1.12.1 Being Related to by the Voice and being Related to by Parents

1.12.1.1 Hypothesis Three

Research suggests that voice hearers perceive their voices to be more powerful than themselves (Birchwood & Chadwick, 1997; Chadwick & Birchwood, 1994; Close & Garety, 1998) and that this power differential is mirrored in social relationships

(Birchwood et al., 2000; Vaughan, 2000; Hayward, 2001). Therefore it is hypothesised that a positive correlation will be found between (negative) upperness in relation to the voice (VTY) and high overprotection by parents (PBI).

1.12.1.2 Hypothesis Four

Birtchnell (1988) proposed that negative closeness involves fearing that others will break away, a notion derived from ethological theory stating that individuals relate closely in order to survive. Negative closeness is characterised by intrusiveness and possessiveness, constructs that also describe overprotection by parents (Parker et al., 1979). Therefore it is hypothesised that a positive correlation will be found between (negative) closeness in relation to the voice (VTY) and high overprotection by parents (PBI).

2. METHOD

2.1 Overview of Chapter 2

Evidence presented in the previous chapter suggested links between early experience and the way in which individuals relate to their voices. More recently studies have focused on the ‘meaning’ attached to voices, and preliminary studies have suggested a link between the experience of voice relating to that of social relationships in the real world. Attachment theory is well established and studies have attempted to make links between early experience and the influence it has on adult relationships. No previous studies have attempted to link early experience and voice relating.

This chapter will begin by presenting the research question and describing the design of the study. Rationale will then be presented regarding the choice of measures. Procedure for the collection of data will then follow as well as any ethical considerations pertinent to this study.

2.1.1 Research Question

The aim of this study was to investigate whether the types of relationships that exist between voice-hearers and their voices are influenced by past experiences. Four testable hypotheses were proposed based on previous research findings (see section 1.11). To test these hypotheses, a method was utilised to investigate the relationship

individuals have with their voices and recollections of attitudes and behaviours of their parents whilst they were growing up.

This chapter will begin by describing the design of this study. A description and rationale for each measure will be presented followed by the research procedure and ethical considerations.

2.2 Design

The study utilised a quantitative, cross-sectional design to investigate relationships between variables, therefore a correlational design was proposed. Ideally regression analysis would have been undertaken. However, the low number of participants in the study precluded this method of analysis. It was hypothesised that correlations would be found between scores on the Parental Bonding Instrument (PBI; Parker et al., 1979) and the You To Voice - Revised (YTV-R; Hayward & Dorey, 2003) and Voice to You (VTY; Vaughan & Fowler, in press) Questionnaires. An additional aim was to further assess psychometric properties of the YTV-R and the VTY.

Face to face clinical interviews were chosen as the method of administering questionnaires due to the potential vulnerability of this client population. This enabled the researcher to clarify any questions and to ensure that participants were supported should they find the experience distressing.

2.3 Participants

The number of participants required was calculated using power analysis based on guidelines provided by Howell (1992). Based on an interpretation of the relevant literature, it was felt that a correlation coefficient of at least 0.5 between the primary outcome measures of the PBI and Relating Questionnaires would be clinically meaningful. Therefore, at the conventional one-tailed probability level of $p < 0.05$ and a conventional power of 80%, the required sample size was calculated to be 32.

Participants included males and females aged 18-64 who had reported hearing voices for at least six months. Recruitment was made through Community Mental Health Teams and hospital-based multi-disciplinary teams and local hearing voices groups. Ethical applications were made to two NHS Trust Committees, covering two study centres, in order to maximise the potential number of participants.

Twenty-seven people participated in the study. Three people declined to take part in the study and one person was excluded due to difficulties understanding the procedure. Demographic data is provided in the results section.

2.3.1 Inclusion Criteria

Referrals were sought from individuals who had a diagnosis of functional psychosis, which comprised schizophrenia, and affective psychosis. Participants included individuals aged 18 to 64 who had heard voices for at least six months.

2.3.2 Exclusion Criteria

Individuals who were suffering from psychosis due to dementia, brief drug-induced psychosis or alcohol-related psychosis were excluded from the study. Individuals under the age of 18 years and over the age of 64 were also excluded.

2.4 Measures

2.4.1 Demographic Information

A demographic information sheet (See Appendix 1) was devised in order to collect data. This would enable comparison with samples of voice-hearers investigated within other studies. Data comprised that on age, gender, ethnic origin, duration of voice hearing, last occasion of voice hearing, psychiatric diagnosis, number of hospital admissions, date of last admission and medication.

2.4.2 Semi-structured Interview

A brief clinical interview was conducted (See Appendix 2) based upon a series of questions derived from the Cognitive Assessment of Voices: Interview Schedule (CAV; Chadwick & Birchwood, 1994). This included questions regarding voice content, identity and power. This assessment has been reported by Close and Garety (1998) to be reliable with respect to both inter-rater reliability ($Kappa > .6$ on 10 of

11 categories) and test-retest ($Kappa > .7$ on 8 of 11 categories) reliability. Following an initial question regarding the number of voices heard, all subsequent questions related to the predominant voice.

2.4.3 Voice to You (VTY)

The VTY (VTY; Vaughan & Fowler, in press) is the first measure specifically adapted for the assessment of relationships with voices (See Appendix 3). It is a modified version of the Couples Relating to Each Other Questionnaire (CREOQ; Birtchnell, 2001) and has 40 items measuring four subscales: upperness, lowerness, closeness & distance. This questionnaire was concerned with the way in which the predominant voice relates to the individual. Participants were required to respond to each statement by answering 'mostly yes,' 'quite often,' 'sometimes,' or 'mostly no.' Each item was scored on a four point Likert scale (0 – 3) with 'mostly yes' receiving a 3-point score with a 0-point score for 'mostly no.' Each subscale was summed providing upperness, lowerness, distance and closeness scores, creating a possible maximum of 30 for each subscale. Higher scores indicated a greater tendency to relate negatively from that position in relation to the other. Scores for each subscale were prorated in the event of missing data.

The upperness and closeness subscales revealed adequate levels of reliability (Cronbach's alpha of 0.86 and 0.83 respectively). The lowerness and distance scales did not provide adequate levels of reliability (Cronbach's alpha of 0.43 and 0.50 respectively). These two scales were not used in the development of the hypotheses,

but the questionnaire was used in its entirety to preserve the psychometric properties of the instrument as a whole.

Even though a revised version of the questionnaire was not available at time of data collection, it was decided to utilise the questionnaire in order to make comparisons with the way in which the person is related to by the voice and by parents.

2.4.4 You to Voice - Revised (YTV-R)

The original version of the YTV (Vaughan & Fowler, in press) is also modified from the Couples Relating to Each Other Questionnaire (CREOQ – Birtchnell, 2001). It has 40 items measuring the four subscales. Investigation of psychometric properties for the original version of the questionnaire revealed adequate levels of reliability on three of the subscales (Vaughan, 2000). Cronbach's alpha scores for loweriness, closeness and distance were 0.86, 0.75 and 0.86 respectively. Cronbach's alpha was less acceptable for upperiness at 0.65. Kline (1993) proposes that ideally alpha should exceed 0.7.

The YTV-R (Hayward & Dorey, 2003) is concerned with the way in which the individual relates to their predominant voice (See Appendix 3). The revised version (YTV-R) contains 18 items derived from each of the four scales, creating two new scales, distance and dependence, each comprising nine items. Subscales are also scored on a four-point scale (0 – 3) as with the VTY creating a possible maximum

score of 27 for each subscale. The higher the score within a subscale, the greater the degree of negative relating.

The dependence (submissiveness) subscale comprises seven lowerness items and two closeness items from the original YTV. The distance subscale comprises nine of the ten original distance items. Hayward and Dorey (2003) report that both scales have good internal consistency and have been found to negatively correlate i.e. measure something completely different (-0.49). Cronbach's alpha scores for distance and dependence were reported as 0.85 ($n = 68$) and 0.91 ($n = 68$) respectively. Test retest reliability ($n = 13$) also proved adequate at 0.75 and 0.65 respectively for distance and dependence. The wording of the items remained unchanged in the revised questionnaire and items that proved unreliable in previous studies were removed.

Cut-off scores were not created for either of the relating questionnaires, as it was believed that they would add little to the interpretation of the measures.

2.4.5 Parental Bonding Instrument (PBI)

There are very few measures of adult attachment available. An initial literature search revealed that the most comprehensive assessment currently in use is the Adult Attachment Interview (AAI; George, Kaplan & Main, 1996). The AAI was not utilised for the present study as it is lengthy to administer and score, and training to use the instrument is costly. The Parental Bonding Instrument (PBI; Parker et al.,

1979) (See Appendix 4) was preferred as it has subscales that may be compared to the relating questionnaires, as well as possessing good internal consistency and re-test reliability. The PBI was designed as a refined measure of the two dimensions isolated in factor analytic studies as reflecting fundamental parental characteristics, care and protection.

The PBI was originally developed to identify the principal dimensions of bonding in comparison to previous research, which focused on the examination of single variables. The scale is a measure of *perceived* parental characteristics and has 25 items measuring four subscales: high protection, low protection, high care & low care. Items suggest parental behaviours and attitudes of care, affection, sensitivity, cooperation, accessibility, indifference, strictness, punitiveness, rejection, interference, control, overprotection and encouragement of autonomy and independence. The measure is 'retrospective' meaning that adults over the age of 16 years complete the measure for how they remember their parents during the first 16 years. Two identical questionnaires are administered relating to the attitude and behaviours of each parent. The participant rates each parent on a four-point Likert scale, each item scoring 0 – 3 (very like, moderately like, moderately unlike and very unlike). 'Care' items are reflected by statements such as, 'was affectionate to me,' and 'protection' items are reflected by statements such as, 'tended to baby me.'

2.4.5.1 Parental Bonding Quadrants

In addition to generating care and protection scores for each scale, each parental

score can be assigned to one of four quadrants as follows:

- Optimal parenting: high care and low protection
- Affectionate constraint: high care and high protection
- Affectionless control: high protection and low care
- Neglectful parenting: low care and low protection

Assignment to 'high' or 'low' categories is based on the following cut-off scores.

For mothers, a care score of 27 and a protection score of 13.5. For fathers, a care score of 24 and a protection score of 12.5.

Whilst responses rely upon the participants' own recollections, the validity of the instrument has been supported by studies that demonstrate participants' ratings correlate strongly with ratings of their parents themselves and impartial raters (Parker et al., 1979; Parker, 1983).

In order to assess the psychometric properties of the scale Parker et al. (1979) used a sample of adult respondents with a mean age of 27 years consisting of health professionals, students and parents of local school children. Two identical items were included in the original 48-item questionnaire to test reliability producing a Pearson correlation of 0.70 ($P < 0.001$). Test-retest reliability obtained for the 'care' scale was 0.76 ($P < 0.001$) and 0.63 ($P < 0.001$) for the 'overprotection scale.'

In a subsequent study (Parker et al., 1982) its high test-retest reliability, in a clinical group of individuals with a diagnosis of schizophrenia, was demonstrated for each

scale with the exception of paternal care. Comparison of mean PBI scores at test and retest provided correlation coefficients as follows: maternal care ($r = .77$); maternal protection ($r = .73$); paternal care ($r = .58$) and paternal protection ($r = .69$).

