Do Negative Schema and Beliefs about Voice Omnipotence and Malevolence Mediate the Relationship Between Attâchment Style and Distress from Hearing Voices?

By

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Dedicated to my husband, Ayo Cole, with whom great things are possible; and my loving parents, Elizabeth Clarke and Christopher Cobourne, who always believed in me.
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INTRODUCTION TO THE PORTFOLIO

The Psych.D. Clinical Psychology portfolios are divided into three sections: the academic, clinical and research dossiers. It documents the range and depth of work, suitable for public viewing, which has been conducted during the three years of training on the doctoral course. The portfolio therefore gives the reader a sense of the experiences and development of the author as a Clinical Psychologist, within multiple contexts: clinically on placement, in trainee clinical psychologist groups and as a researcher. Material which is of a confidential or personal nature is not presented here but stored electronically at the University of Surrey and destroyed after three years.

The academic dossier consists of three assignments: a literature review in an area of adult mental health, an essay on professional issues and two reflective pieces on group developmental learning tasks. The clinical dossier provides an overview of the supervised clinical placements undertaken throughout training. It also shows anonymised summaries of five clinical case reports, which highlight the varied approaches to assessment and intervention over the course of training.

The main body of the research dossier consists of a service-related audit completed in an adult mental health setting and the major research project or thesis. This section also contains a log of research activity and an abstract of an original qualitative research project completed during a group assignment.
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ACADEMIC DOSSIER

This section opens with a literature review on a subject pertinent to diversity and adult mental health: the role of gender and social factors in the increased risk of psychosis in people who emigrate from one country to another. I then present an organisational and professional issues essay reflecting on the roles and functions of Clinical Psychologists in the Increasing Access to Psychological Therapies (IAPT) initiative; and the potential benefits and challenges of this initiative to the professional as a whole.

Two Problem-Based Learning (PBL) accounts are then presented, which document the approach of our trainee Personal and Professional Learning and Discussion Group (PPLDG) to a specific task. The first PBL task was based on the theme of “Relationship to Change.” The second describes our group process and learning around complex systemic issues in a case study. The presenting problems in the case are around the subject of learning disabilities, parental capacity, safeguarding and childhood attachment.

This section closes with two summaries which reflect on my personal and professional learning in our PPLDG. Some themes include the roles and positions I adopted in the group, my contribution to the learning of the group and its contribution to my learning. Group dynamics and the search for group purpose are topics which are also explored.
ASSIGNMENT: Literature Review

TITLE: Are there Gender Differences in the Social Factors Implicated in the Increased Risk of Psychosis in Migrants?

Year 1

DATE: January 2010
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1. ABSTRACT

INTRODUCTION: Compelling worldwide research shows a threefold risk of psychosis in people who migrate (Cantor-Graae & Selten, 2005) without increased psychosis in their homeland (Jablensky et al., 1992). The even greater risk of psychosis in the second-generation indicates that social factors inherent in being a minority contribute. Despite the evidence that gender is a determinant of the course and outcome of psychosis, no review has focused on the interaction between gender and social risk factors. METHOD: Papers from PsycINFO were searched first relating to migrants with psychosis and then to gender. RESULTS: Overall, the increased incidence of psychosis in males worldwide is also evident in migrants. However, in certain groups, women have a greater risk than men (Schrier et al., 2001) with no clear explanations for these findings. Few studies analyze gender separately or examine the interaction between gender and social risk factors in psychosis: discrimination, neighbourhood ethnic density, socioeconomic status and anti-social behaviour all appeared to have a larger impact on men. DISCUSSION: The social risk factors and their differential impact on men and women are discussed. This literature is then linked with the cognitive models of psychosis and implications for clinical effectiveness, training and further research are suggested.

2. DECLARATION OF POSITION

I am a Trainee Clinical Psychologist from a black minority ethnic (BME) group. My parents’ families came to Britain in the 1950s. As someone who has been exposed to the challenges of discrimination and integrating two cultural identities, I have always had an interest in the effects of migration and social identity on mental health. I have male relatives who have been diagnosed with schizophrenia, the explanation for which has been largely medical. However, through
my own experiences and understanding their histories, I intuit that social factors in the context of being in another country have impacted strongly on their diagnoses.

If social factors contribute to psychosis, then there is likely to be an interaction with gender on how, and to what extent, they affect migrants and the second-generation. Therefore, the specific focus on gender in this review is because the literature largely neglects gender differences, (Cantor-Graae, 2007) and refrains from deconstructing the experience of psychosis using a 'gender lens' (Gregory & Leslie, 1996). A deeper understanding of the social impact of gender and migration could reveal how these factors mediate the expression of psychotic experiences. This could also contribute to developments in psychological formulation, clinical effectiveness and the commissioning and delivery of culturally-sensitive services.

3. METHOD

3.1. Search Strategy

To obtain relevant literature, two discrete searches were conducted using PsycINFO from the year 1806. The aim of the first search was to find any paper including the search terms 'migrants' or 'immigrants' and 'schizophrenia' or 'psychosis'. 'Migrants', 'immigrants' and 'schizophrenia' were truncated with an asterisk so that words with the stems 'migr-', 'immigr-' and 'schiz-' could also be identified.

Search phase two was targeted at papers including the first search terms and additional search terms relating to gender: 'women', 'men', 'gender', 'male', 'female' and 'sex'. I also checked that there were not any existing reviews on PsycINFO relating to gender differences in
migrants with psychosis, so final searches were done with all search terms and the word 'review', but none were identified.

3.2. Inclusion Criteria
Papers were excluded if they were related to mental health conditions prior to migration, the native population, substance-induced psychosis or old age psychiatry. Case studies were also excluded due to insufficient evidence quality and security. Subjects in the studies did not have to meet diagnostic criteria for a particular psychotic disorder, but must have been experiencing psychotic symptoms. Seminal papers, which did not make any explicit gender comparisons in the analysis, were used for key contextual information and discussion.

4. INTRODUCTION

4.1. 'Data Versus Dogma'
Schizophrenia and psychotic disorders are a major international health concern due to the cost to individuals and society at large (Department of Health, 2001). Psychotic disorders are usually chronic and relapsing characterized by 'positive' symptoms such as hallucinations and delusions, and 'negative' symptoms such as a lack of willed action and blunted affect. These symptoms greatly impact on all areas of functioning and fewer than 60% of cases ever achieve full symptom remission over five year follow-up (Shepherd et al., 1989). The World Health Organisation (WHO, 2009) stated that there are no marked gender differences in the rates of schizophrenia and that it affects less than 2% of the population. McGrath (2006) coined the term 'data versus dogma' (p.195) to express the idea that prevailing beliefs about the incidence of schizophrenia do not reflect the true data which show male gender, migration, and developed nation (among other factors) all affect the risk of schizophrenia. In this review it seems important to expel myths relating to the
incidence of psychosis and become 'slaves to the data' as McGrath (2006; p.197) urges us to. However, this can be challenging if the process of diagnosis, in even the general population, is flawed.

4.2. Role of Misdiagnosis

Misdiagnosis is an area of much controversy in BME populations. Research shows Jamaican and British psychiatrists differ profoundly in the diagnoses of Jamaican patients with suspected schizophrenia (Hickling et al., 1999). Charalabaki et al., (1995) also showed that immigrants' diagnoses were more likely to change than the native Belgian population. Despite this, data showing the second-generation have a higher proportion of schizophrenia (Selten et al., 2001) lead authors to conclude that there should not be more misdiagnosis in the second-generation – they usually speak the language and are more assimilated into the host culture. Interestingly, there is some evidence that migrant status but not sex of migrant affects diagnostic agreement (Haasen et al., 2000). It has therefore been a conscious decision to include all papers looking at psychotic symptoms and not to restrict my search by diagnosis, due to potential uncertainty and the evidence that psychotic disorders do not have discrete nosological boundaries (Dutta et al. 2007)

4.3. Gender Differences

There is a comprehensive WHO report on gender differences in schizophrenia (Piccinelli & Gomez Homen, 1997). The report shows that females have a better clinical outcome than males within five years after hospital discharge, which has been related to their better quality of life (Salokangas et al., 2001). Although these differences tend to disappear in the long-term, females also tend to receive less inpatient care than males. In the Black community with schizophrenia in Britain, men have higher hospital admission rates than women (Cochrane & Bal, 1989) indicating greater compulsory admissions for Black men (Davies, 1996).
Most studies also show a better social adjustment for females with schizophrenia, supported by the fact that women have better pre-morbid functioning than males. These findings can be explained by a later mean age of illness onset in women (Heila et al., 1997), which may permit fewer disturbances in adolescence, a better educational outcome and make women more likely to marry (Shepherd et al., 1989). Cochrane and Bal (1987) showed that migrant men in Britain have a higher risk of psychosis in the 25-44 age bracket compared to women where it is around 30-65 years-old. This may be because males are more vulnerable to social defeat and social pressures. This notion will be explored in a later section.

4.4. Social Defeat

The model of social defeat is based on the ‘intruder rat’ paradigm in male rats, although it has been replicated in females (Haney et al., 1995) but not with opposite sex pairs, (which would have been useful for the present review). Researchers discovered an increase in mesolimbic dopamine in the brain, which is associated with depressive and psychotic symptoms (Tidey & Miczek, 1996). The male rats also had higher levels of dopamine depending on how long they were isolated from other rats (Isovich et al., 2001). Interestingly, dopamine binding was not affected in attacked rats that were returned to a familiar environment with other rats (Isovich et al., 2001). This is reminiscent of the ‘ethnic density effect’ which will be explored in more detail in section 5 and suggests why women, who are more likely to have social support than men, are at lower risk of psychosis.

This paradigm has also shown that social memory can be affected for at least eight weeks after the social defeat experience (Reijmers et al., 2001) due to traumatic one-trial learning. This suggests retrieval of social memories may be affected by this experience,
possibly affecting the accessibility, perception and encoding of future social experiences. This could be a cognitive mechanism in the maintenance of persecutory delusions in people who have experienced social stress.

4.5. Objective

A range of studies converge on multiple social factors associated with an increased risk of psychosis in BME groups. The social risk factors which have the most evidence are discrimination, neighbourhood ethnic density, socioeconomic status and anti-social behaviour. It is these factors I will review in section 5 to explore how gender may interact with these to give rise to differential rates of psychosis in migrants.

5. RESULTS: SOCIAL RISK FACTORS

5.1 Discrimination

5.1.1. Background

Discrimination and institutional racism have been proposed as major precipitating factors for mental health problems in BME communities (Sashidharan, 2003). Studies suggest that BME men report more discrimination than women (De Maynard, 2009; Veling, Hoek, & Mackenbach, 2008) which would help explain why BME males are more at risk of psychosis. There are a few exceptions to this rule, with some evidence that Asian women in Britain (Carpenter & Brockington, 1980; Coid et al., 2008) and women in the Netherlands from Surinam, the Netherlands-Antilles and Cape Verde (Schrier et al., 2001) have a greater risk of psychosis than their men.
Discrimination is, however, a multi-faceted construct, which could be confounded by and interact with many other contextual factors. The literature to date has failed to develop adequate measures to investigate this complex construct – few have been developed from direct contact with BME or migrant groups (Bhugra et al., 2001) and none with BME individuals with psychosis.

5.1.2. Discrimination and Self-Concept

There is a growing body of evidence that dissociation, or the strategy of suppressing traumatic memories, is related to psychosis (Moskowitz, 2008). De Maynard (2009) showed that for Black males in Britain more factors predict dissociation than for Black women: these were young age, low academic achievement, mental representations of racial stereotypes and racialized body image disturbance. Instead, for Black women, only low self-esteem and mental representations of racial stereotypes predicted dissociation. This suggests that for males, dissociation may be predicted by more factors relating to their social status, which could increase their cognitive vulnerability to dissociate from negative experiences of discrimination. The impact of racial stereotypes on cognitive strategies men use to protect their self-concept, such as dissociating, may in part explain why their risk of developing psychosis is higher. However, a weakness of De Maynard's (2009) study is that the models account for less than 25% of the variance in dissociation. Also, although the research is also on healthy volunteers, it would have been helpful to include measures of psychosis.

5.1.3. Skin Colour

Cantor-Graae et al., (2005) found that darker skin colour was associated with more schizophrenia in immigrants in Sweden, which could suggest discrimination mediates the onset of psychosis as other research suggests (Williams, 1999). However, the authors categorize skin colour into three groups, which may make the
variable less sensitive to differences. Skin colour may also be confounded by factors such as whether the migrant is from a developed or developing nation.

Black men in De Maynard’s (2009) study reported lower incomes than women, which was also associated with darker skin colour. However, interestingly the data did not indicate any significant differences between male and females in relation to ethnicity, academic achievement and annual income; yet Black males reported significantly lower incomes, achievement and darker skin tones. This may therefore suggests that the Black male concept is disturbed by a negative internalized self-concept engendered by racial stereotypes and experiences of discrimination.

5.1.4. Social Stressors

Although it is methodologically and ethically challenging to demonstrate that discrimination plays a causal role in the development of mental health problems, Hickling’s (1991) research utilizes an ecological design to test this hypothesis. Hickling (1991) compared the psychopathology of Jamaicans who migrated to those who remained in Jamaica, (where there were no differences in familial history of mental illness). Of the 68 men and 58 women who migrated, Hickling (1991) found that 90% were diagnosed with schizophrenia and 94% were hospitalized as a result, with no sex differences in the incidence of schizophrenia.

Hickling (1991) identified several social stressors within the host country related to discrimination which precipitated psychotic symptoms in his sample. One of the stressors was a decrease in social class where people could only find work in lower status roles. These experiences were explained to lead to paranoid beliefs about White people such as they ‘practice witchcraft’ (p.83).
Hickling (1991) also identified problems for adolescents who migrate in terms of racial discrimination at school. He explained that this experience was related to a rapid deterioration in learning and increasingly rebellious, criminal and aggressive behaviour, which leads the host community to believe, what was an intelligent child in Jamaica, is ‘educationally sub-normal’ (p.85). The awareness of dominant negative racial stereotypes is associated with poor mental health and academic underachievement, independent of personal experiences of racism or violence (Steele, 1997) so discrimination is likely to compound this effect on psychosis.

Hickling’s (1991) study is helpful for elucidating a role for discrimination in psychosis or at least confirms that living abroad relates to stressors, which are risk factors for psychosis in themselves. It is, however, difficult to infer causality from cross-sectional data and so the study is less robust than if it was based on longitudinal data, where clients were followed-up at regular intervals over time, taking both qualitative and diagnostic information. The high percentage of migrants with psychosis and lack of sex differences does not marry with data from Harrison et al. (1997), which shows Caribbean females in Britain have a lower risk of psychosis than Caribbean men. In addition, since Hickling’s design was unlikely to capture cases who migrated and returned but who did not develop psychopathology. This research would be helpful for discovering protective factors in migration and what constitutes healthy adaptation to life abroad.

5.1.5. Differential Levels of Discrimination across Migrant Groups

In contrast to Hickling’s (1991) local study looking at private cases, in the Netherlands, large-scale population-based studies have been carried out. Using statistics from an anti-discrimination bureau, population data and information on first episode psychosis, Veling et
al., (2007) showed that the incidence of psychosis was higher when people experienced more discrimination. The types of discrimination reported were based on ethnicity, skin colour, race and religion. Moroccans, who experienced the greatest discrimination, had six times the increased incidence of psychosis than the native Dutch. However, 'Westernized' migrants who reported less than a quarter of the discrimination than Moroccans did, had similar rates of psychosis to the Dutch.

In terms of gender, a weakness in Veiling et al.'s (2007) research is that they do not analyse levels of discrimination separately by gender. There were 311 men and 113 women who had a diagnosis of a first episode of psychosis within a seven-year period, which suggests that the number of women was significantly lower than men overall. Veling et al.'s (2007) study does not allow us to determine whether Moroccan or other minority females experience as much discrimination, which is important in the light of other research indicating that Moroccan females do not have an elevated risk of psychosis (Schrier et al., 2001; Vanheusden et al., 2008). Another weakness is that they are comparing three different groups of cross-sectional data when individuals within each sample are different to one another. This means that the discrimination and first episode samples could be mutually exclusive, which would not suggest a causal role for discrimination in psychosis but a mere spurious association.

Veling, Hoek, & Mackenbach (2008) investigated whether perceived discrimination within one year prior to illness onset was a risk factor for schizophrenia. Again, around three-quarters of the sample were male suggesting a lower incidence of psychosis in women. Even though a greater proportion of cases perceived more discrimination than their siblings or non-psychiatric controls, this difference was just as likely to have occurred by chance. It may be that the lack of difference arose because the researchers only looked at the year
prior to illness onset. However, a more thorough index of social adversity, one year prior to a population survey, did find an association with hallucinations in a non-clinical population of migrants (Vanheusden et al., 2008). This suggests that the five-item scale used to measure discrimination was too broad and one-dimensional to tap differences. It would also have been helpful to have a series of questions looking at sexual or gender-dependent discrimination to see if men and women are affected by different types.

5.2. Neighbourhood Ethnic Density

Studies show that the greater the ethnic density of the neighbourhood the lower the incidence of psychosis (Kirkbride et al., 2007; Veling, Hoek & Mackenbach, 2008). There is therefore evidence that ethnic density is a buffer against discrimination given that they negatively correlate. However, studies looking at the role of ethnic density in the incidence of psychosis in BME communities (Halpern & Nazroo, 2000) as it relates to social capital (Kirkbride et al., 2008) and suicide (Neeleman & Wessely, 1999) have failed to analyze results separately by gender although their samples have often predominantly been male. It is therefore difficult to partial out any gender differences as they have been adjusted for in the analyses. It would be parsimonious to say that there is a dose-response relationship between the ethnic density of the neighbourhood and psychosis, which is independent of gender, although we cannot tell if and to what degree males or females would be more affected by psychosis depending on ethnic density.

Veling, Hoek, & Mackenbach (2008) also found that ethnic identity was correlated with social support, cultural distance from the native Dutch, mastery and self-esteem. This could be related to the presence of more social cohesion which comes with greater neighbourhood ethnic density (Allardyce et al., 2005). Social cohesion may explain why Turkish people and Moroccan women
have normal rates of psychosis compared to Moroccan men in the Netherlands. For example, close-knit communities, and women in general who may stay at home to raise their families, may experience more social support and therefore have stronger sense of identity and experience less discrimination, which all appear protective against psychosis.

In Allardyce et al., (2005), neighborhoods characterised by high social fragmentation had higher first episode admission rates for psychosis, which were independent of neighbourhood deprivation. Given that males with psychosis are less likely to be married, this may be another social risk factor meaning that the 'stress of acculturation' could be greater among men, while in women (and other ethnic groups) this is 'less likely because of social stability [and]...social support' (Selten et al., 1997; p.312).

Interestingly, studies have found an increase in the incidence of psychosis in Asian women in Britain (Carpenter & Brockington, 1980; Coid et al 2008). However, family structure and social support may be protective to only to an extent, as Kirkbride et al., (2008) found that the relationship between psychosis and social capital was U-shaped, such that that incidence rates were affected by either too much or too little social capital. Alternatively, Coid et al., (2008) suggest that the 'pressures of sex segregation and female socialization' (p.1257) and 'marginal status' (p.1256) could be responsible for the increase in psychosis seen in Asian women. Unfortunately, insufficient research looking at gender has specifically been conducted in this area. If social capital and social cohesion are preventative in psychosis, they need to be an important focus for future research, with added emphasis on disentangling gender differences in the optimal balance and conditions of this.
5.3. Socio-economic Status (SES)

The relatively normal incidence of psychosis in Westernized migrants is further evidence to support the protective role of the economic status of one’s country of origin (e.g. developing versus developed nation). Historically, the Turkish people have been powerful with an empire spanning several continents, as the British have. This empire may be protective against psychosis in Turkish people, in the same way as British people do not experience increased risk of psychosis in Australia (Murphy, 1978). Interestingly, however, during an economic recession in the early twentieth century, European and British migrants in Canada also had an increased risk of schizophrenia (Smith et al., 2006). This suggests that in times of economic difficulty, all migrant groups may be more prone to discrimination or vulnerable to social risk factors for psychosis.

As predicted, socioeconomic status may be more likely to impact on male migrants in terms of risk to psychosis. Westman et al., (2006) looked at 4.5 million individuals in Sweden, hospital admissions and country of birth. The impact of demographic and socioeconomic factors on risk of psychosis was larger for men than for women. For migrant men in Sweden, the risk was no longer significant after controlling for income and marital status, while for women most results remained significant. Therefore, low income and being single were associated with an increased risk of psychosis, particularly in men.

Analogously, Westman et al., (2006) showed that men from OECD (Organisation for Economic Co-Operation and Development) countries had a lower risk of schizophrenia than native Swedish men suggesting a stronger economy affects men more than women also. Therefore social adversity contributes to psychosis in men since ‘men [are] still regarded as main breadwinner in the family’ (Westman et al., (2006; p.312).
The research suggests that men with low incomes could experience stronger social stigma than women with low incomes. However, it is difficult to confirm the direction of causality as people with psychosis may be prevented from reaching a high SES and also the adversity associated with low SES could engender social stressors more likely to precipitate psychosis. In terms of prevailing stereotypes, it does seem that men are more affected by their economic status which may be related to the differential processing of self-image in BME men and women (De Maynard, 2009). Women may also be more accepting of receiving welfare or state benefits and feel less obligated to pursue employment than men if they have children to look after.

5.4. Anti-Social Behaviour
Gabrielsen and Kramp (2009) compared Danish and immigrant forensic psychiatric patients. Only eleven of the 111 immigrants were female, suggesting that men are at heightened risk of becoming a forensic psychiatric patient. Schizophrenia was associated with violent but not non-violent crimes, which men are at greater risk of committing. The risk of male immigrants being involved in drug crime was around seventeen times the risk of Danish natives. However, only 14% of immigrants compared to 29% of Danes had a substance misuse problem, suggesting that immigrants were trying to make a living from drug crime but were not necessary taking drugs. They may have felt less able to gain employment in other trades.

Interestingly, there were no Iranian women in the sample, but Iranian men had twelve times the risk of schizophrenia. The authors expressed disbelief, appearing not to understand why: they believed Iranians to be 'the best integrated minority group in Denmark' (Gabrielsen & Kramp 2009; p.145). This may suggest that the process of integrating, assimilating and gaining acceptance with the host country (King & Wright, 2001 as cited in Mallett et al., 2004) is a
risk in psychosis through renouncing ethnic identity, where a strong ethnic identity appears protective against psychosis. Assimilation may also be difficult when confronted with a sense of powerlessness to alter prevailing negative perceptions and men often resort to reacting violently (Combs et al., 2006).

The authors go on to say that Westernized migrants have a low risk of psychosis because they ‘have just moved from one socially and culturally equal Scandinavian country to another’ and individuals are therefore ‘positively’ selected and are therefore not ‘true migrants’ (Gabrielsen & Kramp., 2009; p.144). This language suggests a subtext where ethnic groups are socially excluded or included depending historical relationships between countries, their perceived similarity and equality. In terms of the Iranians, the authors denote that ‘negative selection’ occurs as ‘well-educated, socially well-functioning Iranians leave Denmark because of...hidden racism’ (p.145).

These views in the modern day are interesting with respect to how much they show that the migrant group must assimilate, or be similar to the host country in order to be accepted or face racism. Yet, the authors conclude that they do not believe discrimination or social inequity are risk factors in becoming a male forensic patient and ‘...find it unlikely that social factors play a major role’ (p.145). I hope this review can shed light on why this conclusion is vastly inaccurate. It is crucial for the management and treatment of migrants with psychosis that we acknowledge the paramount importance of social dynamics and gender in the aetiology of psychotic experiences.
6. DISCUSSION

6.1. Summary
The common theme running through the literature identifying social risk factors for psychosis in migrants was that of social defeat. Men appear to experience more social defeat through a larger impact on psychosis of discrimination, neighbourhood ethnic density, SES and anti-social behaviour. This appears to be mediated through social stereotypes of men that they should have power, status and resources. Men have an earlier illness onset and are less likely to be married so may be more affected by separation from family abroad. Men may also have had fewer male role models growing up, in particular in the Caribbean community where the majority is raised by single-parent families (Morgan et al., 2007). This would have an impact on both attachment relationships and socioeconomic status. Social adversity may also contribute to more criminal behaviour in men. There is some evidence that, collectively, these factors may make it harder for men to integrate, assimilate and gain acceptance in the host country.

However, it remains to be explained why women in the Netherlands from Surinam, Cape Verde and the Netherlands-Antilles (Schrier et al., 2001) and Asian women in Britain (Carpenter & Brockington, 1980; Coid et al., 2008) have a greater risk of psychosis than their men. Studies have failed to investigate why there are gender differences in these groups and which social risk factors contribute to their increased incidence. Future research and clinical practice would be enriched by this.

6.2. Limitations
The greatest challenge in producing this review is that the literature on migrants with psychosis has not adequately addressed the gender differences with respect to the incidence of psychosis, and how social risk factors interact. This review has therefore been an attempt
to deconstruct existing work through a ‘gender lens’ and closely examine instances of where gender has been separated out in the analysis and not merely controlled for. Another challenge has been that since this was not a systematic review, important studies may have been missed. Also, given extra time, I would have done a separate search on all descendants of migrants given that they have as great a risk of psychosis as the first-generation.

6.3. Cognitive Psychological Models
So how do experiences of social adversity lead to psychotic experiences, particularly in men? It seems there is a prevailing subtext in society about what others are thinking of ethnic groups (Gabrielsen & Kramp, 2009). Men may have more pressure to achieve in society and face more stigma for underachievement (Mallett et al., 2004), leading to social defeat. This may mean men have more pronounced attributional defenses (Bentall, 1994) or self-serving biases, which lead to greater paranoia or delusions of persecution than women (Carpenter & Brockington, 1980). Men may have a more negative mental representation of themselves in society, which they try to dissociate from in order to protect their self-esteem (see Garety et al. 2001), but feel powerless to do so. This could lead to thoughts that outsiders have an ability to control their destiny, their thoughts and actions by either thought insertion or distressing delusions of reference (Frith, 1992).

Freeman et al., (2002) show how important emotional processing is in the maintenance of positive symptoms of psychosis. Anxiety, stress and trauma give rise to anomalous bodily symptoms and sensations – the misinterpretation of which can result in psychotic appraisals (Morrison, 1998). In the context of social isolation, of which men are at greater risk, anomalous experiences do not get re-appraised or invalidated (White, 2000). Increased access to previous
traumatic memories on exposure to chronic social stressors provides evidence for delusional beliefs and further serves to prime and maintain them (Hemsley, 1993).

The cognitive psychology field in psychosis has evolved largely colour- and gender- blind, which may in part explain equivocal findings on the effectiveness of Cognitive Behavioural Therapy (CBT) for psychosis (Drury, et al., 1996a; 1996b and 2000). There is currently no research examining the impact of ethnicity on the efficacy of CBT for psychosis. This is despite the recurring theme in command hallucinations about ‘power’ struggles with the voices and that tackling the conviction in the voices’ power is therapeutic in itself (Trower et al., 2004). It is interesting how these power struggles reflect the literature on migrants with psychosis in looking at social defeat and subordinate positioning in society.

CBT formulation could be enriched by a deeper acknowledgement of the social risk factors and issues of gender in migrants. We may be failing to provide adequate gender and culturally-sensitive services. For example, Thompson and Jenal’s (1994) research indicates avoiding issues of race can be detrimental to the therapeutic alliance. Charalabaki et al., (1995) explain that we may be doing more harm than good when we assume the ‘myth of sameness’ in our approach to treating BME individuals, because of any guilt we hold and our wish to ‘facilitate their rapid acculturation’ (p.242). In doing this, national health services may further increase the alienation of migrants and dissuade them from seeking help — BME men in particular.
7. REFERENCES


ASSIGNMENT: Organisational and Professional Issues

Essay

TITLE: Discuss some of the Different ways that Clinical Psychologists might Relate to IAPT Services for the Benefit of Service-users. What are the Benefits and Challenges of this Relationship to the Profession of Clinical Psychology?

Year 2

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1. INTRODUCTION

Essay Structure

The Increasing Access to Psychological Therapies (IAPT) initiative is the largest government-led mental health initiative to be rolled out in history. I argue that Clinical Psychology (CP) is paramount to the success of IAPT and that the relationship between IAPT and CP creates a number of benefits for service-users and carers\(^1\). CPs have numerous and diverse roles throughout in IAPT, which include its setting up, execution, maintenance and governance.

This essay explores five broad areas, which relate to client benefits and the challenges to the profession itself: these are evidence-based practice, training, clinical supervision, working with diversity and leadership. It is argued that the emphasis of IAPT on the delivery of psychotherapy alone can cause significant challenges for the identity and future of the CP; but it is emphasised throughout that the additional training, skills and expertise that CPs possess can add value beyond the psychotherapy role in many services.

An integrative approach to making theory-practice links, drawing on systemic, cognitive-behavioural, psychodynamic and other psychological theories will be used throughout to engage with and formulate discussions. I will first give some background to the IAPT initiative. I then declare my relevant experience of working in an IAPT service. I reflect, throughout, on how my clinical experience working in IAPT shapes the essay content and argument.

\(^1\) Throughout my clinical work, both 'service-users' and 'carers' have been my 'clients' - I will therefore refer to both groups as 'clients' and only differentiate them when issues specific to carers are discussed.
The Layard Hypothesis
Layard's (2006) economic analysis of the cost of mental health problems marked a turning point in the history of mental health conceptualisation and treatment, with plans to train 10,000 new therapists by 2012 (Layard, 2004). He stated that common mental health problems, such as anxiety and depression, account for 25% of all disability in the UK but only attracted 2% of National Health Service (NHS) expenditure. This was despite a body of evidence for the effective treatment of anxiety and depression from the National Institute for Health and Clinical Excellence (NICE, 2007a; 2007b). Layard calculated that IAPT services could pay for themselves if people returned to employment, which could offset the cost of incapacity and unemployment benefits and sick pay. This formed an agenda to increase access to NICE psychological therapies targeted at working-age adults in primary care, statutory, voluntary and community services.

"New Ways of Working"
CP is a small profession comprising only 6,000 of 1.3 million NHS staff (less than 0.005%; Llewelyn & Cuthbertson, 2009). In order to meet the mental health needs of the UK population, IAPT services required more non-psychology staff to be trained in lower level, time- and cost-effective interventions. This was part of the NWW initiative (Lavender & Hope, 2007) which stated that applied psychologists would need to have a key role in the many facets of the development of this new workforce, as well using psychological principles to enhance the effectiveness of multi-disciplinary team working (Onyett, 2007).

Declaration of Position
A year before doctoral training, I worked in an NHS IAPT service as a Low Intensity (LI) Trainee in general practice (GP). The NHS paid for
me to do a diploma in LI Cognitive Behavioural Therapy (CBT) interventions. I saw clients often, but not exclusively, with anxiety and depression. I could offer three brief sessions and additional telephone appointments for guided self-help, computerised Cognitive Behavioural Therapy (cCBT) or signposting. We offered the 'least restrictive' interventions first and only 'stepped-up' to a high intensity (HI) worker or 'CBT therapist' if the LI intervention was unsuccessful, or clients had more complex diagnoses, in line with Department of Health (DoH, 2008) guidelines. I will refer to my experiences of evidence-based practice, training, supervision, working with diversity and leadership in the relevant sections to follow, from the perspective of now being almost half-way through doctoral training.

2. EVIDENCE-BASED PRACTICE

2.1 Client Benefits
Implementing Self-Help Interventions
CPs make a substantial contribution to the evidence-base of psychotherapy research (Roth & Fonagy, 2005). As such, CPs benefit clients using IAPT services through knowledge of effective interventions and by designing and implementing a range of evidence-based self-help tools such as cCBT, psychoeducational groups, bibliotherapy and guided self-help. CPs also have a key role in designing protocols for the pathways and delivery of such interventions, as well as monitoring and modifying the interventions based on feedback from staff, clients and outcome data. CPs therefore offer clients a range of self-help treatments which are less stigmatising, more normalising, demystify psychotherapy and put the power for change back in the clients hands. Khan et al., (2007) found that clients benefitted from self-help as they viewed it as assisting them to regain everyday functioning. This is in

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2 This will be discussed further in the ‘Leadership’ section 6.
accordance with research showing that self-efficacy is positively related to psychological well-being (David et al., 2009).

As an LI worker, I have used simple, short-term interventions such as sleep hygiene, problem-solving and psychoeducation, which have had a powerful impact on client quality of life, by helping them return to work or use public transport again. I saw many clients with disabling panic attacks who were able to come off of addictive medication through psychoeducation along with a simple mapping of the panic cycle, which has been shown to prevent relapse in panic patients (Wright et al., in Newman et al., 2003). Newman et al., (2003) also cite a plethora of studies on phobias using guided self-help, where self-administered exposure, desensitization and relaxation were as effective as therapist-driven interventions and maintained for up to three years.

As well as working behaviourally, self-help interventions can help clients cognitively by teaching them skills to challenge irrational thoughts such as "I am having a heart attack"; or learn to identify cognitive biases such as 'black-and-white thinking' (Beck, 1995). In developing these skills, clients are able to prevent relapses in their depression and anxiety, as Beck's (1976) 'cognitive model of depression' explains that mood is largely connected with thinking style and the meanings attributed to situations.

**Formulation and Complex Cases**

Increasingly, CPs will be expected to assess and intervene with clients with more complex presentations using interventions other than psychotherapy. This was central to the NWW message 'to improve the psychological wellbeing of the population through working with individuals, families, teams, organisations and communities' (Lavender & Hope, 2007, p.5). As such, clients in IAPT and other services will benefit from applied psychological knowledge.
and intervention at multiple systemic levels as well as through consultation work and as part of a wider health promotion agenda. CPs are an asset to IAPT services because they are unique to other applied psychologists in possessing Level 3 skills of ‘formulation’ (Manpower Planning Advisory Group, 1990); and will be able to formulate issues using both psychotherapeutic and other psychological models to facilitate understanding and intervention on these multiple systemic levels. In addition, although CPs do not have a formal psychotherapy training, their skills in formulation and experience of working clinically in doctoral placements in many different settings means that they can, if necessary, conduct therapy with clients who do not respond to CBT. In my opinion, clients will also benefit from the specialist assessment role of CPs such as neuropsychology and diagnosis of learning disability, trauma or emotional and behavioural problems in children.

### 2.2 Challenges and Benefits to the Profession

**Psychotherapeutic Research**

A major challenge to the CP profession of evidence-based practice could be the way psychotherapy research is being conducted. It has been thought that the IAPT projects expanded before any substantial evidence (Cromby et al., 2008). Vanheule (2009) presents a compelling argument that difficulties measuring outcomes in psychotherapy research originate from the belief that randomised controlled trials (RCTs), used to measure the effectiveness of medication, can be used to measure the effectiveness of psychotherapy. As such, despite the many logical flaws of this paradigm (e.g. difficulties ‘blinding’ clients to therapy or providing a short-term ‘cure’), it is still considered the gold-standard. CPs are best placed to use their skills in alternative forms of research, such as qualitative research or case series, to challenge the authority of this dominant discourse and promote the publication of other forms of evidence in peer-reviewed journals.
An Emphasis on CBT

In prioritising CBT, which is more readily captured by the RCT design, clients have less choice in intervention, particularly at LI level which the majority of clients access. This “implies that people...do not have personal preferences or ideas of what good psychotherapy is like” (Vanheule, 2009, p.95), which is inaccurate. Not giving clients a choice of therapies may be unethical if we take into account the ‘allegiance effect’, which shows that therapist’s allegiance to therapy is the most powerful explanatory variable when comparing psychotherapies in research (Luborsky et al. in Vanheule, 2009).

Many of the clients I saw were disgusted to be told that we did not have sufficient time to discuss the origins of their problems in childhood and that, instead, I was to give them a booklet on ‘stress and worry,’ for example, as this was the presenting problem in the ‘here and now’. Client dissatisfaction is a challenge to the profession of CP in IAPT as this leads to high drop-outs and poor outcome data, as well as poor use of resources (Glover et al., 2010), for which clinical leads, like CPs, would be accountable.

However, the lack of choice for clients has lead to an upsurge of other evidence-based therapies being integrated into IAPT services, such as Interpersonal Psychotherapy and Couples Therapy. This may be a challenge for CPs who do not, once again, have a psychotherapy training, and who are not the originators of these therapies. CPs may benefit from this by carrying out continuing professional development (CPD), which is available in the services they work in. However, there is a consensus in the January 2011 Clinical Psychology Forum, that if CPs focus on developing skills and roles other than psychotherapy, the profession is less likely to become ‘lost’, without a future (e.g. Hassall & Clements, 2011).
Valid and Reliable Measurement of Client Outcomes

While working in IAPT, I was disappointed that CPs did not challenge the routine use of sessional depression and anxiety screening measures even when, for example, 'relationship issues' or 'anger' were the primary problem. In my opinion, CPs should be involved in selecting appropriate disorder or problem-specific psychometric tools and questionnaire measures, which demonstrate valid and reliable ways of measuring client outcomes. This may help avoid some of the problem-behaviours which bias outcome measures e.g. clients reporting greater depression than clinically viable in order to receive more therapy. The CP profession could aid biases in outcome measurement by training services to record and monitor client-oriented goals, as well as service-related ones, which has been successfully modelled by LaVigna and colleagues' 'Periodic Service Review' (1994).

3. TRAINING

3.1 Client Benefits

Staff Psychological Awareness

A large proportion of IAPT funding has gone into modelling training competencies and skills and accrediting courses. CPs have an important role to play in training both IAPT and non-IAPT staff to be more psychologically aware. Turpin (2007) describes how applied psychologists can train GPs to be more psychologically-minded, which increases their confidence in making appropriate psychological referrals and means clients have choices beyond medication. CPs also aim to carry out CPD throughout their career so they develop ongoing skills and keep up-to-date with research - this should mean the training they provide is current.
The Therapeutic Alliance

NICE literature largely ignores the importance of the therapeutic alliance in facilitating clients to make meaningful change and reduce psychological distress. This explains why computerised therapies received significant funding despite the lack of pragmatic and ecological evidence for their effectiveness outside trials, which include volunteers (e.g. Proudfoot et al., 2004). CPs have an important role in training IAPT workers in basic counselling skills such as empathy, active and reflective listening, genuineness, impartiality and warmth, validation and taking a curious, non-judgemental stance. There is evidence that the therapeutic alliance has greater impact on client outcomes than the type of therapy used (Lambert & Barley, 2002). Therefore in my opinion, training workers to engage clients and build a good therapeutic alliance, even when interventions are brief, can be beneficial to them.

3.2 Challenges and Benefits to the profession

Clinical Psychology Doctoral Training

CPs are not automatically qualified to work in IAPT as CBT therapists (DoH, 1996) and most have to do a diploma. I do not think this is an economical use of NHS funding and may explain why the funding for doctoral courses is to be significantly reduced in 2011. Given the overlap of teaching in CP and psychotherapy courses, it may be beneficial for the doctoral courses to take into account trainees’ prior academic, research, clinical and work experience during training. This could help save resources if this could reduce the time taken to train. Alternatively, the three years could be spent conducting more specialist placements where it would be possible to gain leadership, supervision and consultation skills. In this way, we could also justify continuing to attract higher salaries than psychotherapists in the NHS or other organisations.
Emerson (2011) also argues that the CP profession should move away from the individual or 'proximal causes of distress' and begin to address the 'the causes of the causes' or intervene at the level of factors which determine physical and mental health. This could broaden the focus of CP's work to wider health promotion and preventative aims. Emerson (2011) suggests mapping the doctoral curricula on to the World Health Organization's recommendations, which concurs with Burns (2011) who suggests adding two further competencies to the CP doctorate portfolio - 'basic health economics' and 'how to influence NHS policy'. I think these changes could be incredibly useful to CP training, if we could apply our psychological knowledge and research skills to a wider health economic agenda and inform how local services are funded.

**Professional identity**

It is a challenge to the profession to delineate roles within the foundation, intermediate and advanced IAPT training levels, such that staff have security in their professional identity and less overlap with other staff. For example, when I received the certificate of my diploma, it stated that I had 'successfully completed a diploma in CBT,' which was completely inaccurate! I had really completed a diploma in 'Low Intensity Cognitive-Behavioural Interventions' and any staff with a 'real' diploma in CBT have every right to be outraged by this. The 'structural boundaries' (Minuchin, 1974) between the CPs and IAPT workers across the hierarchy were broken, leading to anxiety (feeling incompetent) and role reversals (taking the role and responsibilities of a qualified psychologist) and an over-idealisation of what 'real' psychologists do. This lead to feelings of inadequacy and a motivation to move up the hierarchy – in fact, all LI workers in my service left within one or two years, in the pursuit of doctoral training. For these reasons, staff retention was difficult for the CP management.
Adequate IAPT Training

The question has been raised as to whether the IAPT training is good enough (Prescott, 2007). The LI training I received meant we were not trained in ‘formulation’ and so I struggled to apply psychological knowledge to problems which did not fit the formulations within the self-help materials. The ‘cook book’ approach to intervening with clients does not look at the context which supports change - CP training is different in this respect. I also had little knowledge of psychodynamic principles of ‘transference’ and ‘countertransference’ ‘splitting’ and ‘projection’ (Howard, 2006). This meant that I could experience strong emotions and behaviour towards certain clients and staff in ways I did not always understand. We did not learn about group dynamics and so my knowledge of how to deal with competition and domination within groups and the hierarchy created between different IAPT, workers was limited. Furthermore, we had very little teaching on reflective practice, which is an essential skill for learning (Kolb, 1984). I think that inadequate IAPT training can be a challenge to CP because it may contribute to staff burnout, problems with retention and dissatisfaction with the level of training or lack of career pathway.

Another challenge for the profession is to justify instructing LI workers to treat ‘part’ of a client's problem: treat the ‘depression’ but not the ‘personality disorder’; or the ‘panic attacks’ but not the ‘bereavement’. Through training, I have gained skills in formulating the whole of the person’s difficulties and not just ‘part’ of them, which is crucial to working ethically with clients; and historically CPs have been encouraged to suspend the use of techniques until a proper formulation has been developed (Meyer in Gurnani, 2011). It is therefore a challenge for the CP profession to supervise staff, who have a limited range and depth of interventions they can provide, and still provide the optimal, most ethical treatment for clients.
4. **CLINICAL SUPERVISION**

4.1 **Client Benefits**

**The Functions of Clinical Supervision**

Bower *et al.*, (2006) review evidence to show that supervision can increase the efficacy of interventions beyond the effects of staff training alone in mental health. Supervision performs a number of functions: it ensures that therapy is being conducted appropriately and that clients are getting care in accordance with best practice guidelines; that client progress and outcomes can be discussed, which also aids decision-making when considering whether to step clients up to HI, or down to LI interventions (Turpin & Wheeler, 2008). Supervision is also integral for the management of client risk such as suicide, self-harm and safeguarding as well as risk to staff well-being.

IAPT workers can use their supervisor’s expertise to inform and reflect on their own clinical practice and, as such, CP supervision can also provide a mentoring role. I had a number of positive experiences of supervision, at times where ineffective interventions and ruptures in the alliance were aided by the input of my supervisor. Supervisors can also directly teach within supervision and create a safe learning environment where supervisees can talk openly about challenges in the clinical work, or explore areas they do not understand or are experiencing difficulties with. In addition, observations and role playing exercises, which can crystallise ‘concrete experience’ such as the processes of an intervention (Kolb, 1984), also highlight the supervisees’ clinical skills strengths and needs and stimulate learning.


4.2 Challenges and Benefits to the profession

Supervising Numerous Client Interventions

Through supervision, CPs can have an impact on the well-being of numerous numbers of clients, but at the cost to the focus on individual client needs. Waiting lists have been significantly reduced by the introduction of IAPT from approximately 6-9 months (Layard, 2004) to as little as 20 days in the Doncaster pilot site (Richards & Suckling, 2008). While reducing waiting time can benefit clients, I recall having at least 40 active clients at a time to discuss in two-hourly weekly supervision.

There are many different models of supervision and one important model for IAPT could be the systemic-psychodynamic ‘seven-eyed supervisor’ model (Hawkins & Shohet, 1989). This model encourages the supervisor to look at the relationship between the client, therapist, supervisor and the political and economic context and how these are all inter-connected. However, in reality, LI supervision was rarely like this due to the sheer number of cases. Therefore, supervising numerous client interventions poses a challenge to the integrity of the profession in terms of what can be considered an adequate amount of supervision and what is ethical and good practice for the clients themselves. In my opinion it is highly likely, with large caseloads, that all the vital functions of supervision cannot be performed for the benefit of each individual client, which may pose a risk to both clients and staff.

Managing Client and Staff Risk

Software enables the efficient and accurate monitoring of client outcomes and can alert supervisors to risk. However, I accumulated over one hundred and 30 cases in nine months of working in IAPT and supervision was very often centred around managing the throughput and status of each client, rather than the process of the clinical work. I felt this constituted a risk to both client and staff in
terms of a lack of depth of discussion about clients and the sheer responsibility of having numerous clients on a caseload, which could not all be discussed. I therefore often felt 'consciously incompetent' (Maslow in Eraut, 1994) because I was not getting the appropriate support or time to reflect on my work and make theory-practice links. As LI workers, we were expected depend heavily on 'concrete experience' and 'active experimentation' alone (Kolb, 1984), which can carry a heavy burden of responsibility if interventions are unsuccessful.

As a profession, I believe CPs benefit from an important role in ensuring staff receive adequate emotional support and training in self-care. There is a continuing role for CPs to develop the supervision of LI workers so it is less like 'caseload management supervision' and more clinically relevant, focused on developing therapeutic skills. In my view, risk protocols also need to be put in place, which recognise the complexity in the way services are designed.

5. WORKING WITH DIVERSITY

5.1 Client Benefits

Increasing Equality of Access

CPs are beginning to work in eclectic ways with diverse groups by partnering with different community and voluntary organisations to meet the needs of black, minority and ethnic (BME) groups. The Wandsworth IAPT service works in a range of settings including community centres, libraries, churches, temples and mosques. In my opinion, this could help services present as less stigmatising and more accessible. An example of one of these projects is the Tamil initiative (Gilleard et al. in Turpin, 2007) which is involved in developing self-help information in Tamil, based on NICE-recommended treatments Tamil-speaking IAPT workers are also
trained to run mental health courses on relevant topics such as coping with loss, conflict resolution, relaxation and anger management.

Client Consultation and Involvement
CPs have skills in liaising with and facilitating the participation of clients in service design and evaluation (e.g. Hayward et al., 2006 in Turpin, 2007). Through consultation with clients on various committees, CPs can therefore aid commissioners in understanding how clients and other stakeholders can work with the organisation to add value to the service. CPs also have a role in promoting and actively supporting service-user and carers groups and forums, and are needed to ensure that the services are culturally appropriate in ways that respect and value the diversity of clients and are informed by client preference and choice (Hope, 2004).

5.2 Challenges and Benefits to the profession
BME Group Barriers
The barriers faced by BME communities to accessing mental health services are numerous and will vary considerably from group to group. Broadly, CPs may need further training to develop competencies in working with diverse groups and may rely on good joint working with CPs from differing ethnic backgrounds, who can provide consultation and share cultural and religious knowledge and experience. However, this could be enriching to the profession and help with the development of the evidence-base where there may be gaps in the research.

In addition to language barriers, there could be significant cultural barriers for clients trying to access mental health treatment from ‘mainly eurocentric-focussed health professionals’ (Turpin, 2007, p.49). CPs may have difficulties understanding how culturally diverse groups express mental health problems and how they conceptualise
the help they wish to receive. Although there is a degree of consultation with clients, IAPT services have essentially gone into BME communities with a pre-package sets of NICE CBT interventions, which may not be appropriate for cultures who live in communities with less focus on autonomy and individual choice. It would therefore be important for CPs to work flexibly with more collectivist groups and draw on other psychotherapeutic models such as systemic theory.

**Clients with a Learning Disability (LD)**

CPs in IAPT need to make sure that services do not discriminate against any specific vulnerable groups and that adequate funding is put into appropriate services for minority groups. Currently, people with a LD are expected to access mainstream IAPT services (DoH, 2009), which would not be appropriate for people with moderate to severe LD due to an emphasis on reading aptitude and self-help. There would be a lack of IAPT funding for essential work with this group such as consultancy and indirect work with staff and family carers. CPs would therefore have an important role in leading the adaptation of materials for this group, making information more accessible, considering including advocates or carers in sessions (DoH, 2009) and bidding for funding for alternative services for those with moderate to severe LD.

6. **LEADERSHIP**

6.1 **Client Benefits**

**Leadership Qualities**

Clinical leadership is defined as 'facilitating evidenced-based practice and improved patient outcomes through local care' (Millward & Bryan in Turpin, 2007). CPs can provide leadership at both the organisational level and within clinical teams. There is an emphasis on CP trainees developing leadership qualities in line with the NHS

Leadership qualities are particularly important when managing the effects of budget cuts, staff redundancy and service re-design and reconfiguration in teams: IAPT cost mental health services 170 million pounds in two years (DoH, 2008), which has impacted on less funding for community mental health teams (Jones-Berry, 2010) and other mental health services. Because CPs are able to cope in a ‘complex environment’ where there is increased ‘blurring of organisational boundaries and the requirement to work in partnership’ (NHS, 2006, p.5), they can be resilient to change and can help clients through change by informing and consulting with them.

Organisational Level Input

CPs have an important role in developing standards across services, such as core standards for supervision and audit. IAPT also shows that CPs can use research evidence to inform policy and services nationally (Clark et al., 2008). There are many additional roles for CPs in developing care pathways and to advise on appropriate needs assessments, assessment tools and interventions. Turpin (2007) also suggests that commissioners should consider seconding applied psychologists to advise on commissioning frameworks and funding bids for services because of their diverse skills and knowledge and ability to lead evidence-based practice. This could have a positive top-down influence on the quality of care clients receive.
6.2 Challenges and Benefits to the Profession

Commissioning Specialist Services

As leaders of IAPT services, it would be unethical of CPs not to also focus on the psychological input of groups who are unlikely to work and contribute the economic agenda of IAPT, or those who may not benefit from psychotherapy (e.g. people with dementia, children under five or clients with brain injury). The Division of Clinical Psychology et al., (2003) show that only 31% of CPs work in adult mental health - it would therefore be detrimental to the profession if other services had less funding. CPs need to work with commissioners to ensure they are aware of the importance of their work outside IAPT and that services meet the needs of the population. CPs could also use economic arguments, if necessary, for the maintenance of alternative psychological services to IAPT (e.g. demonstrating that paying for the psychoeducation of carers in a dementia service keeps government respite costs down).

7. DISCUSSION

I began this essay with an overview of five different ways CPs can relate to IAPT services for the benefit of clients and noted that these relationships also gave rise to some of the benefits and challenges to the profession. The five areas were evidence-based practice, training, clinical supervision, working with diversity and leadership. Clients benefit through the additional value that CPs add to IAPT services beyond psychotherapy. A few examples of this were that CPs, as leaders of services, could ensure quality and monitoring of the efficacy of IAPT interventions through supervision and staff training. Clients also benefitted from involvement in consultation and innovative ways of promoting mental well-being in diverse groups.
However, I argued that it is crucial for CPs to be involved with the commissioning of services. This could ensure that clients across the lifespan, those who may not be able to go to work or benefit from CBT or any psychotherapy, access alternative services. Promoting commissioning of diverse services would also be in keeping with the range of skills and expertise CPs possess through doctoral training and CPD. Furthermore, if funding for IAPT was to end due to insufficient evidence for the Layard Hypothesis (as shown in Glover et al., 2010), the profession would still continue to have a future.

One last point of exploration is the nature of the relationship between the NHS and CP as the main employer. Hassall and Clements (2011) think that the NHS pressures CPs to ‘do therapy aimed at alleviating some quasi-medical disorder’ because this is an activity which is ‘convenient [and] readily monitored by managers’ (p.8). In the efforts to find job security, the profession may have sought solace in delivering psychotherapy, but it is important for CPs to have a relationship with the NHS management and commissioners, in order to re-negotiate and inform of our additional abilities as applied psychologists. This could ensure a resilience and adaptability of the profession, which filters through to doctoral training.
8. REFERENCES


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ASSIGNMENT: Problem-Based Learning (PBL) Task – A Reflective Account

TITLE: The Relationship to Change

Year 1

DATE: May 2010
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**Introduction**

Problem-based learning (PBL) tasks are group exercises aimed at promoting knowledge acquisition and learning through the exploration of a 'stimulus' (Wood, 2003, p.328). Our stimulus was 'Relationship to Change': we had to present clinical and personal material using this theme and make theory-practice links which were relevant to our professional development. We decided to look at the impact of 'forced change' or bereavement on the changing roles and relationships within a trainee's system. We presented this in week six to the other groups (Appendix 1).

**Attitudes to Change**

I was excited by the theme and enthusiastic about learning and exploring change with my new peers. A positive experience of group learning in a previous job helped me improve on my reflective scientist-practitioner skills. My expectation was that this group would fulfil the same role and it would be both liberating and meaningful to have this time to reflect on our relationship to change, given that we were all going through change.

We had all overcome a challenging selection process to be accepted on to the doctorate. Therefore I saw the identity of our group as one where our relationship to change itself *must* have involved personal qualities such as resilience, intelligence, perseverance, dynamism and ability. On reflection, I now know that I was in fact projecting my own relationship to change on the group and not everyone appraised starting the doctorate in such a life-affirming way but instead expressed feelings of 'imposter syndrome' (Clance & Imes, 1978) as though they did not deserve to be there.

Many group members were wary of being evaluated and felt inhibited by the status of the facilitator. However, I was reassured by the
facilitator's encouragement and urges for us to see her in a different role. With my previous supervisor, I was able to improve communication and address a power imbalance in our relationship which inhibited me and negatively impacted my self-esteem. Therefore this helped me feel less intimidated than some of my peers by the facilitators' authority. This experience resonated with a theory of change we later came across on how stress in a past experience can build resilience and prepare one for future stressors (Wheaton, 1990). My reactions to the facilitator helped me realise how much our personal histories and scripts dictate how we will respond in the future, but also that overcoming previous adversity within my life has built confidence and resilience within me to manage change.

Although I was unaware of this perception, a course tutor has since given me feedback that I come across as confident and strong. My confidence to make changes comes from having a secure attachment relationship (Bowlby, 1969) with my mother; one that has given me a secure base for ongoing support and confidence to explore a world where there is both 'danger and opportunity', as the Chinese symbol for 'change' conveys (Mair, 2009). This attachment relationship resonates with the importance of a good therapeutic alliance with clients such that they can safely explore alternatives to their beliefs and behaviours to reduce their psychological distress.

Collaboration

During our brainstorming exercise, I learnt that that there are diverse but equally valid ways of approaching the same problem and that the steps to a shared outcome can be perceived very differently. Therefore, collaborating with and incorporating everyone’s ideas leads to a richer formulation or approach to the problem and greater cohesion within the group. This echoes the usefulness of a multi-disciplinary approach in working with complex presentations.
Our diversity of thinking also showed me that it is important to check out with clients, carers or colleagues what they understand by something you communicate and whether it makes sense to their way of thinking, processing information or problem-solving. I also learnt that you need to empathise with difference and try and see how a conclusion was arrived at before trying to convince of another idea. This is a profound lesson I learnt in terms of sharing a formulation with a client, as you need to show that you completely empathise with a client and can draw out their rationale, before providing evidence or ideas to the contrary (Beck, 1995). Fully understanding the other perspective also helps you to reflect on why you saw the same concept in a different way, what you bring or what makes you passionate about an idea that someone else is not.

Each member had many strengths which they could contribute and learn from. Some people were excellent at capturing our ideas in a pictorial or diagrammatic way; others brought a wealth of personal experience which we could tap into for the emotional and systemic context of our interpretation of the exercise. Everybody was personally and professionally committed to the process and so we were able to teach one another how to communicate links between the personal and professional. Members were also good at balancing decision-making and collaboration through listening to one another, respecting personal experiences of loss and commitment to work outside sessions.

**Leadership Struggles**

We had a rotating chair and scribe in our group. Interestingly, I felt submissive as scribe and less able to contribute; but as chair, I felt more able to be assertive and persuasive as I noticed that people look to you for structure and answers. Also, as chair, I was praised by the facilitator for validating members who did not feel confident
about their contributions, but this happened less when I did not have the status of chair. It occurred to me that this is the power of having a mere label or title, as people use that title to create expectations of you, your knowledge and abilities. This experience resonates with the way a diagnosis can affect clients: the label 'schizophrenic' connotes danger and severe mental illness; but 'lived experience' inspires us to listen to the client's narratives and reflect on how they have overcome adversity.

During induction, I felt inspired by the leadership narratives and I was beginning to reflect on my potential to be an NHS leader. I brought lots of material into the group which was used in the final presentation and I took on an active role in presenting and feeding back to the group. I also noticed I had skills I was previously unaware of such as making links between ideas, summarising and reflecting back within the group so we could review appropriate information to move towards a common goal. This also enhanced my ability to hear others' views.

My confidence was facilitative in the initial stages of the group process; however, dynamics within the group changed in weeks four to six when there was time pressure on the group. Certain members became more dictatorial and forceful and wanted to make the final decisions: there was over-involvement or avoidance in decision-making, depending on personality types (Cloninger, 1986).

I perceived that certain group members wanted to exercise their power and leadership over the group by having additional meetings at lunchtimes. No minutes were taken at these meetings, which made me feel vulnerable as it felt less professional and boundaried. In addition, key decisions were to be made by members of the group who had broken off to discuss something they thought we ought to change.
When we learned about the systemic phenomenon of 'escalating symmetry' during lectures, where people compete to have the final word, it helped me understand our group's behaviour. Tuckman's (1965) theory of team development also helped me understand why we were 'storming' as a group before 'performing'. Indeed, having knowledge of these theories was a relief, as it took away individual responsibility for the group's 'storming' and rather made it feel like natural group psychological processes or symptoms of group dynamics. The way I responded to these theories felt (as I imagine it feels) when we share formulations with clients: the theories gave me a renewed understanding of the group's problems and therefore enabled me to have more control over these difficulties.

The Presentation

The presentation contents were divided up in a way that protected group members' personal contributions and identity. However, in doing this, it meant I was given a smaller role and did not get to present elements of the theories I felt most knowledgeable about. Since doing clinical case reports, I now see that the most important role in presenting sensitive information is that the individuals concerned are protected. Confidentiality is paramount and we all made a collective contribution to the process and so it did not matter, in hindsight, if I presented a small element I had less in-depth knowledge about.

It was helpful for the audience to reflect on how sensitive our subject-matter was. This suggested that we had become close in the group and trust had formed. However, at the same time, I did not feel fully comfortable using such personal material because I experienced the presentation as an uncomfortable interface between our personal and professional selves. Peer support from others with similar experiences helped me manage this as well as reflecting on
feedback from my personal interview at Surrey: this suggested I have a tendency to not want to share personal information for fear of showing weakness or being evaluated. However, I have since learned that it is vital that I am able to share personal information in a professional manner in order to bring it into my consciousness and process it. Sharing personal information in a professional context also shows I am aware of how my experiences impact on my clinical work and relationships.

The fact that we had no humour in our presentation and that we did not use multimedia were weaknesses, in my opinion. My impression of the presentations is that they may have reflected the facilitator's interests to an extent and therefore perhaps an inhibition within our group to do something less conventional. Another weakness is that due to time pressure we did not make time to reflect on the group process in the final weeks, and this meant we were more focused on presentation delivery than group processes.

**Clinical Work**

Each of my clients has an innately different reaction to making changes. Through supervision, I have learnt to reflect on the utility of certain models for different clients and to take into account their relationship to change. For example, for one client there are secondary gains to not making any changes to her level of independence because it serves the function of enhancing communication between her parents who are divorced. I am aware that I will need to work with the family's beliefs about mental illness and how the safety behaviours within the network itself maintain my client's dependency and lack of confidence to make changes. This also means that a systemic intervention rather than individual therapy is necessary for effective change to be possible.
My client with schizophrenia has less conviction in his delusions and is beginning to believe the voices are coming from him. However, to integrate these experiences into his self-concept rather than 'seal-over' (McGlashan, 1987) is to believe that he is not special and exposes his low self-esteem (Bentall, 1994). Therefore, for him to change his relationship with his voices and delusions is to experience 'role depletion' (Lenaghan & Sengupta, 2007) or the loss of a belief that made him feel unique. We therefore have to weigh up the costs and benefits of changing his beliefs in the future.

**Final Reflections**

It is no surprise to me that there are health-related benefits of reflective writing (Pennebaker, 2000). In keeping a reflective diary we are giving weight to our thoughts by bringing them into consciousness and binding them to a time and context in which they can be interpreted and learnt from. Reflective writing can also help us see where we filter or interpret events using a particular theoretical lens based on our personal history or teaching. Reflection also means that our learning can be dynamic, rather than static, and responsive to our environments.
References


Appendix – PowerPoint Presentation Slides

The Relationship to Change
Forced Change + Multiple Roles:
The Ripple effect
The Process

1. Brainstorm 'The Relationship to Change'
2. Feedback on Favoured Approach
3. Theories of multiple roles
4. Personal Experiences
5. Eco-Maps
6. Presentation

BEFORE...

- Grandmother
- Grandfather
- Partner
- Trainee
- Mother
- Client
- Younger Sibling
- Siblings' Friend
- Friend A
Key Messages

- The ripple effect of one change on the multiple roles in a system.

- Our relationship to change depends on our attitudes and experience.

- Effects on our professional role & ourselves in the role of service user or carer.

- Change in group dynamics, group roles and the process of 'Problem Based Learning.'
## References


ASSIGNMENT: Problem-Based Learning (PBL) Task – A Reflective Account

TITLE: Child Protection, Domestic Violence, Parenting, Attachment and Learning Disabilities

Year 2

DATE: February 2011
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Introduction

In the beginning of the first year, as Trainee Clinical Psychologists, we were introduced to the concept of ‘problem-based learning’ (PBL) (Wood, 2003). These tasks are designed to stimulate group learning, collaborative working and reflective practice. Our first PBL task was the ‘Relationship to Change’: we had to explore psychological theories of change and how people process and react to change in individual, group and organisational contexts. Similarly, at the beginning of our second year, we were set another PBL task. This also involved staying within our trainee Personal and Professional Learning and Discussion Group (PPLDG), which meets five times per term to discuss the impact of clinical psychology training on our personal and professional lives.

The year-two PBL task, on which this reflective account is based, involved presenting our ideas on a complex case study of a three-generational family network. The case material and task is shown in Appendix 1. In the case example, Mr. and Mrs. Staines were parents of twins and were said to have a mild learning disability. There is evidence of physical neglect and emotional abuse of the twins. Mrs. Staines is also being physically assaulted by Mr. Staines when he drinks alcohol. The twins are taken into care and the question for us, as Trainee Clinical Psychologists, is around whether the children should be considered for adoption or returned to their parents with a rehabilitation programme in place.

This reflective account is separated into five main headings, which broadly relate to essential clinical psychology skills within the National Health Service (NHS) or other organisational contexts: presentation skills, leadership, complex formulation, report writing and group work. These headings also reflect five skills I feel I have further developed, since working on this PBL task, while on my learning disabilities placement.
Presentation Skills

The PowerPoint presentation we delivered is shown in Appendix 2. We decided that a debating format would give us the opportunity to thoroughly research and present both sides of the argument 'for' and 'against' adoption of the twins, as well as show how both outcomes would affect everyone in the family and professional systems. Presenting both arguments also enabled us to remain curious, impartial and evidence-driven, which are important qualities to have as Clinical Psychologists. Given that the case study is complex, our feedback from the panel was that we communicated all the issues in a thorough, concise and clear way. We also made time to explore each of the issues in depth and find both research evidence and government guidance on issues. This helped strengthen our arguments and assisted the audience in easily weighing up the pros and cons of adoption.