2.4.6 Summary of Measures

Table 1. Summary of Measures used in the Study

| MEASURE | AUTHOR/ YEAR | ORIGIN | DESCRIPTION | SCORING RANGE | SCORING INDICATION |
|--|-------------------------------|---|---|---|--|
| Demographic Information Sheet | Developed by researcher | N/A | General characteristics | N/A | N/A |
| Semi-Structured Interview | Developed by researcher | Cognitive Assessment Of Voices (CAV) Chadwick & Birchwood (1994) | Enquires about the Voice, and beliefs about the voice's identity and power | N/A | N/A |
| Voice to You Questionnaire (VTY) | Vaughan & Fowler (in press) | Couples Relating To Each Other Questionnaire (CREOQ) Birtchnell & Spicer (1994) | Measures the perceived position the predominant voice relates to the person. Consists Of subscales: Upperness, Lowerness, Closeness & Distance. | 0 – 3 0 = mostly no 1 = sometimes 2 = quite often 3 = mostly yes | High scores indicate a greater tendency to relate negatively from that position in relation to the other. |
| You to Voice Questionnaire Revised (YTV-R) | Hayward & Dorey (2003) | As above | Measures the perceived position the Person relates to the predominant voice. Consists of subscales: Distance & Dependence | As above | As above |
| Parental Bonding Instrument (PBI) | Parker Tupling & Brown (1979) | N/A | Retrospective measure of perceived parental style. Consists of subscales: Care & Protection | 0 – 3 Very like Moderately like Moderately unlike Very unlike (Not all items are scored in the same direction) | Assignment to high or low categories is based on cut-off scores: Mothers – High Care >27 High Prot. >13.5 Fathers: High Care >24 High Prot > 12.5 Optimal bonding is indicated by high care & low protection |

2.5 Procedure for Data Collection

Mental health professionals were contacted throughout the region and provided with information about the study (See Appendix 5). Visits were made to several community mental health teams in order to present health professionals with information regarding the study. Potential participants were then approached by their key worker and presented with a letter of invitation (See Appendix 6) and Patient Information Sheet (See Appendix 7). Participants were encouraged to ask questions and discuss their decision with a mental health professional. Participants were then given at least 72 hours to consider whether they wished to participate. A researcher then contacted those who expressed an interest and a meeting was arranged to carry out the interview.

Participants were given the choice about whether they wished the interview to take place at a local health centre facility or at their home. Guidelines were followed regarding Trust protocols for lone visits and advice was sought from relevant key workers about potential risk. On each occasion the researcher informed a named healthcare professional by telephone of their whereabouts whilst undertaking home visits.

A meeting was arranged with individuals and consent forms (See Appendix 8) were then signed. With the permission of the participant, a letter (See Appendix 9) was sent to their General Practitioner informing them of their decision to take part in the study. Further details of the study were given to the participant and they were encouraged to ask questions. Participants were advised that they were free to

withdraw from the study at any time without giving a reason. They were then interviewed individually for approximately one hour. If necessary, interviews were conducted over two sessions.

Measures were administered in the following order: demographic sheet; semi-structured interview; YTV-R, VTY, PBI (Mother); PBI (Father).

2.6 Ethical Considerations

In accordance with confidentiality of personal records, data collected was stored under the Data Protection Act and only available to the principal investigator. Participants were assured that all the information given would remain confidential and be stored securely. Numbers were allocated to each participant once consent had been gained and information was recorded so that individuals were not identifiable.

During the planning stage it was recognised that talking about the voices may be distressing for participants. Participants were visually monitored for signs of distress throughout the procedure. Follow-up appointments were offered to all participants. Two people were unable to complete the questionnaires during one session and follow-up sessions were carried out.

Wherever possible the participant was encouraged to arrange a meeting with a health professional, or in some cases attend a hearing voices group following administration of the questionnaires.

2.6.1 Ethical Approval

2.6.1.1 University Research Committee

The initial stage of the ethical approval process involved gaining support from the University Research Committee. A research proposal was submitted to the committee and a meeting followed to discuss the proposal in further detail. Permission was gained to apply to the local Health Authority Research Ethics Committees.

2.6.1.2 Health Authority Ethics Committee

Health Authority Ethical approval was obtained from two NHS Trusts, Research Ethics Committees A and B (See Appendix 10).

3. RESULTS

3.1 Overview of Chapter 3

As outlined in chapter's one and two, the present study was interested in whether perceived parenting styles are related to the relationship individual's have with their predominant voice. The study also aimed to further assess properties of new questionnaires designed to measure 'relating to' the voice (YTV - R) and 'being related to' by the voice (VTY).

This chapter will begin by presenting an overview of the data and some descriptive statistics. This will include a description of the sample and the nature of their voices. Secondly, data concerning additional psychometric properties of the VTY will be offered. Thirdly, an exploration of the appropriateness of tests will be carried out. Fourthly, the main hypotheses of the study, correlations between parenting styles and relationship with the voices will be presented. Finally, further supplementary analyses will be considered.

Data analysis was carried out using the Statistical Package for Social Sciences (SPSS Inc., Chicago, Illinois, USA) for Windows (Version 11). A significance effect of $p < 0.05$ was adopted for the purposes of this study.

3.2 Descriptive Statistics and Initial Data Analyses

3.2.1 General characteristics of participants

Twenty-seven participants took part in the study. The mean age of participants was 40.15 years ($SD = 9.32$), ranging from 23 – 54 years. Seventeen participants were male (63 %) and 10 were female (37 %). Twenty-two participants were Caucasian (81.5), with the remaining five describing themselves as either Black Caribbean ($n=2$; 7.4 %) or Asian Other ($n=3$; 11.1 %). Duration of voice hearing ranged from 1 to 17 years, with a mean of 16.26 ($M = 16.26$; $SD = 1.98$). All but one of the participants were being prescribed antipsychotic medication at the time of interview. Twenty-four participants were diagnosed with schizophrenia and two with schizoaffective disorder. One participant had not been given a diagnosis. All but three participants had been admitted to psychiatric hospital in the past. Ten admissions had taken place within the last year (29.6 %), with a total of 66.7 % being admitted at least once in the last 8 years.

The present sample has characteristics similar to the samples of other studies. Male to female ratios are reported as 2:1 in various studies (Birchwood & Chadwick, 1997; Birchwood et al., 2000; Close & Garety, 1998; Hayward, 2003; Offen, Thomas & Waller, 2003). All participants in previous studies were being prescribed neuroleptic medication at the time of interview (Birchwood et al., 2000; Close & Garety, 1998; Hayward, 2003). Similar age ranges (reported as a mean of 39 years ($SD = 11.8$) by Birchwood & Chadwick, 1997 and 39.52 ($SD = 10.73$) by Hayward, 2003) and duration of voice hearing (reported as a mean of 13 years ($SD = 10$) by

Vaughan, 2000 and 12.59 (SD = 8.30) by Hayward, 2003) were also reported in previous research.

3.2.2 Cognitive Assessment of Voices (CAV)

The following data was derived from the Cognitive Assessment of Voices (CAV; Chadwick & Birchwood, 1994). The first question asked about the number of voices heard and all subsequent questions related to the predominant voice.

3.2.2.1 Voice characteristics

Six (22.2 %) participants heard only one voice, with nine (33.3%) participants hearing five or more voices. The remaining ten participants heard between two and four voices.

Nineteen participants stated that the predominant voice was male (70.49 %). Of the remaining eight participants, five (18.5 %) heard a female voice and three (11.1 %) were unsure of the gender of the voice.

3.2.2.2 Voice Content

Twelve participants (44.4 %) described the predominant voice as coming from inside their head, with eight (29.6 %) from outside their head and seven (25.9 %) as both inside and outside their head.

Twenty participants (74.1 %) said that the voice had used their name, 20 (74.1 %) said that the voice talked to them directly and 23 (85.2 %) said that the voice talked about them.

Nineteen participants (70.4 %) said that the voice gave them commands and told them to do things. Seventeen (63 %) stated that the voice gave them advice and suggestions. All but one participant (96.3 %) said that the voice commented on what they were doing or thinking, and said unpleasant things about them. Eight participants (29.6 %) claimed that the voice had threatened to harm them.

3.2.2.3 Voice Identity

Table 1 illustrates the identity that participants attributed to their predominant voice: Fourteen participants (51.9%) described their voice as aligned to someone in the real world. Six participants identified their voice as a past acquaintance and five participants identified the voice as a family member. Six participants identified their voice with respect of gender and content of speech only, referred to as 'incognito.'

Table 2. The Identity that Participants Aligned to the Voice

| | Frequency | Percent |
|----------------------|-----------|------------|
| Incognito | 6 | 22.2 |
| Self | 2 | 7.4 |
| Identity not aligned | 2 | 7.4 |
| Supernatural | 2 | 7.4 |
| Current friend | 1 | 3.7 |
| Family member | 5 | 18.5 |
| Neighbour | 2 | 7.4 |
| Past acquaintance | 6 | 22.2 |
| Alien | 1 | 3.7 |
| Total | 27 | 100 |

3.2.2.4 Voice Power

All but two participants (92.6 %) described the predominant voice as powerful. The reasons given by participants are presented in Table 2. The most common reasons concern compulsion to do things that the voice says ($n = 7$) and lack of control ($n = 7$).

Table 3. The Main Reason Attributed to the Power of the Voice

| | Frequency | Percent |
|-------------------------|-----------|------------|
| Makes me do things | 7 | 25.9 |
| Knows what I'm thinking | 4 | 14.8 |
| Can't control | 7 | 25.9 |
| Influences mood | 4 | 14.8 |
| Loudness | 1 | 3.7 |
| Other | 2 | 7.4 |
| Not applicable | 2 | 7.4 |
| Total | 27 | 100 |

Eight participants (29.6 %) said they were able to control the voice with a further two stating that they were unsure. Four (14.8 %) said that they were able to call up the voice and only six (22.2 %) said they were able to stop the voices talking. Eleven participants (40.7 %) said they were able to have a conversation with the voice.

3.2.2.5 Parental Bonding Quadrants

Tables 4 and 5 show the Parental Bonding Quadrants that each participant was assigned to, based on cut-off scores. For mothers, a care score of 27 and a protection score of 13.5. For fathers, a care score of 24 and a protection score of 12.5. Bonding style is spread across all of the four bonding quadrants for both mothers and fathers, with affectionate constraint scores accounting for only four assignments overall. The optimal category accounted for the highest score of 11, for paternal bonding. The highest assignment for maternal bonding was 12, for neglectful bonding. Male participants assigned a higher number of both parents to the optimal bonding quadrant.

Table 4. Maternal Bonding Quadrants

| Sex of Participant | Maternal Bonding Quadrant | | | |
|---------------------------|----------------------------------|---------------------------|------------------------------|--------------------------------|
| | Optimal Bonding | Neglectful Bonding | Affectionless Control | Affectionate Constraint |
| Male | 7 | 8 | 1 | 1 |
| Female | 1 | 4 | 4 | 1 |
| Total | 8 | 12 | 5 | 2 |

Table 5. Paternal Bonding Quadrants

| Sex of Participant | Paternal Bonding Quadrant | | | |
|---------------------------|----------------------------------|---------------------------|------------------------------|--------------------------------|
| | Optimal Bonding | Neglectful Bonding | Affectionless Control | Affectionate Constraint |
| Male | 8 | 4 | 4 | 1 |
| Female | 3 | 2 | 4 | 1 |
| Total | 11 | 6 | 8 | 2 |

3.3 Assessment of psychometric properties of the Relating Questionnaires

Preliminary assessment of the psychometric properties of the relating questionnaires has been carried out in two previous studies (Vaughan, 2000; Hayward, 2001). The following section explores some the features of the questionnaires in comparison to these previous studies.

3.3.1 Descriptive Features of the Relating Questionnaires

3.3.1.1 Voice to You Questionnaire (VTY)

The mean upperness score was 21.3 (SD = 7.82). The distribution of scores fell across all ranges but was negatively skewed. The mean closeness score was 18.33 (SD = 8.26). Scores also fell across all ranges but produced a negatively skewed distribution.

3.3.1.2 You to Voice Questionnaire – revised (YTV – R)

The mean distance score was 21.93 (SD = 5.66). The majority of scores fell at the top end of the scale creating a negatively skewed distribution. This suggests that the predominant voice was treated with suspicion and attempts were made to keep it at a safe distance.