From the experience of presenting material in a debating format in such a prepared and thorough manner, I learnt that, in team meetings or when discussing complex issues in supervision or other contexts, it is important to be well-prepared on good practice and research evidence; to delineate specific issues or themes and to communicate clearly any consequences of actions or decisions on all parties involved. In team meetings and in supervision, I am now more able to say the pros and cons of assessment and intervention, make a contribution to decisions which need to be made about client care; and consider how these will impact people within the system.

Another strength of our presentation, which feeds into the skills I have developed, is injecting improvisation, where necessary, and humour into presentations. One group member was absent on the day of the presentation and so another group member, who knew the main elements of her speech, decided to say both the 'for' and 'against' sections. To do this, she had to run to the other side of the room and call herself another name. The audience responded well to
us explaining that we had to do this by laughing and showing interest and engagement. This misfortune did not detract from the key messages we needed to make. This showed me the importance of not catastrophising when things do not go to plan. I am now more able to improvise and see the positives in situations when they do not go to plan. I am now more able to explain my limitations, background issues or any difficulties I may have faced before presenting the information to an audience. This was reflected in the excellent feedback my supervisor and I received while doing challenging behaviour training for care staff. I was able to explain that I had only worked with people with challenging behaviour and learning difficulties for a few months and be open about my experience of learning how to work in this setting. An openness about personal limitations and a willingness to inject humour in the face of adversity warms an audience to you and creates a positive cycle: as a presenter you feel less anxious and the audience is consequently more relaxed and engaged, which is positively reinforcing of a humorous and open presenting style.

Leadership

The year-two PBL task was more structured and focused with plenty of information. The year-one 'relationship to change' PBL was so broad it was more difficult to contain group anxiety about where to focus and how much to read, which lead to difficulty selecting and allocating specific reading, setting goals and reaching decisions. This is analogous to Forsyth (2010) who says 'groups that set clear, challenging goals outperform members who have lost sight of their objectives (p.297)'. This shows the importance, as a leader, of giving people specific information and clear instructions, goals and suggested steps to consider. Under these conditions, even where there are strong differences of opinion, personalities or learning needs, groups have a greater chance of working effectively together.
I also learnt the importance of 'ownership' of the task for group members' motivation and success. Research from the Ownership Associates, Inc. (2001) shows that employees' interpretation of ownership is fundamentally important. Group members benefitted from three aspects in particular relating to this construct of 'ownership': being included in decision-making (participation), having sufficient impact on the work (influence) and having an equal contribution (fairness). I feel that doing group work in pairs initially (one person 'for' and 'against' the motion) positively supported this context of 'ownership'.

However, after working in pairs, it became apparent that there was no leader to take the information forward and combine it. We decided not to appoint a chair or scribe in the initial stages so that the task felt more relaxed. This may have worked initially while we were discussing the information, allocating work and coming up with our arguments, but towards the end of the process we needed someone with an overall understanding of how all the information was going to be collated and presented. I communicated this with everyone, asked to chair for one week and wrote an agenda. The group understood that this was necessary and I ensured, as best I could, that I chaired in a collaborative manner, incorporating everyone's input. This experience shows that a chair is usually required – chairing meetings is also a skill of leadership, which the NHS are encouraging Clinical Psychologists to become (Department of Health, 2004).

**Complex Formulation**

As Clinical Psychologists, we possess the unique skill of 'formulation' as applied psychologists (Manpower Planning Advisory Group, 1990). We have a duty to share formulations with clients, carers, groups, staff and multi-disciplinary colleagues for the enrichment of direct, indirect work and consultation. Since working on this PBL
task four months ago, which drew on systemic, psychodynamic and cognitive formulation (as well as other psychological theories and research), I have greatly developed my integrative formulation skills. This has meant that I feel less intimidated when working with complex client issues or trying to understand what may be going on for an individual or system. I have also become more apt at sharing formulations of complex cases with multi-disciplinary team members to improve their understanding of clients and help them decide the best services to meet their needs.

On my learning disabilities placement, I was asked to do an autism assessment for a client with a complex forensic, substance misuse and trauma background with a history of neglect and abuse who lived in multiple care homes and had gone to many different schools – all of which had broken down. He had also recently started hearing voices. Through a standardised assessment, I was able to explain that it was unlikely that he had autism, but that a lack of secure attachment figure combined with substance misuse and a trauma history may have contributed to his psychosis. I also said that I thought that absence of a trustworthy and safe attachment figure may have led to his difficulties expressing and understanding his emotions and the intentions of others (Holmes, 2001). If we think in terms of evolution and survival, I explained to this client’s keyworker that it makes sense for him not to show his emotions in case of revealing vulnerability, which could expose him to exploitation. These hypotheses are supported by Holmes’ (2001) literature on the effects of disorganised attachment on self-soothing and emotion regulation, which stems from the frightening experience of having a parent which one needs to both avoid and seek proximity to for survival.

Similarly, my supervisor has since commended my formulation skills at a Positive Practice Forum, where clients with a learning disability, challenging behaviour and sexuality issues were discussed and where there were difficult ethical dilemmas and decisions to be
made. My supervisor was impressed that I was able to communicate that a client's sexual desire and yearning to be 'normal' was at odds with his Clinical Psychologist's idea to suggest a sex worker for him. I explained how his father's terminal illness and mother's denial and escape of this through over-work, may mean this would be a particularly vulnerable time for him. This could also reinforce low self-esteem, poor self-image and family scripts about the impossibility of a 'normal' life for this client. I think this PBL task enabled me to think of a client deeply in this way - one I had never met. I was surprised that the Clinical Psychologist was interested and took on board my formulation and recommendations.

**Report Writing**

We had a lecture on 'Parents with Learning Disabilities' shortly after the PBL task and one of the Clinical Psychologists had worked with a family like 'Mr. and Mrs. Staines'. It was her belief, which was backed up with evidence, that the parents of a newborn baby could be supported to look after the child; however, the court forced the mother of the baby to live with the maternal grandmother, despite significant difficulties in their relationship. I really wanted to know that the lecturer had presented evidence to the courts about the parents' ability to look after their child; and when she said she had not, I felt very defensive about this. This was partly because my section of the debate (Appendix 3) was full of evidence that this was not best practice. I felt that the parents were not given a fair chance, in particular the father who was more able to parent than the mother. It was unfortunate that he misused substances as a way of coping with the loss, which further perpetuated the view that he could not look after his family.

Since doing the PBL task I have become more aware of the importance of clinical report writing as a method of communicating
the work we do with clients. I have also learnt that a separate letter should be written to the client in more accessible language, so they can actually make use of our recommendations and formulations; and so that an understanding of the client is shared with current and future professionals working with them. We are all so dominated by written words in our communication. The PBL task made me realise how bounded by words the law and society is and how confusing, chaotic and frightening it must be for anyone, let alone someone with a learning disability, to navigate the legal system. For example, there is a definite conflict between The Children's Act (2004) and the Disabilities Discrimination Act (1995). I really appreciate meeting advocates on my current placement and liaising with them because I feel there is a value of Clinical Psychologists as advocates, as shown in important qualitative research (Tarleton, 2007).

**Group Work**

In the PBL task Mr. and Mrs. Staines fail to attend parenting classes offered to them. Our group discussed many possible reasons for this including practical, financial and those relating to their learning disability. Hypothesizing about why Mr. and Mrs. Staines could not attend helped me think about why family carers of people with challenging behaviour were unable to attend our group. We had two attendees and had to cancel the group after the second session. This group was set up following good practice on training carers, as well paid staff, in how to manage challenging behaviour. However, there were so many barriers and difficulties to setting up and running this piece of training weekly, that it showed how difficult it can be to follow good practice. People may have had difficulties retaining information and attending due to stress, sleep deprivation or chaotic lives and would have found it hard to take time out of their caring role.
Summary

In this reflective account, I have explored how a PBL task relating to a three-generational family system with multiple issues has inspired the group's, as well as my individual, learning. The examples of these were presentation skills, leadership, complex formulation, reporting writing and group work. I have demonstrated that the PBL experience has helped developed many professional clinical psychology skills; and this has impacted on how I now interact with clients, carers, teams and other forums on placement - in the NHS and in other organisational contexts.
**References**


Appendix 1 – PBL Case Material

Problem Based Learning Exercise

Child Protection, Domestic Violence, Parenting, Attachment and Learning Disabilities

The Family

The Staines Family

- Live locally Supportive
- Raised in the care system
- No contact with mother and father

The Professional Network

- Domestic Violence
The Problem

The twins, Sally and Sarah Staines, were placed in short term foster care following a recommendation of a full child protection case conference, and enacted at an initial Court hearing, that the children continued to be at risk in the care of their parents. The children were on the child protection register, under the categories of emotional abuse and neglect. The children's Guardian (Court Reporter) has approached you, and asked you to help the Court by conducting a full risk assessment, and if appropriate, to help the Court develop a rehabilitation plan for the children. This is a joint instruction by all parties to the proceedings. However the Local Authority wishes to place the children for adoption, before it is too late, in the belief that Mr and Mrs Staines will never be able to care adequately for their children. Mr and Mrs Staines are passionate in their commitment to have the children returned to their care.

Whose problem is it? Why?

Some Background Information....... 

Mr and Mrs Staines are white English. They live on State benefits. Mrs Staines is described as a woman with learning disabilities, in the mild range. Mr Staines attended a school for children with special educational needs. His parents are members of a fundamentalist, evangelical Christian church. Social Services has not approached them as potential carers for the children, although they would welcome such an approach. Mr and Mrs Staines do not read and write English. It should be noted that many long reports have been written about them, their children, their care of their children and so on. Their solicitors read the reports out loud to them, usually once, and sometimes on the morning of a Court hearing.

Mrs Staines has two older children living with separate adoptive families. She is not able to have contact with them at the moment, as it was closed adoption. This is because her first husband was extremely violent to her, and threatened violence to the previous social workers. Social Services staff feared for the safety of the adopters if their whereabouts were known. Mrs Staines promised herself it would be different with this marriage and for these children.

Mr Staines has physically assaulted Mrs Staines, during disagreements, and apparently only when inebriated. She minimises his behaviour, saying it is nothing compared to what her previous husband used to do to her. The two children have witnessed these arguments and assaults. Mr Staines has not been offered a service from the local drugs and alcohol agency.

Mr Staines’ parents are supportive. They buy clothes and toys for the children, and occasionally buy food shopping for the family. Apparently, they are willing to look after the children, despite Mr Staines mother suffering from a painful rheumatic condition. Mrs Staines was raised in the Looked After Children "..."
system, in a residential children's home, and has no contact with her family of origin. Does she know her family, and has she no contact with them?

Mr and Mrs Staines live in conditions of deep poverty. They do not have many household appliances that work, and it seems that Mrs Staines struggles to understand the workings of the second-hand appliances donated to them by family. It would seem that Mr Staines understands their workings, but is not prepared to use them. Social Services staff are most concerned about physical neglect of the children's needs. Family Centre staff say they have tried to engage both Mr and Mrs Staines in parenting classes, but the couple do not attend on a regular basis. The Family Centre appointed a family worker to visit the home, and show Mrs Staines 'how to keep house'. The family support worker has not been trained to work with parents with learning disabilities. The Social Worker says the Department has offered the family everything, and it makes no difference to the care of the children. Mr and Mrs Staines are desperate about the loss of their children. They want them to come home. They fiercely resent the foster carers, and the supervisor of their contact with the children. The children's Guardian (Court Reporter) believes the parents can learn to be 'good enough' to satisfy Social Services requirements. Mrs Staines was referred to the local AMH service for help with feelings of despair and depression. She is taking anti-depressant medication, and is seeing a CPN for counselling.

Prompt Questions

...something about paying attention to the professional network (liaison, - neath, communication, respective roles, different agendas)

...something about safety, risk assessment and risk management

...something about parenting and learning disabilities

...something about child witnesses to domestic violence and the intergenerational effects of domestic violence

...something about the effects of poverty and class discrimination

...something about literacy and verbal comprehension (effects of anxiety and stress on memory and comprehension, and willingness/ability to express concerns, and say, 'I don't understand these reports')

...something about resilience, adversity, depression and coping

...something about problem drinking, and unaddressed need

...something about the role of grandparents in the care of children

...something about children of parents with learning disabilities

...something about gender issues and gender scripts

...something about psychologists, child protection and the legal system

- Strengths of family

C:\Users[User]\Documents\Academic Texts\Psych.D. Academic Dossier\6.6.8.20 Problem Based Learning Exercise L2\Child V2\04.04.doc

27/05/2010
Appendix 2 – The PowerPoint Presentation

Adoption: the big debate!

The process

- Why a debate?
  - Stepping away from our immediate positions
  - Balance of views
  - Collaborative research process to enable all group members chance to critically appraise 'the problem'
  - Difference between last years PBL and now
THE DEBATE

MOTION

'The Staines children should be adopted NOW'

For and against....
Over to the debaters.

Input so far - for adoption now

- Vast amount of input already provided to the Staines family
- Concern over the grandmother’s physical health
- Concern over the family adopting traditional gender roles
- A lack of resources in the current economic climate
Input so far – against adoption now

- LD specialist team
- Child/adult liaison worker
- Staff training
- Disability Discrimination Act (1995)
  - Adapt parenting classes
  - Home-based programmes (Hur, 1997)
- Valuing People White Paper (2001)
  - Advocate essential
  - Research: more respect, emotional support, challenge poor practice (Tarleton, 2007)
- Kinship care
- Family's strengths & further assessment

Risk – for adoption now

Duty to protect children at risk.
Language, motor skills, cognitive and social development.
Poor long term outcomes for children exposed to DV, physical neglect, poverty.
Girls exposed to DV at greater risk of trauma and suffering domestic abuse in later life.
Maternal depression - secure attachment less likely to be protective factor.
‘Denial’ as coping strategy (common trait in adults with a LD when placed under stressful circumstances) - reduces likelihood of further interventions being effective.
Risk – against adoption now

- Positive risk taking and reducing risk
- Enriching environment and challenging poverty
- Individualised treatment for depression and alcohol issues
- Poor long-term outcomes for looked-after children – mental health, education, employment and social issues etc

Attachment and power – for adoption now

- Attachment is crucial at this stage
- Children's Act - Children's welfare paramount
- Power or Responsibility?
- What about further pressure on resources and finances?
Sorry, scene change...

Please wait patiently while we change the scenery...

Attachment and power – against adoption now

- Bond with the birth family
- Considering attachment systemically
- Childrens Act...Human Rights Act...Valuing People
- Power and the context of parents with learning disabilities
- Transference and the team
Recommendations

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<td>Individualised, specialist training to help work appliances</td>
<td>Consider how transference in the team is contributing to decision making</td>
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<td>Assess the parents based on fair criteria, and not more strictly than other parents</td>
<td>Review of financial situation and training in money management techniques</td>
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<td>Adapt parenting classes or use a home-based programme</td>
<td>Consider kinship care and support relationship with grandparents</td>
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<td>Provide a specialist advocate</td>
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What have we learnt?

- Our debate represents our personal and professional experience and the diversity in the group

- This debate sits within a broader historical and cultural context, both in terms of parenting and learning disabilities

- The role of the psychologist in bringing together diverse views, hypothesising and formulating
The end....

Questions?

References


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Appendix 3 – My Section of the Debate

PBL Summary – Against Adoption: A Critique of the Input So Far in the Context of Best Practice

I am arguing against adoption now! Are we really in a position to say we’ve tried everything? The 2007 Department of Health Good Practice Guidelines on Working with Parents with a Learning Disability (LD) states that clients should always be referred to an LD specialist team with a liaison worker when their children have been referred to child services. Keyworkers and staff working with clients with a learning disability must also have some specialist training or supervision.

Because the parents have not been referred to specialist services, the parenting classes were not tailored to them. This is a requirement of the 1995 Disability Discrimination Act. Such groups can be disempowering and perpetuate feelings of inadequacy. Conversely, home based programmes which emphasise practical skills, interaction, reinforcement and pictorial materials are the most effective.

The 2001 Valuing People White Paper also says it is essential that an advocate is provided who is trained in both child protection proceedings and working with people with learning disabilities. Qualitative research shows that advocates enable these parents to feel treated with more respect, have their voice heard, receive guidance and emotional support and to challenge poor practice as I am aiming to do today!

Finally, the family’s strengths have not been taken into consideration. The grandparents have expressed an interest in looking after the twins and have the right to have their wishes heard and to be supported in this process. Research shows there is less stigma or trauma from separation for the children in kinship care.

Further assessment is crucial in helping this family. Do we even have a clear understanding of whether they meet the criteria for a learning disability? A cognitive assessment could indicate skills which could be built on as well as ways to compensate for any difficulties. An Occupational Therapy assessment would also be helpful so we have an understanding of the parents’ practical skills and know for sure that it is not just that the appliances in their home do not work or could merely be adapted for their use!

I urge you to reconsider permanently removing the children and to refer these parents for the appropriate support and guidance they need are and have a right to!
ASSIGNMENT: A Reflective Account of the First Year Trainee Personal and Professional Learning and Discussion Group (PPLDG)

TITLE: Group Work, Development and Process

Year 1

DATE: September 2010
First Year PPLDG Summary

PPLDGs are trainee groups facilitated by course tutors or regional Clinical Psychologists, which meet around five times per term. Its aim is to provide a secure and intimate space for trainee reflections on the personal and professional aspects of clinical psychology and working for the National Health Service (NHS). Initially during induction, the group engaged in a problem-based learning task after which we met to record video role plays of mock assessments. Other ‘work’ included case discussions, explorations of the therapeutic and supervisory relationship, discussion of service, ethical and placement issues and trainee self-care.

Towards year-end, we presented our genograms in confidential dyads, with one session to feed back common themes. In this reflective account, I look at how the group and I mutually contributed to learning within the group. Themes from my learning included refraining from interpreting ‘right’ and ‘wrong’, considering transference processes as a therapist, relationship to time boundaries, role strain and the differences between my group and dyadic attachment style.

My main contribution was resonating with other members’ experiences of training and contributing a balance of ‘relations-oriented’ leadership as opposed to the more ‘task-oriented’ leadership originally forming in the group. I also reflect on the strengths and weaknesses of the group and its possible future directions. Attempts are made to link my group experiences to an evidence-base, drawing on psychological theory and research. Throughout, I also show the relevance of the group experience to working in the NHS with clients and in teams.
ASSIGNMENT: A Reflective Account of the Second Year Trainee Personal and Professional Learning and Discussion Group (PPLDG)

TITLE: The Search for Group Purpose

Year 2

DATE: July 2011
Second Year PPLDG Summary

PPLDGs were set up for trainees to have a safe and intimate space to explore their personal and professional development, group dynamics and how this relates to working in the National Health Service (NHS). This reflective account covers the history of the group over two academic years. It is structured around how and why the group lost its sense of purpose and which factors promoted or hindered this.

There were several factors which seemed most associated with regaining a sense of purpose: the influence of the facilitator, avoidance of conflict, my own core beliefs about hierarchies, reflective discussions about clinical practice, exploring individual strengths and values and feeling nurtured. 'My experience of group processes', 'my contribution to the group' and 'its contribution to my learning,' over the two years, are the three overarching themes.

I also reflect on my developmental change over the two years in terms of my understandings and perceptions of group dynamics and working in teams. My opinion of the group’s strengths and weaknesses are highlighted; and the account ends with how the development of the group could shape its future. References are made to psychological theory and research.
CLINICAL DOSSIER

This section highlights the nature of the work undertaken during clinical training placements over three and a half years. It also presents the summaries of five case reports written on clinical assessments and interventions conducted on different placements. I worked in a range of services for people across the lifespan, whilst completing the doctoral course. Clients presented with various functional and organic mental health problems as well as physical health problems.

I completed six placements during my training. These were in adult and older adult mental health, adult learning disabilities, a specialist neurorehabilitation team and separate neuropsychology service; I also completed two placements with children and families in child and adolescent mental health services (CAMHS). These teams were mainly multi-disciplinary and based in community or out-patient settings.
OVERVIEW OF CLINICAL PLACEMENTS
(September 2009 – March 2013)

**Year 1: Adult Community Mental Health Team**
This one year NHS placement was based in a community mental health team (CMHT) for adults with severe and enduring mental health problems. Clients presented with a range of mental health problems which included psychosis, borderline personality disorder, depression, bipolar and anxiety disorders.

A range of core competencies were developed throughout the placement, which set the foundation for training as a Clinical Psychologist. These included client engagement, building the therapeutic alliance, therapy, assessment, formulation and intervention skills. The main therapeutic model was Cognitive Behavioural Therapy (CBT). Interventions included one-to-one and group CBT as well as family work for psychosis.

A service-related research project (SRRP) was conducted within this service. This was an audit of the interventions offered to people with a diagnosis of psychosis and the extent to which these complied with NICE (2009) guidance.

**Year 2: Community Team for Adults with Learning Disabilities**
This placement was based in a Social Services department with multi-disciplinary staff from both Social Services and the local Primary Care Trust. My clients were adults with learning disabilities across the spectrum of severity, who lived in the community. Many clients had co-morbid mental health problems and developmental disorders such as Autism Spectrum Disorder (ASD) and Downs Syndrome. One-to-one therapy, consultation and group work in this setting drew on behavioural, systemic and CBT models.
My supervisor was the lead challenging behaviour specialist and so the majority of clients were referred for consultation on the management of challenging behaviour. As such, interventions involved consultation and training to staff teams and family carers. Extended assessment was also a focus of the work, with specialist routine dementia assessment for clients with learning disabilities approaching the middle stage of life.

**Year 2: Child and Adolescent Mental Health Team**

This placement was based in an NHS out-patient service in a multi-disciplinary team (MDT) for children and families with mental health problems and developmental disorders. I worked with a range of presentations intervening on an individual, family and group level. The presentations included obsessive compulsive-disorder (OCD), Post Traumatic Stress Disorder (PTSD), anger, tics and other anxiety disorders as well as problems with exclusion from school. The psychological models used were based on CBT, behavioural and systemic formulation. Effective novel ways of working were introduced in my training, which involved intervening with the parents alone in therapy sessions over time to treat the child indirectly.

Unfortunately, the service context was such that the team had changed NHS Trusts three times in three years and was under enormous pressure in terms of resources and re-organisation. During this difficult time, although my clinical skills were satisfactory, it was felt that I had not fully developed the “meta-competencies” required of a Clinical Psychologist to understand team dynamics, mentalize the needs of the other and the supervisory relationship. It was recommended that I undertake a second child placement before qualification.
Year 3: Community Neurorehabilitation Team and Neuropsychology Service

This was my specialist or 'advanced competencies' placement. It was an NHS service based in an adult out-patient community neurorehabilitation setting within an MDT. There were clients who were referred to the Neuropsychology Service alone and clients who were referred to the wider team who needed input from other staff such as Occupational Therapists, Physiotherapists and Speech and Language Therapists.

Clients presented with acquired neurological illnesses and injuries such as multiple sclerosis, head injury, stroke, meningitis and HIV. They were referred to the team soon after they were discharged from inpatient settings. The work was a balance of neuropsychological assessment and formulation, cognitive rehabilitation strategies and therapy for mood and adjustment. Consultation and training was also provided to staff, carers and clients. The models used were integrative, drawing on health psychology, neurorehabilitation, systemic and CBT formulation.

In this placement, I was given the opportunity to write a reflective piece on team dynamics to address a developmental learning need in my training. I also conducted a joint audit of client case notes, with other Clinical Psychologists, to monitor the adherence of the team to NICE (2011) guidelines on mood management. This was later disseminated to the team.

Year 3: Older Adult Community Mental Health Team

This was a CMHT for older adults based in an NHS Trust. This was the first placement where the service was accessed exclusively from home, with an option for neuropsychological assessment at another hospital site.
Clients presented with functional mental health problems and organic conditions, in addition to chronic physical health conditions. I worked with older clients with depression, anxiety, cognitive and psychosocial problems. The work consisted of comprehensive neuropsychological assessment, “Life Story” work, one-to-one therapy and interventions with families and carers. Strong connections were made with the Alzheimer’s Society and the voluntary sector. The main models for intervention were CBT, systemic and behavioural.

I undertook some consultation work with a care home for the duration of the placement, as part of a pilot study for the Challenging Behaviour Service. In these meetings with staff, a client's challenging behaviour would be formulated psychologically, with the aim of increasing awareness of the origins of the behaviour and improving staff interactions with clients to reduce the challenging behaviour.

**Year 4: Child and Adolescent Mental Health Service**

This final placement was based in an out-patient CAMHS clinic for children and adolescents with mental health problems and developmental disorders. Some work was also conducted in a school under the Clinical Psychologist in the CAMHS Learning Disabilities Team. The presenting problems ranged from acquired brain injury to anger, depression, self-harm and developmental conditions such as autism and attention deficit hyperactivity disorder (ADHD). Work with families was also essential as well as inter-agency and joint work with other professionals, such as Family Therapists and Psychiatrists.

During my time on this placement, I was given the opportunity to visit a Pupil Referral Unit for primary school age children. I contributed to their service development project, which involved piloting a new
observation template for children in different settings, drawing on time-sampling techniques.

References

ASSIGNMENT: Adult Mental Health Case Report – Case Report One

TITLE: Cognitive Behavioural Therapy with a Retired Man with a Nine Year History of Chronic Depression

Year 1

DATE: May 2010

STATEMENT OF CONSENT AND CONFIDENTIALITY:
Written and oral consent was obtained from the client in order for the clinical work to be written up for academic and training purposes. All material has been anonymised such that it contains no information that would identify the client, family members, professionals or institutions. The names used throughout are pseudonyms and some details have been altered to preserve anonymity.
Mark Andrews was a retired White British man with a nine year history of chronic depression. He was re-referred to the community mental health team (CMHT) after his GP noticed deterioration in his symptoms. A referral was made for psychological assessment: a cognitive-behavioural formulation was constructed around Mark’s depression using Padesky and Greenberger’s (1995) adaptation of the cognitive model of depression (Beck, 1967, 1976).

His early retirement, coupled with his wife’s career taking off, precipitated changes in his thinking: he was more negative about himself, the world and the future (exhibiting Beck et al.’s, 1979 ‘cognitive triad’). He also experienced thinking biases which exacerbated his depressed mood and lead to a reduction in activity, creating a lack of positively reinforcing experiences (Lewinsohn et al., 1979).

This vicious cycle impacted Mark’s self-esteem and he therefore found it difficult to talk to his wife and others about his problems. Behavioural activation was used to increase meaningful activity and behavioural experiments tested out faulty cognitions. Thought challenging was also used to generate alternative balanced thoughts, known to have a positive impact on mood (Greenberger & Padesky, 1995).

Over sessions, it became apparent that an interpersonal psychotherapy (IPT) reformulation could be helpful. IPT explores the loss of roles and self-esteem captured within those roles during normative life transitions. Symptoms of depression are also framed within an interpersonal context with relationships as the target for intervention. Critical reflections are given about the interventions as well issues of diversity and self-reflexivity.
References


ASSIGNMENT: Adult Mental Health - Case Report Two

TITLE: Cognitive Behavioural Therapy (CBT) with a Second-generation West African man with a Twenty-year History of Schizophrenia

Year 1

DATE: August 2010

STATEMENT OF CONSENT AND CONFIDENTIALITY: Written and oral consent was obtained from the client in order for the clinical work to be written up for academic and training purposes. All material has been anonymised such that it contains no information that would identify the client, family members, professionals or institutions. The names used throughout are pseudonyms and some details have been altered to preserve anonymity.
Case Report Two Summary: Adult Mental Health

Tunde Ade was a 40 year old man whose parents migrated to England in the 1960s. He had a twenty-year history of schizophrenia and distressing medication-resistant positive psychotic symptoms. These consisted of delusions of persecution and derogatory and threatening voices. This case report details the process of referral, assessment, formulation and intervention stages of Cognitive Behavioural Therapy for psychosis and the effectiveness and limitations of the work completed.

The formulation suggested that Tunde had traumatic childhood events which created an enduring cognitive vulnerability to beliefs around his subordination, other people’s power over him and the world as an unsafe place. These beliefs were mirrored in his appraisal of voice power and malevolence, which are some of the beliefs we challenged with success throughout the intervention. Normalising and coping strategy enhancement were also used which were helpful for reducing stigma, enhancing self-efficacy and control.

Although Tunde engaged well with the cognitive strategies and these had a significant clinical impact on the severity of his symptoms and improved his quality of life, there were challenges to completing behavioural experiments, which target avoidance behaviours. Reflections are made on the development and quality of the therapeutic alliance and ruptures within it. Issues within my own learning experiences as a trainee as well as those of diversity are reflected upon.
ASSIGNMENT: Learning Disabilities Case Report: An Extended Assessment – Case Report Three

TITLE: A Financial Capacity Assessment of a 36 year-old man with Asperger’s Syndrome, Bipolar Disorder and a Mild Learning Disability

Year 2

DATE: April 2011

STATEMENT OF CONSENT AND CONFIDENTIALITY: Written and oral consent was obtained from the client in order for the clinical work to be written up for academic and training purposes. All material has been anonymised such that it contains no information that would identify the client, family members, professionals or institutions. The names used throughout are pseudonyms and some details have been altered to preserve anonymity.
Case Report Three Summary: Adult Learning Disabilities

This is an extended assessment of a 36 year-old gentleman, Ivan, with a diagnosis of Asperger’s syndrome, bipolar disorder and a learning disability. An extended assessment was done in order to draw on information from multiple sources and methods, to formulate a clinical problem and provide recommendations for the family-professional network. The report is divided into three sections. Part A documents the initial assessment and formulation, leading up to the action plan. Part B looks at the content and process of the extended assessment. An extended formulation, recommendations and reflexive critique are shown in Part C.

Ivan was referred to clinical psychology for a financial capacity assessment because of multiple difficulties he had managing his money in the context of his mental health problems, social skills and communication deficits. These included overspending, not paying his bills and spending money on luxury items he could not afford. There were also several safeguarding issues surrounding probable financial abuse and exploitation.

The extended assessment showed that, under the right conditions, Ivan could make wise decisions with his money and did have capacity to manage a weekly budget. His understanding of numbers and financial concepts was also good. The integrative extended formulation suggests that Ivan’s difficulties managing money relate to the many systemic, biopsychosocial, cognitive, behavioural and neuropsychological factors as well as factors relating to a lack of experience of financial decision-making. Recommendations for possible interventions are highlighted.
ASSIGNMENT: Oral Case Presentation – Case Report Four

TITLE: Systemic thinking, Supervision and the Therapeutic Alliance in a Parenting Intervention for a 10 year-old girl with Obsessive-Compulsive Disorder

Year 2

DATE: September 2011

STATEMENT OF CONSENT AND CONFIDENTIALITY: Written and oral consent was obtained from the client in order for the clinical work to be written up for academic and training purposes. All material has been anonymised such that it contains no information that would identify the client, family members, professionals or institutions. The names used throughout are pseudonyms and some details have been altered to preserve anonymity.
Case Report Four Summary – Child and Adolescent Mental Health

In the oral presentation I will discuss “Jane”, a 10 year-old girl with a diagnosis of Obsessive Compulsive Disorder (OCD), which emerged in the summer of 2010 when her grandfather was in hospital for a protracted period of time. The referral to the Child and Adolescent Mental Health Service (CAMHS) was prompted by her parents' concern that she was losing weight as she refused to eat certain foods. Jane presented with one main obsession around a fear of vomiting through contamination and had a number of different rituals around this. There was evidence that these rituals were being positively reinforced by parental attitudes and responses as the time Jane spent on rituals at home was significantly greater than when she was at school.

My development as a Clinical Psychologist can be linked to three aspects of the work where my awareness and clinical skills improved: a) systemic formulation b) the use of supervision and c) building a parent-therapist therapeutic alliance. The presentation will provide more information and detail around these as well as reflect on issues of diversity and difference.

In terms of systemic thinking, I learnt to conceptualise the function of Jane’s behaviour within her family system such that her difficulties were formulated interpersonally rather than intrapsychically. There was evidence of a cross-generational coalition between Jane and her mother, which contributed to Jane’s anxiety as she may have experienced too much control in the home. I therefore worked with the parents to strengthen the parental coalition and explored their strengths and beliefs as a resource to improve their daughter’s OCD. Building a successful therapist-parent alliance was integral to successful working with this family, to intervene at a different level in
the system than in my prior experience. I also discuss the role of supervision in reformulation and reflection when the initial cognitive-behavioural intervention was not helpful in the early stages of the work.
ASSIGNMENT: Neuropsychological Case Report – Case Report Five

TITLE: Second repeat neuropsychological assessment of a 33 year-old African woman with HIV, psychosis and previous meningitis: Contributions to care planning

Year 3

DATE: May 2012

STATEMENT OF CONSENT AND CONFIDENTIALITY:
Written and oral consent was obtained from the client in order for the clinical work to be written up for academic and training purposes. All material has been anonymised such that it contains no information that would identify the client, family members, professionals or institutions. The names used throughout are pseudonyms and some details have been altered to preserve anonymity.
Case Report Five Summary: Specialist Neuropsychology and Neurorehabilitation

Funmi Adebayo was a 33 year-old African lady who was HIV+ and contracted opportunistic meningitis in 2009. Upon hospital admission she became psychotic, exhibiting bizarre, non-violent behaviour and unusual thoughts. After successful resolution of her psychosis with an anti-psychotic, she was discharged back home but was unable to look after herself or carry out activities of daily living. Funmi was therefore sent to residential care with 24-hour support.

However, Funmi had a strong conviction that God would cure her HIV and she wanted to get married and have a baby. Following concerns from professionals, Funmi was referred to the Neuropsychology Service three times from 2009-2011. In June 2009, the Repeatable Battery for the Assessment of Neuropsychological Status (RBANS) showed overall evidence of a marked deterioration in global cognitive abilities (lowest 1\textsuperscript{st} percentile) on tests of immediate and delayed memory, visuospatial skills and language. Further testing, in June 2011, showed improvement in visuospatial skills and a decline in auditory attention against a background of consistently low Index scores (at the 1\textsuperscript{st} and 2\textsuperscript{nd} percentiles).

In December 2011, Funmi started to re-experience psychotic thoughts and had urges to eat non-foods. All of Funmi's RBANS Index scores were in the Extremely Low range, indicating no areas of improvement and further deterioration in sustained auditory attention. This case report details the second repeat assessment of Funmi's cognitive functioning and contributions made to care planning. This included further capacity and risk assessment, guidance on illness management, neurorehabilitation strategies, consultation, education and liaison with the professional network.
RESEARCH DOSSIER

This section includes three pieces of research conducted during the Clinical Psychology doctorate. The first piece is a service-related audit conducted on my adult mental health placement. It examines the extent to which the CMHT I was based in adhered to NICE guidelines on the treatments offered to clients with a diagnosis of psychosis.

The second piece of research is the major research project or thesis, which was conducted over the second and third years of the course. It is a large scale quantitative study which looks at the role of adult attachment style in hearing voices. It tests an original hypothesis that interpersonal schemas and beliefs about voices mediate this relationship.

Next, the abstract of a qualitative piece of research is presented on young females' opinions of celebrity infidelity. This was conducted as a team in our qualitative research methodology course groups. The portfolio ends with a log of the research experiences gained during doctoral training in Clinical Psychology.
ASSIGNMENT: Service Related Research Project (SRRP)

TITLE: An Audit of Referrals for CBT and Family Interventions for Psychosis – Does the CMHT Comply with NICE Guidelines?

Year 1

DATE: July 2010
ACKNOWLEDGEMENTS

I would like to acknowledge the regional and programme supervisors, Dr. Rachel Silva and Dr. Louise Deacon for the supervision, input, expertise and the time they dedicated to this audit. I am also grateful to Dr. Peter James and Dr. Suzanne Haddad, who were incredibly helpful in providing information on service-related research on Cognitive Behavioural Therapy (CBT) and family interventions for psychosis. I would like to thank Sue Burchell for her invaluable and prompt admin support. It is also important that the marker, who remains anonymous, is acknowledged for their rigorous feedback on an earlier draft of this research proposal.
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ABSTRACT

Aims: The overall aim was to establish whether the CMHT meets the standards set by the National Institute for Health and Clinical Excellence (NICE) with regards to offering Cognitive Behavioural Therapy (CBT) and family interventions to clients with psychosis. Further aims were to establish who referred clients, the time taken to refer and whether there was equality of access by gender and ethnicity.

Procedure: The data were extracted from ‘RiO’, the NHS electronic patient records system. Excel and SPSS for Windows 17 were used to analyse the data with descriptive statistics and chi-squared tests.

Results: Thirty-one out of 113 clients with psychosis were referred for CBT (27.4%). This should have been approximately 104/113 (92.8%) using Haddad (2005) as an estimate of client eligibility. The mean time taken to refer to CBT was 3.3 years (S.D. 2.5) with psychiatrists making 72% of referrals. Chi-squared tests showed there was equality of access for CBT. No clients were directly referred for family interventions where approximately 59/113 (52.2%; Haddad, 2005) should have been.

Conclusions: Insufficient numbers of clients with psychosis were referred for CBT and family interventions. However, a limitation of this study is that staff were not asked directly about clients they considered; and it was not always possible to determine the intention of the referral on ‘RiO’. Therefore there was no insight into the reasons remaining clients were not referred and the extent to which these decisions concurred with NICE guidelines. Further research would find out why clients are not referred if they are eligible.
INTRODUCTION

Psychosis
Psychoses, the majority of which include diagnoses such as 'schizophrenia' and 'schizoaffective disorder', are the mental health conditions carrying the greatest stigma, risk of suicide and cost to the government (Department of Health, 2001). Psychoses are chronic relapsing disorders for around 30% of people (Mason et al., 1996) characterized by heterogeneous symptoms. The extent to which diagnostic certainty can be ascertained, particularly over the course of the illness, is an ongoing challenge in psychiatry (Dutta et al., 2009).

After a first psychotic episode, 80% of people experience further acute episodes requiring hospital admission, with 50% of these occurring within the first two years (Mason et al., 1996). As such, a lot of research has been conducted on treating psychoses early within a critical period, with delays in treatment associated with poorer outcomes in social and psychological functioning (Birchwood & MacMillan, 1993). However, there is evidence that around 50% of people with psychosis can experience favourable outcomes over a 15-25 year follow-up, including achieving recovery status on outcome measures, low hospitalisation rates, periods of years without relapse and up to 80% in employment rates (Harrison et al., 2001) although this research is rarely acknowledged.

NICE Guidelines
Since 1999, NICE have synthesized rigorous evidence for the NHS to produce guidelines on best practice, cost-effective and efficacious treatments. Its aim is to minimise 'postcode lotteries' (Butler, 2000) or stark variations in treatment across the UK and promote equality in service-delivery whilst improving standards of care.
NICE have shown that CBT and family interventions are vital in preventing relapse, hospital admission and reducing the impact of distressing positive symptoms: auditory and visual hallucinations, paranoia and delusional thinking; and negative symptoms including a lack of willed action and blunted affect (NICE, 2002, 2009). These interventions will be discussed in turn.

**Cognitive Behavioural Therapy**

The guidelines recommend CBT for all clients including those with persistent or medication-resistant, acute and remitting symptoms. The only exception to offering clients CBT should be if they are unable to engage in an informed discussion (NICE, 2002, 2009). CBT is a form of psychotherapy used to illuminate links between thoughts, feelings and behaviours and how interactions between these factors contribute to psychological distress and functional difficulties. CBT is focused on the here and now and uses evidence or rational thought to engender changes in beliefs or cognitions. Cognitive models of psychosis implicate biases in thinking and reasoning processes in the maintenance of distressing psychosis, which is conceptualised on a continuum with the general population (Chadwick *et al.*, 1996). It is these which are the targets for change as well as thinking about coping strategy enhancement and relapse prevention, which are also vital components of the CBT treatment (Kuipers *et al.*, 1997).

**Family Interventions**

There is also compelling evidence to suggest that involving families and carers in psychological interventions is crucial in preventing relapse. Therefore clients with families or carers, either living with them or in close contact with them, are all recommended to be offered family interventions (NICE, 2002, 2009). The only exception to offering clients a family intervention should be if an advocate or carer is unavailable.
Within families, high levels of 'expressed emotion', a phrase coined by Brown et al. (1962), is a reliable predictor of hospitalisation and relapse in psychotic symptoms. The characteristics of families with this added risk may be that they are too critical, hostile or over-involved with the person with psychosis. As such, family interventions are based on psychoeducation, problem-solving, improving communication and relapse prevention (Kuipers et al., 2002).

Psychosis: Gender and Ethnic Minorities
There is compelling evidence that groups who migrate (Cantor-Graae & Selten, 2005), have a greater risk of developing schizophrenia, due to chronic social stressors such as discrimination (Veling et al., 2007) isolation and social defeat (Cantor-Graae, 2007). Epidemiological studies, looking at the incidence of schizophrenia worldwide, show that for every three men who develop the disorder, two women develop it (McGrath et al., 2008) suggesting that males are also at greater risk. It is therefore key to ensure that there is equality of access in services for males and those from ethnic minority backgrounds.

Objectives
The following objectives were considered crucial to the audit of the CMHT’s compliance with NICE guidance on referrals for CBT and family interventions:-

- To estimate the proportion of CMHT clients who have a diagnosis of psychosis.
- To estimate how much the CMHT adheres to NICE guidelines on client eligibility for CBT and family interventions using Haddad (2005).
- To find out if there is equality of access by gender and ethnicity for CBT and family interventions.
Psych.D. Research Dossier

- To establish the length of time taken to refer for CBT and family interventions since the NICE guidelines were produced in 2002.
- To find out the distribution at which the different disciplines refer for CBT and family interventions.

**METHOD**

**Ethical Approval**
The National Health Service (NHS) trust in which this audit was carried out was satisfied that the project did not constitute research and therefore no ethical approval was deemed necessary (Appendix 2).

**Procedure**
This study was an audit of the electronic notes of clients with a diagnosis of psychosis, which produced retrospective data. Only clients who were on the CMHT caseload at the time of the audit were included.

**Data sources**
There were three main sources of data collection. Firstly, the NHS electronic system ‘RiO’ was used for the majority of the data collection. RiO is a specialist Mental Health and Learning Disability system, which is currently being used by seven Mental Health Trusts (for further information see Hampshire Partnership Programme for IT, 2009). It includes the following client records: psychiatric diagnosis, daily progress notes, demographics, clinical documentation and care plans.

RiO is accessible by all staff involved in an individual’s care as a convenient single source of information. It is, however, confidential and secure and demands, of all staff, legal responsibility for its appropriate use. The second main source of information was the
Reliability and Validity
The method of data extraction was considered valid and reliable. There were two main reasons for considering the data valid: qualified psychiatrists enter all diagnoses on RiO and it is mandatory that every contact with a client is entered on RiO including treatment decisions. However, there were limitations to the reliability of the data regarding the intention of the referrer. The accuracy of this data depended on staff actually entering the specific 'name' of psychological intervention they referred clients to the psychologist for.

The data extracted on the treatment decisions were considered reliable because cross-checks could be made between the progress notes and the clinical documentation. The clinical documentation included letters written by the health professional providing treatment, the name and purpose of the treatment and their job title. This enabled vital discrimination between staff providing psychotherapies or CBT and family interventions.

Data Extraction
Data was extracted in alphabetical order between the months of January and June 2010. A proportion of clients on the caseload were discharged and new referrals were also taken on during this time period, however, these clients were not included in the analysis.

The initial proportion of clients diagnosed with a psychotic disorder was taken from February 2010 alone. All clients with a diagnosis of a psychotic disorder were added to a password protected Excel spreadsheet. There were 15 types of psychotic disorder (Appendix 3)
under the International Classification of Diseases and Related Health Problems, 10th Revision (ICD-10; World Health Organization, 1992). Clients who were on the CMHT caseload before RiO was established had a ‘historical’ word document saved under their clinical documentation containing prior written communications between professionals. Keywords were used as search terms to find any evidence of CBT or family interventions in all aforementioned data sources. The keys ‘CTRL and F’ were used to highlight particular keywords (in Appendix 4). Truncations were considered necessary for certain words in case of differences in spelling between staff or spelling errors. To elicit whether there were family members in contact with the client several key search terms were used relating to family relationships.

**Data Analysis**

The Excel ‘COUNTIF’ formula was used to sum demographic information, the occurrence of psychological interventions and the incidence of family members. Means, medians, modes and subtractions from two time points were also calculated in Excel. Chi-squared tests were conducted in SPSS to determine whether there were differences in observed and expected numbers of interventions by gender and ethnicity.

**Exclusion Criteria**

All clients with an ICD-10 diagnosis of psychosis were included. Clients with organic psychosis were excluded.
RESULTS

Proportion of CMHT Cases with a Diagnosis of Psychosis
There were 328 clients on the caseload in February 2010, 21 (6.4%) had no diagnosis so they were excluded from the analysis leaving 307 clients in total. One hundred and twenty-three clients out of 307 (40.1%) on the caseload had a diagnosis of psychosis. By the time of data analysis completion in May 2010, 10 clients with psychosis had been discharged and therefore the analysis has only been considered for the remaining 113 clients on the caseload. The most common ICD-10 psychotic diagnosis was ‘F200’ which consisted of 68/113 (60.2%) clients.

One of the 113 clients was deaf and two clients also needed interpreters. There were 47 (41.6%) females and 66 (58.4%) males. The age range was 19-79 with a mean age of 38.5 years (S.D. = 11.7). The CPA levels were as follows: 41 (36.3%) were on standard CPA and 69 (61.1%) on enhanced – three clients had no care package.

Ethnicity
As predicted, there were more clients from ethnic minority backgrounds with a diagnosis of psychosis than estimated for that demographic region. The Office of National Statistics Home Census (2001) showed that 89.2% of the population in this region was White British – in the CMHT White British clients constituted only 69.9% of the clients with psychosis (see Table 1).
Table 1: Ethnicity of CMHT Clients with Psychosis

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>No. Clients with Psychosis Diagnosis</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>White British</td>
<td>79</td>
<td>69.9</td>
</tr>
<tr>
<td>White Irish</td>
<td>10</td>
<td>8.8</td>
</tr>
<tr>
<td>African</td>
<td>6</td>
<td>5.3</td>
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<tr>
<td>Indian</td>
<td>5</td>
<td>4.4</td>
</tr>
<tr>
<td>Any other Asian Background</td>
<td>4</td>
<td>3.5</td>
</tr>
<tr>
<td>Caribbean</td>
<td>2</td>
<td>1.8</td>
</tr>
<tr>
<td>Any Other White Background</td>
<td>2</td>
<td>1.8</td>
</tr>
<tr>
<td>White European</td>
<td>1</td>
<td>0.9</td>
</tr>
<tr>
<td>Pakistani</td>
<td>1</td>
<td>0.9</td>
</tr>
<tr>
<td>Mixed White and Black Caribbean</td>
<td>1</td>
<td>0.9</td>
</tr>
<tr>
<td>Any Other Group</td>
<td>1</td>
<td>0.9</td>
</tr>
<tr>
<td>Any other Black background</td>
<td>1</td>
<td>0.9</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>113</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

**Number of Referrals to Psychology**

Figure 1 shows the sum total of the referrals for psychological assessment (n = 43) and how many were specifically for CBT. CBT referrals consisted of 31/43 (72.1%) of the total referrals to psychology; and this number included clients who declined a psychology assessment. Therefore 31/113 (27.4%) clients with a diagnosis of psychosis were referred for CBT.

There were no referrals for family interventions, although two clients were offered family interventions by the psychologist as a result of a
general psychological assessment of need\(^3\). There were 12/43 (27.9\%) referrals for alternative psychological assessments. Two of 43 (4.7\%) referrals were discussed with the psychologist, but did not lead to a referral for a psychological assessment.

One client out of 113 (0.8\%) was referred for both a CBT assessment and an alternative psychological assessment at a later date. Two clients out of 113 (1.8\%) were suitable for family interventions after psychological assessment and had also been assessed for CBT. Six of the 43 (12.8\%) referrals made were for three clients who were referred for two psychological assessments each. Therefore, 40/113 (35.4\%) clients were referred for CBT or an alternative psychological assessment for psychosis.

\[\text{Figure 1: Distribution of Psychology Referrals for Psychosis}\]

\(^3\) There were four other referrals for 'family therapy', the orientation of which is 'systemic', looking at the interactions between family members, which is not based on Kuipers et al., (2002). It is possible, but unlikely from speaking with the team psychologist, that when staff referred clients for 'family therapy', they meant to refer for the NICE recommended 'family intervention'.
Discipline and Referrals

Table 2 shows the distribution of the 31\(^4\) CBT referrals by staff discipline. There were no direct referrals for family interventions so this is not included in the analysis. Psychiatrists made the majority of the referrals (71.9\%) with psychologists making the least (6.2\%).

<table>
<thead>
<tr>
<th>DISCIPLINE</th>
<th>CBT referrals</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychiatrist</td>
<td>23</td>
<td>71.9%</td>
</tr>
<tr>
<td>Community Psychiatric Nurse</td>
<td>4</td>
<td>12.5%</td>
</tr>
<tr>
<td>Social Worker</td>
<td>3</td>
<td>9.4%</td>
</tr>
<tr>
<td>Psychologist</td>
<td>2</td>
<td>6.2%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>32</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Length of Time to CBT Referral

Of the 113 clients with psychosis, the mean time on the CMHT caseload was approximately 8 years to the nearest whole year (median = 4.5, mode = 1, range = 0-26 years). When removing the 37 clients who were on the caseload pre-dating the NICE guidelines for schizophrenia in 2002, the mean time to referral for CBT was 3.3 years (S.D. = 2.5, median = 3, range = 0 - 7 years).

Accessibility of CBT by Gender and Ethnicity

Chi-squared tests showed there were no differences in the proportion of female or male referrals for CBT ($\chi^2 = 1.11$, df = 1, $p = 0.29$; see Table 3). In addition, when comparing 'White British' to all other

---

\(^4\) There were 32 referrals for CBT by staff discipline as one client was referred jointly by a psychiatrist and a community psychiatric nurse (CPN).
ethnic groups combined there were also no differences in referral rates \( (\chi^2 = 0.27, \, df = 1, \, p = 0.60; \text{ see Table 4}) \) although the sample sizes of each ethnic group were too small for a powerful separate analysis.

Table 3: Observed and Expected Referrals for CBT by Gender

<table>
<thead>
<tr>
<th></th>
<th>CBT referrals</th>
<th>Expected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>10</td>
<td>12.89</td>
</tr>
<tr>
<td>Male</td>
<td>21</td>
<td>18.11</td>
</tr>
<tr>
<td>Total</td>
<td>31</td>
<td>31</td>
</tr>
</tbody>
</table>

Estimating the ‘NICE’-ness of the CMHT

In a previous audit by Haddad (2005) which looked at referrals for CBT and family interventions for clients with psychosis in the same demographic region as this study, 36/68 (52.9%) clients were in close contact or lived with family members. A further 6/68 (8.8%) cases met the exclusion criteria for CBT and 1/68 (1.5%) for family interventions.

One hundred and six out of 113 clients had references to family members on their progress notes. However the closeness of the contact with the family was not assessed at this time using this methodology. Haddad’s (2005) study aids estimation of the eligibility of clients in the current sample: 60/113 (52.9%) clients should have been offered family interventions where none were, and only 1.5% of these 60 clients are likely to have been considered ineligible \( (n = 1) \). Therefore, referrals fell short by around 59 clients. Also, based on Haddad’s (2005) estimate for CBT referrals, 104/113 (92.8%) clients should have been offered CBT where only 31/113 (27.4%) clients were.
DISCUSSION

Summary
The purpose of this audit was to find out whether the CMHT complied with NICE recommendations to offer CBT and family interventions to clients with psychosis. Less than a third of clients were referred for CBT treatments and none were referred for family interventions. It appears that referrals for CBT may have only marginally increased from 2005 (Haddad, 2005), with no improvement on the 0% seen for family intervention referrals. This is in contrast with Macpherson et al., (2007) who found greater compliance with NICE guidelines over a two year period in an Assertive Community Treatment (ACT) team. This suggests that little progress has been made in implementing family interventions since Brown et al.'s (1962) pivotal work on expressed emotion almost forty years ago.

Encouragingly, there was equity of access when analysing referrals by gender and ethnicity. However, on average for all clients, CBT referrals were made after more than three years of being referred to the CMHT, which suggests that clients were not being seen early enough during the course of their illness (Birchwood & MacMillan, 1993).

Finally, an interesting result was that psychiatrists made 72% of referrals for CBT. This could be due to greater knowledge of NICE, the efficacy of psychological treatments or stronger professional support (Sheldon et al., 2004). It may also be that the power to refer within the CMHT lies with the psychiatrist given finite resources and frequent waiting lists, although this cannot be deduced from this study.
Strengths and Limitations

The data collection of psychosis information was more reliable than that of other studies which asked care co-ordinators to give diagnostic information in the absence of electronic systems (Telford, 2003; Macpherson et al, 2007). Care co-ordinators in this CMHT did not have access to diagnostic information on RiO and it may be problematic to ask them if there is no systematic way of finding this information out.

Another strength of the electronic records approach to identifying clients is that those with both primary and secondary diagnoses were considered. This is in accordance with NICE's emphasis on psychotic symptoms and not diagnosis alone. This was important because a larger range of clients were identified as having psychoses, almost double those in a team of a similar size and region (Haddad, 2005).

However, there are limitations to not contacting care co-ordinators: there is no insight into the reasons remaining clients were not referred and the extent to which these decisions concurred with NICE exclusion criteria. It was also difficult to extract data on the intention of the referrer unless they made this explicit, which is a limitation of this audit.

Macpherson et al., (2007) showed that staff have good reasons for not referring and these can concur almost entirely with NICE guidance. However, Macpherson et al.'s (2007) results could be met with scepticism in that solely asking staff may be unreliable – almost six times the number of clients than in Haddad (2005) were considered 'unable to engage in an informed discussion', which suggests the ACT team may have overestimated clients’ ineligibility. Staff may be prone to overestimate their concordance with NICE guidance because of perceived threats to job security or their professionalism. As such, the study may have overestimated the
NICE-ness of the ACT service while this study perhaps underestimated it given the constraints of the methodology used.

**Future Research**

Future research should use multiple methods (face-to-face interviews with staff and clients as well as electronic methods) to investigate why clients are not referred if they are eligible according to NICE criteria. When interviewing psychiatrists, Kingdon *et al.*, (2008) found that a shortage of trained therapists is the most common reason for not referring clients with psychosis for cognitive therapy, rather than a resistance from staff to refer or for patients to take up interventions. This is in accordance with the present audit which indicated that psychologists refer the least clients probably due to a lack of resources. However, further research could also look into what the most effective strategies are for bolstering referral rates of appropriate clients.
REFERENCES


Haddad, S. (2005). *Measuring the need for cognitive behavioural therapy (CBT) and family intervention (FI) for service users with a diagnosis of schizophrenia in a community mental health team caseload*. Unpublished service-related research project, University of Surrey.


Appendix 1: Evidence that the Results of the SRRP were Communicated to the Service

25th August 2010

Dear Community Mental Health Team (CMHT),

RE: An Audit of Referrals for CBT and Family Interventions for Psychosis – Does the CMHT Comply with NICE Guidelines?

Audit background

As part of my doctorate training, the University of Surrey requires that I complete a service-related piece of research. During my time with CMHT I conducted an audit looking at all cases of clients with a diagnosis of schizophrenia or related disorders. The purpose of this audit was to see whether or not the CMHT complied with National Institute for Clinical Excellence (NICE) guidelines to refer all clients with psychosis for Cognitive Behavioural Therapy (CBT) or family interventions.

The only case for exclusion for CBT, according to NICE, is if the individual is unable to engage in an informed discussion. For family work, NICE exclude clients without frequent or close contact with their families. Understandably, as a team we would not have the resources to meet the needs of all clients with psychosis in terms of psychological input. Therefore, I am presenting the findings to you for your information, rather than for you to feel the need to take any action in terms of increasing referrals to psychology. All data was collected from the progress notes and clinical documentation of clients with psychosis on ‘RiO’.

Numbers of cases with psychosis

Three hundred and seven out of 328 clients on the team caseload had diagnostic information on RiO. One hundred and thirteen clients out of 307
(36.8%) on the caseload had a diagnosis of psychosis. The most common ICD-10 psychotic diagnosis was 'F200' which consisted of 68/113 (60.2%) clients. There were 47 (41.6%) females and 66 (58.4%) males (age range 19-7, mean = 38.5 years). Forty-one (36.3%) were on standard CPA and 69 (61.1%) on enhanced – three clients had no care package.

Ethnicity

There were more clients from ethnic minority backgrounds with a diagnosis of psychosis than estimated for the demographic region. The Office of National Statistics Home Census (2001) showed that 89.2% of the population in this region was White British – in the CMHT White British clients constituted only 69.9% of the clients with psychosis.

Number of Referrals to Psychology

Figure 1 shows the sum total of the referrals for psychological assessment and how many were specifically for CBT. CBT referrals consisted of 31/43 (72.1%), including 5 clients who declined a CBT assessment. Therefore 31/113 (27.4%) clients with psychosis were referred or considered for CBT. There were no referrals for family interventions, although two clients were offered family interventions by the psychologist as a result of a general psychological assessment of need. Twelve out of 43 (27.9%) referrals were for alternative psychological assessments e.g. neuropsychological testing.

Two of 43 (4.7%) referrals were considered with the psychologist but did not end up in referrals for any psychological assessment. One client out of 113 (0.8%) was referred for both a CBT assessment and an alternative psychological assessment at a later date. Two clients out of 113 (1.80%) were suitable for family interventions after psychological assessment and had also been assessed for CBT.

Figure 1: Distribution of Psychology Referrals for Psychosis
Discipline and Referrals

Psychiatrists made the majority of the CBT referrals (71.9%) with psychologists making the least (6.2%).

Table 1: CBT Referrals by Staff Discipline

<table>
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<th>DISCIPLINE</th>
<th>CBT referrals</th>
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<td>Community psychiatric nurse</td>
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<td>Social Worker</td>
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</tr>
<tr>
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<td>100.0%</td>
</tr>
</tbody>
</table>

Length of time to CBT referral

Of the 113 clients with psychosis, the mean time on the CMHT caseload was approximately 8 years to the nearest whole year (median = 4.5, mode = 1, range = 0-26 years). When removing the 37 clients who were on the caseload pre-dating the NICE guidelines for schizophrenia in 2002, the mean time to referral for CBT was 3.3 years (S.D. = 2.5, median = 3, range = 0-7 years).

Accessibility of CBT by Gender and Ethnicity

Results showed there were no differences in the proportion of female or male referrals for CBT. In addition, when comparing 'White British' to all other ethnic groups combined, there were also no differences in referrals for CBT.

If you have any further questions or would like to request a full copy of this audit, then please contact me or

Yours sincerely

Trainee Clinical Psychologist
Email:

References

Haddad, S. (2005). Measuring the need for cognitive behavioural therapy (CBT) and family intervention (FI) for service users with a diagnosis of schizophrenia in a community mental health team caseload. Unpublished service-related research project, University of Surrey.
16 June 2010

TO WHOM IT MAY CONCERN

Re: An audit of referrals for Cognitive Behaviour Therapy and Family Interventions for Psychosis: Does the CMHT comply with NICE guidelines?

I confirm that the above named Service Related Research Project, conducted by while on placement at CMHT constitutes an audit and I am happy that this does not require approval from the Ethics Committee for research conducted within NHS Trust.

Yours faithfully

[Signature]

Chartered Clinical Psychologist
Community Mental Health Team
### Appendix 3: ICD-10 Classification of Psychotic Disorders

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
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<td>Mental and behavioural disorders</td>
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<tr>
<td>F203</td>
<td>Mental and behavioural disorders</td>
</tr>
<tr>
<td>F209</td>
<td>Mental and behavioural disorders</td>
</tr>
<tr>
<td>F21X</td>
<td>Mental and behavioural disorders</td>
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<td>F220</td>
<td>Mental and behavioural disorders</td>
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<td>F225</td>
<td>Schizophrenia, schizotypal &amp; delusional disorders</td>
</tr>
<tr>
<td>F230</td>
<td>Acute and transient psychotic disorders</td>
</tr>
<tr>
<td>F239</td>
<td>Acute and transient psychotic disorders</td>
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<td>F250</td>
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### Appendix 4: Search Terms - Keywords and Truncations

#### KEYWORDS FOR CBT AND FAMILY INTERVENTIONS

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</tr>
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<tbody>
<tr>
<td>Psychology</td>
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</tr>
<tr>
<td>Family</td>
<td>Fam-</td>
</tr>
<tr>
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<td>Cog-</td>
</tr>
<tr>
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<td>Behav-</td>
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</tr>
<tr>
<td>CBT</td>
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</tr>
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<td>Work</td>
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</tr>
<tr>
<td>Intervention</td>
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<td>Brother</td>
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</tr>
<tr>
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<td>Aunt</td>
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</tr>
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</table>
Do Negative Schema and Beliefs about Voice Omnipotence and Malevolence Mediate the Relationship Between Attachment Style and Distress from Hearing Voices?

By

Esther Cole

Submitted for the Degree of Doctor of Psychology (Clinical Psychology)

Department of Psychology
School of Human Sciences
University of Surrey

July 2012

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ABSTRACT

Objective: Research suggests an association between insecure adult attachment and distress from hearing voices. The current study hypothesised that four cognitive-affective factors might mediate this relationship: negative-self and negative-other schema (negative schema) and beliefs about voice omnipotence and malevolence (beliefs about voices). In a two-stage mediational model, it was hypothesised that negative schema mediate the relationship between attachment style and beliefs about voices; and that beliefs about voices mediate the relationship between negative schema and voice distress.

Design and Analyses: The study adopted a quantitative, cross-sectional design. Mediational effects were tested using bootstrapped confidence intervals, which estimate the size of the indirect effect (Preacher & Hayes, 2008).

Setting: 150 participants were recruited anonymously through international mental health charity networks that support people who hear voices.

Measures: The Experiences in Close Relationships Revised (ECR-R), Brief Core Schema Scales (BCSS), Beliefs about Voices Questionnaire - Revised (BAVQ-R) and the Hamilton Programme for Schizophrenia Voices Questionnaire (HPSVQ) were used. Participants also completed the Patient Health Questionnaire (PHQ-9) and Generalized Anxiety Disorder (GAD-7) scale to control for confounding factors.

Results: The results indicated that all hypotheses, in the two-stage mediational model, were supported. Negative schema emerged as indirect-only mediators of the relationship between attachment avoidance and voice malevolence. All cognitive-affective factors
remained as mediators when controlling for the influence of negative affect and voice characteristics.

**Conclusions:** This is the only study to demonstrate that, in spite of co-morbid anxiety and depression or the severity of voice characteristics, negative schema and beliefs about voices mediate the relationship between attachment style and voice distress. These findings support the use of therapeutic interventions that change the hearer’s relationship to voices or involve modifying, and decentering from, negative interpersonal schemata and distressing beliefs about voices.
1. INTRODUCTION

1.1. Overview

The experience of hearing voices or "auditory hallucinations" has been defined as 'a sensory perception that has a compelling sense of reality, but occurs without external stimulation' (APA, 2000, p.767).

This thesis investigates the relationship between adult attachment style and distress at hearing voices further by exploring potential cognitive-affective mediators of this relationship. Studies suggest that 'schema' (or core beliefs about the self and others; Fowler et al., 2006), and beliefs about voice omnipotence or malevolence might mediate this relationship (Birchwood et al., 2004; Birchwood & Chadwick, 1997; Birchwood et al., 2000). Seminal research on the cognitive models of distress at hearing voices (termed 'voice distress' from here on) indicate that it is the subjective meaning made of the experience which is associated with voice distress – interestingly, coping behaviour, voice content, form or topography are less important determinants of distress (Birchwood & Chadwick, 1997).