The mean dependence score was 4.04 (SD = 5.95). Scores fell across the range of possible scores, but the distribution was positively skewed.

3.3.2 Internal Consistency of the VTY

The internal consistency of both relating questionnaires was analysed using

Cronbach's alpha. The alpha scores for the two scales of the VTY are summarised in Table 6 and include combined data from the present study and previous studies (Vaughan, 2000). Table 7 summarises alpha scores for the two scales of the YTV – R of the present study in comparison to previous studies.

Table 6. Cronbach's alphas for the two scales on the VTY

| Scale | Present study | Combined studies |
|--------------|----------------------|-------------------------|
| Upperness | 0.82 (n = 27) | 0.84 (n = 66) |
| Closeness | 0.81 (n = 27) | 0.79 (n = 63) |

Table 7. Cronbach's alphas for the two scales on the YTV – R

| Scale | Present study | Previous studies |
|--------------|----------------------|-------------------------|
| Distance | 0.73 (n = 27) | 0.75 (n = 66) |
| Dependence | 0.85 (n = 27) | 0.65 (n = 63) |

Analysis of the two scales on both the VTY and YTV – R in the present study produced acceptable Cronbach's alphas of greater than 0.73. Adequate levels of internal consistency were also confirmed by previous studies. Removing items from any of the scales did not significantly enhance internal consistency. As found in previous studies, internal consistency for the remaining lowerness and distance scales on the VTY was found to unacceptable at 0.57 and 0.15 respectively, and these scales were not included in the correlational analysis. However, the

questionnaire was used in its entirety in order to preserve its psychometric properties.

3.3.3 Relationships between Scales on the Relating Questionnaires

3.3.3.1 Voice to You Questionnaire (VTY)

Associations between the scales on the YTV – R and the VTY were examined for the current sample.

Table 8. Correlations between the Scales of the VTY

| | Upperness | Lowerness | Closeness | Distance |
|-----------|-----------|-----------|-----------|----------|
| Upperness | 1.00 | | | |
| Lowerness | .081 | 1.00 | | |
| Closeness | .814** | -.018 | 1.00 | |
| Distance | -.080 | .454* | -.219 | 1.00 |

** $p < .01$ * $p < .05$

As shown in Table 8, correlations are small and non-significant, between the scales of upperness and lowerness and closeness and distance. This suggests that there is a degree of independence between these scales. However, there was a positive correlation between the scales of upperness and closeness and between the scales of lowerness and distance. This suggests that these scales may be measuring a single

underlying factor. This issue will be discussed in the discussion and is reflected in the use of the scales in the current study.

3.3.3.2 You to Voice Questionnaire – Revised (YTV – R)

Table 9 shows correlations between the scales of the YTV – R. There was a negative correlation between the scales of upperness and closeness. This suggests that these two scales are measuring a single underlying factor. This will be reflected upon later in the discussion.

Table 9. Correlations between the Scales of the YTV – R

| | Distance | Dependence |
|------------|----------|------------|
| Distance | 1.00 | -.702** |
| Dependence | -.702** | 1.00 |

** $p < .01$

3.4 Appropriateness of Tests

The data was analysed to assess the appropriateness of the use of parametric or non-parametric tests. Howell (1992) proposed that in order for parametric tests to be used, data must be normally distributed, measured on at least an interval scale and possess homogeneous variance.

The main hypotheses of the study explored the strength and direction of the linear relationship between two variables therefore correlational analysis was used. There are a number of assumptions that must be fulfilled in order to perform correlational analysis. Preliminary analyses were conducted to ensure no violation of the assumptions of normality, linearity and homoscedasticity.

Clark-Carter (1997) proposed the use of the Kolmogorov-Smirnov One-Sample Test to determine whether a variable is normally distributed. Most of the data was normally distributed and met the assumptions for the use of parametric statistical tests on each of the scales of the PBI and VTY. The exception was for the scales of distance and dependence on the YTV – R. Parametric tests are often described as robust because they are quite accurate even when some of their assumptions are violated. Clark-Carter proposes that parametric tests are appropriate to use provided that no more than one assumption regarding that test is violated. In such cases it may be more appropriate to use parametric tests that relax these assumptions, or alternatively a non-parametric equivalent. Analysis of this data was consequently conducted using parametric statistics (Pearson's r).

When looking at the correlation between two variables, Pearson's Product Moment Correlation assumes that the relationship is linear (that is, it forms a straight line). The data was found to be linear and there were no significant outliers.

The variability in scores for each comparison of variables was found to be similar at all levels demonstrating homoscedasticity. Scatterplots were used to show a fairly even cigar shape along its length.

The level of measurement for the variables was 'interval' and each participant provided a score on each variable comprising the X and Y axes, necessary for this type of analysis. The observations that comprise the data were independent of each other. That is, each measurement was not influenced by any other measurement.

3.5 Descriptive Data for the Questionnaire Scales

Table 10 shows the total mean scores achieved on the measures of relating to the voice (YTV- R), being related to by the voice (VTY) and parental bonding (PBI). It also shows the results of the Kolmogorov-Smirnov tests, used to test whether the critical variables were sufficiently normally distributed to allow the use of parametric analyses. There was a large discrepancy between distance and dependence on the YTV-R. A mean of 21.93 on the distance score shows that participants related primarily from a distance. Mean upperness scores on the VTY were only slightly higher than mean closeness scores.

Both maternal care and paternal care were relatively high in comparison to overprotection scores. Maternal care scores are slightly higher than paternal care scores and paternal protection scores are slightly higher than maternal protection scores. With the exception of the YTV- R, the distribution of scores was sufficiently normal to allow the critical variables to be used in parametric analyses.

Table 10. Descriptive Data for Questionnaire Scales

| | Descriptive Statistics | | Kolgomorov-Smirnov | |
|-----------------------------|------------------------|-------|--------------------|-------|
| | M | SD | z | p |
| Voice to You | | | | |
| Upperness | 21.30 | 7.82 | .142 | .175 |
| Closeness | 18.33 | 8.26 | .136 | .200 |
| You to Voice – revised | | | | |
| Distance | 21.93 | 5.66 | .235 | .000* |
| Dependence | 4.04 | 5.94 | .249 | .000* |
| Parental Bonding Instrument | | | | |
| Maternal Care | 20.60 | 12.73 | .161 | .070 |
| Maternal Overprotection | 9.52 | 9.50 | .200 | .007* |
| Paternal Care | 18.96 | 12.49 | .110 | .200 |
| Paternal Overprotection | 11.37 | 10.18 | .148 | .136 |

* $p < 0.05$ and therefore not normally distributed

3.6 Main hypotheses

The main hypotheses of this study were explored using bivariate correlations. See Tables 11 and 12 for a summary of the results. The *r*-values indicate the strength of the relationship between the two variables.

Table 11. Bivariate Correlations on the Scales of the VTY and Scales of the PBI

| | PBI Mother care | PBI Mother protection | PBI Father care | PBI Father protection |
|------------------|----------------------------|----------------------------------|----------------------------|----------------------------------|
| VTY upperness | -.11 | .33 | -.08 | .21 |
| VTY closeness | -.05 | .37 | -.07 | .33 |

Table 12. Bivariate Correlations on the Scales of the YTV - R and Scales of the PBI

| | PBI Mother care | PBI Mother protection | PBI Father care | PBI Father protection |
|---------------------|----------------------------|----------------------------------|----------------------------|----------------------------------|
| YTV-R dependence | .15 | -.03 | .11 | -.09 |
| YTV-R distance | -.17 | .36 | -.02 | .27 |

3.6.1 Relating to the Voice and being Related to by Parents

3.6.1.1 Hypothesis One

It was predicted that relating to the voice from a position of dependence would be positively correlated with high overprotection in terms of mother's parenting style.

The correlation between dependence on the YTV - R and overprotection on the PBI was not significant ($r = -.03$, n.s.). This hypothesis was therefore not supported.

It was predicted that relating to the voice from a position of dependence would be positively correlated with high overprotection in terms of father's parenting style.

The correlation between dependence on the YTV - R and overprotection on the PBI was not significant ($r = -.09$, n.s.). This hypothesis was therefore not supported.

3.6.1.2 Hypothesis Two

It was predicted that relating to the voice from a position of distance would be negatively correlated with low care in terms of mother's parenting style.

The negative correlation between distance on the YTV - R and care on the PBI was not significant ($r = -.17$, n.s.). This hypothesis was therefore not supported.

It was predicted that relating to the voice from a position of distance would be negatively correlated with low care in terms of father's parenting style.

The negative correlation between distance on the YTV - R and care on the PBI was not significant ($r = -.02$, n.s.). This hypothesis was therefore not supported.

3.6.2 Being Related to by the Voice and being Related to by Parents

3.6.2.1 Hypothesis Three

It was predicted that being related to from a position of upperness by the voice would be positively correlated with high overprotection in terms of mother's parenting style.

A positive correlation between upperness on the VTY and overprotection on the PBI was found to be approaching significance ($r = .33$, $n = 27$, $p < 0.05$). This suggests tentative support for this hypothesis.

It was predicted that being related to from a position of upperness by the voice would be positively correlated with high overprotection in terms of father's parenting style.

The correlation between upperness on the VTY and overprotection on the PBI was not significant ($r = .21$, n.s.). This hypothesis was therefore not supported.

3.6.2.2 Hypothesis Four

It was predicted that being related to from a position of closeness by the voice would be positively correlated with high overprotection in terms of mother's parenting style.

The positive correlation between closeness on the VTY and overprotection on the PBI ($r = .37$, $n = 27$, $p < 0.05$) was found to be approaching significance. This suggests tentative support for this hypothesis.

It was predicted that being related to from a position of closeness by the voice would be positively correlated with high overprotection in terms of father's parenting style.

The positive correlation between closeness on the VTY and overprotection on the PBI was found to be approaching significance ($r = .33$, $n = 27$, $p < 0.05$). This suggests tentative support for this hypothesis.

3.7 Partial Correlations

In order to control for the possible confounding effects of duration of voice hearing upon each of the four hypotheses, partial correlations were performed. The results are illustrated in Table 13. In order to demonstrate comparisons without controlling for duration of voice hearing, bivariate correlations are shown in brackets. For each of the four hypotheses, there was little or no difference in the strength of the correlation. This suggests that the observed relationship between parenting style and relationship to the predominant voice is not just due to the influence of duration of voice hearing.

Table 13. Partial Correlations between Relating Questionnaire Scales and Scales of the PBI controlling for duration of voice hearing

| | Maternal | | Paternal | |
|-----------------------|-------------------|-------------|-------------------|-------------|
| | PBI Protection | PBI Care | PBI Protection | PBI Care |
| | <i>r</i> | <i>r</i> | <i>r</i> | <i>r</i> |
| YTV-R (dependence) | -.07 (-.03) | | -.07 (-.09) | |
| YTV-R (distance) | | -.11 (-.17) | | .01 (.02) |
| VTY (upperness) | .33 (.33) | | .21 (.21) | |
| VTY (closeness) | .37 (.37) | | .33 (.33) | |

3.8 Additional Analyses

Additional analysis concerning duration of voice hearing, directness of voice, controllability, and ability to have a conversation with voice and voice gender were conducted. With the exception of duration of voice hearing each of the following voice characteristics was derived from the Cognitive Assessment of Voices Interview Schedule (CAV; Chadwick & Birchwood, 1994). The purpose of the additional analysis was to determine if specific voice characteristics had an impact on the relationship that voice-hearers had with their voice in terms of content, power and identity.

3.8.1 Duration of Voice Hearing

A bivariate correlation was carried out to test for associations between styles of relating to, and being related to by the voice, and duration of voice hearing. A significant negative correlation was found between voice dependence and duration of voice hearing ($r = -.415$, $n = 27$, $p < 0.05$, two-tailed). This suggests that hearers become less dependent on their voice over time.