In a similar vein, since Benjamin (1989), developments in the literature show that the experience of voice hearing is inherently relational and that voice hearers often respond in ways which mimic their responses in the social world (Birchwood et al., 2000; Hayward et al., 2009). I propose that adult attachment style makes a key contribution to an individual's voice perception, through expectations and beliefs about the self and others.

Although insecure attachment has been found to be associated with positive and negative symptoms of psychosis in general (Ponizovsky et al., 2007; Berry et al., 2008) and voice hearing in particular, (Berry et al., 2006), few studies have specifically examined the relationship between attachment style and voice 'distress' (Berry et al., 2011) as they draw from predominantly non-clinical samples (Wilson & Costanzo, 1996; Pickering et al., 2008) where reported distress from
hearing voices is rare (Posey & Losch, 1983-1984). As a consequence, factors that might mediate this relationship are not well understood. Beliefs about the self and others are potential mediating variables given that they are associated with both attachment style (Bartholomew and Horowitz, 1991; Wearden et al., 2008) and beliefs about voices (Birchwood et al., 2004). Understanding the possible mediating factors further has relevance to the development of psychological and social interventions.

In this introduction, I will first explore the link between the medical model of voices as it is conceptualized in the psychiatric literature. In parallel, I will also discuss the more recent move towards hearing voices being conceptualized on a continuum of normal functioning. I then give an overview of attachment theory before reviewing the literature looking specifically at the relationship between attachment styles and psychosis, with particular reference to hearing voices. Before presenting my rationale for the research and hypotheses further, I turn to an exploration of some possible mediators of attachment style and voice distress by examining evidence for the cognitive models of psychosis.

1.2. Psychotic Disorders

Psychotic disorders are considered to be one of the most costly and severe disorders of mental health; they are usually chronic or relapsing and people usually suffer their entire lives (WHO, 2011). They are characterized by heterogeneous symptoms and the course and nature of episodes can differ. In addition, treatments which were effective in the past for an individual can become ineffective and medication-resistant symptoms are common.

Male gender, migration and living in a developed nation are the three of the main risk factors for the development of psychosis (McGrath, 2006). Furthermore, communities with more of these risk factors,
such as the Afro-Caribbean population in Britain, have a much greater chance of developing psychosis (Cantor-Graae & Selten, 2005).

In the Diagnostic and Statistical Manual Fourth Edition Text Revised (DSM-IV-TR; APA 2000), a number of forms of psychotic disorders or ‘psychosis’ are described (e.g. schizophreniform disorder, schizoaffective disorder, substance-induced psychotic disorder and brief psychotic disorder). Schizophrenia is the most prevalent and well-researched form and affects about 7 in 1,000 of the adult population worldwide; the first episode usually occurs between the ages of 15-35 years (WHO, 2011).

Saha and colleagues (2007) showed that people with a diagnosis of schizophrenia die, on average, 12-15 years earlier than the general population and that this difference in mortality is increasing. Research suggests that suicide, followed by physical health problems, are the leading causes of death in this group (Tran et al., 2009). The risk of death by suicide in people with schizophrenia is estimated at around 50 times higher than in the general population (Centres for Disease Control, 1992), around 10-13% of people with a diagnosis (Caldwell & Gottesman, 1990). Tran et al. (2009) showed that cancers are the second most common reason for death in people with schizophrenia, whose risk of death by cancer is 50% higher than the general population. The increased mortality related to physical illnesses has been linked to poor access to medical care, secondary negative effects of anti-psychotic medication and poor quality of life (Saha et al., 2007).

In terms of psychotic symptoms, the word ‘psychosis’ is the umbrella term generally used to describe a range of unusual experiences (positive, negative, cognitive and affective), which involve the disordered perception and integration of sensory input. Having psychotic experiences does not always entail a diagnosis of
psychosis as unusual experiences are quite common in the general population.

Positive symptoms are named so because they are thought of as being in 'addition' to the experiences of most people, such as hallucinations, delusions and thought disorder. 'Auditory hallucinations,' or hearing voices, is the most common positive symptom of schizophrenia (World Health Organization, 1973). Conversely, negative symptoms refer to deficits in the experiences that people usually have, such as absences in emotional response (blunted affect), poverty of speech (alogia), lack of pleasure (anhedonia), willed action or motivation (avolition; Sims, 2002).

Hearing voices is common, occurring in about 10% of the general population and need not entail a psychiatric diagnosis (Posey & Losch, 1983-1984). Hearing voices can also be a symptom of other mental health diagnoses, such as bipolar disorder and post-traumatic stress disorder (PTSD; APA, 2000).

Overall, these complex symptoms of psychosis culminate in an enigma. Research suggests a lack of a discrete nosological category separate from bipolar disorder and a range of other mental health conditions (Dutta et al., 2007). In this research, I have therefore decided to focus on the experience of hearing voices in general using a symptom-focused, transdiagnostic approach (see Bentall, 2003) which recognises that hearing voices is found across a range of clinical conditions and non-clinical populations.

1.3. A ‘Continuum’ of Hearing Voices

1.3.1. Prevalence of Hearing Voices

There have been a range of studies, dating back to the 19th century, which show the experience of hearing voices is common in the
general population (Sidgwick et al., 1894). In a large-scale U.S. sample looking at a range of hallucinatory experiences (in a range of sensory modalities), the lifetime prevalence has been estimated at around 10% of women and 15% of men (Tien, 1991). Interestingly, the vast majority of people in multiple studies do not report any consequent distress or psychiatric disturbance (Tien, 1991; Van Os et al., 2000; Johns et al. 2002).

Strauss (1969) was the first to suggest that people could be on a 'continuum' of voice hearing, with some experiencing more frequent voices and more voice distress than others. Pierre (2010) therefore makes a useful suggestion to think of voices as "coughs - common experiences that are often, but not always, symptoms of pathology associated with a larger illness" (p. 22). This idea is echoed in Posey and Losch's (1983-1984) study, where around 10% of their 375 healthy students heard voices and reported finding them "comforting or advising." Five percent of the students admitted to conversing with them, yet the authors concluded that no evidence of diagnosable psychosis was found.

In the clinical and non-clinical population, voices can be triggered by stressful situations. Of the people who hear voices, up to seventy percent first experienced them after a traumatic event (Romme & Escher, 1989), which links in with the body of research relating traumatic experiences to the onset of psychosis (Read et al., 2005). Those who have experienced bereavement (Grimby, 1993), who are deprived of sleep (Oswald, 1974), placed in solitary confinement (Grassian, 1983) or suffer abuse as children (Heins et al., 1990) are also at heightened risk of hearing voices.

In the non-clinical population, voice hearers are more likely to hear pleasant, supportive voices who guide them (Stip, 2009), whereas clinical voice hearers are more likely to think their voice has power over them and malevolent intent (Birchwood & Chadwick, 1997).
Such factors show that, there are aspects of voice hearing which significantly increase the risk of distress and acquiring a psychiatric diagnosis.

1.3.2. Characteristics of Clinical versus Non-clinical Voices

There are a plethora of factors which appear to differ between clinical and non-clinical voice hearers which are assumed to relate to the fact that clinical voice hearers experience more distress. Some of these differences include the social situation, voice appraisals, cognitive biases and extent of exposure to traumatic events. There is conceptual and empirical overlap between many of these factors and nearly all interact with one another, perhaps in a bi-directional manner. I will now discuss each of these factors in turn.

Social situation and voice identity

Romme et al., (1992) found that significantly more non-clinical voice hearers were married, reported more social support and readily communicated with people about their voices. Conversely, in one longitudinal study of 50,000 soldiers admitted into the Swedish army, adolescent men, who later developed schizophrenia, were premorbidly shown to have fewer than two friends, no partner and to feel more sensitive interpersonally (Malmberg, et al., 1998). These finding on the social make-up of the clinical and non-clinical population concur with Hayward et al., (2009) who found that people relate to their voices in ways which mirror their styles of ‘social relating’. Therefore, clinical voice hearers would be more likely to respond to their voices in maladaptive ways with, for example, ‘withdrawal’ or ‘submission’ (Vaughan & Fowler, 2004; Sorrell et al., 2010).

Following on from this, other studies also show that the identity of the voice can differ between clinical and non-clinical groups. Leudar et al., (1997) found that non-clinical voice hearers were more likely to
recognise their voices as family members or their own voice, where as clinical voice hearers were more likely to believe the voice was supernatural, an acquaintance or a public figure. This complements David et al. (2004) who showed that voices which talk to the individual are more positive that those which talk about the individual in the third person - voices of family members may be less distressing as they would be more likely to address the person directly.

**Voice appraisals**

Voice appraisals may also contribute to differences in voice topography (Birchwood et al., 2000) as there are often differences reported in voice severity between clinical and non-clinical populations (Stip, 2009). Sanjuan (2004) found that positive voices were negatively associated with the amount, intensity, degree of negative content and loudness of the voices and positively associated with perceived control over the voices. As mentioned, voices are usually experienced as more positive in a non-clinical sample and clinical voices tend to be more frequent, intrusive, and distressing (Stip, 2009). Appraisals of voice power, intent and identity appear to be linked to the levels of distress experienced by the voice hearer. Interestingly, cognitive-behavioural strategies, which change the voice-linked appraisals, can reduce the frequency, intensity and intrusiveness of voices (Garety et al. 1997), although there is mixed evidence for the efficacy (Mawson et al. 2010).

Research also shows that clinical voice hearers are more likely to be given commands by their voices, some of which involve instigating violence (Leudar et al., 1997). As such, clinical voice hearers can feel more abused by their voice than non-clinical voice hearers. This may be linked to findings, which have been replicated, that clinical voice hearers are more likely to believe their voice is powerful with greater social rank (Birchwood et al., 2000). Conversely, voice hearers who experience less distress are more likely to seek proximity and
dependency with their voice and appraise their voice as benevolent (Paulik, 2011; Sorrell et al., 2010).

**Cognitive biases**

Another appraisal involves the perception of the source of the voice. People with psychosis often believe their voices are real and an external agent (e.g. a neighbour or spirit); whereas non-clinical voice hearers have less conviction in this and are more likely to believe their voices are internally generated (Kingdon & Turkington, 1993). As such, the differences experienced by clinical and non-clinical voice hearers may be related to the level of cognitive deficits in verbal self-monitoring and other cognitive biases. This is indicated by studies of people at risk of developing psychosis (Johns et al., 2010) and research indicating problems discriminating covert from overt speech in clinical populations (Franck, et al., 2000).

In addition, studies looking at deficits in self-monitoring around actions (Franck, 2001) support Bentall et al.'s (1991) theory that people with schizophrenia may misattribute self-generated thoughts and actions to an external source; and that an impairment in inner-speech monitoring and deficits in monitoring willed actions, may lead to the onset of hallucinations (Frith, 1992).

Several contributions were made to the understanding of cognitive biases in people with psychosis, which are on a continuum with the general population. These include the “jumping-to-conclusions” bias (on the basis of limited information; Garety & Freeman, 1999) and making external and personal attributions for negative events (i.e. explaining a negative event in terms of another wanting to cause personal harm; Bentall et al., 1994). These factors may contribute to difficulties discerning the nature and intent of voices and may make individuals more prone to coming to detrimental conclusions about their experience of hearing voices.
Exposure to traumatic events

A review by Read et al., (2005) shows the rates of different forms of child abuse in people who later develop psychosis is alarmingly high, greater than for any other psychiatric diagnosis (Friedman et al., 2002). For example, 35% of 500 people diagnosed with schizophrenia were removed from home due to neglect – twice the rate of any other diagnosis (Robins, 1996). Holowka et al., (2003) showed that in an adult out-patient sample of people diagnosed with schizophrenia, 85% had experienced some form of childhood abuse or neglect, with 50% reporting child sex abuse.

Furthermore, Bleuler (1978) found that 31% of over 900 people diagnosed with schizophrenia had lost a parent before the age of fifteen, a rate substantially greater than the general population. Parents of people diagnosed with schizophrenia were also found to have many more deaths of their own parents within two years of their child’s birth (Walsh, 1978). Loss of a grandparent was significantly less common for people with other diagnoses and that of the general population.

Andrew et al., (2008) propose that voices are interpreted in the context of traumatic memories, which influence beliefs about voices and consequent distress. In line with this, there is evidence that trauma impacts on the content, valence, distress and feelings of control over the voice (Honig et al., 1998). The role that trauma plays in the development of psychosis is not well understood. Garety et al., (2001) propose that heightened affect, as a result of negative events, can alter sensory perception and give rise to anomalous experiences. Through increased anxiety and hypervigilance, it is suggested that cognitive biases maintain positive symptoms, for example, increased attention to threat-related stimuli.

Although traumatic events or memories usually trigger voice hearing experiences for clinical and non-clinical voice hearers (Honig et al.,
1998), overall, research shows that clinical voice hearers are exposed to more trauma than non-clinical voice hearers, particularly child sex abuse (Andrew et al., 2008; Read et al., 2005). This suggests that parental losses and trauma at an early, critical time in child development may be relevant factors which contribute to psychosis in later life. These findings link in with the following section on attachment theory, after which we turn to a discussion of the relevance of attachment to psychosis and hearing voices.

1.4 Attachment theory

1.4.1. Theoretical Underpinnings of Attachment Theory

John Bowlby, the original exponent of attachment theory, suggests that humans (and evolutionarily close animals) need to have an 'affectional bond' (Bowlby, 1977, p.201) with a primary caregiver or attachment figure who can understand and respond to their need for survival. Derived from this, the attachment relationship has implications for emotional regulation, and is activated when the infant is in distress e.g. through hunger, pain or need for physical proximity. Forced separation or loss of an attachment figure usually results in distress (Bowlby, 1973) as shown in studies of infants in the 'Strange Situation' experimental paradigm (Ainsworth et al., 1978), where the parent leaves their infant with a stranger and then returns.

Attachment theory states that a 'secure base' is needed from which to explore the challenges of the world and to return to for continuing support. Returning to a 'secure base' in times of distress could be either 'internal' or 'external' (Holmes, 2001). An external secure base might be manifest in being able to seek support from an attachment figure themselves; whereas an internal secure base would be when that attachment figure becomes an 'internal object' (Bowlby, 1988) within one's own 'internal working model,' as a largely unconscious framework for responding to distress. In this way, attachment theory
predicts that we learn to adapt to stress by drawing on the resources and ways of coping demonstrated through early attachment relationships.

There are three major aspects of attachment theory. The first is that individual attachment patterns reflect differences in beliefs about the self and others. These beliefs form 'internal working models' of relationships which set up expectations for the self and others, in relation to the self. The second aspect is that, therefore, one's attachment style impacts on interpersonal behaviour, functioning, social cognition and communication. Finally, attachment systems influence the ways in which people cope with and regulate difficult emotions (explored in the following sections). I will now turn to the empirical basis for attachment theory relating to the original work conducted with infants and later adults.

1.4.2. Infant and Childhood Attachment

'Secure,' 'avoidant' and 'ambivalent/resistant' attachment profiles

Ainsworth et al.'s (1978) work on infant attachment categorization explains that, depending on the sensitivity of the caregiver to the child's needs, three broad attachment styles or patterns are observed in infants: a 'secure' and two insecure categories — 'avoidant' and 'ambivalent/resistant'. In secure attachment relationships, the primary caregiver makes the negative emotions projected into them from the infant more bearable through consistently labelling, responding to and modelling effective responses to the infant's distress.

Studies show that parental 'mind-mindedness,' or the ability to conceptualise what the child may experience, affects the development of "theory of mind" skills in children (Meins et al., 1998). In effect, caregivers who are sensitive to the mental states of their child promote awareness and sensitivity of others' minds (their
beliefs, desires, feelings, intentions and attitudes) in the child’s mind. This is coined ‘mentalization’ (Fonagy et al., 2002). The theory on attachment is further developed by suggesting that this mentalization process may be disrupted or biased in insecure internal working models, learnt from interactions with primary caregivers whose are themselves insecurely attached.

An ‘avoidant’ attachment style is said to emerge because expressing emotional distress has been discouraged by the primary caregiver or considered intolerable. Under these conditions, the infant learns to inhibit their emotions and to become overly independent. Consistent with this suggestion, studies looking at cortisol levels in infants with avoidant attachment styles, using the ‘Strange Situation,’ still indicate that their level of arousal and distress is similar to secure and ambivalent/resistant infants; however, their behaviours and facial expressions show less overt distress (Hertsgaard et al. 1995).

An ‘ambivalent/resistant’ attachment style is said to arise when the child experiences inconsistent responses from the primary caregiver when they are in distress. The experience of the primary caregiver as unpredictable and inconsistently emotionally available to them is a source of anxiety and leads to an exaggeration of the emotional response (e.g. crying for long periods of time). Infants are also said to develop ambivalent/resistant styles when the parent is perceived to be over-involved, or when they are expected to worry about the caregiver, as a form of ‘role reversal’ (Boris & Zeanah, 1999).

**Disorganised attachment profiles**

Of note is that, generally, insecure but organised attachment styles can be seen as evolutionarily adaptive for the child or adult - they protect against a caregiver who has difficulties showing emotional availability (leading to attachment avoidance) or who does so in an inconsistent way (leading to attachment anxiety). However, Main and Solomon (1986) observed that some children could not be classified
and had, in fact, a ‘disorganised’ attachment pattern, sometimes labelled as ‘unresolved.’ This is where the infant does not develop a coherent and organised internal working model and thus experiences difficulties coping with, and regulating, distress. This attachment style has been most commonly linked to interpersonal, behavioural and conduct disorders, as well as other functional mental health disorders in children (Benoit, 2004) and adults (Tyrrell & Dozier, 1997).

Upon separation from their primary caregiver in the ‘Strange Situation,’ Hertsgaard et al., (1995) found even higher levels of cortisol in infants with disorganised attachment than those with other attachment profiles. Given the attachment system is activated in times of distress, it is particularly detrimental to children’s functioning if there appears to be no coherent strategy for minimising this distress. Such children may grow up in households where they experience neglect or abuse and therefore struggle with the paradox of their environment of ‘fright without solution’ (Main & Hesse, 1990) - that the person who they depend on to meet their needs is also a source of threat.

1.4.3. Adult Attachment

*Adult attachment methodologies*

Attachment theory would predict that attachment profiles would be fairly stable across the lifespan, which is supported by a longitudinal study by Waters et al., (2000). This is because internal working models of relationships would filter interpersonal information processing, memory, attention and interpretations, biasing cognitions towards those representations, and therefore become self-reinforcing. In the adult literature, attachment style has been measured in many different ways using multiple methodologies ranging from self-report questionnaire (Bartholomew & Horowitz, 1991), structured narrative interviews (Main et al., 1985) to
retrospective questionnaires of parental attachment (Parker et al., 1979). Different attachment relationships have also been examined from romantic (Bartholomew & Horowitz, 1991) to parental relationships and even attachments in groups (Markin & Marmarosh, 2010). Broadly, the four categories in adulthood have been labelled as secure, dismissive, preoccupied and fearful (Bartholomew and Horowitz, 1991), which map on to the four childhood attachment categories respectively.

Factor analysis has led to adult attachment styles being measured and conceptualised according to two affective-behavioural dimensions 'attachment anxiety' and 'attachment avoidance', which also have a cognitive component relating to working models of 'self' and 'others' (Crowell et al., 1999). 'Attachment avoidance' is related to 'model of others' where behaviour involves appropriately seeking proximity to others (low avoidance) or withdrawing from others (high avoidance). 'Attachment anxiety' relates to one's 'model of self:' a low sense of self-worth could give rise to high levels of preoccupation and fears around gaining acceptance from others (high anxiety), whereas assuredness that one is worthy of others’ responsiveness leads to the opposite (low anxiety; Bartholomew, 1990). Bartholomew & Horowitz’s (1991) two-dimensional model forms the four categorical attachment styles (Figure 1).
### Methodological Limitations

Findings from empirical studies of attachment theory should be interpreted with caution due to methodological limitations. Adult studies usually use interview methods and self-report questionnaires, some of which rely on retrospective memories of parenting, which tap different conceptual constructs to attachment theory. Furthermore, infant attachment is assessed through observation; whereas child and adolescent attachment is assessed through different self-report measures to the ones used in adulthood. This presents challenges when reliably comparing the attachment profiles of the same individual over time.

Most of the research on attachment styles is designed using cross-sectional rather than longitudinal data, where the dynamic changes in attachment cannot be assessed. There are also challenges to artificially classifying people into three or four groups, when people can fall on the border of different groups. Dozier & Kobak's (1992)

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**Figure 1:** Bartholomew & Horowitz's (1991) two-dimensional model of adult attachment classification.

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<thead>
<tr>
<th>Model of Self (Dependence or 'Anxiety')</th>
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<td>Positive (Low)</td>
<td>Secure</td>
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<td>Negative (High)</td>
<td>Preoccupied</td>
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<td>Dismissing</td>
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<td>Fearful</td>
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experimental study on college students, also shows that people can lack insight into their own sense of attachment insecurity or attachment avoidance, despite evidence of unpleasant physiological arousal, when downplaying the impact of ruptures in attachment relationships. This lack of insight has implications for the accuracy of responses on self-report measures of attachment.

Also of note, is that change in mood and psychological symptoms can have an impact on attachment style, as seen in the majority of over a hundred studies reviewed examining the relationship between depression, anxiety and attachment profiles (Mikulincer & Shaver, 2007). There is also some evidence to suggest that changes in attachment anxiety are positively correlated with changes in voice activity (auditory hallucinations) over a period of months (Berry et al. 2008). Future studies therefore have an important role in determining, or disentangling, the causal relationship between negative affect, severity of symptoms and attachment style.

Although adult self-report measures need to be interpreted with some caution for the reasons stated, there is some evidence to suggest that adults can accurately recall their early interpersonal experiences and that these recollections are not necessarily biased by current emotional state. Rankin et al., (2005) show that currently ill and remitted people with psychosis describe similar levels of negative interpersonal experiences, suggesting that mental illness does not necessarily bias retrospective memory for parental relationships. In addition, data on childhood trauma and the onset of psychosis (Read et al., 2005) are also in line with people’s self-reports of abuse. Therefore, although measuring current attachment style in adults does not map directly on to their attachment style as an infant, adults can recall their early interpersonal experiences with some accuracy and there is good empirical evidence to suggest some stability of attachment style from infancy through to adulthood (Waters et al., 2000).
Attachment stability

Studies have shown that attachment categories throughout the lifespan are fairly stable across a twenty-year period between the ages of 12 months and 21 years (Waters et al., 2000). Attachment profiles have also been shown to be 'transmitted' throughout three generations such that a child and grandparent's attachment profiles are reliably predicted by the mothers' attachment profile (Benoit & Parker, 1994).

Despite the relative stability of attachment patterns throughout the lifespan and inter-generationally, significant changes in a child or adult's attachment profile can be seen under conditions of trauma, abuse, loss, illness and other significant life events, including those of their primary caregiver (Waters et al., 2000). Furthermore, Liotti & Gumley (2008) explain that significant relationships throughout one's life, which strongly disconfirm previously held schema, can alter or modify the internal working models developed in childhood (including positive relationships, which may involve a therapeutic relationship; Maertens, 2006). Overall, there is good empirical evidence to suggest some stability of attachment style from infancy through to adulthood and this provides a valid rationale for measuring current attachment style in adulthood.

Cross-cultural issues

Research across several decades indicates that 'attachment theory' is a universal and transcultural concept, which can be measured in different languages using multiple methods (Reebye et al., 1999). This may be because attachment relationships are fundamental to survival and adaptation (Bowlby, 1951). However, the majority of methods and questionnaires developed originate from English-speaking countries in the West, which are then usually translated into the native language.
Factor analyses across cultures do suggest the two-factor structure of attachment anxiety and attachment avoidance holds up (Conradi et al., 2006), but there are clear differences in the ways the infant-mother dyad express emotions and behaviours across cultures (Reebye et al., 1999). Caution should be made in cases where researchers with their own cultural biases and lenses interpret observations and data: there are inevitable influences of the researcher on the sense made of the data.

**Attachment as context-dependent**

The complexity of attachment theory comes further to light when we consider the possibility that attachment style may also be a fluid phenomenon. There is evidence to show that people can have different attachment styles in response to different people (Fraley et al., 2011). For example, an adult may have an avoidant attachment to their father but a secure attachment relationship with their mother or spouse. Research suggests that these differences arise out of perceptions of the others' attachment style and closeness of that relationship (Ross, 2000).

If attachment style is largely stable over time, a more parsimonious explanation could be that the instruments established for measuring attachment are confounded by changes in context. Given the complexities of attachment theory as a construct, it suggests that the phenomenon may not be a stable one, but a model of relationships and relating which is in flux and revision depending on the person, situation or group, which activates a particular attachment representational system.

Interestingly, people have also been shown to have transference processes and patterns of attachment within organisations and with leaders (Maysless & Popper, 2007). This suggests, on the one hand, that it is a concept with a good evidence-base but, on the other hand, one which is influenced by the relationship in question. As highlighted
by Cassidy & Shaver (1999), attachment theory continues to evolve and integrate more sophisticated research, which crosses multiple fields from psychotherapy and organisational psychology to neuroscience.

1.5. Attachment, Psychosis and Voice Distress

1.5.1. Adult Insecure Attachment and Psychosis

Bowlby's initial child research on the emotional impact of rearing in institutions indicated that secure attachment could be a 'vaccination' against mental health problems; and that 'maternal deprivation' was problematic for the adjustment and well-being of children (Bowlby, 1951). Further studies with adults are in line with this seminal work and suggest that people with mental health problems are more likely to have insecure attachments early in life (Dozier et al., 1999).

The mechanisms by which insecure attachment confers vulnerability to poor mental health are not fully clear. Evidence suggests that insecure attachment may result in particular cognitive and interpersonal vulnerabilities and difficulties with effective emotion regulation. For example, Garety et al.'s (2001) cognitive model of psychosis suggests that templates for understanding the world (i.e. beliefs about self and others), in the presence of environmental stressors, can predispose people to develop psychological distress. Interestingly, Dozier (1990) found that people with psychosis had greater levels of insecure attachment than people with affective diagnoses, and this may be linked to the higher levels of trauma, abuse and loss in childhood of the former group.

In line with the concept of psychotic phenomenon being on a continuum with the general population, many studies of non-clinical participants show that 'schizotypy,' or the propensity for unusual experiences, relates to insecure attachment (Berry, Band, Corcoran...
et al., 2007; Cooper, Shaver, & Collins, 1998; Berry et al., 2006). In particular, several studies with non-clinical populations have found that attachment anxiety is more strongly related to cognitive-perceptual disorganisation, such as hearing voices, whereas attachment avoidance is more predictive of negative symptoms and paranoia (MacBeth et al., 2008; Berry et al., 2006; Tiliopoulos & Goodall, 2009). This suggests that insecure attachment and schizotypal traits may pose a risk for the later development of psychosis.

In a clinical in-patient sample of men in Israel, Ponizovsky et al. (2007) showed that insecure attachment in male in-patients with psychosis predicted earlier age onset, greater numbers of hospital admissions and longer hospital stays. Attachment avoidance predicted both positive and negative symptoms with attachment anxiety predicting positive symptoms alone. The proportion of men with schizophrenia reporting avoidant and anxious attachment styles was significantly higher in the clinical than the non-clinical group (57% vs. 17% and 27% vs. 10% respectively). This study, like many others, used the Positive and Negative Syndrome Scale (PANSS; Kay et al., 1987) as the outcome measure, which provides an overall psychotic symptoms severity score, does not discriminate the distress from symptoms and only has one item on hearing voices (“hallucinations”). Ponizovsky et al., (2007) also used Hazan & Shaver’s (1987) crude 3-item classification of attachment style which, unlike questionnaire or interview methods, lacks validity and reliability.

Berry et al., (2008) investigated the association between attachment style and psychotic symptoms using the PANSS. They developed their own Psychosis Attachment Measure (PAM), which has sound psychometric properties, but has only been developed with samples with psychosis. In a sample of 96 people with a diagnosis of
psychosis, with both stable and unstable symptoms, the authors found that attachment avoidance (and not attachment anxiety) was related to both positive and negative symptoms. However, the use of the PAM is limited to a few studies, which makes comparability with other clinical and non-clinical samples difficult. Again, in using the PANSS the authors did not specify the measurement of a particular symptom; their findings therefore contradict a later paper by Berry and colleagues (2011), suggesting a role for attachment anxiety in voice severity and distress (and not attachment avoidance).

MacBeth and colleagues (2011) investigated attachment classification in a first episode psychosis group using the Adult Attachment Interview (AAI; Main et al., 2002). The study found no relationship between attachment category and PANSS scores, but their study was hampered by being underpowered and methodological challenges in classifying participants into three or four categories, instead of using the recommended two-dimensional model of adult attachment. Ultimately, the study had insufficient power to reject the null hypotheses and used multiple statistical comparisons for investigation.
The finding of greater attachment avoidance than attachment anxiety in clinical samples with psychosis has been replicated in multiple studies (see review by Berry, Barrowclough & Wearden, 2007). This is congruent with research which shows specifically that ‘paranoia’ (an emotion which is often global across the clinical presentation) is predicted by attachment avoidance (Berry et al., 2008; Macbeth et al., 2011; Pickering et al., 2008). In essence, it is likely that people with paranoid thoughts and feelings about others are less likely to have their paranoia disconfirmed as they respond with avoidance to others. People therefore continue to be a source of potential threat and this is difficult to disconfirm if there is little exposure to alternative ways of thinking about, and interpreting, interpersonal situations.

When considering positive symptoms as a separate category to negative symptoms, there are mixed findings in the literature. Berry et al., (2006) showed that, for non-clinical participants, attachment avoidance and attachment anxiety were both predictive of positive symptoms, whilst attachment avoidance was more strongly related to negative symptoms. Clinical studies also suggest ‘de-activating strategies’ (attachment avoidance) is more predictive of positive symptoms overall (Dozier & Lee, 1995). However, contrary to this, negative symptomatology may also be predicted by attachment anxiety in non-clinical samples (Tiliopoulos & Goodall, 2009).

In summary, the clarity of findings on the relationship between attachment style and hearing voices is precluded by the need for studies to separate the different positive symptoms under investigation – (paranoia) delusions and voices – as well as whether samples meet the criteria for clinical or non-clinical symptomatology; and, if so, whether distress or mere “symptoms” of voices are being investigated. I now turn to studies which specifically investigate the relationship between attachment and hearing voices.
1.5.2. Attachment Style and Hearing Voices

In terms of the role of attachment style specifically in hearing voices, few studies have been conducted with clinical participants (Berry et al., 2011). Berry et al., (2011) interviewed 73 community and in-patient participants with a diagnosis of a schizophrenia spectrum disorder. Again, the authors used the PAM and PANSS, but also the Psychotic Symptom Rating Scales (PSYRATS) which measures voice distress and severity. Unfortunately, the authors did not use a reliable and valid measure of beliefs about voices: they used a mixed methodology, adopting qualitative thematic analysis of participants' experiences of hearing voices, and used these to investigate associations between these themes and self-reported attachment styles.

Berry et al., (2011) also examined the “content” of what participants reported the voices said, explaining this was because of the “potential delusional interpretation of speech-content often evident in people with psychosis” (p.5). This is a potential flaw in their research, as those adopting a cognitive model of voices have shown that it is the meaning made of the experience of hearing voices, which is predictive of distress, less so the content. In addition, from the researchers' interpretation and perspective, there is evidence that in only around 25% of cases do beliefs about voices follow directly from voice content (Birchwood & Chadwick, 1997).

Despite these methodological flaws, Berry et al., (2011) found an association between attachment anxiety (not attachment avoidance) and voice distress and severity. However, contrary to hypothesis (possibly due to their methodology), they did not find an association between attachment anxiety and themes of 'threat' and 'control' of voices. Themes of rejection, criticism and threat were associated with attachment avoidance. In line with Berry et al., (2011), in a large non-
clinical sample of students recruited online, Berry and colleagues (2006) found that, when controlling for negative affect, only attachment anxiety (and not attachment avoidance) was predictive of voice symptoms.

Overall, studies indicate that attachment anxiety may be more predictive of voices than attachment avoidance. However, other studies show that both attachment anxiety and attachment avoidance are associated with hearing voices. In a sample of a non-clinical mix of students and workers, MacBeth et al., (2008) found that whereas paranoia was predicted by an organised attachment strategy (attachment avoidance), voices were predicted by a contradictory combination: attachment anxiety and interpersonal affiliating strategies and attachment avoidance and interpersonal distancing strategies. The authors thought that this contradiction could represent disorganised attachment in terms of dysfunctional regulation of emotions and interpersonal relating.

A strength of MacBeth et al.’s (2008) study was that they used structural equation modelling (SEM) - no study on hearing voices, before or since, has been able to demonstrate these specific relationships between variables in this way. However, since the authors were not able to classify participants according to attachment category due to poor internal consistency, we do not know if disorganised attachment does relate to hearing voices. It could simply be that voices are predicted separately by two types of attachment style: avoidant people with more interpersonal distancing and anxiously attached people with more interpersonal affiliating. It is therefore unclear whether the same participants adopted both strategies with their voices simultaneously. In addition, as there was no measure of voice distress, we do not know whether, and to what extent, attachment style and interpersonal behaviours are associated with distress from hearing voices.
Retrospective childhood attachment and psychosis

The majority of the studies on childhood attachment and psychosis use the Parental Bonding Instrument (PBI), which uses retrospective memories of parental relationships to measure attachment style. Interestingly, the PBI does not map well on to attachment classifications, and correlations between the PBI and attachment dimensions are low (Berry et al., 2006). There are two axes: care and over-protectiveness. Many studies have replicated the finding that people with psychosis score low on the parental care scale and high on the parental over-protectiveness scale when compared to non-clinical controls (Berry, Barrowclough & Wearden, 2007).

Tait et al., (2004) showed that low parental care, high levels of over-protectiveness and hostility predicted poor recovery style - 'sealing over' instead of 'integration' of psychotic experiences into self-identity (McGlashan, 1987). The authors likened this 'sealing over' coping strategy to avoidant attachment. These findings are in line with research showing that high expressed emotion in families is a risk factor for patient relapse into psychosis (Brown et al., 1962) and suggests that avoidance of intimacy could be one coping strategy in this population. Furthermore, Offen et al., (2003) showed that recalled paternal over-protectiveness was associated with current beliefs about voice malevolence, suggesting that experiences of parenting may be key factors in maintenance of psychotic symptoms. We now turn to an exploration of potential cognitive-affective mediators of the relationship between attachment style and voice distress.
1.6. Psychological Models of Psychosis and Voices

1.6.1. The Conceptual Overlap between Cognitive and ‘Interpersonal’ Models of Voices

Psychological models of psychosis provide a perspective on potential mediators between attachment style and voice distress. These can be divided into two main categories: cognitive and interpersonal models of voices. Cognitive models focus on beliefs, schemas and appraisals which are seen to determine voice distress; whereas interpersonal models of voice distress position the voice hearer and voice in a more social dynamic that mirrors interactions with people in the real world. Both types of model, the cognitive and interpersonal, have conceptual links with attachment theory and provide the evidence for the foundation upon which this thesis builds.

To my knowledge, no studies have tried to assess whether there are cognitive or interpersonal mediators of the relationship between attachment style, on the one hand, and voice distress on the other.

However, I argue that the interpersonal literature reflects the same principles as the cognitive literature. For examples, the interpersonal literature which focuses on the power relationship between the voice and the hearer (Sorrell et al., 2010) reflects the cognitive model of ‘beliefs about voices’ ‘omnipotence or malevolence. The relationship between the voice and the hearer can also be conceptualised cognitively as interpersonal schema – “beliefs about the self and others” (where the ‘other’ is the voice). As such, both models have conceptual links to attachment theory.

This thesis is focused on whether cognitive-affective factors (‘negative schema’ and ‘beliefs about voices’) mediate the relationship between attachment style and voice distress. As interpersonal theories of voice hearing, in many ways, mirror cognitive theories, I have chosen to investigate the cognitive model further as the measures are more well-established and have stronger
Psychometric properties (Chadwick et al., 2000). Well-established quantitative tools which measure the interpersonal nature of voices are still in their infancy (Hayward et al., 2008; Phillips & Hayward, 2005).

1.6.2. Cognitive Model of Voices: Negative Schema or ‘Core Beliefs’

Theoretically, insecure adult attachment is seen to create a cognitive vulnerability for psychopathology by predisposing people to negative schema about themselves and others, as well as difficulties in regulating emotions. In support of this, research shows more extreme negative-self and negative-other core beliefs in people with psychosis as compared to non-clinical controls (Fowler et al., 2006). These schemas are implicated as maintenance factors in cognitive models of psychosis (Garety et al., 2001).

In the line with the findings from Fowler et al., (2006) that clinical populations have more extreme negative schema than the non-clinical population, people with psychosis exhibit higher levels of negative interpretations of voices, in comparison to non-clinical controls (Morrison et al., 2004). In a Korean study of non-clinical students, Hwee Sook, (1998) showed that self-image mediated the relationship between self-reported attachments to caregivers in infancy and psychosis.

Furthermore, Gracie et al., (2007) found that the link between trauma and psychosis was mediated by negative beliefs about self and others. Poor self-image or low self-esteem (what could be termed alternative ways of conceptualising ‘negative self-schema’) have also been shown to relate to insecure attachment: Berry et al., (2006) showed that there was a significant correlation between attachment anxiety and attachment avoidance with low self-esteem.
Finally, Stowkowy and Addington (2012) showed that for people at high risk of developing psychosis, negative-self and negative-other negative-schema mediated the relationship between social defeat and prodromal psychotic symptoms. 'Social defeat' is an evolutionary term for a conflict between animals, which results in loss of social rank, status or resource of the socially defeated. Interestingly, social defeat echoes what may be occurring when people perceive their voices to be powerful and omnipotent (Birchwood et al., 2000). This suggests that, maladaptive interpersonal beliefs play a role in the onset of psychosis. Links with social defeat and insecure attachment, in the context of trauma or loss, may also have relevance to the current study.

1.6.3. Cognitive Model of Voices: Beliefs about Voices

Mawson et al., (2010) conducted a systematic review which showed that several factors were associated with greater levels of voice distress: beliefs about voice malevolence and voice omnipotence, the voice being perceived as a personal acquaintance and attitudes of disapproval and rejection of the voice from the hearer. On finding limited evidence for the efficacy of cognitive therapy for voices, the authors speculated that therapies need to include interventions which address interpersonal schema, which may mediate the relationship between voice appraisal and distress. Beliefs about voices are closely associated with self-evaluations (Birchwood et al., 2000), which is why attachment theory can provide a helpful framework for conceptualisation of beliefs about voices.

Beliefs about voices are also associated with coping strategies, which may be one reason why they are connected to voice distress. Romme et al., (1992) found that voice hearers find it more difficult to cope if they believe the voice is more powerful than them. Birchwood and Chadwick (1997) showed that voices perceived as malevolent
were met with fear and anger and were resisted, whereas voices perceived as benevolent were associated with positive affect and were engaged with. This resonates with models of attachment insecurity and security and further research would need to show the conceptual link has an empirical basis.

1.6.4. Interpersonal Models of Voices

Pivotal work by Benjamin (1989) using a complex, validated computer-based Structural Analysis of Social Behaviour (SASB) model with thirty psychiatric inpatients showed that meaningful associations could be made between patients and their voices. A plethora of descriptions of interpersonal states were used such as love-hate and enmeshment-differentiation. The analysis suggested that the voice hearer relationships showed complementarity e.g. if the voice was nurturing and protecting then the voice hearer would felt able to trust it and rely on it. Conversely, if the voice was ‘attacking and rejecting’ the voice hearer was more likely to respond in a ‘deferring and submitting’ (p. 296) manner. Later findings from cognitive models of voices are similar in that they also capture the thoughts, feelings, emotions and behaviours in interactions with voices.

In addition to exploring the interpersonal responses to and from the other (i.e. the voice), Benjamin (1989) also raises the concept of ‘introjection’. Introjection is a psychoanalytic concept (Lemma, 2003), where a subject embodies the behaviours and attributes of object (i.e. the voice). This reflects the voice hearer’s relationship with themselves and could, in effect, map on to concepts of ‘core beliefs’ or schema in cognitive models. For example, people distressed by hearing voices will start to believe the negative evaluations made of them by the voices e.g. “I am evil”.

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Hayward and colleagues (2009) have been some of the first to apply concepts of interpersonal relating to voices to clinical interventions. Progress has also been made in developing questionnaires to examine the nature of voice hearer relationships further (Sorrell et al., 2010). These are based on Birtchnell’s (1996, 2002) theories of inter-relating and use two axes: ‘upperness-lowerness’ and ‘closeness-distance’, similar to cognitive models which, instead, report beliefs about ‘voice omnipotence’ and ‘voice benevolence’ respectively.

The first studies have given evidence to suggest Birtchnell’s Relating Theory is a useful model for voice hearers, which predicts voice hearer beliefs, coping behaviours and distress (Hayward 2003; Hayward et al., 2008; Vaughan & Fowler, 2004; Sorrell et al., 2010). Qualitative studies also show that the concept of a ‘relationship’ with one’s voice is also broadly acceptable (Chin et al., 2009), although it appears there is less confusion for clients in endorsing the ‘Beliefs about Voices Questionnaire’ items (Chadwick et al., 2000), as some clients cannot conceive of having a ‘relationship’ with their voice.

1.7 Rationale and Hypotheses

1.7.1. Rationale

Multiple authors have suggested that further research is warranted to investigate the role of attachment style and psychosis and potential mediating variables. For example, Mawson et al., (2010) concluded that results from cognitive therapy trials did not consistently report significant improvements in voice distress. The authors attributed this to a lack of effectiveness to a need for interventions to include mediating variables such as ‘social schemata’. Further research is required to examine the nature and association of internal working models with beliefs about with voices.
Paulik’s (2011) review also supports the idea that further developments in the cognitive model of voices ought to include an interpersonal element. Interventions which acknowledge the role of significant attachment relationships and the impact on social relating to voices (and vice versa) have had some initial successes (Hayward et al., 2009; Hayward & Fuller, 2010). Berry, Barrowclough and Wearden (2007) have also primed the field for further research to investigate "the nature of attachment styles in psychosis and how they relate to the cognitive, interpersonal and affective factors" (p. 458).

Few studies have investigated the role of attachment in voice distress in a clinical population; and there is mixed evidence for the role of attachment anxiety and attachment avoidance. Early findings do implicate both attachment avoidance and attachment anxiety in voice symptoms (Berry et al., 2006). Berry et al. (2011) did not use a validated measure of beliefs about voices, which may explain why they did not find a significant association between attachment avoidance and voice severity or distress and attachment anxiety was not linked to voice control, criticism or threat. Further research therefore needs to be conducted using validated, reliable measures of adult attachment, core beliefs and distressing beliefs about voices.

In terms of mediational analysis, many studies are still adhering to Baron & Kenny’s (1986) strict principles of mediational analysis (Bebbington et al., 2011; Pickering et al., 2008), which do not provide a measure for “indirect-only” or “competitive mediation” (Zhao et al., 2010). This may explain a lack of effect of putative mediators in these and other social science studies. Statistical papers have shown that the Baron and Kenny (1986) approach to mediation has a number of flaws (Hayes, 2009; Zhao et al., 2010) and, consequently, support for these methods is weakening. The current study therefore adopted a mediation procedure which calculates an estimate of the indirect
effect size, using bootstrapped confidence intervals of the indirect effect (Preacher & Hayes, 2008).

1.7.2. Hypotheses
Figures 2 shows the hypotheses to be tested in this thesis. In this hypothesized model, negative schema mediate the relationship between attachment style and beliefs about voices; and beliefs about voices, in turn, mediate the relationship between negative schema and voice distress. This is a theoretically-driven model derived from the cognitive models of hearing voices (Garety et al., 2001; Birchwood & Chadwick, 1997) which suggest that attachment styles give rise to interpersonal schema, which underlie beliefs about voices and voice distress. I will test this mediational model in two parts - hypotheses 5-8 relate to part (a) and hypotheses 9-10 to part (b).

![Diagram of Hypothesized Model 1](image)

**Figure 2:** Hypothesized Model 1 - Negative Schema as Mediators of Attachment Style and Beliefs about Voices which, in turn, Mediate the Relationship between Negative Schema and Voice Distress
Hypothesis 1: Attachment anxiety and attachment avoidance will both predict negative-self and negative-other schema.

Hypothesis 2: Negative-self and negative-other schema will both predict beliefs about voice malevolence and voice omnipotence.

Hypothesis 3: Voice Malevolence and voice omnipotence will both predict voice distress.

Hypothesis 4: Attachment anxiety and attachment avoidance will both predict voice distress.

Hypothesis 5: Negative-self and negative-other schema will mediate the relationship between attachment anxiety and beliefs about voice omnipotence. This will remain true when controlling for voice characteristics and negative affect (anxiety and depression).

Hypothesis 6: Negative-self and negative-other schema will mediate the relationship between attachment anxiety and beliefs about voice malevolence. This will remain true when controlling for voice characteristics and negative affect.

Hypothesis 7: Negative-self and negative-other schema will mediate the relationship between attachment avoidance and beliefs about voice omnipotence. This will remain true when controlling for voice characteristics and negative affect.

Hypothesis 8: Negative-self and negative-other schema will mediate the relationship between attachment avoidance and beliefs about voice malevolence. This will remain true when controlling for voice characteristics and negative affect.
Hypothesis 9: Beliefs about voice omnipotence will mediate the relationship between Negative-self and Negative-other schema and voice distress. This will remain true when controlling for voice characteristics and negative affect.

Hypothesis 10: Beliefs about voice malevolence will mediate the relationship between Negative-self or Negative-other schema and voice distress. This will remain true when controlling for voice characteristics and negative affect.
2. METHOD

2.1. Ethical Issues

2.1.1. Ethical Approval

This study was part of a wider project entitled "Hearing Voices: Research into Relationships and Recovery". The data were collected with one other doctoral research trainee who investigated a different research question. Both studies were given ethical approval from the Faculty of Arts and Human Sciences Ethics Committee at the University of Surrey, United Kingdom (see Appendix 1 for proof of ethical approval and project documentation).

2.1.2. Managing Risk

There were several ethical issues raised by the study which needed to be addressed. In terms of the well-being of participants, there was the possibility of becoming distressed or discomforted by answering the questionnaires. In order to manage this, participants were given an opportunity to withdraw from the study at the end of each screen. If participants chose to abandon the questionnaires prematurely, they were also re-directed to the final screen with debriefing with information and support organisations.

For additional practical or emotional support, participants who were members of hearing voices support groups could also request for personal assistance and support from their facilitators to complete the online questionnaires. Once all questionnaires were completed, participants were directed to a screen thanking them for their participation and then to the same debriefing information and support organisations as those who declined the study.

2.1.3. Consent, Confidentiality and Dissemination

Participants were given a consent screen after the screening questions and information screen so that informed consent could be obtained. Participants were not able to proceed to the self-report
questionnaires until they had agreed to all statements on the consent form. No identifiable information was given on the website so the data remained confidential and the researchers were blind to the identity of the participants.

Participants (and charities who supported people who hear voices) were offered the opportunity to receive a summary of the results of the studies at the end of the project (Appendix 2). This could be requested by emailing the researchers.

2.2. Design and Power
The design was quantitative and cross-sectional. The literature suggests that the standardised regression coefficients for the effect of the independent variable on the mediator, and the mediator on the dependent variable, will be between .26 and .39 (a medium effect size; Cohen, 1988). Fritz and MacKinnon (2007) estimate that a sample size between 78 and 162 should be sufficient to obtain a power of 80% to detect mediation at the 5% level using the bootstrapping method (Preacher & Hayes, 2004).

2.3. Participants
2.3.1. Eligibility Criteria
The participants were an international, self-selecting sample who expressed an interest in the research online. This is not the first study to use an international English-speaking sample to complete online research with people who hear voices (Lawrence et al., 2010; Berry, Band, Corcoran et al., 2007; Joppich, 2010). Participants were eligible if they were fluent in reading and speaking English, between the ages of 18-65 inclusive and experienced voices for at least three months (hearing at least one voice in the past week). If participants
did not meet these criteria then they were taken to a debriefing screen and organisations were suggested for support.

Figure 3 in Appendix 3 shows the recruitment flow diagram for participants recruited into the study. There were 679 participants who accessed the website. Of these, 228 (33.6%) were ineligible and 282 (41.5%) did not give consent to take part. Of the eligible participants who completed the screening questions, 169 (24.9%) consented to take part in the study. Of the eligible participants who consented, 150 (22.1%) completed the questionnaires and 19 (2.8%) dropped out of the study.

2.3.2. Sample Characteristics

Demographic information is shown in Tables 1-3 in Appendix 4. Almost 63% (n = 94) of the participants were female. The mean age was 37.1 years old (SD=11.08; Range = 18-64). Almost 60% (n = 88) of participants lived in the United Kingdom (UK), 20% (n = 30) lived in the United States of America, 7.3% (n = 11) lived in Canada, 6.7% (n = 10) lived in Australia and a further 6.7% lived in other countries. In terms of ethnicity, the majority of the sample were White British (n = 98; 65.3%) or from other White backgrounds (n = 24; 16%) and nearly 93% of participants (n = 139) spoke English as a first language.

The majority (n = 112; 74.6%) of participants were currently using a mental health service. Only 12.7% (n = 19) reported no diagnosable mental health problem or being unsure of a diagnosis, suggesting the sample represented a clinical population. In addition, 34% (n = 51) of participants endorsed more than one mental health diagnosis.
2.4. Measures

Throughout the website, all questions were forced-choice with options to write text into an ‘Other’ option where appropriate. After the information and consent screens, participants proceeded to the questionnaires in the following order, before proceeding to the debriefing screens:

a. The Experiences in Close Relationships-Revised (ECR-R; 36 items)
b. The Hamilton Program for Schizophrenia Voices Questionnaire (HPSVQ; 13 items)
c. The Brief Core Schema Scales (BCSS; 24 items)
d. The Patient Health Questionnaire (PHQ-9; 9 items)
e. The Recovery Assessment Scale Revised (RAS-R; 24 items)
f. The Voice Acceptance and Action Scale – 9 (VAAS; 9 items)
g. The Generalized Anxiety Disorder measure of anxiety (GAD-7; 7 items)
h. Beliefs About Voices Questionnaire-Revised (BAVQ-R; 35 items)

2.4.1. The Experiences in Close Relationships-Revised (ECR-R; Fraley, et al., 2000).

The ECR-R is a 36-item measure derived from an exhaustive list of over 300 attachment items collated by Brennan et al. (1998). The original items refer to thoughts, feelings and behaviours in romantic relationships, but the scale has been adapted, according to the authors’ guidance, so that experience of romantic relationships is not essential to answering the items. Any references to ‘romantic partners’ or ‘partners’ was replaced with the word ‘others’.
The participants assess the extent to which each item is representative of them using a 7-point Likert scale from 'strongly disagree' to 'strongly agree'. The ECR-R has high internal consistency reliability with a Cronbach's α (Cronbach, 1951) of higher than 0.90 and good test re-test reliability (86% shared variance over time; Sibley et al., 2004). Sibley et al., (2005) also show that the ECR-R has significant associations with the Relationships Questionnaire (RQ; Bartholomew & Horowitz, 1991): the ECR-R and RQ measures of attachment anxiety were moderately positively correlated, $r = .69$ ($p < 0.001$), as were both measures of attachment avoidance, $r = .45$ ($p < 0.001$), indicative of construct validity. Internal consistency reliability in the current sample was excellent for attachment avoidance (Cronbach α = 0.92) and attachment anxiety (Cronbach α = 0.95).

2.4.2. The Hamilton Program for Schizophrenia Voices Questionnaire (HPSVQ; Van Lieshout & Goldberg, 2007)

The HPSVQ questions were based on the authors' clinical experience and adapted from existing measures such as the Auditory Hallucinations Subscale of the Psychotic Symptom Rating Scales (PSYRATS-AH; Haddock et al., 1999), an interviewer-rated measure. The HPSVQ has good construct validity, showing strong significant correlations with the PSYRATS-AH ($r = .76$, $p < .001$) up to an 11 week interval ($r = .73$, $p < .001$), which indicates the scales are measuring similar constructs (van Lieshout & Goldberg, 2007). The HPSVQ is a 13-item measure where the first nine items are on a 5-point Likert scale from 0 (least severe or impairing) to 4 (most severe). The maximum total severity score is therefore 36. The final four items were not included because they are used to assess qualitative aspects of voices e.g. time of day of the voices.
The first 9 items represent two broad aspects of voices - the physical characteristics (e.g. frequency and duration) and the emotional (e.g. how bad the voices make the person feel). In this study, we added another option to “How often do you DO what the voices say” without extending the Likert scale: instead of “No voices telling me what to do” we added “Never” no voices telling me what to do”.

Kim et al. (2010) found the HPSVQ had good-to-excellent internal consistency reliability at baseline, one week and at a period of six months (Cronbach’s α = 0.83 - 0.94). The scale has fair to good test-retest reliability with items ranging from $r = 0.50 - 0.89$ at a one week re-test interval (Kim et al., 2010). Internal consistency in the current sample for total voice severity was good (Cronbach’s α = 0.85). The Emotional Impact sub-scale (Voice Distress) internal consistency reliability was also good-to-excellent (Cronbach’s α = 0.89). The voice characteristics sub-scale had acceptable internal consistency reliability (Cronbach’s α = 0.69).

2.4.3. The Brief Core Schema Scales (BCSS; Fowler et al., 2006)

The 24-item BCSS has items relating to positive and negative beliefs about the self and others. It first asks participants to choose ‘yes’ or ‘no’ to statements (12 items about the self: e.g. ‘I am unloved’ and 12 items about others: e.g. ‘Other people are hostile’). They then rate any items they have endorsed on a five-point Likert scale from 0–4 (from ‘believe it slightly’ to ‘believe it totally’). In this study, with the authors’ permission, we removed the first step of answering ‘yes’ or ‘no’ and instead made the scale a six-point Likert, with the first response being “do not believe it at all”.

The scale has good construct validity as shown by a moderate to strong association with the Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965): the negative-self and positive-self BCSS
subscales had a moderate-to-strong association \((r = 0.64\) and 0.65, \(p <0.001\)) respectively. However, correlations between the RSES and BCSS negative-other and positive-other scales were weak \((r = 0.20\) and \(r = 0.26, p <0.001\), respectively) indicating that they may measure different constructs.

Cronbach’s \(\alpha\) scores for the BCSS are between 0.78 and 0.88, indicating good internal consistency reliability. The scales also have good test-retest reliability: negative-self \((r =0.84)\), positive-self \((r = 0.82)\) negative-other \((r = 0.70)\) and positive-other \((r = 0.72;\) all significant at \(p < 0.001\)). For negative self-schema, internal consistency in the current sample was good-to-excellent (Cronbach’s \(\alpha = 0.89\)) and the internal consistency reliability for negative-other schema was excellent (Cronbach’s \(\alpha = 0.95\)).

2.4.4. The Patient Health Questionnaire (PHQ-9; Kroenke et al., 2001)

The PHQ-9 is a screening measure for depression. The PHQ-9 has high internal consistency reliability (Cronbach’s \(\alpha = .80;\) Lee et al., 2007), good test-retest reliability \((r = .84,\) Kroenke et al., 2001) and construct validity \((r =.73,\) Martin et al., 2006). Items are based on experience of a range of problems, presenting in the last two weeks, which are signs of depressed mood such as ‘Little interest or pleasure doing things’ and ‘feeling tired and having little energy’. Items are on a four-point Likert scale from ‘not at all’ to ‘nearly every day’. Internal consistency in the current sample was excellent (Cronbach’s \(\alpha = 0.91\)).
2.4.5. Generalized Anxiety Disorder Assessment (GAD-7; Spitzer et al., 2006)

This is a 7-item self-report measure of anxiety which is used as a screening instrument for generalised anxiety disorder. The GAD-7 has a scale of 0-3, with higher scores indicating greater symptoms of anxiety in the past two weeks: 0 corresponds to “not at all” and 3 to “nearly every day”. The GAD-7 has high internal consistency reliability (Cronbach’s $\alpha = .92$; Spitzer et al., 2006), good test-retest reliability ($r = .83$, Spitzer et al., 2006) and construct validity ($r = 0.72$ to $r = 0.74$, Spitzer et al., 2006). Internal consistency in the current sample was excellent (Cronbach’s $\alpha = 0.93$).

2.4.6. Beliefs about Voices Questionnaire-Revised (BAVQ-R; Chadwick, et al., 2000)

This is a 35-item measure of people’s beliefs about their voices as well as their reactions and behaviour towards them. Data was collected for the first 26 items only, which related to beliefs about voice omnipotence and voice malevolence. Examples of items for voice malevolence and voice omnipotence respectively are “my voice is evil” and “my voice makes me do things I do not want to do”. The Cronbach’s $\alpha$ for the two subscales is 0.74 (voice omnipotence) and 0.88 (voice malevolence), which shows good internal consistency reliability (Chadwick, et al., 2000). This was even higher in the current sample for both voice malevolence (Cronbach’s $\alpha = 0.87$) and voice omnipotence (Cronbach’s $\alpha = 0.81$).
2.5. Procedure

2.5.1. Data Collection

An interactive website was designed (Appendix 5), which included the following information presented in this respective order: four screening questions, an information page, a consent screen, the questionnaire measures, participant demographics and a debriefing screen with suggested organisations for support. The questionnaires took around 20 minutes to complete. Questions and answers were exported and stored anonymously in Excel 2007. The tasks of designing the online questionnaire pack and of participant recruitment were shared with the other doctoral trainee; otherwise this project was conducted independently of the other trainee.

2.5.2. Recruitment

Participants were recruited indirectly through Hearing Voices Group facilitators or representatives, mainly affiliated with the Hearing Voices Network (HVN) or Intervoice - the international network for people who hear voices. HVNs in all English-speaking countries were contacted directly in Australia, New Zealand, the UK, USA, Canada and Ireland. Other mental health charities that supported people who hear voices, but which were outside the HVN, were also contacted. Appendix 6 shows a list of organisations who agreed to participate in recruitment for the study.

The international organisations were telephoned and emailed a letter about the study. These organisations were prompted to disseminate information about the research in multiple media: though email distribution lists, forums, newsletters, posters or through a link on their website. Participants were also offered the opportunity to recommend the study to others who may be interested.

As an incentive to participate, participants were invited to enter into a prize draw for vouchers to the value of £50, £40 and £30 (or
equivalent in their local currency). Participants had to email the researchers separately to be entered into the prize draw.

2.6. Planned Data analysis

2.6.1. Correlation and Mediation Analysis

The data were analyzed using Statistical Package for the Social Sciences (SPSS) version 19. Bivariate associations between variables were analyzed with Pearson's correlation (r). In order to test for mediation, the INDIRECT macro for SPSS version 19 was used (Preacher & Hayes, 2008). The paths of interest are illustrated in figure 4 - paths a, b and c in particular. What INDIRECT tests for is the effect size of X (the independent variable) on Y (the dependent variable) through M (the mediator). This is termed the ‘a x b’ indirect effect point estimate.

The INDIRECT macro generates 'bootstrapped' confidence intervals for indirect effects of X on Y through one or more mediator variables M. Bootstrapping involves repeatedly sampling (up to 10,000 times), from the dataset and estimating the a x b indirect effect in each re-sampled dataset. As this process is repeated thousands of times, an approximation of the sampling distribution of a x b is generated and used to construct confidence intervals (CIs) for the indirect (mediated) effect. The CIs used here were 95%, computed from the cut-offs for the 2.5% highest and lowest scores. Indirect effects are considered as significant (mediation has occurred) when the bias corrected confidence interval do not include zero (Preacher & Hayes, 2008).

5 The planned data analysis for mediation differs from that shown in the ethics proposal (Appendix 1). During the last five years, mediational analysis has been in flux and revision. Traditional approaches such as Baron & Kenny (1986) have been heavily critiqued (Preacher & Hayes, 2008; Zhao et al., 2010). It has now been established that it is not necessary to satisfy the first three steps of Baron & Kenny's (1986) model to test for mediation. It was decided that INDIRECT mediation would be the most suitable approach.
Path A: Direct Effect

Path B: Indirect Effect

Figure 4: Mediation Model Depicting Direct and Indirect Effects.

Path A in Figure 3 represents the total effect of X on Y. Path B represents a simple mediation model of the effect of X on Y through M (c'). Depending on the direction of the indirect effect as compared with the direct effect, a x b indirect effects were classified as "complementary mediation" "competitive mediation" "indirect-only mediation" or "non-mediation" (Zhao et al., 2010). Effect sizes of the indirect effects are estimated based on the unstandardised indirect effect (Preacher & Kelley, 2011). The interpretation of the effect size
is therefore based on how much change “in the effect of X on Y when M is added to the model; or as the amount by which Y is expected to increase indirectly through M per a unit change in X”. (p.99)².

2.6.2. Assumptions of Multiple Regression

The assumptions of multiple regression were checked for each regression model included in the analysis according to Field (2009). Histograms of residuals of each regression model were visually inspected to see if they approximated the normal distribution. Visual inspection of histograms and Q-Q plots also supported the assumption of normality of the residuals in each regression. Cook's distance values for each participant were checked in order to ascertain if any one participant was having a disproportionate influence on any of the regression models: these suggested that no individual participants could be identified as consistent outliers.

None of any of the assumptions of multiple regression were violated including linearity, normality of residuals, homogeneity of error variance, multi-collinearity and independence of errors. Although bootstrapped confidence intervals of the indirect effect (Preacher & Hayes, 2008) do not make any assumptions about the sampling distribution, these checks confirm that the regression paths are robust.

² E.g. If the $a \times b = 0.72$ and 95% CIs did not cross zero (CI: 0.43 -1.01) (for the indirect effect of “negative-self schema” on the relationship between anxious attachment and voice omnipotence); this means that voice omnipotence is expected to increase by 0.72 units on a 18 point scale (range 6-24) for every one unit of attachment anxiety if one considers only the indirect effect via negative self-schema.
3. RESULTS

3.1. Descriptive Statistics

All 150 participants (N) were included in the analyses, as no participant presented as a significant outlier. No participants had scores greater than 2.58 standard deviations from the mean on more than one questionnaire measure. Table 4 shows the descriptive statistics (range, mean, standard deviations, skewness and kurtosis) of the research variables. In terms of the distribution of the data, the Negative-other Schema scale was positively skewed (z = 2.02, p < 0.05). HPSVQ Impact, Attachment Anxiety, Negative-Self Schema, PHQ-9 Depression, GAD-7 Anxiety and the BAVQ-R Malevolence scales all showed significant negative kurtosis (-3.28 < z < -2.14, p < 0.05).