3.8.2 Voice Directness

An independent samples t-test was used to compare voice relating between participants whose voice talks directly to them, and participants whose voice does

not talk directly to them. There was a significant difference between the conditions for voice dependence ($t = 2.244$, $df = 25$, $p = .034$, two-tailed). No such associations were found between voice relating and individuals whose voice talks about them. This suggests that participants were more likely to develop a dependent relationship with a voice that talks to them rather than about them.

3.8.3 Controllability of the Voice

An independent samples t-test was used to compare voice relating between participants who were able to control the voice, and participants who were not able to control the voice. There was a significant difference in scores between the conditions for voice upperness ($t = -2.761$, $df = 23$, $p = .011$, two-tailed) and voice closeness ($t = -2.574$, $df = 23$, $p = .017$, two-tailed) and controllability of the voice. This suggests individuals who were unable to control the voice were related to by the voice from a position of higher upperness (dominance) and closeness, in comparison to those who were able to control the voice.

3.8.4 Conversation with the Voice

An independent samples t-test was used to compare voice relating between participants who were able to have a conversation with the voice, and participants who were not able to have a conversation with the voice. There was a significant difference between conditions for ability to converse with the voice and dependent

voice relating ($t = 3.408$, $df = 25$, $p = 0.002$, two-tailed). Individuals who were able to have a conversation with the voice were more dependent on the voice.

3.8.5 Voice Gender

An independent samples t-test was used to compare voice relating between participants whose predominant voice was either male or female. There was a significant difference between the conditions for both upperness ($t = -2.082$, $df = 22$, $p = .049$, two-tailed) and closeness ($t = -2.419$, $df = 15$, $p = .029$, two- tailed). Relating to female voices was significantly more upper and more close than relating to male voices.

3.9 Summary of Main Results

Evidence was found to support previous findings regarding voice characteristics. Internal consistency on the relating questionnaires was found to be adequate on the scales of upperness and closeness (VTY) and distance and dependence (YTV - R). Evaluation of the psychometric properties of the relating questionnaires suggested that there was a degree of dependence between some of its scales. However, upperness and closeness on the VTY showed a positive correlation. The scales of distance and dependence on the YTV - R revealed a negative correlation. This suggests that the scales may be measuring a single underlying factor.

There was some support for two of the four main hypotheses. Associations approaching significance were found between voice relating from a position of upperness and maternal overprotection. Associations approaching significance were also found between voice relating from a position of closeness and both maternal and paternal overprotection.

Additional analyses revealed an association between relating to the voice dependently and duration of voice hearing. However, controlling for the effects of duration of voice hearing had very little effect on the strength of the relationship between the variables of parenting style and relationship with the voice. A negative correlation suggests that voice hearers had become less dependent on their voice over time. Differences between directness of voice relating and voice dependence suggests that participants were more likely to develop a dependent relationship with a voice that talked to them than about them. In addition, individuals who were

unable to control the voice were related to from a position of greater upperness and closeness by the voice. Those who were able to have a conversation with the voice were significantly more dependent on the voice. Female voices related to individuals from a significantly more upper and close position.

4. DISCUSSION

4.1 Overview of Chapter 4

This chapter will begin with an overview of the current study. This will be followed by a summary and interpretation of the results in relation to the two sets of hypotheses. An exploration of these findings, reflecting on previous research literature will be presented. The implications for clinical practice will be detailed, as well as a discussion of the strengths and limitations of the study. Issues regarding research design, measures and also any practical considerations will be discussed. Finally, recommendations for the direction of future research will be described in light of the findings and a conclusion section will complete this thesis.

4.2 Overview of the Study

Understanding the interpersonal nature of the relationship between voice hearer and voice may be key to the alleviation of distress and improved coping. However, research in this area is limited, especially regarding interpersonal determinants. One factor that is believed to mediate the response to the voice hearing experience is the influence of past experience. Specifically, that the relationship that individuals experienced during childhood may affect the interpersonal relationship an individual has with their predominant voice. Birtchnell's (1999) ethological approach proposes that children learn to relate from different positions dependent on the behaviour of

the parent whilst Birchwood et al., (2000) found specific links between proximity to the voice and past experience.

Current results tentatively supported, and contributed to, previous findings as well as understanding links between early attachment, interpersonal theory and voice relating.

Results of these hypotheses are summarised and discussed below.

4.3 Summary and Interpretation of Main Research Findings

The purpose of this study was to explore associations between the relationship that individuals have with their predominant voice and the perceptions they had of their parents whilst growing up.

Four main hypotheses were proposed. Hypotheses one and two refer to the way in which participants related to the voice and were related to by their parents. Hypotheses three and four concerned the way in which participants are related to by the voice and were related to by their parents.

4.3.1 Relating to the Voice and being Related to by Parents

4.3.1.1 Hypothesis One

It was predicted that relating to the voice from a position of dependence would be positively correlated with high overprotection in terms of mother's parenting style.

It was predicted that relating to the voice from a position of dependence would be positively correlated with high overprotection in terms of father's parenting style.

This hypothesis for both maternal and paternal parenting style was not supported. There was no association found between scores of high dependence on the YTV-R and high protection scores in relation to either maternal or paternal bonding.

4.3.1.2 Hypothesis Two

It was predicted that relating to the voice from a position of distance would be negatively correlated with low care in terms of mother's parenting style.

It was predicted that relating to the voice from a position of distance would be negatively correlated with low care in terms of father's parenting style.

This hypothesis for both maternal and paternal parenting style was not supported. There was no association found between high distance scores on the YTV-R and low care scores in relation to either maternal or paternal bonding.

Hypothesis 1 predicted that individuals whose parents related to them from a position of high overprotection would respond reciprocally to the voice from a position of greater dependence. High overprotection is characterised by control and intrusion. The construct of dependence is less well defined and is described by Birtchnell (1999) as the adult equivalent to insecure attachment, which includes factors such as negative closeness (fear of rejection and disapproval), inferiority and humility. In terms of the YTV-R this translates as the combined factors of lowerness and closeness subscales. It would be expected that the child of a controlling parent might respond by conforming and adopting a position of inferiority and lowerness, which would then be carried through to adulthood in relationships with others.

Hypothesis 2 predicted that individuals whose parents related to them from a position of low care would respond reciprocally to the voice from a position of greater distance. Distance is characterised by suspiciousness, withdrawal and excessive self-reliance. Low care is characterised by emotional coldness, indifference and neglect. In terms of attachment theory it was expected that a child would adopt a distanced position in response to emotional coldness, indifference or control, the equivalent to the avoidant pattern of attachment in childhood leading to an insecure pattern of attachment in adulthood. According to Ainsworth et al., (1978), insecure attachment can be either avoidant, ambivalent or disorganised in style.

One reason why the results were non-significant may be because being related to by parents and relating to the voice involves mixing two different constructs. 'Relating to' the voice and 'being related to' by parents involves comparisons of a reciprocal relationship. The PBI measures how a person perceived that their parents related to them and the YTV-R measures how the person relates to their predominant voice. The present study assumed that the response of an individual to a specified parental style would be the same now as it was in childhood. However, in reality each individual will respond differently to each set of parents who relate in a particular way. We do not know how the child related back then in response to non-caring parents. It is also possible that the voice-hearer has modified their interpersonal schema/internal working models over time. Indeed, it is unlikely that these templates for relating have remained unchanged since early childhood. Peer relationships, stigma towards mental health problems and medication are all examples of variables that may have contributed to changes in schema over time.

This raises questions such as how did the child respond to the behaviour of the parent and whether one parent was more influential in the care of the child than the other. Did the child respond by relating from a position of distance or did the child become dependent on the parent? These are questions that could not be answered in the present study and further research is required to investigate the reciprocal nature of the relationship with parents and its link to the experience of voice hearing. Indeed, it has been argued that the reciprocal relationship that exists between the voice and voice-hearer needs to be investigated in order to account for the reflexive nature of the voice hearing experience (Davies, Thomas & Leudar, 1999). As described earlier, Bowlby (1980) argued that the attachment relationship is closely

tied to personality development, which results in individual differences in attachment behaviour. Individual differences in attachment styles are thought to reflect differences in the psychological organisation of the attachment system. In conjunction with external influences such as psychological and cultural influences, this creates a complex reciprocal (interrelating) relationship. According to Birtchnell (1993) individuals adopt a state of relatedness. They may have been forced into a position they did not want or they may have adopted a position that was advantageous for them in some way.

A further explanation why the results were non-significant may be due to the Voice to You Questionnaire used in the study. Investigation of associations between the scales of the YTV-R revealed a negative correlation between the scales of distance and dependence, suggesting that they were measuring a single underlying construct. A critique of the relating questionnaires will be provided later in the discussion.

4.3.2 Being Related to by the Voice and being Related to by Parents

4.3.2.1 Hypothesis Three

It was predicted that being related to from a position of upperness by the voice would be positively correlated with high overprotection in terms of mother's parenting style.

Tentative support is offered for this hypothesis. The positive correlation was found to be approaching significance between upperness scores on the VTY and protection scores on the mother PBI.

It was predicted that being related to from a position of upperness would be positively correlated with high overprotection in terms of father's parenting style.

This hypothesis for paternal bonding was not supported. The positive correlation between high upperness scores on the VTY and high protection scores on the father PBI was not significant.

4.3.2.2 Hypothesis Four

It was predicted that being related to from a position of closeness would be positively correlated with high overprotection in terms of mother's parenting style.

It was predicted that being related to from a position of closeness would be positively correlated with high overprotection in terms of father's parenting style.

Tentative support is offered for this hypothesis for both maternal and paternal bonding. Positive correlations between closeness scores on the VTY and protection scores on both the mother and father PBI were found to be approaching significance.

In contrast to hypotheses one and two, it appears that 'being related to' by the voice and 'being related to' by parents are more comparable constructs. This could be explained by the similarity of the constructs of upperness and overprotection, the former described by Birtchnell (1993) as dominance and intrusiveness and the latter described by Parker et al. (1979) as concerned with control and intrusiveness. This provides support to previous research by Birchwood and Chadwick (1997) who argued that the meaning of voices might be linked to interpersonal schemas based on the individual's past and current experience of interpersonal relationships, particularly early relationships with powerful caregivers. Findings of the present study therefore present support for this argument in terms of the way in which their parents related to them in the past and the way in which their predominant voice relates to them currently.

In order to provide an explanation for this tentative link, varying strands of research were reviewed in the present study. Benjamin (1989) was the first to suggest that the relationship an individual has with their voices might mirror patterns of relating within the family. Thomas (1997) suggested that voices can be identifiable as an 'interpersonal other' and this is influenced by both past and present relationships. Drayton et al., (1998) investigated the direct relationship between early relationships and style of recovery from psychosis, finding differences in style of recovery dependent on style of parenting. Birtchnell (1993, 1999) and Birchwood et al., (2000) both attribute social relationships to early experiences of relationships and attachments to significant others. Essentially, it was believed that if voices are mirrored by those in the real world and parents are influential in the development of

the interpersonal nature of child's relating experience, then there may be similarities between parental bonding and voice relating.

The exception to this was the non-significant finding related to paternal overprotection and upperness. One explanation may be the level of involvement fathers have in the upbringing of the child. Research suggests that parents are similar in their interactions with children. This may be a result of shared child-rearing values or practices or alternatively, infant characteristics eliciting of the same type of caregiving. A meta-analysis of 11 studies concerning attachment concordance child-mother and child-father relationships concluded that mother and father child relationships were concordant (Fox, Kimmerly and Schafer, 1991). However, conflicting research in terms of children's competence Main et al. (1985) found that the mother-child attachment security is more influential than the father's. The principal attachment is usually the mother, therefore this attachment is more likely than other attachments to influence bonds, including relationships with others. This explanation is consistent with literature suggesting that the mother shapes the father-child relationship (Steele, Steele & Fonagy, 1995). Although most children do become attached to their fathers, the bonds to their secondary caregivers are not automatically attachments. This may explain some of the discrepancies between types of attachments between the child and both mothers and fathers. Further research is required to clarify the nature of these bonds and its relationship to the voice hearing experience.

Finally, it is likely that a larger sample might have enabled correlational analysis to attain statistical significance.

In summary the findings of this study tentatively suggest that there is a direct association between the way parents related to an individual as a child and the way in which the voice relates to them currently. However, no such association was found between the reciprocal relationship of the individual to the voice and that of the parent to the individual.

4.4 Summary and Interpretation of Additional Research Findings

Previous research suggests that voices are aligned to people in the voice-hearer's social world (Nayani & David, 1996; Leudar et al., 1997; Birchwood et al., 2000; Vaughan, 2000; Hayward, 2001). In the present study more than half the participants aligned their voice to an identifiable person, either past or present. Of these, five were family members. This is consistent with the findings of Vaughan and Fowler (in press) and Hayward (2003).

Consistent with the findings of Vaughan (2000) and Hayward (2003), participants within the present study related to the predominant voice primarily from a position of distance. This position has been interpreted by Birtchnell (1993, 2001) as indicative of a tendency to relate with suspicion towards a voice that they are attempting to keep at a safe distance.

Voice controllability results suggested that those who were unable to control the voice were related to from a position of high upperness or dominance, compared to those who were able to control the voice. Again, this supports the hypothesis that voices that are dominant and upper are more difficult to control (Birchwood et al., 2000). Relating from a position of lowerness may be advantageous to the individual. This is consistent with research showing that women in good marriages perceived themselves as relating from a more submissive position, compared to those perceived to be in difficult marriages (Birtchnell & Spicer, 1994). Indeed, as described earlier, Vaughan (2000) suggests that hearers might be submitting to a voice that they perceive cannot be escaped from. In terms of voice directness,

participants were more likely to develop a dependent relationship with a voice that talks to them than with a voice that talks about them. A voice that talks directly to a hearer is more indicative of a reciprocal relationship. However, dependency in this context is a negative form of relating, adding further support to the belief that engaging with the voice may be negative. Benjamin (1989) would argue with this point, whereas Birchwood and Chadwick (1997) spoke of a '*modus vivendi*,' or a compromise between conflicting agenda. It appears that adopting a position of submissiveness and/or dependency might be the least distressing way of relating to a voice that is perceived as unchangeable.

As described in section 1.4 working models of attachment are subject to change, therefore it would be expected that the relationship with the voices should be subject to change. The present study found evidence that voice hearers become less dependent on their voice over time. This supports previous research suggesting that the relationship with the voices can change over time (Benjamin, 1989; Romme et al., 1992). Decreased dependence may be a result of education, medication or previous intervention (Romme & Escher, 2000) and further research is required to identify the specific factors involved. Cross-sectional and longitudinal studies of relationships in the 'real world' indicate the longer partners have been together, the less anxious they become about attachment-related issues such as separation or abandonment (Fraley & Shaver, 1998). This observation suggests that attachment is affected by reciprocal influence processes as a relationship develops.

Conversely, individuals who were able to have a conversation with the voice were more dependent on the voice resulting in inferiority and fear of rejection in the voice

hearer. However, this does not clarify whether the position of dependence was chosen because of its benefit to the voice hearer or if the hearer was forced into this position unwillingly by the voice.

With respect to voice gender, it was found that female voices were significantly more upper and more close than male voices. The reasons for this are not clear and can only be speculated upon. Certainly it is understandable that females in the real world tend to relate more closely and in some cases it may be a reflection of the relationship the individual had with their mother. Further research is required to investigate voice gender differences to determine the impact that this has on voice relating.

4.4.1 Parental Bonding Quadrants

In contrast to research carried out by Drayton et al., (1998) and Parker et al., (1982) the present study did not produce comparable assignment to the four bonding quadrants: optimal bonding, neglectful bonding, affectionless control and affectionate constraint. In their studies of individuals diagnosed with schizophrenia, all patients were assigned to the 'affectionless control' quadrant, denoting low care and high overprotection. The present study found fewer participants assigned to both the affectionless control and affectionate constraint quadrants, with a greater number of participants being assigned to both the neglectful and optimal bonding quadrants. One possible reason is differences in participant characteristics. Both

Drayton et al. and Parker et al. recruited participants who were 'recovering' from psychoses and assessment was carried out very soon after hospital discharge.

4.5 Clinical Implications of the Research

Results of the current study provide scope for the integration of interpersonal, attachment and cognitive theories, which in turn could be applied to voice relating. Indeed, research by Cook (2000) suggests that internal working models of relationships developed in childhood may be considerably more dependent on social interactions than originally assumed, therefore interpersonal schemas investigating adult attachment security may be a useful component in therapy.

The current study implies that assessment and formulation should provide a crucial role when implementing an individually-tailored intervention. This should take into consideration both past and present experiences of relating to others, relating to the voices and the wishes of the person to explore directly or indirectly with the voices. Benjamin (1989) suggested that if therapy were seeking to reduce involvement with the voices, it may be necessary to provide more satisfactory alternatives to the relationship the person has with their voices. One suggestion by Benjamin is intervention to change family interactional patterns as a means of ameliorating the negative experience of voice hearing. Working indirectly, through working on general social relationships, may help the person to cope better with the relationship they have with their voice. If there are similarities between past and present relationships, this may add weight to adopting an approach using interpersonal

schema. Research investigating voice relating as mirroring 'real world' relationships also lends support to the notion that people with healthier social relationships may be able to improve their relationship with the voices. This may also offer an alternative way of working with individuals who, as described in section 1.5, *seal over* rather than *integrate* with the voice (Drayton et al., 1998).

Relating Therapy (Birtchnell, 1993) offers a way in which the therapeutic relationship itself can be used to provide insight into aspects of how the client relates socially and/or with their voices. Specific interventions include the 'empty chair' technique and Gestalt Therapy. The Therapist presents themselves in a humanistic manner, typically disclosing personal opinions and information in order to establish a positive relationship with the client. This approach is also compatible with literature emphasizing engagement, development of trust and rapport building within the voice hearing population (Fowler et al., 1995). The therapist would vary their state of relatedness either naturally or contrived in order to bring about the desired change in state of relatedness for the client. The client may be able to rehearse new and more affective relating both in social situations and with the voices.

Birtchnell also suggests that a therapist can re-address the balance of typically negative relating. In his paper on relating therapy with individuals, families and couples, Birtchnell (2001) proposes that people, in general, encounter relating difficulties because they relate negatively and/or are related to negatively by others. He suggests that therapeutic intervention should include the identification and correction of these negative tendencies as well as enabling people to cope with the negative relating of others towards them. Assertiveness training may be one way to

alleviate some of the difficulties associated with voice hearing. Indeed, Birchwood et al. (2000) propose the use of assertiveness training and problem solving therapy as a method of improving the social status of those who consider themselves as relatively low in rank to the voice.

Interestingly, Birtchnell categorises the humanistic therapies described above as the 'most close' style of therapy, in contrast to the most distant style, cognitive behaviour therapy. Perhaps patient characteristics, in terms of ability and willingness to relate to the voices, could be matched with treatment strategies. Those not wishing to engage with the voices may be more suited to the more distant approach provided by cognitive therapy. Conversely, those more willing to engage with the voices may prefer relating therapy aimed at developing adaptive relating styles or they may wish to work indirectly on developing improved competence in social relationships.

In terms of assessment, formulation and treatment, it is clear that interpersonal schemas may be a viable target for therapeutic intervention. Safran (1990) defines interpersonal schemas as, "*a generic knowledge structure based on previous interpersonal experience, that contains information relevant to the maintenance of interpersonal relatedness*" (p.87).

Safran proposes that the concept of interpersonal schema can facilitate the integration of cognitive and interpersonal theories. In terms of working with voices it may be helpful to bring early relationships into the therapeutic domain. This

would fit well with techniques developed using a cognitive-behavioural approach to hearing voices.

Similarly, Romme and Escher (2000) suggest developing a 'construct' as part of the therapeutic process. They propose that the main purpose of this is to determine whom the voices characterise and what problems the voices represent. They suggest that the experience of voice hearing is not about why the person hears voices, rather how sense can be made of the voices. This is in response to the opinion of traditional medical treatment that hearing voices is a product of disease and therefore ignores the personal history of the person and hence the history of the emergence of the voices. They suggest that the concept of a construct should be offered tentatively and include information under five structured headings. These include the identity of the voices, their characteristics including content, the history and triggers, including impact, and childhood and adolescence.

The relating questionnaires utilised in this study were relatively easy to administer and with future exploration of reliability and validity, may prove a useful tool as part of the assessment process. Based on the current study this assessment should include a consideration of the identity of the voice and a careful exploration of the way in which parents related to them whilst they were growing up. In addition, an exploration of other significant relationships may help identify specific interpersonal schemas. It will be important to assess other aspects of the individuals' subjective experience of their voices such as level of distress and phenomenological features including frequency and severity of the voices. Such an assessment should be client-led, working from the client's perspective and their wish to engage in the therapeutic

process. The client may be unable or unwilling to discuss significant past relationships that may have been difficult, therefore this issue should be dependent on clinical judgement and addressed sensitively.

4.6 Strengths and Limitations of the Study

4.6.1 Strengths

The aim of the present study was to extend limited previous research concerning the relationship that individuals have with their predominant voice. The current results have supported and added to previous findings as well as expanding knowledge regarding the possible links between early attachment experience and hearing voices.

Firstly, the study aimed to build on previous research investigating the concept of voice relating mirroring relationships in the 'real' world (Nayani & David, 1996; Leudar et al., 1997; Birchwood et al., 2000; Vaughan, 2000; Hayward, 2003). More recently attempts have been made to link perceived parenting and voice relating (Drayton et al., 1998; Birchwood et al., 2000; Offen, Thomas & Waller, 2003). The dearth of research linking the two areas has been recognised by other researchers. One explanation may be a difficulty in defining what constitutes parenting, especially as there are believed to be many factors affecting the outcome of parenting and the development of personality and relationships. The present study has highlighted the need for further development of research in this area and a careful consideration of appropriate measures such as the relating questionnaires.

process. The client may be unable or unwilling to discuss significant past relationships that may have been difficult, therefore this issue should be dependent on clinical judgement and addressed sensitively.

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4.6.1 Strengths

The aim of the present study was to extend limited previous research concerning the relationship that individuals have with their predominant voice. The current results have supported and added to previous findings as well as expanding knowledge regarding the possible links between early attachment experience and hearing voices.

Firstly, the study aimed to build on previous research investigating the concept of voice relating mirroring relationships in the 'real' world (Nayani & David, 1996; Leudar et al., 1997; Birchwood et al., 2000; Vaughan, 2000; Hayward, 2003). More recently attempts have been made to link perceived parenting and voice relating (Drayton et al., 1998; Birchwood et al., 2000; Offen, Thomas & Waller, 2003). The dearth of research linking the two areas has been recognised by other researchers. One explanation may be a difficulty in defining what constitutes parenting, especially as there are believed to be many factors affecting the outcome of parenting and the development of personality and relationships. The present study has highlighted the need for further development of research in this area and a careful consideration of appropriate measures such as the relating questionnaires.

Conducting face-to-face clinical interviews by a single researcher enabled participants to ask questions and provide consistency throughout the study. This was set against the resources and length of time needed to interview individuals, in some cases for up to two hours.