Table 4: Descriptive Statistics and Distributions of Research Variables (N = 150)

<table>
<thead>
<tr>
<th>Measures (Scale Min/Max)</th>
<th>Mean (SD)</th>
<th>Skewness (z)</th>
<th>Kurtosis (z)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPSVQ Total Severity (0/36)</td>
<td>19.71 (6.93)</td>
<td>0.65</td>
<td>-0.59</td>
</tr>
<tr>
<td>HPSVQ Emotional Impact (0/16)</td>
<td>7.95 (4.56)</td>
<td>0.52</td>
<td>-2.44</td>
</tr>
<tr>
<td>HPSVQ Characteristics (0/20)</td>
<td>11.77 (3.34)</td>
<td>-0.14</td>
<td>1.17</td>
</tr>
<tr>
<td>ECR-R Attachment Anxiety (1/7)</td>
<td>4.00 (1.54)</td>
<td>-1.02</td>
<td>-2.20</td>
</tr>
<tr>
<td>ECR-R Attachment Avoidance (1/7)</td>
<td>4.63 (1.22)</td>
<td>-1.63</td>
<td>-0.36</td>
</tr>
<tr>
<td>BCSS Negative-self schema (0/24)</td>
<td>10.31 (6.54)</td>
<td>0.91</td>
<td>-2.14</td>
</tr>
<tr>
<td>BCSS Negative-other schema (0/24)</td>
<td>9.96 (6.76)</td>
<td>2.02</td>
<td>-1.89</td>
</tr>
<tr>
<td>PHQ9 Depression (0/27)</td>
<td>14.29 (7.76)</td>
<td>-0.28</td>
<td>-2.66</td>
</tr>
<tr>
<td>GAD7 Anxiety (0/21)</td>
<td>10.39 (6.66)</td>
<td>0.83</td>
<td>-3.13</td>
</tr>
<tr>
<td>BAVQ-R Voice Malevolence (0/18)</td>
<td>7.44 (5.75)</td>
<td>0.91</td>
<td>-3.28</td>
</tr>
<tr>
<td>BAVQ-R Voice Omnipotence (0/18)</td>
<td>8.15 (4.61)</td>
<td>1.89</td>
<td>-1.71</td>
</tr>
</tbody>
</table>

7 The residuals of the hypothesised regression models were all approximately normally distributed but the distribution of the raw data was not consistently normally distributed. It could therefore be more accurate to report medians and inter-quartile ranges, however, since the data are later compared to mean scores of other clinical and non-clinical samples, the means and standard deviations are reported.

8 It is important to note that these tests for skewness and kurtosis become less accurate with greater N values as they are more likely to suggest that large data distributions are not normal (Field, 2009). However, visual inspections of histograms also supported these results.
The mean HPSVQ Total Voice Severity score of 19.71 was in the "Moderately Severe" range and higher than non-clinical norms (Van Lieshout & Goldberg, 2007). There are no norms for the separate HPSVQ sub-scales for the Emotional Impact of Voices (Voice Distress) and Voice Characteristics. Participants in this study scored higher on Attachment Avoidance than a clinical sample (mean = 4.63 vs. 3.55; Stein et al., 2011) and almost twice as high on the Attachment Avoidance subscale as a non-clinical sample (mean score = 4.63 vs. 2.55; Tiliopoulos & Goodall, 2009). Mean scores on Attachment anxiety were similar to those reported in a clinical sample (mean = 4.00 vs. 3.76; Stein et al., 2011).

The mean Negative-self scale (BCSS - NSS) was almost three times as high as in a non-clinical sample (mean = 10.31 vs. 3.50); the mean Negative-other scale (BCSS - NOS) score was more than twice that of a non-clinical sample (mean = 9.96 vs. 4.00; Fowler et al., 2006). The Negative-self and Negative-other schema scores were also higher than in a documented clinical sample (Negative-self = 7.20, Negative-other = 9.10; Fowler et al., 2006; BCSS).

The mean PHQ-9 depression and GAD-7 anxiety scores were in the moderate ranges (Kroenke et al., 2001; Spitzer et al., 2006). The Voice Malevolence and Voice Omnipotence mean scores were higher than in a documented clinical sample (mean BAVQ-R malevolence = 13.44 vs. 10.10, mean BAVQ-R omnipotence = 14.15 vs. 11.10; Chadwick et al., 2000). In summary, the means shown in Table 3.4 suggest that the participants in this study closely resembled a clinical population.
3.2. Correlational Findings

Bivariate Pearson's $r$ correlations were conducted to deduce the relationships between study variables. From Table 5 it can be seen that the majority of variables correlated positively with one another, in the expected direction. The specific hypothesized relationships will be described in more detail below.

3.3. Hypothesis Testing

**Hypothesis 1:** *Attachment Anxiety and Attachment Avoidance will both predict Negative-self and Negative-other Schema.*

From Table 5 it can be seen that hypothesis 1 is supported. Scores on the Attachment Anxiety measure significantly correlated with scores on the Negative-self and the Negative-other scales ($r = 0.65$ and $r = 0.52$, $p <0.001$ respectively). This shows that Attachment Anxiety explained 42% of the variance in Negative-self schema and 27% of the variance in Negative-other schema. Scores on the Attachment Avoidance measure significantly correlated with scores on the Negative-self and the Negative-other scales ($r = 0.48$ and $r = 0.38$, $p <0.001$ respectively). This shows that Attachment Avoidance explained 23% of the variance in Negative-self schema and 14% of the variance in Negative-other schema.
### Table 5: Bivariate Pearson’s Correlations (r) Between Research Variables

<table>
<thead>
<tr>
<th></th>
<th>HPSVQ Emotional Impact</th>
<th>HPSVQ Voice Characteristics</th>
<th>Attachment anxiety</th>
<th>Attachment avoidance</th>
<th>BCSS Negative-self Schema</th>
<th>BCSS Negative-other Schema</th>
<th>PHQ-9 Depression</th>
<th>GAD-7 Anxiety</th>
<th>BAVQ-R Malevolence</th>
<th>BAVQ-R Omn datapoint</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPSVQ Total Severity</td>
<td>.91***</td>
<td>.83***</td>
<td>.23**</td>
<td>.24**</td>
<td>.44**</td>
<td>.29***</td>
<td>.40***</td>
<td>.40***</td>
<td>.64***</td>
<td>.72***</td>
</tr>
<tr>
<td>HPSVQ Emotional Impact</td>
<td></td>
<td></td>
<td>.52***</td>
<td>.33***</td>
<td>.22**</td>
<td>.50***</td>
<td>.27***</td>
<td>.40***</td>
<td>.40***</td>
<td>.67***</td>
</tr>
<tr>
<td>HPSVQ Voice Characteristics</td>
<td></td>
<td></td>
<td>0.03 NS</td>
<td>.19*</td>
<td>.24**</td>
<td>.22**</td>
<td>.29***</td>
<td>.29***</td>
<td>.42***</td>
<td>.57***</td>
</tr>
<tr>
<td>Attachment anxiety</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.47***</td>
<td>.65***</td>
<td>.52***</td>
<td>.49***</td>
<td>.47***</td>
<td>.23**</td>
</tr>
<tr>
<td>Attachment avoidance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.48***</td>
<td>.38***</td>
<td>.42***</td>
<td>.29***</td>
<td>0.13 NS</td>
<td>.18*</td>
</tr>
<tr>
<td>BCSS Negative-self Schema</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.49***</td>
<td>.65***</td>
<td>.58***</td>
<td>.40***</td>
<td>.44***</td>
</tr>
<tr>
<td>BCSS Negative-other Schema</td>
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<tr>
<td>PHQ-9 Depression</td>
<td></td>
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<tr>
<td>GAD-7 Anxiety</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BAVQ-R Malevolence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.75***</td>
</tr>
</tbody>
</table>

*NS = non-significant, *p<0.05, **p<0.01, ***p<0.001*
Hypothesis 2: Negative-self and Negative-other schema will both predict beliefs about Voice Malevolence and Voice Omnipotence.

This hypothesis was supported. Table 5 shows that scores on the Negative-self Schema scale correlated with scores on the Voice Malevolence and Voice Omnipotence scales ($r = 0.40$ and $r = 0.44$, $p < 0.001$ respectively). This shows that Negative-self Schema explained 16% of the variance in Voice Malevolence and 19% of the variance in Voice Omnipotence. Scores on the Negative-other Schema scale correlated with scores on the Voice Malevolence and Voice Omnipotence scales ($r = 0.36$ and $r = 0.43$, $p < 0.001$ respectively). This shows that Negative-other Schema explained 13% of the variance in Voice Malevolence and 18% of the variance in Voice Omnipotence.

Hypothesis 3: Voice Malevolence and Voice Omnipotence will both predict Voice Distress.

This hypothesis was supported. Table 5 shows that scores on the Voice Malevolence and Voice Omnipotence scales correlated with Voices Distress ($r = 0.67$, $p < 0.001$ for both correlations). This shows that Voice Malevolence and Voice Omnipotence each explained 44% of the variance in Voice Distress.

Hypothesis 4: Attachment Anxiety and Attachment Avoidance will both predict Voice Distress.

This hypothesis was supported. Table 5 shows that scores on Attachment Anxiety and Attachment Avoidance correlated with Voice Distress ($r = 0.33$, $p < 0.001$ and $r = 0.22$, $p < 0.01$ respectively). This showed that Attachment Anxiety explained 11%
of the variance and Attachment Avoidance explained 5% of the variance in Voice Distress.

3.3.1. Hypotheses 5-8

Figure 4 shows the first part (a) of Model 1 to be tested by hypotheses 5-8 of this thesis. Table 3 shows the unstandardised beta coefficients and 95% CIs for the $a \times b$ indirect effects for hypotheses 5-8.

![Diagram](Attachment style -> Negative schema -> Beliefs about voices)

**Figure 5: Hypothesized Model 1 (a) - Negative Schema Mediate the Relationship between Attachment Style and Beliefs about Voices**

**Hypothesis 5:** *Negative-self and Negative-other Schema will mediate the relationship between Attachment Anxiety and beliefs about Voice Omnipotence. This will remain true when controlling for Voice Characteristics and negative affect (Anxiety and Depression).*

Hypothesis 5 was supported as shown in Table 6. For the indirect effect of Attachment Anxiety on Voice Omnipotence through Negative-self or Negative-other Schema, the 95% bootstrap CIs did not cross zero and were positive. Negative-self and Negative-other Schema were therefore complimentary mediators of the relationship between Attachment Anxiety and Voice Omnipotence. These mediational models explained 20% and 19% of the variance in Voice Omnipotence respectively.
Negative-self and Negative-other Schema remained as significant, complimentary mediators of the relationship between Attachment Anxiety and Voice Omnipotence when controlling for Voice Characteristics \((a \times b = 0.62 \text{ and } 0.44; \ 95\% \ CI \ did \ not \ cross \ zero \ and \ ranged \ from \ 0.28-1.00 \ \text{and} \ 0.19-0.78 \ \text{respectively})\). Negative-self and Negative-other Schema also remained mediators after controlling for negative affect \((a \times b = 0.44 \text{ and } 0.37; \ 95\% \ CI \ did \ not \ cross \ zero \ and \ ranged \ from \ 0.18-0.79 \ \text{and} \ 0.15-0.70 \ \text{respectively})\). However the \(c\) paths were no longer significant \((c = 0.01, \ p = 0.97 \ \text{for both} \ c \ \text{paths}), indicating that Negative-self and Negative-other Schema were indirect-only mediators of the relationship between Attachment Anxiety and Voice Omnipotence, when controlling for negative affect.
### Table 6: Hypotheses 5-8 - Unstandardised Beta Coefficients of Mediation Analyses with Single Mediators (N = 150, 5000 bootstrap samples)

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Independent variable</th>
<th>Mediating variable</th>
<th>Dependent variable</th>
<th>Effect of IV on M (a)</th>
<th>Effect of DV on M (b)</th>
<th>Direct Effect (c')</th>
<th>Indirect Effect (axb)</th>
<th>95% CI</th>
<th>Total Effect (c)</th>
<th>Variance in DV</th>
<th>Mediator Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 ECR-R Attachment Anxiety</td>
<td>BCSS - NSS</td>
<td>BAVQ-R Omnipotence</td>
<td></td>
<td>2.75***</td>
<td>0.36***</td>
<td>-0.31 NS</td>
<td>0.98</td>
<td>0.58-1.43</td>
<td>0.67**</td>
<td>0.20***</td>
<td>Complimentary</td>
</tr>
<tr>
<td></td>
<td>BCSS - NOS</td>
<td></td>
<td></td>
<td>2.28***</td>
<td>0.29***</td>
<td>0.00 NS</td>
<td>0.67</td>
<td>0.33-1.09</td>
<td>0.67**</td>
<td>0.19***</td>
<td>Complimentary</td>
</tr>
<tr>
<td>6 ECR-R Attachment Anxiety</td>
<td>BCSS - NSS</td>
<td>BAVQ-R Malevolence</td>
<td></td>
<td>2.75***</td>
<td>0.37***</td>
<td>-0.18 NS</td>
<td>1.03</td>
<td>0.59-1.54</td>
<td>0.85**</td>
<td>0.16***</td>
<td>Complimentary</td>
</tr>
<tr>
<td></td>
<td>BCSS - NOS</td>
<td></td>
<td></td>
<td>2.78***</td>
<td>0.28***</td>
<td>0.21 NS</td>
<td>0.63</td>
<td>0.23-1.08</td>
<td>0.85**</td>
<td>0.13***</td>
<td>Complimentary</td>
</tr>
<tr>
<td>7 ECR-R Attachment Avoidance</td>
<td>BCSS - NSS</td>
<td>BAVQ-R Omnipotence</td>
<td></td>
<td>2.55***</td>
<td>0.32***</td>
<td>-0.16 NS</td>
<td>0.83</td>
<td>0.47-1.31</td>
<td>0.67*</td>
<td>0.19***</td>
<td>Complimentary</td>
</tr>
<tr>
<td></td>
<td>BCSS - NOS</td>
<td></td>
<td></td>
<td>2.13***</td>
<td>0.29***</td>
<td>0.05 NS</td>
<td>0.62</td>
<td>0.30-1.10</td>
<td>0.67*</td>
<td>0.19***</td>
<td>Complimentary</td>
</tr>
<tr>
<td>8 ECR-R Attachment avoidance</td>
<td>BCSS - NSS</td>
<td>BAVQ-R Malevolence</td>
<td></td>
<td>2.56***</td>
<td>0.38***</td>
<td>-0.33 NS</td>
<td>0.96</td>
<td>0.55-1.47</td>
<td>0.63 NS</td>
<td>0.16***</td>
<td>Indirect-only</td>
</tr>
<tr>
<td></td>
<td>BCSS - NOS</td>
<td></td>
<td></td>
<td>2.13***</td>
<td>0.31***</td>
<td>-0.02 NS</td>
<td>0.65</td>
<td>0.29-1.15</td>
<td>0.63 NS</td>
<td>0.13***</td>
<td>Indirect-only</td>
</tr>
</tbody>
</table>

NS = non-significant, *p<0.05, **p<0.01, ***p<0.001
Hypothesis 6: Negative-self and Negative-other Schema will mediate the relationship between Attachment Anxiety and beliefs about Voice Malevolence. This will remain true when controlling for Voice Characteristics and negative affect.

Hypothesis 6 was supported. Table 6 shows that for the indirect effect of Attachment Anxiety on Voice Malevolence through Negative-self or Negative-other Schema, the 95% bootstrap CIs did not cross zero and are positive. Negative-self and Negative-other Schema were therefore complimentary mediators of this relationship. The mediational models explained 16% and 13% of the variance in Voice Malevolence respectively.

Negative-self and Negative-other Schema remained significant complimentary mediators of the relationship between Attachment Anxiety and Voice Malevolence, when controlling for voice characteristics ($a \times b = 0.72$ and $0.43$, 95% CI did not cross zero and ranged from $0.29-1.20$ and $0.11-0.88$ respectively). Negative-self and Negative-other Schema also remained mediators after controlling for negative affect ($a \times b = 0.57$ and $0.37$, 95% CI did not cross zero and ranged from $0.24-0.96$ and $0.09-0.75$ respectively). However, the $c$ paths were no longer significant ($c = 0.29$, $p = 0.39$ for both $c$ paths), indicating that Negative-self and Negative-other Schema were indirect-only mediators of the relationship between Attachment Anxiety and Voice Malevolence, when controlling for negative affect.
Hypothesis 7: Negative-self and Negative-other Schema will mediate the relationship between Attachment Avoidance and beliefs about Voice Omnipotence. This will remain true when controlling for Voice Characteristics and negative affect.

Hypothesis 7 was supported. Table 6 shows that for the indirect effect of Attachment Avoidance on Voice Omnipotence through Negative-self or Negative-other Schema, the 95% bootstrap CIs did not cross zero and are positive. Negative-self and Negative-other Schema are therefore complimentary mediators of this relationship. The mediational models both explained 19% of the variance in Voice Omnipotence.

Although Negative-self and Negative-other Schema remained mediators of the relationship between Attachment Avoidance and Voice Omnipotence when controlling for voice characteristics ($a \times b = 0.62$ and 0.45, 95% CI did not cross zero and ranged from 0.33 -1.01 and 0.21-0.78 respectively) and negative affect ($a \times b = 0.28$ and 0.27, 95% CI did not cross zero and ranged from 0.08-0.63 and 0.07-0.59 respectively); the $c$ paths were no longer significant in any model, (controlling for Voice Characteristics: $c = 0.26$, $p = 0.31$; controlling for negative affect: $c = 0.03$, $p = 0.91$, for both $c$ paths). This indicates that Negative-self and Negative-other Schema were indirect-only mediators of the relationship between Attachment Avoidance and Voice Omnipotence in the presence of confounding variables.
**Hypothesis 8:** Negative-self and Negative-other Schema will mediate the relationship between Attachment Avoidance and beliefs about Voice Malevolence. This will remain true when controlling for Voice Characteristics, or negative affect.

Hypothesis 8 was supported. Table 6 shows that for the indirect effect of Attachment Avoidance on Voice Malevolence through Negative-self or Negative-other Schema, the 95% bootstrap CIs did not cross zero and are positive. However, the c paths were not significant ($c = 0.63, p = 0.11$ for both models), and therefore Negative-self and Negative-Other Schema are indirect-only mediators of the relationship between Attachment Avoidance and Voice Malevolence. The models explained 16% and 13% of the variance in Voice Malevolence respectively.

Negative-self and Negative Other Schema remained indirect-only mediators of the relationship between Attachment Avoidance and Voice Malevolence when controlling for voice characteristics ($a \times b = 0.77$ and $0.49$, 95% CI did not cross zero and ranged from 0.42-1.23 and 0.21-0.94 respectively) and negative affect ($a \times b = 0.42$ and $0.30$, 95% CI did not cross zero and ranged from 0.15 -0.83 and 0.08-0.72 respectively).
3.3.2. Hypotheses 9-10

Figure 5 shows the second part (b) of Model 1 to be tested by hypotheses 9-10 of this thesis. Table 4 shows the unstandardised beta coefficients and 95% CIs for the \( a \times b \) indirect effects for hypotheses 9-10.

![Negative Schema → Beliefs about voices → Voice distress](image)

**Figure 6: Hypothesized Model Part 1 (b) - Beliefs about Voices Mediate the Relationship between Negative Schema and Voice Distress**

**Hypothesis 9:** *Beliefs about Voice Omnipotence will mediate the relationship between Negative-self or Negative-other Schema and Voice Distress. This will remain true when controlling for Voice Characteristics and negative affect.*

Hypothesis 9 was supported. Table 7 shows that for the indirect effect of both Negative-self or Negative-other Schema on Voice Distress, through Voice Omnipotence, the 95% bootstrap CIs did not cross zero and are positive. Voice Omnipotence is therefore a complimentary mediator of both relationships. These models explained 50% and 44% of the variance in Voice Distress respectively.

Voice Omnipotence remained a significant complimentary mediator of Negative-self schema and voice distress, when controlling for voice characteristics \((a \times b = 0.10, 95\% \text{ CI did not cross zero and ranged from 0.05-0.16})\) and Negative-other Schema and Voice Distress, when controlling for Voice Characteristics \((a \times b = 0.12, 95\% \text{ CI did not cross zero and ranged from 0.07-0.18})\). Voice Omnipotence also remained a complimentary mediator between Negative-self Schema and Voice Distress when controlling for negative affect \((a \times b = 0.10, 95\% \text{ CI did not cross zero and ranged from 0.05-0.16})\).
cross zero and ranged from 0.03-0.19); but an indirect-only mediator between Negative-Other Schema and voice distress, when controlling for negative affect ($a \times b = 0.12$, 95% CI did not cross zero and ranged from 0.05-0.20) as the $c$ path was no longer significant ($c = 0.06, p = 0.28$).
Table 7: Hypotheses 9-10 - Unstandardised Beta Coefficients of Mediation Analyses with Single Mediators (N = 150, 5000 bootstrap samples)

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Independent variable</th>
<th>Mediating variable</th>
<th>Dependent variable</th>
<th>Effect of IV on M</th>
<th>Effect of DV on M</th>
<th>Direct Effect</th>
<th>Indirect Effect</th>
<th>Total Effect</th>
<th>Variance in Mediator</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>BCSS - NSS</td>
<td>BAVQ-R Omniscience</td>
<td>HPSVQ</td>
<td>0.31***</td>
<td>0.55***</td>
<td>0.18***</td>
<td>0.17</td>
<td>0.11-0.24</td>
<td>0.35*** 0.50***</td>
<td>Complimentary</td>
</tr>
<tr>
<td>BCSS - NOS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>10</td>
<td>BCSS - NSS</td>
<td>BAVQ-R Malevolence</td>
<td>HPSVQ</td>
<td>0.35***</td>
<td>0.44***</td>
<td>0.20***</td>
<td>0.15</td>
<td>0.09-0.23</td>
<td>0.35*** 0.51***</td>
<td>Complimentary</td>
</tr>
<tr>
<td>BCSS - NOS</td>
<td></td>
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</tbody>
</table>

NS = non-significant, *p<0.05, **p<0.01, ***p<0.001
**Hypothesis 10:** Beliefs about Voice Malevolence will mediate the relationship between Negative-self or Negative-other Schema and Voice Distress. This will remain true when controlling for Voice Characteristics and negative affect.

Hypothesis 10 was supported. Table 7 shows that for the indirect effect of Negative-self or Negative-other Schema on Voice Distress through Voice Malevolence, the 95% bootstrap CIs did not cross zero and are positive. Voice Malevolence is therefore a complimentary mediator of both these relationships. These models explained 50% and 44% of the variance in voice distress respectively.

Voice Malevolence remained a significant complimentary mediator of Negative-self schema and Voice Distress, when controlling for Voice Characteristics ($a \times b = 0.10$, 95% CI did not cross zero and ranged from 0.05-0.16) and Negative-other Schema and Voice Distress, when controlling for Voice Characteristics ($a \times b = 0.12$, 95% CI did not cross zero and ranged from 0.07-0.18).

Voice malevolence also remained a complimentary mediator of Negative-self Schema and voice distress, when controlling for negative affect ($a \times b = 0.10$, 95% CI did not cross zero and ranged from 0.03-0.19); but an indirect-only mediator between Negative-Other Schema and voice distress, when controlling for negative affect ($a \times b = 0.12$, 95% CI did not cross zero and ranged from 0.05-0.20), as the c path was no longer significant ($c = 0.06$, $p = 0.28$) in this model.
3.4. Exploratory INDIRECT Mediation Analyses

Testing Model 1 in two parts (a and b), as shown in Figures 2-4, was 'theoretically-driven' by the cognitive model of psychosis (Garety et al., 2001; Birchwood & Chadwick, 1997) and Preacher & Hayes (2008) suggest this is the optimal way to test for mediation. However, the authors also suggest "including several mediators in the same model is one way to pit competing theories against one another within a single model. Theory comparison is good scientific practice." (p.881). They go on to recommend "including two or more mediators in one model and then comparing the strengths of the two indirect effects to decide which theory should be given more credence." (p. 884). In addition, Zhao et al., (2010) suggest that "complimentary mediation" is a sign of an "incomplete theoretical framework" and to "consider the likelihood of an omitted mediator" (p. 201).

Following the guidance from Preacher & Hayes (2008) and Zhao et al., (2010), given the multiple finding of "complimentary mediation" in Model 1, I investigated two alternative combination mediation models involving further single mediation (Model 2) shown in Figure 7 in Appendix 6; and multiple mediation (Model 3) shown in Figure 8 in Appendix 6. Entering all cognitive-affective variables as single (Model 2) or multiple mediators (Model 3) of the relationship between attachment style and voice distress did not provide as good a fit to the data as Model 1. This was evidenced by greater numbers of "non-mediations" and instances of "competitive mediation" in some analyses (shown in Tables 8 and 9 in Appendix 7); which is inconsistent with the cognitive model of voices and less valid in terms of clinical interpretation. Therefore, Model 1 appears the more accurate fit to the data than a model in which all cognitive-affective mediators are seen to mediate the relationship between attachment style and voice distress in parallel.
4. DISCUSSION

4.1. Overview

The model shown in Figure 2 outlines a cognitive model of hearing voices. In the cognitive model, distress from hearing voices is determined by the meaning made of this experience and beliefs about voices, rather than as a consequence of voice characteristics (Chadwick & Birchwood, 1994; Birchwood & Chadwick, 1997). The beliefs one holds about voices is, in turn, determined by core beliefs about the self and others which are, in themselves, driven by internal working models of attachment styles.

![Figure 2: The Supported Model - Negative Schema as Mediators of Attachment Style and Beliefs about Voices which, in turn, Mediate the Relationship Between Negative Schema and Voice Distress](image)

The aim of this study was the test the model shown in Figure 2 using a cross-sectional design. Specifically, it was hypothesised that anxious and avoidant attachment styles would predict negative-self and negative-other schema, which in turn would predict beliefs about voice omnipotence and voice malevolence, which relate to distress at
hearing voices. To test the model further it was hypothesised that negative schema would mediate the relationship between attachment style and beliefs about voices and that beliefs about voices would mediate the relationship between negative schema and voice distress.

Given the cross-sectional design of the study, the causal relationship between the variables in the model cannot be determined. However, all hypotheses in the model shown in Figure 2 were supported. Moreover, the model continued to be supported when controlling from voice characteristics (e.g. loudness and frequency) and negative affect (anxiety and depression). Furthermore, it was shown that the model in Figure 2 fit the data better than alternative models, where all cognitive variables were entered in parallel as mediating the relationship between attachment style and voice distress, supporting the linear model shown in the diagram.

4.2. Findings

In this section, I now outline the current findings in more detail. Around 60% of participants reported currently using mental health services and 90% reported a diagnosis of at least one mental health disorder. In line with this, on the range of measures used, the participants in this study scored at or above reported clinical means. Of note is that the current sample scored almost twice as high on measures of attachment avoidance as a non-clinical sample (Tiliopoulos & Goodall, 2009) and higher than clinical samples (Stein et al., 2011). These findings echo similar results in previous studies, which indicate greater levels of attachment avoidance or dismissing profiles in clinical samples with positive symptoms of psychosis (MacBeth et al., 2011; Berry, Barrowclough & Wearden, 2007; Dozier, 1990; Dozier & Tyrrell, 1997).
As hypothesized and shown in Figure 2, attachment anxiety and attachment avoidance were significant predictors of both negative-self and negative-other schema. Negative-self and negative-other schema were, in turn, significant predictors of both voice omnipotence and voice malevolence. Finally, voice omnipotence and voice malevolence, (in addition to attachment anxiety and attachment avoidance), predicted voice distress.

In terms of the two-stage mediational analysis, the hypotheses were again supported and provide strong empirical evidence for the cognitive model of voices outlined in Figure 2 above. The model tested was in two parts - 1a and 1b. In model 1a, negative-self and negative-other schema significantly mediated the relationship between attachment anxiety and attachment avoidance, on the one hand, and beliefs about voice omnipotence or voice malevolence, on the other. The majority of these mediation analyses indicated complimentary mediation, suggesting that the direction of indirect effect operated in the same direction as the direct effect. In the case of the relationship between attachment avoidance and voice malevolence, this relationship was only indirectly mediated by negative-self or negative-other schema, as the direct relationship between attachment avoidance and voice malevolence was not significant.

In model 1b, voice omnipotence and voice malevolence were also complimentary mediators of the relationship between negative-self and negative-other schema, on the one hand, and voice distress, on the other. Throughout all mediational analyses in Models 1a and 1b, when controlling for voice characteristics and negative affect, in most cases the size of the indirect effect lessened (and was more likely to be classified as indirect-only mediation); however, all mediations of the hypothesized relationships remained significant, when controlling for these variables, and were in the expected direction.
4.3. Theoretical Implications

4.3.1. Two-Stage Mediational Model

This study makes a novel contribution to the literature on attachment and psychosis whilst lending more definitive support to the cognitive model of hearing voices in its entirety than known, previously published studies. It provides empirical evidence for the role of cognitive-affective factors as mediators between attachment style and voice distress. Although previous studies have implicated interpersonal schema, core beliefs and beliefs about voices in the maintenance of voice distress (Birchwood & Chadwick, 1997; Birchwood et al., 2000), no known published studies to date have demonstrated that negative schema mediates the role of attachment on beliefs about voices, and that beliefs about voices, in turn, mediate the relationship between negative schema and voice distress (Figure 2). The current study also suggests that negative schema mediate the content and nature of interactions with voices. This study complements Morrison et al.'s, (2003) “Integrative Model of Trauma and Psychosis”, which formulates that emotional memories and images, which relate to previous trauma and attachment experiences, can guide the interpretations of voices.

4.3.2. Attachment Style and Voice Distress

As mentioned in the Introduction, “Relating Theories” (Birtchnell 1996, 2002) use different language to describe similar concepts to those in cognitive models and attachment theory. The lack of significance of voice dominance and intrusiveness on voice distress, when controlling for beliefs about voices, suggests that relational and cognitive measures tap similar constructs (Sorrell et al., 2010). The current findings are in line with studies which are based on “Relating Theory”. Sorrell et al., (2010) looked at clinical and non-clinical voice hearers’ distress from hearing voices and differences in their
perceived relationships and responses to their dominant voice. The authors used the newly developed “Voice and You” and “You and Others” questionnaire measures to capture these relationships (Hayward et al., 2008; Phillips & Hayward, 2005 respectively).

The results suggested that clinical voice hearers tend to relate with withdrawal and distancing to their voices. These coping strategies have been shown to be less adaptive and more distressing than engagement, submissiveness and intimacy with voices, which is more typical of non-clinical populations (Sorrell et al., 2010). Withdrawal and distancing from voices may well reflect internal working models of attachment avoidance in relationships with people. Furthermore, the more positive interactions with voices shown in the non-clinical population may be linked with more secure attachment styles.

The current findings suggest a role for both attachment anxiety and attachment avoidance in voice distress. This is in line with MacBeth et al., (2008) who used structural equation modelling and found that voices were predicted by a combination of attachment anxiety and interpersonal affiliating strategies and attachment avoidance and interpersonal distancing strategies. The authors thought that their “hallucinations model reflect[ed] mutually incompatible interpersonal strategies” (p.90) which could represent disorganised attachment. Neither MacBeth et al., (2011) nor the current study categorised the sample based on attachment style, so participants who met the criteria for the disorganised attachment category cannot be deduced from these data. So far, we can deduce that both attachment styles are each related to voice symptoms, but due to the cross-sectional design, we cannot ascertain both “incompatible” patterns of interpersonal relating to voices occurs within or between specific individuals.
4.3.3. Attachment Style and Beliefs about Voices

From emerging evidence, researchers have speculated that attachment anxiety may be associated with cognitive-perceptual disorganisation such as hallucinations; and that attachment avoidance may be associated with paranoia, interpersonal problems, and the negative symptoms of psychosis, such as social anhedonia, rather than with voices (Berry et al., 2006; Tiliopoulos & Goodhall 2009; MacBeth et al., 2008). The present study lends partial support for this, as it shows a stronger association between attachment anxiety and both beliefs about voices - voice omnipotence and voice malevolence. Attachment avoidance was not associated with beliefs about voice malevolence.

Our finding that a belief about voice omnipotence was a mediator of the relationship between both attachment styles and voice distress complements Peters et al. (2011). The authors showed voice omnipotence had strong associations with all their measures of distress (suicidal ideation, anxiety, depression and voice distress). Vaughan & Fowler (2004) also showed that, for clinical voice hearers, voices were more likely to relate from a position of dominance. This is also in line with evidence that clinical voice hearers are more likely to experience their voices as powerful and obey their commands than non-clinical voice hearers (Leudar et al., 1997).