It is suggested that the findings from the present study support those gained by previous researchers. The preliminary results gained from this study could assist further development of research in this area and may have important implications for the understanding and treatment of individuals who are distressed by the experience of hearing voices. There are however a number of limitations regarding the present study which will now be addressed.

4.6.2 Limitations

4.6.2.1 Critique of the Relating Questionnaires

Two new questionnaires, the You-to-voice (YTV-R) and the Voice-to-you (VTY) were used to measure the way in which participants related to their predominant voice. Adapted from Birtchnell's Couples Relating to each Other Questionnaire (CREOQ), both questionnaires were validated upon several small samples and therefore the psychometric properties require further evaluation.

The internal consistency of the YTV-R and the VTY were examined using Cronbach's alpha. Consistent with previous studies, analysis of the two scales on

both the YTV-R (distance and dependence) and the VTY (upperness and closeness) produced acceptable Cronbach's alphas. However, as found in previous studies, internal consistency for the remaining lowerness and distance scales on the VTY was found to be unacceptable. Intercorrelations between upperness and closeness and lowerness and distance suggest that these scales may be measuring a single underlying factor. The reasons for the inconsistency within the scales are unclear but clinically it makes no sense for a voice causing distress to relate submissively or from a distance.

The relating questionnaires were not originally designed for use with voice-hearers and the questions may have appeared abstract to participants. In particular, the wording of several items on the relating questionnaires potentially caused difficulties for some participants. In the current study, item 10 proved difficult for several participants to answer ('Does not let me get close to him/her'). Participants stated that they did not want to get close to the voice due to its distressing nature, therefore this question was not relevant to them. However, omitting single items from the scales in both the current and previous studies did not change the internal consistency of scales. Previous studies have highlighted the lack of internal consistency on the upperness scales of the original YTV. Vaughan (2000) and Hayward (2003) found an association between the scales of lowerness and closeness. These two scales were subsequently combined to produce the revised version of the questionnaire resulting in the dependence scale. Vaughan also reported significant associations between the scales of the VTY, suggesting that they may measure a single construct. However, Vaughan (2000) also reported that both questionnaires had reasonable face validity in comparison to existing measures of voice hearing.

Further exploration of psychometric properties of both questionnaires is required and a questionnaire combining both the VTY and the YTV-R is currently under construction (M.Hayward, personal communication, December 9, 2004). This questionnaire will integrate the scales of the YTV-R (distance and dependence) with the most statistically robust scales of the VTY (upperness and closeness) to create a measure of the reciprocity within the relationship with the prominent voice.

4.6.2.2 Additional Limitations

An additional shortcoming of the present study was the small sample size. A prospective power analysis was conducted (See section 2.3) which revealed that a sample size of 32 was required for the present study for results to be clinically meaningful. A total of 27 participants in the current study falls short of this target. Consequently there is a need for replication with larger samples, particularly with respect of achieving significance.

A further limitation of the present study concerns the omission of several measures due to time constraints. No specific measure of distress was used, although all patients stated that they did not gain any comfort from the voices. One person said that they had a 'guiding' voice that helped them, but this was not their predominant voice. Many said that they had become less distressed over time because they had learned to cope with the voices. Furthermore, The Cognitive Assessment of Voices (CAV; Chadwick & Birchwood, 1994) revealed that unpleasant things were said by the predominant voice of all participants. The addition of a more precise measure of

distress would have allowed comparison to previous studies of the relationship between levels of distress and relationship to the voice.

In addition, several previous studies have found that depressed people tend to perceive their parents as less caring and overly protective (Parker, 1983; Plantes, Prussof, Brennan & Parker, 1988). Depression was not measured in the present study although other studies have reported very high levels of depression in people with schizophrenia and links between levels of distress (Soppitt & Birchwood, 1997; Chadwick & Birchwood, 1994, 1995). Vaughan & Fowler (in press) found a significant relationship between levels of distress and voices perceived as dominant or malevolent. It appears pertinent therefore to consider depression in subsequent studies concerning voice relating as well as a component of therapy.

It is common for voice hearers to experience more than one voice and this was evident in both the current and previous studies. The present study involved the investigation of the predominant voice only. Hayward (2001) found that individuals who hear more than one voice have qualitatively different relationships with each voice. Further investigation is required to determine how these voices are similar to their social relationships with particular reference to the characteristics of those most influential to that individual, namely their parents.

The current study identified only 'negative' forms of relating. This was relevant for the hearing voices population in the current study as they all access services due to the distress caused by the voices. An extension of the study may be to conduct research investigating positive forms of relating to the voice using the interpersonal

octagon (Birtchnell, 1993). However, as with previous research, the limited access to individuals who hear voices who do not access services makes this method of investigation problematic.

Finally, a further shortcoming relates to the mode of recruitment of participants who volunteered to take part in the study. A number of participants declined or were unable to take part due to their current mental state. In the present study individuals were approached by Clinical Psychologists and Community Mental Health Team Professionals or were recruited through local hearing voices groups and therefore were generally more able. Those considered less able such as individuals recently discharged from inpatient units were less likely to be referred for interview by their keyworker due to concentration difficulties. Previous studies used participants who were more 'disturbed' which may have had an impact on the findings (Drayton et al., 1998; Parker et al., 1982)

4.7 Implications for Future Research

The present study was concerned with the *current* relationship that an individual has with their predominant voice and the relating measures were designed to investigate *past* relating style of parents. Findings suggest that voice hearers become less dependent on their voices over time and several participants said that their ability to cope with the voices had changed over time. Research also indicates that although attachment styles may be carried from childhood to adulthood, they do not remain stable over time (Kirkpatrick & Hazan, 1994; Schafe & Bartholomew, 1994). There is also evidence that the relationship to the voices changes over time (Benjamin, 1989; Romme et al., 1992). Further longitudinal investigation of the changing relationship with the voices is required in order to determine the specific factors involved in this process.

One of the implications of the research is that the experience of hearing voices appear unique to each individual. An alternative to the use of measures such as those in the current study would be to consider researching similar themes using qualitative methods. This may provide further insight into the unique experiences of each person and provide unifying ideas as well as adding to theoretical development. This method would also combat the problem of over-research of participants in this population, as fewer participants are required to produce meaningful results.

Generating direct links between attachment style and voice relating proved problematic due to a variety of reasons. Theoretically, models of attachment theory are derived from research with infants and their bond to the primary caregiver,

usually the mother. Conversely, theories of adult attachment appear to have been developed separately and links between the two are unclear. Bowlby (1980) stated that attachment theory carries on through to adulthood, but does not provide the evidence to support this. Much of the research carried out in adults refers to that of close romantic relationships and little attention has been paid to other forms of relating. This is clearly an area that requires further investigation.

A further area of research, which has been neglected due to difficulties in accessing participants, is those voice-hearers who do not access mental health services. This may be primarily because they are not distressed by the experience of voice-hearing. This may provide further insight into the different coping mechanisms that these individuals may have in order to inform treatment approaches.

Recent Government directives such as The National Service Framework for Mental Health (Department of Health, 1999) and Modernising Mental Health Services (Department of Health, 1998) have highlighted the importance of early intervention in the treatment of psychotic illness. In light of the fact that the relationship with voices changes over time, there is scope for early intervention research investigating the early relationship that an individual has with their voices. This may increase the feasibility of interpersonal interventions if deemed appropriate.

With respect to the parenting questionnaires, the current study has highlighted the need for appropriate measurement of parenting styles. The PBI clearly has a number of methodological flaws that need to be addressed. Indeed, a study factor analysing the PBI using 583 US and 236 UK students suggested a three-factor solution might

be preferable (Murphy, Brewin & Silka, 1997). The modified version of the PBI would include care, denial of psychological autonomy and encouragement of behavioural freedom, providing an alternative framework for the less defined protection scale. Alternatively, a more detailed measure of perceived early life experience, such as the Adult Attachment Interview (AAI; George et al., 1985) may be more appropriate. It should be noted that participants' perceptions of parental bonding, not the actual bonding patterns themselves were the target of investigation. The AAI describes retrospective childhood attachment relationships as well as experiences of loss, rejection and separation through less direct questioning. This may also facilitate specific comparisons of the reciprocal relationship that the individual had as a child towards the parent. Classification of secure, ambivalent or disorganised bonding patterns (Ainsworth et al., 1978) may allow direct comparisons to be made using a measure of competence in relating to parents and the YTV-R.

Clinically the present study emphasises interpersonal theory as a means of understanding the relationship between the voice hearer and the voice. This is especially important as interpretations of voices determines the associated distress and disability (Morrison, 1998) and depression is linked to derogatory voice content and malevolent beliefs (Soppitt & Birchwood, 1997). In particular further investigation is required to enable integration of cognitive and interpersonal theories to understand and provide effective psychological interventions for voice hearers.

4.8 Conclusion

The aim of the current study was to investigate whether the types of relationships that exist between voice-hearers and their voices are influenced by past experiences.

Previous research has focused on parenting as a cause of psychosis and very little attention has been paid to the influence of parenting on the subsequent relationship with the voice. Recent consideration of the voice as an ‘interpersonal other’ has generated the exploration of alternative means of understanding how people relate to the voices.

This study provides tentative support for the hypothesis that parenting styles are associated with the way in which the predominant voice relates to an individual.

Current results propose integration of cognitive and interpersonal models and further investigation into the factors that mediate between past experience and current relating to the voices.

Further investigation towards understanding these experiences will better aid the delivery of appropriate individually tailored interventions. This has important treatment implications as relating variables have been demonstrated to be influential in mediating distress associated with voice-hearing.

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APPENDICES

Name:

Date of Birth:

Gender:

Ethnicity:

Duration of voice hearing:

Last occasion voice/s heard:

Current diagnosis:

Number of hospital admissions:

Date of last admission:

Current medication:

VOICE

How many voices do you hear?

Does the voice come through the ears or from inside your head?

Is the voice a man or woman, or are you unsure?

CONTENT

Does the voice talk to you or about you?

Has the voice used your name?

Can you tell me what kinds of things the voice says? (Record 2 or 3 recent examples)

.....
.....
.....

Explore if the voice ever says the following (record examples)

Commands: Does the voice ever tell you to do something

.....
.....

Advice: Does the voice ever give you advice or suggestions

.....
.....

Commentary: Does the voice ever comment on what you are doing or thinking?

.....
.....

Criticism and abuse: Does the voice say unpleasant things about you or someone else?

Self.....Other.....
.....

Hostility: Does the voice ever threaten to harm you or someone else?

Self.....Other.....
.....

IDENTITY

Do you have an idea whose voice you hear?

How sure are you that the voice is (give name)?

What makes you think that the voice is (give name)?

0. Voice identifies itself
1. Inferred from voice (sounds like her', 'it talks about the Bible', only he could know that')
2. Belief is based on guilt, visual hallucinations etc.
3. Other (please specify).....

POWER

Do you think that the voice might be very powerful?

What makes you think this? (e.g. Voice makes me do things, reads my mind...)

.....
.....

Can you control the voice? Yes/No How sure are you of this.....

Can you 'call up' the voice?

Can you stop it talking?

Can you have a conversation with it (e.g. ask questions and get answers)?

YTV-R

A PERSON'S ASSESSMENT OF THEMSELVES IN RELATION TO THEIR PREDOMINANT VOICE

PLEASE READ THIS BEFORE YOU START

The statements listed here are the sorts of feelings and attitudes which people sometimes have about or towards the voices that they hear. Please read each statement carefully and indicate, by ticking the appropriate column, the extent to which you think it applies to you in relation to your predominant voice.

Try to be completely frank and honest about yourself. Avoid answering the way you would like to be or the way you would like others to think of you, rather than the way you really are.

Try as far as possible, to place your ticks in the "Mostly yes" and "Mostly no" columns. The two middle columns are really for if you cannot make up your mind.

Please make sure that you have not missed a page and that you have put a tick against every statement.

YTV-R Questionnaire

| | Mostly yes | Quite often | Some times | Mostly no |
|---|---------------|----------------|---------------|--------------|
| 1. I prefer to keep my voice at a safe distance | | | | |
| 2. I have a tendency to look up to my voice | | | | |
| 3. I feel uneasy when my voice plans things independently of me | | | | |
| 4. I need to have my voice around me a great deal | | | | |
| 5. I try not to show my voice my feelings | | | | |
| 6. My voice's judgement is better than mine | | | | |
| 7. I do not like to get too involved with my voice | | | | |
| 8. I look to my voice for guidance | | | | |
| 9. I am not inclined to spend much time listening to my voice | | | | |
| 10. I prefer my voice to make my decisions for me | | | | |
| 11. When my voice gets too close to me, it makes me feel uneasy | | | | |
| 12. I ask my voice to help me solve my problems | | | | |
| 13. I tend to escape from my voice into a world of my own | | | | |
| 14. My voice helps me make up my mind | | | | |
| 15. I don't like my voice to know what I am thinking | | | | |
| 16. I can be very demanding of my voice's attention | | | | |
| 17. I don't really feel I have much to offer my voice | | | | |
| 18. I let my voice take responsibility for me | | | | |

VTY

A PERSON'S ASSESSMENT OF THEMSELVES IN RELATION TO THEIR PREDOMINANT VOICE

PLEASE READ THIS BEFORE YOU START

The statements listed here are the sorts of feelings and attitudes which people sometimes have about or towards the voices that they hear. Please read each statement carefully and indicate, by ticking the appropriate column, the extent to which you think it applies to you in relation to your predominant voice.

Try to be completely frank and honest about yourself. Avoid answering the way you would like to be or the way you would like others to think of you, rather than the way you really are.

Try as far as possible, to place your ticks in the "Mostly yes" and "Mostly no" columns. The two middle columns are really for if you cannot make up your mind.

Please make sure that you have not missed a page and that you have put a tick against every statement.

VTY Questionnaire

My voice.....

| | | Mostly yes | Quite often | Some times | Mostly no |
|----|---|---------------|----------------|---------------|--------------|
| 1 | Ignores me | | | | |
| 2 | Tends to look up to me | | | | |
| 3 | Keeps me at a distance | | | | |
| 4 | Wants things done his/her way | | | | |
| 5 | Won't leave me alone | | | | |
| 6 | Makes me feel useless | | | | |
| 7 | Does not easily communicate with me | | | | |
| 8 | Needs to have me around a lot | | | | |
| 9 | Makes hurtful remarks to me | | | | |
| 10 | Does not let me get close to him/her | | | | |
| 11 | Tries to make me out to be stupid | | | | |
| 12 | Not very good at solving his/her problems | | | | |
| 13 | Tries to stay too close to me | | | | |
| 14 | Turns to me for guidance | | | | |
| 15 | Does not like to get too involved with me | | | | |
| 16 | Needs to be the one in control | | | | |
| 17 | Tries to accompany me when I go out | | | | |
| 18 | Not very good at making up his/her own mind | | | | |
| 19 | Does not let me know what he/she is thinking | | | | |
| 20 | Constantly reminds me of my failings | | | | |
| 21 | Seems to want me to make all the decisions for him/her | | | | |
| 22 | Dislikes it when I exclude him/her by showing an interest in other people | | | | |
| 23 | Is not good at accepting responsibility for me | | | | |
| 24 | Easily influenced by me | | | | |
| 25 | Tries to put me off the things I like | | | | |
| 26 | Gives me too much responsibility | | | | |
| 27 | Does not seem to trust his/her own judgement | | | | |
| 28 | Seems to live in a world of his/her own | | | | |
| 29 | Does not give me credit for the good things I do | | | | |
| 30 | Tries to get the better of me | | | | |
| 31 | Complains that I don't pay him/her enough attention | | | | |
| 32 | Does not want to spend much time with me | | | | |
| 33 | Makes it difficult for me to do the things I like to do | | | | |
| 34 | Finds it hard to allow me to have time away from him/her | | | | |
| 35 | Feels he/she has not much to offer me | | | | |
| 36 | Does not easily show me his/her feelings | | | | |
| 37 | Does not let me have time to myself | | | | |
| 38 | Whenever he/she wants to talk I have to be ready to talk | | | | |
| 39 | Dislikes spending time on his/her own | | | | |
| 40 | Needs me to tell him/her what to do | | | | |

Appendix 4 Parental Bonding Instrument (PBI; Parker, Tupling & Brown, 1979)

Mother Form

This questionnaire lists various attitudes and behaviours of parents. As you remember your Mother in your first 16 years would you place a tick in the most appropriate section next to each question.

| | Very Like | Moderately Like | Moderately Unlike | Very Unlike |
|---|-----------|-----------------|-------------------|-------------|
| 1. Spoke to me in a warm and friendly voice | | | | |
| 2. Did not help me as much as I needed | | | | |
| 3. Let me do the things I liked doing | | | | |
| 4. Seemed emotionally cold to me | | | | |
| 5. Appeared to understand my problems and worries | | | | |
| 6. Was affectionate to me | | | | |
| 7. Liked me to make my own decisions | | | | |
| 8. Did not want me to grow up | | | | |
| 9. Tried to control everything I did | | | | |
| 10. Invaded my privacy | | | | |
| 11. Enjoyed talking things over with me | | | | |
| 12. Frequently smiled at me | | | | |
| 13. Tended to baby me | | | | |
| 14. Did not seem to understand what I needed or wanted | | | | |
| 15. Let me decide things for myself | | | | |
| 16. Made me feel I wasn't wanted | | | | |
| 17. Could make me feel better when I was upset | | | | |
| 18. Did not talk with me very much | | | | |
| 19. Tried to make me feel dependent on her/him | | | | |
| 20. Felt I could not look after myself unless she/he was around | | | | |
| 21. Gave me as much freedom as I wanted | | | | |
| 22. Let me go out as often as I wanted | | | | |
| 23. Was overprotective of me | | | | |
| 24. Did not praise me | | | | |
| 25. Let me dress in any way I pleased | | | | |

Appendix 4 **Parental Bonding Instrument (PBI; Parker, Tupling & Brown, 1979)**

Father Form

This questionnaire lists various attitudes and behaviours of parents. As you remember your Father in your first 16 years would you place a tick in the most appropriate section next to each question.

| | Very Like | Moderately Like | Moderately Unlike | Very Unlike |
|--|--------------|--------------------|----------------------|----------------|
| 1. Spoke to me in a warm and friendly voice | | | | |
| 2. Did not help me as much as I needed | | | | |
| 3. Let me do the things I liked doing | | | | |
| 4. Seemed emotionally cold to me | | | | |
| 5. Appeared to understand my problems and worries | | | | |
| 6. Was affectionate to me | | | | |
| 7. Liked me to make my own decisions | | | | |
| 8. Did not want me to grow up | | | | |
| 9. Tried to control everything I did | | | | |
| 10. Invaded my privacy | | | | |
| 11. Enjoyed talking things over with me | | | | |
| 12. Frequently smiled at me | | | | |
| 13. Tended to baby me | | | | |
| 14. Did not seem to understand what I needed or wanted | | | | |
| 15. Let me decide things for myself | | | | |
| 16. Made me feel I wasn't wanted | | | | |
| 17. Could make me feel better when I was upset | | | | |
| 18. Did not talk with me very much | | | | |
| 19. Tried to make me feel dependent on her/him | | | | |
| 20. Felt I could not look after myself unless she/he was around | | | | |
| 21. Gave me as much freedom as I wanted | | | | |
| 22. Let me go out as often as I wanted | | | | |
| 23. Was overprotective of me | | | | |
| 24. Did not praise me | | | | |
| 25. Let me dress in any way I pleased | | | | |

NHS Trust Headed Paper

Date:

Dear

A research study is being carried out at (*name of unit*). The study has been designed to investigate the relationship between voice hearers and their voice/s with particular reference to past experiences. Participants are being asked to complete questionnaires and answer questions about their voice/s and how they relate to them. Questions will also be asked about how their parents related to them while they were growing up.

The study is being supported by the Department of Applied Psychology – Clinical Section at the University of Leicester and results will be written up as part of my Doctoral Degree in Clinical Psychology. The study has been reviewed and approved by the (*local*) Research Ethics Committee.

Patient interviews will commence in March 2003 for 6 months. Participants will be asked to complete brief questionnaires that should take about 1 hour to complete.

Criteria for inclusion are individuals aged 18-64 who hear voices and have done so for at least 6 months. Participants will have a diagnosis of functional psychosis, which includes schizophrenia and affective psychosis. Individuals who are suffering from psychosis due to dementia, brief drug-induced psychosis or alcohol related psychosis will **not** be included in the study.

I enclose a copy of the Letter of Invitation and Patient Information Leaflet. If you work with any clients who you feel may be interested in taking part and/or wish to gain more information about the study please let me know. I am also able to provide further copies of the information sheets if required.

Yours sincerely,

Helen Johnson
Trainee Clinical Psychologist

NHS Trust Headed Paper

**EARLY ATTACHMENT EXPERIENCE AND INTERPERSONAL
RELATIONSHIPS BETWEEN THE VOICES THAT PEOPLE
HEAR AND THE VOICE-HEARER**

LETTER OF INVITATION/INTRODUCTION

Date:

To:

Dear patient

A research study is being carried out by Helen Johnson, Trainee Clinical Psychologist at the University of Leicester.

The study has been designed to examine the relationship between voice-hearers and their voice/s with particular reference to past experiences. Patients are being asked to complete questionnaires and answer questions about their voice/s and how they relate to them. We are also asking questions about upbringing.

As you are currently being treated at this unit, your responses would be very valuable. It is hoped that the results of the study will help understand more about the experiences of voice-hearers and how they relate to their voice/s.

A researcher will return shortly to discuss whether you would like to take part in the study, which should take about 1 hour to complete. If you decide to take part in the study you will be asked for written consent at this time.

Thank you for taking time to read this letter and the Information Leaflet enclosed.

Yours sincerely,

Clinician/keyworker

NHS Trust Headed Paper

LETTER OF INVITATION/INTRODUCTION

Study title

**EARLY ATTACHMENT EXPERIENCE AND
INTERPERSONAL RELATIONSHIPS BETWEEN THE VOICES
THAT PEOPLE HEAR AND THE VOICE-HEARER**

Date:

To:

Dear patient

A research study is being carried out at (*name of unit*) by Helen Johnson, Trainee Clinical Psychologist at the University of Leicester.

The study has been designed to look at the relationship between voice-hearers and their voice/s with particular reference to past experiences. Patients are being asked to complete questionnaires and answer questions about their voice/s and how they relate to them. They are also asking questions about how your parents related to you when you were growing up.

As you are currently being treated at this unit, your responses would be very valuable. It is hoped that the results of the study will help understand more about the experiences of voice-hearers and how they relate to their voice/s.

A researcher will return shortly to discuss whether you would like to take part in the study, which should take about 1 hour to complete. If you decide to take part in the study you will be asked for written consent at this time.

Thank you for taking time to read this letter and the Information Leaflet enclosed.

Yours sincerely,

Helen Johnson
Trainee Clinical Psychologist

NHS Trust Headed Paper

**EARLY ATTACHMENT EXPERIENCE AND INTERPERSONAL
RELATIONSHIPS BETWEEN THE VOICES THAT PEOPLE
HEAR AND THE VOICE-HEARER**

PATIENT INFORMATION LEAFLET

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

What is the purpose of the study?

The aim of the study is to look at the relationship between you and your voice/s and to see if this is influenced by past experiences. We hope to gain a better understanding of this area in order to inform treatment approaches.

This study will run from March 2003 to July 2003.

What will be involved if I take part in this study?

You will be asked to meet with me for about 1 hour at a time and place that is most convenient for you. You will be asked to complete a short interview and 4 brief questionnaires relating to your voice/s and the relationship you had with your parents as a child. Once this is completed you will not be asked to do anything else.

There are no anticipated disadvantages or risks to taking part in the study. However, if you wished to withdraw from the study at any time you may do so immediately.

It is hoped that the study will contribute a greater understanding of the voices that people hear and improve future treatment approaches.

Will information obtained in the study be confidential?

All information that is collected about you during the course of research will be kept strictly confidential and used for research purposes only. Your name will not be identifiable from any documents relating to the study.

A letter will be sent to your GP informing them that you will be taking part in the study.

What happens if I do not wish to participate in the study or wish to withdraw from the study?

If you do not wish to participate in the study or if you wish to withdraw from the study you may do so without justifying your decision and your future treatment will not be affected.

Contact for further information

If you require further information about the study you may contact me at the following address and telephone number:

Helen Johnson
Trainee Clinical Psychologist

(Name and address of Unit)

Telephone No: *(number)*

If you decide to take part in the study you will be given a copy of the information leaflet and asked to sign a consent form to keep.

Thank you for your time.

Helen Johnson
Trainee Clinical Psychologist
Supervised by
(Name of Supervisor)
Chartered Clinical Psychologist *(Name of Unit)*

Principal Researcher: Helen Johnson

PATIENT INFORMATION SHEET

Study title

**EARLY ATTACHMENT EXPERIENCE AND INTERPERSONAL
RELATIONSHIPS BETWEEN THE VOICES THAT PEOPLE
HEAR AND THE VOICE-HEARER**

Invitation paragraph

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

What is the purpose of the study?

The aim of the study is to look at the relationship between you and your voice/s and to see if this is influenced by your past experiences. We hope to gain a better understanding of this area in order to inform future treatment approaches.

The study will run until July 2003.

Why have I been chosen?

I am interested in talking to you because you have heard voices for at least 6 months.

In total 30 people will take part in the study.

Do I have to take part?

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

What will happen to me if I take part?

You will be asked to meet with me for about 1 hour, at a time and place that is most convenient for you. You will be asked to complete a short interview and 4

questionnaires relating to your voice/s and the relationship you had with your parents as a child. Once this is completed you will not be asked to do anything else.

What are the possible disadvantages and risks of taking part?

There are no anticipated disadvantages or risks to taking part in the study. However, if you wished to withdraw from the study at any time you may do so immediately.

It is hoped that the study will contribute a greater understanding of the voices that people hear and improve future treatment approaches.

Will my taking part in this study be kept confidential?

All information that is collected about you during the course of research will be kept strictly confidential. Any information about you that leaves the hospital will have your name and address removed so that you cannot be recognised from it.

What will happen to the results of the research study?

The results of the study will be written up and submitted to my course in Clinical psychology at the University of Leicester. It is hoped that the results will then be published in a psychology journal. No participant will be identified in any part of the write-up.

Who is organising and funding the research?

The study is being supported by the Department of Applied Psychology – Clinical Section at the University of Leicester.

Contact for further information

If you require further information about the study you may contact me at the following address and telephone number:

Helen Johnson
Trainee Clinical Psychologist

(Name and Address of Unit)

Telephone No: *(number)*

If you decide to take part in the study you will be given a copy of the information sheet and asked to sign a consent form to keep.

Thank you for your time

NHS Trust Headed Paper

**EARLY ATTACHMENT EXPERIENCE AND INTERPERSONAL
RELATIONSHIPS BETWEEN THE VOICES THAT PEOPLE
HEAR AND THE VOICE-HEARER**

PATIENT CONSENT FORM

Principal Investigator: Helen Johnson

This form should be read in conjunction with the Patient Information Leaflet

I agree to take part in the above study as described in the Patient Information Leaflet.

I understand that I may withdraw from the study at any time without justifying my decision and without affecting my normal care and medical management.

I have read the Patient Information Leaflet on the above study and have had the opportunity to discuss details with Helen Johnson and ask any questions. The nature and the purpose of the interview and questionnaires to be undertaken have been explained to me and I understand what will be required if I take part in the study.

Name of patient.....(print)
Name of patient.....(signature)
Date.....

I confirm I have explained the nature of the study, as detailed in the Patient Information Leaflet, in terms in which my judgment are suited to the understanding of the patient.

Name of investigator.....(print)
Name of investigator.....(signature)
Date.....

PATIENT CONSENT FORM

**EARLY ATTACHMENT EXPERIENCE AND INTERPERSONAL
RELATIONSHIPS BETWEEN THE VOICES THAT PEOPLE
HEAR AND THE VOICE-HEARER**

Investigator: Helen Johnson, Trainee Clinical Psychologist

The patient should complete the whole of this sheet himself/herself.

Please cross out as necessary

- | | |
|---|--------|
| • Have you read & understood the patient information sheet | YES/NO |
| • Have you had opportunity to ask questions & discuss the study | YES/NO |
| • Have all the questions been answered satisfactorily | YES/NO |
| • Have you received enough information about the study | YES/NO |

- | | |
|--------------------------|-----------|
| • Who have you spoken to | Dr/Mrs/Ms |
| | |

- Do you **understand** that you are free to withdraw from the study

- | | |
|--|--------|
| • at any time | YES/NO |
| • without having to give a reason | YES/NO |
| • without affecting your future medical care | YES/NO |
| • Do you agree to take part in the study | YES/NO |

Signature (Patient)

Date

Name (In block capitals)

I have explained the study to the above patient and he/she has indicated his/her willingness to take part.

Signature (Investigator)

Date

Name (In block capitals)

NHS Trust Headed Paper

Date:

Re:

Dear Dr

The above named patient has agreed to participate in a study concerning investigating links between early attachment experience and the relationship that voice-hearers have with their voice/s. Participants will be interviewed individually and asked to answer standard questionnaires about their early experiences and their relationship with their voice/s.

The study is being supported by the Department of Applied Psychology – Clinical Section at the University of Leicester and results will be written up as part of my doctoral degree in Clinical Psychology. The study has been reviewed and approved by the (*local*) Health Authority Research Ethics Committee.

Patient interviews will commence until July 2003. Participants will be asked to complete brief questionnaires about the experience of relating to their voices.

If you wish to gain further information about the study please do not hesitate to contact me.

Yours sincerely,

Helen Johnson
Trainee Clinical Psychologist

Appendix 9

GP Letter: NHS Trust B

NHS Trust Headed Paper

Date:

Re:

Dear Dr

The above named patient has agreed to participate in a study concerning investigating links between early attachment experience and the relationship that voice-hearers have with their voice/s. The study is being supported by the Department of Applied Psychology – Clinical Section at the University of Leicester and results will be written up as part of my doctoral degree in Clinical Psychology. The study has been reviewed and approved by the (*local*) Research Ethics Committee.

Patient interviews will commence until July 2003. Participants will be asked to complete brief questionnaires about the experience of relating to their voices.

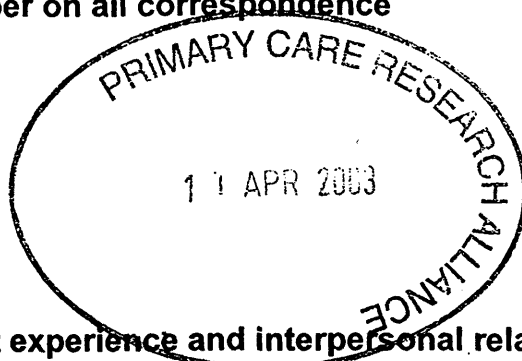
If you wish to gain further information about the study please do not hesitate to contact me.

Yours sincerely,

Helen Johnson
Trainee Clinical Psychologist

03 April 2003

6834 Please quote this number on all correspondence



Dear Ms Johnson

Re: Study of early attachment experience and interpersonal relationships between the voices that people hear and the voice hearer, ethics ref: 6834.

The Chair of the Local Research Committee One has considered the amendments submitted in response to the Committee's earlier review of your application on 7 February 2003 as set out in our letter dated 10 March 2003. The documents considered were as follows:

Patient information leaflet version 3
Letter of invitation/introduction version 3
PBI forms and revised copy of the YTV-R

The Chair, acting under delegated authority, is satisfied that these accord with the decision of the Committee and has agreed that there is no objection on ethical grounds to the proposed study. I am, therefore, happy to give you the favourable opinion of the committee on the understanding that you will follow the conditions set out below:

Conditions

- You do not recruit any research subjects within a research site unless favourable opinion has been obtained from the relevant REC.
- You do not undertake this research in an NHS organisation until the relevant NHS management approval has been gained as set out in *the Framework for Research Governance in Health and Social Care*.
- You do not deviate from, or make changes to, the protocol without prior written approval of the REC, except where this is necessary to eliminate immediate hazards to research participants or when the change involves only logistical or administrative aspects of the research. In such cases the REC should be informed within seven days of the implementation of the change.
- You complete and return the standard progress report to the REC one year from the date on this letter and thereafter on an annual basis. This form should also be

used to notify the REC when your research is completed and in this case should be sent to this REC within three months of completion.

- If you decided to terminate this research prematurely you send a report to this REC within 15 days, indicating the reason for the early termination.
- You advise the REC of any unusual or unexpected results that raise questions about the safety of the research.
- The project must be started within three years of the date on which REC approval is given.
- You should be able to assure the Ethics Committee that satisfactory arrangements have been made for the labelling, safe storage and dispensation of drugs and pharmaceutical staff are always willing to provide advice on this.

Your application has been given a unique reference number. Please use it on all correspondence with the REC.

Yours sincerely

Chairman

Local Research Ethics Committee One

11th March 2003

Miss H C Johnson
Clinical Psychologist in Training

Dear Miss Johnson

Re: **A study of early attachment experience and interpersonal relationships between the voices that people hear and the voice-hearer**

The Chair of the Research Ethics Committee 1 has considered the amendments submitted in response to the Committee's earlier review of your application on 19th August 2002 as set out in our letter dated 22nd August 2002. The documents considered were as follows:

- Application Form
- Protocol
- Patient Information Sheet
- Letter of Invitation/Introduction
- GP letter
- Questionnaire

The chair, acting under delegated authority, is satisfied that these accord with the decision of the Committee and has agreed that there is no objection on ethical grounds to the proposed study. On behalf of the Committee, I am therefore happy to give full approval for your study on the understanding that you will follow the conditions as set out below:

You must not start the project until you have received written approval from the R&D department of all the institutions involved in your study. Your original application will have submitted application to the R&D office and parallel review will have occurred, and notification should be imminent. If your study is to take place in any of the following units then you do not need further ethical approval but you do need R&D approval.

- Medical Centre
- City Hospital
- Primary Care Trust
- Mental Health Care Trust

If your study is to take place in units outside of but still within the boundaries of the Strategic Health Authority, then you do not need further ethical approval but you will need your study approved by the local R&D unit and an assessment of 'locality issues.' These 'locality issues' are usually addressed and reviewed by the local ethical committee and you should clarify this point with the administrator of your local REC

You do not deviate from, or make changes to, the protocol without prior written approval of the REC, except where this is necessary to eliminate immediate hazards to research participants or when change involves only logistical or administrative aspects of the research. In such cases the REC should be informed within seven days of the implementation of the change.

You complete and return the standard progress report form to the REC one-year from the date on this letter and thereafter on an annual basis. This form should also be used to notify the REC when your research is completed and in this case should be sent to this REC within three months of completion.

If you decide to terminate this research prematurely you send a report to this REC within 15 days, indicating the reason for the early termination.

You advise the REC of any unusual or unsuspected results that raise questions about the safety of the research.

The project must be started within three years of the date on which REC approval is given.

Yours sincerely

Chair/Administrator