Unlike voice omnipotence, Peters et al. (2011), found voice malevolence was more strongly related to the ‘resistance’ of voices than voice distress. The lack of association between attachment avoidance and beliefs about voice malevolence, in this study, is difficult to understand conceptually, given the evidence that attachment avoidance is related to interpersonal withdrawal and independence, which could be conceptually similar to ‘behavioural resistance’ to voices (Chadwick et al., 2000). Our study adds to
psychological theory and knowledge of attachment and psychosis literature as it suggests, unexpectedly, that voice malevolence is only associated with attachment anxiety.

4.3.4. Negative Schema as Mediators
This current findings suggest that Bartholomew & Horowitz's (1991) model of attachment style could benefit from revision, given that it was found that both attachment styles significantly predict both negative-self and negative-other schema. The authors suggest that attachment anxiety reflects "views of self" and attachment avoidance reflects "views of the other". However, our study shows that both attachment profiles are associated with beliefs about the self and others. In addition, as explained, attachment avoidance was not associated with 'voice malevolence' ("negative view of other" or voice), which also contradicts the authors' model.

The important mediating role of negative schema in the maintenance of psychosis has been shown in more recent papers. Stowkowy and Addington (2012) found that negative beliefs mediated the relationship between social defeat and first episode symptoms of psychosis. "Social defeat" is conceptually similar to social rank and status and is related to beliefs about voice omnipotence (Paulik et al., 2011). As such, Stowkowy and Addington's (2012) study also supports the current findings. Similarly, Gracie et al., (2007) showed negative beliefs about self and others were associated with trauma and hallucinations. As attachment losses are traumatic events (Bowlby, 1973), our study could be seen to complement Gracie et al.'s (2007) findings also.
4.3.5. Controlling for Voice Characteristics and Negative Affect

Beliefs about voices remained significantly associated with voice distress, after controlling for negative affect and voice characteristics, a finding which was replicated in multiple studies (Birchwood & Chadwick, 1997; Birchwood et al., 2000; Hayward, 2003; Vaughan & Fowler, 2004; Hacker et al., 2009). The current findings also concur with Peters et al., (2011) who found that voice severity (frequency and intensity) was not related to distress once beliefs about voices were controlled for. Consistent with Birchwood & Chadwick's (1997) cognitive model of psychosis, controlling for voice characteristics or mood did not eradicate the relationship between voice omnipotence and voice distress in the present study. The current findings suggest that beliefs about of voice omnipotence have a key mediating role between attachment style and voice distress.

Berry et al., (2006) also showed that both attachment anxiety and attachment avoidance predicted voice hearing. However, the relationship between attachment anxiety and voices (but not attachment avoidance and voices) was significant when controlling for negative affect, suggesting a stronger association between attachment anxiety and hearing voices (Berry et al., 2006). However, due to the use of mediational analyses, the current study was able to demonstrate more subtle indirect relationships between variables when controlling for negative affect and voice characteristics. The relationships between both attachment styles and beliefs about voices was still mediated (albeit indirectly in most cases), by negative schema. Beliefs about voices also mediated the relationship between negative schema and voice distress when controlling for negative affect and voice characteristics.

Finally, Smith et al. (2006) have shown that people with lower self-esteem (or negative self-evaluations) experienced hallucinations of greater severity, more negative content and were more distressed by
them. In line with this, the current study has also shown that negative-self schema remain related to voice distress, even when controlling for negative affect and voice characteristics, suggesting the relationship between negative schema and voice distress is independent of these factors.

4.4. Strengths and Limitations

The main limitation of this study is that it utilizes a cross-sectional design and so causation between variables cannot be inferred. For example, voice distress could also contribute to attachment style, as could beliefs about voices and we cannot claim any of these relationships are unidirectional. Cross-sectional designs examine variables at a single point in time across a group of individuals. Therefore we cannot examine the process of change in terms of how variables are dynamically related over a period of time, for each particular individual. Longitudinal designs would aid inference of causation and it is through such studies we can ascertain that attachment style can be influenced by mood and psychotic symptoms (Mikulincer, & Shaver, 2007). However, caution still needs to be exercised in inferring causation with longitudinal designs, as it is still possible for a factor to precede another factor without the first playing a causal role.

In addition, across this cross-section of different participants there were a range of diagnoses and often participants endorsed more than one diagnosis. There is evidence that people with different diagnoses experience hallucinations differently. For example, Hammersley et al., (2010) found that malevolent or omnipotent hallucinations were comparatively rare in bipolar affective disorders as compared to psychotic disorders. This could be a potential limitation of our data. However, this may also be a strength of the study as we had variability in our sample. Symptom-based models of mental illness are also gathering more empirical support rather than
diagnostic models based on medical models (Johnstone & Dallos, 2006).

The use of an internet recruitment strategy can pose a risk in that the anonymity of the respondent means we do not know if participants are genuine voice hearers. Our recruitment through charities that support people who hear voices, reduced this risk. As such, this risk does not outweigh the benefit, given the often low sample sizes of voice hearers recruited through mental health services (Sorrell et al., 2010). Anecdotal evidence suggested that people who may not have answered the questionnaire in a service setting were able to complete it online because it was anonymous (e.g. some participants created anonymous email accounts to ask questions first).

Furthermore, our sample scored at or above the clinical mean on measures, 60% were currently using mental health services and 90% had a mental health diagnosis: this suggests that the recruitment strategy was successful in recruiting participants who were, in general terms, a clinical population. Furthermore, studies have shown that participants who take part in internet-based research on mental health have similar characteristics to those who are recruited face-to-face (Joppich, 2010).

Another novel decision was to sample across cultures and countries and permit all English-speaking people to participate, even if English was a second language. However, some measures used in this study have been translated or used in countries where English is a second language and the constructs have good validity and reliability (e.g. Ranjan et al., 2010). In addition, only 7% of our sample did not have English as a first language. A recent study by Lawrence et al., (2010) also conducted internet-based research across countries with participants who were fluent in English. Their findings reflected the continuum model of hearing voices, and many of the results around affect and beliefs about voices reflected the presentation seen in a
clinical population. These studies show the validity in using an international, online methodology.

Another strength of this study was that the statistical analyses were adequately powered. The measures used had good to excellent internal consistency reliability and good construct validity. It was important to abandon references to romantic relationships and replace with reference to “others” on the Experiences in Close Relationships Questionnaire Revised (ECR-R), as attachment status is context and relationship dependent; and a general perception of how people relate to others close to them has been shown to mirror how they relate to voices (Hayward, 2003).

Pickering et al. (2008) concluded that attachment models should not necessarily be included in models of voice distress, as they found the association between insecure attachment and voices was not significant when controlling for co-morbid paranoia. A weakness of this study may have been that the role of paranoia on the findings was not controlled for. In particular, studies have shown that voice characteristics are related to increased severity of delusional thinking (Hustig & Hafner, 1990). Future studies could explore the associations between paranoia and voices with attachment style, however, beliefs about voices in themselves could be considered “paranoid” or “delusional” and investigation of this itself may lead to the circular measurement of very similar constructs. In addition, Pickering et al., (2008) did not look at indirect effects, and so we cannot draw any conclusions about the possibility of indirect-only mediating variables.

Finally, it is recognised that the two-stage mediational approach is a limitation of the analysis in this study. There are other methods (e.g. path analysis) that would allow the relationships between variables, in the hypothesised model in Figure 2, to be tested in serial, rather than in two parts. This is planned for the final paper when the study is written for submission to a peer-reviewed publication. However, for
this thesis, I decided to use a statistical approach that I understood sufficiently clearly.

4.5. Research Implications

There are several research questions which could be addressed following this study. The first is whether the development of psychosis is in the two-stage mediational model described in Figure 2. Do attachment styles precede beliefs about self and others, which precede beliefs about voices and voice distress; or are the relationship between factors more complex?

Future research would look at attachment styles in children and adolescents at risk for developing psychosis. Malmberg et al.’s (1998) recruitment strategy, which targeted 50,000 young men in the army was effective, yielded sufficient data and enabled contact with participants over time. Alternatively, young people presenting to early intervention services could complete these measures as outcome measures, to be used as part of their treatment throughout (and beyond) their contact with mental health services.

In the initial phase for children at risk from psychosis, the development of attachment style and core beliefs would be measured over time. At adolescence, measures of attachment styles and schema, in addition to positive schizotypy and beliefs about voices and voice distress (if they develop voices) would be given over at least three time points. This would enable understanding of the development of attachment style, schema, beliefs about voices and voice distress over time - whether it is stable or in flux and, if so, how so.

There are consistent findings that there are higher levels of attachment avoidance in people with a diagnosis of psychosis. This may relate to greater numbers of ruptures in attachment relationships
and increased traumatic separations (Read et al., 2005). However, it is still unclear whether the increase in attachment avoidance or attachment anxiety relates to interpersonal trauma, given recent research reporting an association between attachment anxiety (and not attachment avoidance) in interpersonal traumas and PTSD in people with psychosis (Picken et al., 2010). However, there is evidence to suggest that people who score higher on attachment avoidance are also more likely to underreport their distress (Picken et al., 2010; Dozier & Kobak, 1992). Further longitudinal studies which examine the relationship between traumatic events, attachment styles and psychosis would elucidate this further. There is also a paucity of longitudinal evidence for Liotti & Gumley’s (2008) hypothesis that significant relationships, that strongly disconfirm previously held schema, can alter or modify the internal working models developed in childhood (Waters et al., 2000). Research on attachment, trauma and the development of schema would illuminate this.

The current findings suggest a role for both attachment anxiety and attachment avoidance in voice distress, in line with MacBeth et al., (2008) and Berry et al., (2006). As we did not categorise our sample based on attachment style, participants who met the criteria for the “fearful attachment” category cannot be deduced from our data. MacBeth et al., (2011) tried to address this research question in their study of people with first episode psychosis, who were classified according to the Adult Attachment Interview (AAI). Their study was hampered by too small a sample size, multiple comparisons and the use of broad PANSS categories of positive and negative symptomatology. However, there are difficulties gathering sufficient data face-to-face from a clinical sample through semi-structured interviews (see Sorrell et al., 2010); and questionnaires which categorise attachment style have poorer construct validity and
reliability than questionnaires which use the two-factorial model of attachment avoidance and attachment anxiety.

Research also shows more extreme negative self and other core beliefs in people with psychosis as compared to non-clinical controls (Fowler et al., 2006) who exhibit higher levels of negative interpretations of voices, in comparison to non-patients (Morrison et al., 2004). Challenges in creating effective interventions may arise because of the strength of the relationship between negative schema and beliefs about voices. This would need further investigation.

Since negative schemas are long-standing, any related beliefs (e.g. beliefs about voices) may be resistant to change. Appraisals of, as well as distress from, hearing voices could also create a vicious cycle of stigma, shame and reinforcement of those negative schema, making them even less amenable to change. The difficulties shifting these underlying schemas may explain the equivocal outcomes seen in CBT for psychosis. Further research would need to examine the utility of schema focused approaches for people with psychosis, given the current evidence base which suggests that they are important factors in the development and maintenance of psychosis.

Finally, there is evidence that perceptions of voice characteristics do change, when people are less distressed by them (Chadwick & Birchwood, 1994). Therefore, appraisals of voice power and negative schema may also contribute to voice topography, as there are often differences reported in the voice severity between clinical and non-clinical populations (Stip, 2000). Further research would examine the voice activity changes and perceptions of voice activity in the context of modified beliefs about voices.
4.6. Implications for Clinical Practice

Many people who experience psychosis have medication-resistant symptoms or do not wish to take medication. One could argue, from the current study, that cognitive factors such as negative schema and beliefs about voices present as long-term vulnerability factors for distress at hearing voices, which in turn, may relate to their attachment style. The substantial attachment traumas and general trauma histories in this group, as well as consequent social anxiety and difficulties with social relating, also increase the risk of development of maladaptive schemas and difficulties altering longstanding beliefs. It would therefore be important to identify and modify core beliefs and schemas with the aim of trying to weaken the strength of these beliefs and to generate alternative beliefs. Specific cognitive intervention is important since there is some longitudinal evidence that even when positive symptomatology improves, the underlying beliefs do not change (Csipke & Kinderman 2006).

The current findings add empirical support for formulations in psychosis that link attachment style to beliefs about the self and others and voices, and to current distress. It could therefore be clinically meaningful to elucidate the attachment styles of people presenting with voice distress and this could help link voice appraisals to attachment style. These formulations could then help increase “insight,” shown to improve outcomes (Perivoliotis et al., 2010): lack of insight plays a role in maintaining and developing psychotic symptoms.

The present findings support a person-centred, individualised approach to formulation and treatment and complement Chadwick's (2006) Person-Based Cognitive Therapy for Psychosis (PBCT). The model recognises that judgements made by voices have a quality of being negative-self schema due to their interpersonal nature. The therapy is a combination of classic cognitive therapy and third wave Cognitive Behavioural Therapy Techniques. It involves challenging
the negative, global, stable experience of the self and viewing this as only one possible self among other, positive versions. It accepts that negative schemas have "emotional validity" which makes them self-evident; and that negative schemas are experienced psychologically and behaviourally as well as emotionally. Therefore, person-centred therapy for psychosis would necessitate the development and integration of positive-self and positive-other schema. There is a small evidence-based for the effectiveness of PBCT at reducing emotional distress in individual and group formats (Chadwick, 2006; Dannahy et al., 2011).

Mindfulness techniques have also been shown to be effective at reducing voice distress (Chadwick, 2005; Chadwick et al., 2009; Dannahy et al., 2011). Mindfulness teaches that although thoughts, feelings and beliefs seem true in a particular moment, they also fade and pass to different thoughts and feelings. PBCT groups facilitate learning about different psychological techniques to manage voice distress: evaluating beliefs and practising mindfulness complement one another as strategies as, in not becoming overly attached to these experiences and letting thoughts go, this provides evidence that voices are less powerful and have less control.

Finally, due to the conceptual overlap between cognitive and interpersonal models of voices, the current study also lends support for an intervention based on "Relating Therapy" for people who hear voices (Hayward & Fuller, 2010). This therapy aims to modify distressing relationships with voices through skills training in assertiveness techniques for powerful or controlling voices, engaging voices in dialogue and building on more positive experiences of relationships. Although the evidence-base for Relating Therapy is small and no large scale studies have been conducted (Hayward et al., 2009), a range of different stakeholders (clients, relatives, therapists and referrers) provide qualitative evidence that Relating Therapy can be beneficial (Hayward & Fuller, 2010). Positive change
has been said to occur through improving clients’ relationships with their voices and social relationships, improving mood and well-being as well as engendering hope and acceptance (Hayward & Fuller, 2010).

### 4.7. Conclusions

The model outlined in Figure 2 lends support to a new model of voice distress which has not previously been investigated. It is the first study to test the cognitive model of voices in its entirety using one data set. Although previous studies have supported parts of the model, the model has not been supported as a whole. Hence, the current findings both build upon, as well as unite, different aspects of the cognitive model. For example, the current findings are in line with Vaughan and Fowler’s (2004) hypothesis that interpersonal schemata contribute to the style of relating to voices and that these mediate voice distress. It also supports the seminal work of Chadwick and Birchwood (1994) who suggested that beliefs about voices develop as part of making sense of voices and that these beliefs are underpinned by core beliefs or schema, both interpersonal and individual.

The current study demonstrates that negative-self and negative-other schema and beliefs about voice malevolence and omnipotence mediate the relationship between attachment style and voice distress. These cognitive-affective factors mediate the relationship between attachment style and voice distress, independent of voice activity and co-morbid anxiety and depression. Therefore, despite methodological limitations, the current study provides a significant novel contribution to the literature. Future research would benefit from developing the measures available to classify attachment styles and investing in longitudinal designs, which can capture the dynamics of significant interpersonal events, trauma and negative
schema, in the development and maintenance of beliefs about voices and psychotic symptoms.
5. References


6. APPENDICES

6.1. Appendix 1: Ethics Committee Documents – Ethical Approval Letters, Project Amendment Letter, Detailed Project Proposal and Summary
Dear Esther and Alison

Reference: 574-PSY-11 RS

Title of Project: Recovery and distress in Psychosis

Thank you for your inquiry about proposed amendments to your research study. We note that your original proposal (574-PSY-11), received a favourable ethical opinion from the Faculty of Arts and Human Sciences Ethics Committee on the 8th March 2011. Technically the proposal should go through a renewed review process because a new measure has been added to the study and amendments have been made to each stage of the research process and the documentation. However, because most of the amendments are minor and do not affect the initial proposal significantly, we are willing to conclude that on this occasion the favourable opinion still stands.

We also wish to note that your covering letter does not explain why these amendments are being made at this stage. Normally we would expect an applicant to explain how their original plans have not worked out in the ways anticipated and how the proposed amendments are a response to this. Please bear this in mind if you wish to seek our advice on further significant changes to your research plans as they may require further scrutiny by the Faculty Ethics Committee before proceeding with your Project.

Yours sincerely

Dr Adrian Coyle
Chair
8th March 2011

Dear Alison and Esther

Reference: 574-PSY-11 RS

Title of Project: Recovery and Distress in Psychosis

Part A: Exploring the mediating role of psychological flexibility and cognitive re-structuring on the relationship between hearing voices and recovery.

Part B: Do negative schema and beliefs about voice power mediate the relationship between attachment style and psychosis?

Thank you for your re-submission of the above proposal.

The Faculty of Arts and Human Sciences Ethics Committee have given a favourable ethical opinion.

If there are any significant changes to this proposal you may need to consider requesting scrutiny by the Faculty Ethics Committee.

Yours sincerely

Dr Adrian Coyle

Chair
6th May 2011

Dear Julie Earl,

RE: 574-PSY-11 RS – Significant Amendments to Project with Favourable Ethical Opinion

Project Title: – Relationships and Recovery in Psychosis (amended from “Recovery and Distress in Psychosis”)

Part A: Exploring the mediating role of psychological flexibility and cognitive re-structuring on the relationship between hearing voices and recovery.

Part B: Do negative schema and beliefs about voice power mediate the relationship between attachment style and psychosis?

We would like to inform you of recent updates to our project and request scrutiny by the Faculty Ethics Committee. We would be grateful if you could verify whether we will still qualify for a favourable ethical opinion. The title of the project has been changed from ‘Recovery and Distress in Psychosis’ to ‘Relationships and Recovery in Psychosis’.

All original documents have been resubmitted electronically. Most changes have been highlighted in ‘bold italics’ unless significant changes have been made to an entire document. I will go through each document and page number where amendments have been made:-
A) The Amended Specimen Letter
- This is to be sent to charitable organisations that support people who hear voices. Much of this wording has been changed throughout.

B) Detailed Project Protocol
- Summary, p.1: One sentence has been amended to more clearly describe the aims of the research project (Part B).
- Page 3: The Generalized Anxiety Disorder Assessment (GAD–7) measure is described. This will be added to the existing battery of measures to control for the contribution of anxiety levels on the relationships under investigation in Part B.
- Page 4: GAD-7 has been added to the list of measures.
- Page 4, point '9': We can now more clearly describe how participants can exit the survey if they become distressed and retrieve the debrief page and details of support organisations.
- Page 4, point 10: We ask participants to forward details of the study to anyone who may be interested as part of our recruitment strategy.
- Page 6: The use of the GAD-7 as a ‘covariate’ is described.
- Page 7: There is an extra reference, Spitzer et al., (2006).

C) Ethics Summary
- Page 3: There are now two references to the GAD-7 measure.

D) Questionnaire Pack
- Page 1: There are now more background information questions.
- Page 12: The GAD-7 measure is shown.

E) University Ethics Form
- There are no changes to the university ethics forms but these have been resupplied for completeness.

F) Website Screens
- Page 1: The first page has been made more concise and appealing through less emphasis on ‘distress’ and more emphasis on coping, treatment, self-management and recovery.
- Page 2, consent screen: There is no section asking for an email address, name or date. Participants simply click if they are in agreement with each of the consent items and are then
taken to the beginning of the questionnaire if they are or away from the study if they are not in agreement.

- Page 3: There is now an eligibility screen for participants to answer two questions, in order for us to assess their eligibility. If participants are not eligible they are taken directly to page 6.

- Page 4: If participants are not in agreement with any of the consent items they are taken to page 4 which says “Thank you for your interest!”

- Page 5: The final section on the debrief screen has been changed to less ‘alarming’ language, following service-user consultation feedback. These changes will still enable people to access support services where there is some risk to themselves or others. Rather than indicating that taking part could be potentially ‘troubling or disturbing’, we have changed this to ‘How are you feeling? If you feel distressed or discomforted...’

Please do not hesitate to contact either myself, Alison Holt or Dr. Clara Strauss if you require any further information.

Yours sincerely

Esther Clarke
Trainee Clinical Psychologist
Summary of the Project

This is an application to conduct a wider research project looking at factors associated with distress and recovery in psychosis. It consists of two separate doctoral-level projects which depend on questionnaire data taken from the same online respondents. We apologise for exceeding the recommended word limit as this proved difficult when summarising two projects.

Part A: Exploring the Mediating Role of Psychological Flexibility and Cognitive Re-structuring in the Relationship between Hearing Voices and Recovery.

The experience of psychosis involves a range of experiences, one of which is hearing voices (‘auditory hallucinations’). Voice hearing is reported by people with a range of other mental health conditions including schizophrenia. Contrary to popular belief, hearing voices is not always experienced as distressing. Many people who hear voices report feeling comforted and do not always interfere with quality of life (Romme & Escher, 1993). This project will explore the relationship between hearing voices and recovery, where recovery is used to refer to leading a meaningful and valued life despite ongoing symptoms.

Acceptance and Commitment Therapy (ACT) is a third wave Cognitive Behavioural Therapy (CBT) approach, which focuses on acceptance, mindfulness and values-based living (Hayes et al., 1999). Traditional CBT focuses on challenging thoughts (cognitive restructuring), whereas ACT teaches clients tolerance and acceptance of symptoms. Whilst both CBT and ACT focus on behaviour change, ACT is more explicit at directing behaviour change towards valued living.
There is little research testing the theoretical basis of either ACT or CBT for psychosis, as the emphasis has been on evaluating therapy outcome (Bach and Hayes, 2002). Theoretically, from an ACT perspective, factors such as ‘acceptance’ and ‘values-based living’ should mediate the relationship between hearing voices and recovery. Alternatively, a traditional CBT perspective would predict that conviction in beliefs about voices, as well as positive self- and other- schema, would mediate this relationship.

**Objectives**

This project aims to investigate if and to what extent ACT and/or CBT factors mediate the relationship between hearing voices and recovery. It is predicted that the two ACT factors (acceptance and committed action) and five CBT factors (beliefs about voice omnipotence, beliefs about voice malevolence, beliefs about voice benevolence, and negative core beliefs) will all mediate the relationship. There are no strong theoretical or empirical grounds for specifying the hypotheses in any more detail.

**Part B: Do Negative Schema and Beliefs about Voice Power Mediate the Relationship between Attachment Style and Psychosis?**

Research shows there are individual differences in current ‘attachment style’ or people’s attitudes, beliefs and behaviours in relationships (Bartholomew & Horowitz, 1991). Current attachment style is shaped by significant relationships throughout the lifespan which contribute to ‘internal working models’ of relationships. Current attachment has been measured and conceptualised according to attachment ‘avoidance’ and ‘anxiety’ (Bartholomew, 1990) - with higher scores indicating greater attachment insecurity.

Empirical evidence suggests a consistent association between insecure adult attachment style and a wide range of distressing mental health conditions (Dozier et al., 1999), including psychosis (Ponizovsky et al., 2007). This study will evaluate possible factors which mediate the relationship between attachment anxiety and attachment avoidance, on the one hand, and distressing auditory hallucinations (voices) on the other. The purported mediators are (a) ‘core beliefs’ and (b) ‘beliefs about voice power’. In line with (a), extreme negative beliefs about the self and others are consistently found in people with psychosis (Fowler et al, 2006). In line with (b)
attributions of voice ‘power’ have been shown to include beliefs about voice ‘malevolence’ and ‘omnipotence’, which are associated with level of voice hearing distress (Chadwick et al., 2000). However, whether or not and to what extent these variables might mediate the relationship between attachment style and distress at hearing voices has not been explored.

Objectives

Further research needs to be conducted using validated, reliable measures of current attachment, core beliefs and beliefs about voice power in order to understand the relationship between insecure attachment and psychosis as hypothesised in Figure 1.

Figure 1

See Figure 1 for the rationale and different factors involved in testing the main hypotheses:-

1) Attachment anxiety and avoidance, as measured by the Experiences in Close Relationships Revised (ECR-R), will predict negative beliefs about the self- and others, as measured by the Brief Core Schema Scales (BCSS). However, the association between attachment anxiety and negative self-schema will be stronger than negative other-schema. Conversely, the association between attachment avoidance and negative other-schema will be stronger than negative self-schema.
2) Negative core beliefs about the self and others will predict beliefs about voice malevolence and omnipotence, as measured by the revised Beliefs about Voices Questionnaire (BAVQ-R).

3) Voice malevolence and omnipotence will predict distress, as measured by the distress item in the Hamilton Program for Schizophrenia Voices Questionnaire (HPSVQ).

4) Negative core beliefs about the self and others will mediate the association between attachment anxiety and attachment avoidance and beliefs about voice malevolence and omnipotence.

5) All hypotheses will remain when controlling for Patient Health Questionnaire (PHQ-9) depression, but the strength of the relationships will be less.

6) All hypotheses will remain when controlling for Generalized Anxiety Disorder (GAD-7) measure of anxiety.

Summary of Methodology

Participants

It is estimated that 160 participants will be needed for both parts of the study. Participants will be recruited through specialist UK and international hearing-voices organisations. Participants will be at least 18 years of age.

Measures

Participants will be asked to complete the following questionnaires:

i. Background information screen (attached)

j. The Brief Core Schema Scales (24 items)

k. Beliefs About Voices Questionnaire-Revised (35 items)

l. The Hamilton Program for Schizophrenia Voices Questionnaire (13 items)

m. The Voice Acceptance and Action Scale – 9 (9 items)

n. The Recovery Assessment Scale Revised (24 items)

o. The Experiences in Close Relationships-Revised (36 items)

p. The Patient Health Questionnaire (9 items)

q. The Generalized Anxiety Disorder (GAD-7) measure of anxiety (7 items)
Procedure

1. Hearing voices organisations will be approached to advertise the study on their websites in their support groups (e.g. HVN etc). A letter to the organisations inviting them to participate in the research is enclosed.

2. Participating organisations will host a link to the study website on their own websites and will help us to distribute information about the study to support groups (participant information leaflet enclosed)

3. Once participants access the website, they will be asked to read the consent form and agree by ticking a box. They will also be asked to leave their contact details which, with their permission, will be entered into a draw for Amazon vouchers.

4. The participants are then asked to complete the questionnaires. This data will be transferred into an Excel format, which can be used for data analysis by the researchers.

References


**Summary**

This study takes a closer look at the mediating factors of recovery in psychosis. The study takes two separate strands and will ultimately produce two distinct doctoral research projects. The first project will explore mediating variables commonly purported by Cognitive Behavioural Therapy (CBT) and Acceptance and Commitment Therapy (ACT) as being necessary for recovery. This research hopes to contribute to developing parsimony in psychological interventions offered to people who experience psychosis, particularly those who hear voices. The second project examines whether negative schemas and beliefs about voice power mediate the relationship between current attachment style and psychosis. Both strands of this study will be using responses from the same participants in their data collection. This project hopes to contribute to the understanding of psychosis, as well as inform approaches to the treatment of those experiencing psychosis.

**Participants**

A power calculation suggested that 160 participants will be required for this study. Participants will be recruited through advertisements posted on credible websites for people who have had voice hearing experiences. Local support groups will also be approached to invite group members to participate in the project.

Participant inclusion criteria are as follows:

- 18-65 years old inclusive
- Have heard voices for at least three months
- Have a sufficiently good grasp of the English language in order to understand and respond to the questionnaire items.

This will be assessed using self-report.
Measures

Joint Measures for Parts A and B

The Brief Core Schema Scales (BCSS; Fowler et al., 2006)

The 24-item BCSS has items relating to positive and negative beliefs about the self and others. It first asks participants to choose ‘yes’ or ‘no’ to statements (12 items about the self: e.g. ‘I am unloved’ and 12 items about others: e.g. ‘Other people are hostile’). They then rate any items they have endorsed on a five-point Likert scale from 0–4 (from ‘believe it slightly’ to ‘believe it totally’).

The scale has good construct validity as shown by a moderate to strong association with the Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965) the negative-self and positive-self BCSS subscales had a moderate to strong association (r = 0.64 and r = 0.65, p<0.001 respectively). However, correlations between the RSES and BCSS negative-other and positive-other scales were weak (r = 0.20 and r = 0.26, p<0.001, respectively) indicating that they might be measuring different constructs.

Cronbach’s α scores are between 0.78 and 0.88, indicating good internal consistency reliability. The scales also have good test-retest reliability: negative-self (r =0.84), positive-self (r = 0.82) negative-other (r = 0.70) and positive-other (r = 0.72; all significant at p < 0.001).

Beliefs about Voices Questionnaire-Revised (BAVQ-R; Chadwick, et al., 2000)

This is a 35-item measure of people’s beliefs about their voices as well as their reactions and behaviour towards them. We will only collect data on the first 26 items relating to people’s beliefs about their voices, with a focus on beliefs about voice omnipotence and malevolence. Examples of items about voice malevolence and omnipotence, which are ‘my voice is evil’ and ‘my voice makes me do things I do not want to do’, respectively. The Cronbach’s α for the two subscales is 0.74 (omnipotence) and 0.88 (malevolence), which shows good internal consistency reliability.
The Hamilton Program for Schizophrenia Voices Questionnaire (HPSVQ; Van Lieshout and Goldberg, 2007)

This 13-item scale will be used to measure the different dimensions of voices. The items are rated on a five-point Likert scale (0 = least severe or impairing and 5 = most severe). The items represent two broad aspects of voices - the physical (e.g. frequency and duration) and the emotional (e.g. how bad the voices make the person feel). Kim et al. (2010) found the HPSVQ had good internal consistency reliability (Cronbach’s $\alpha = 0.74 - 0.94$). The scale has fair to good test-retest reliability with items ranging from $r = 0.50 - 0.89$ (Kim et al., 2010).

Measures for Part A only

The Voice Acceptance and Action Scale – 9 items (VAAS-9; Ratcliff, 2010)

The VAAS-9 is a 9 item measure containing two sub-scales of acceptance (‘There are worse things in life than hearing voices’) and action (‘When I disagree with a voice, I simply notice it and move on’). The VAAS-9 is a shortened version of the original VAAS designed by Shawyer et al. (2007). Preliminary studies show good consistency and reliability. Cronbach’s $\alpha$ were 0.7 and 0.83 for the respective factors of acceptance and action.

The Recovery Assessment Scale Revised (RAS-R; Corrigan et al., 1999)

The RAS-R will be used to measure participants’ perception of their recovery from serious mental illness. The self-report questionnaire has 24 items which are rated on a 5 point Likert scale (from ‘strongly disagree’ to ‘strongly agree’). Sample items include ‘I have a desire to succeed’ and ‘I can handle it if I get sick again’. There are five domains identified by Corrigan et al. (2004) namely personal confidence and hope, willingness to ask for help, goal and success orientation, reliance on others, and no dominations of symptoms. Corrigan et al. (1999) demonstrated the RAS-R had good internal consistency with a Cronbach’s $\alpha$ score of 0.93. Re-administration of the RAS-R demonstrated adequate test re-test reliability ($r=0.88$).
Measures for Part B only

The Experiences in Close Relationships-Revised (ECR-R; Fraley, et al., 2000).

The ECR-R is a 36-item measure derived from an exhaustive list of over 300 attachment items collated by Brennan et al. (1998). The original items refer to thoughts, feelings and behaviours in romantic relationships, but the scale has been adapted, according to the authors’ guidance, so that this is not essential to answering the items. References to ‘romantic partners’ or ‘partners’ has been replaced with the word ‘others’. The participants assess the extent to which each item is representative of them using a 7-point Likert scale from ‘strongly disagree’ to ‘strongly agree’. The ECR-R has high internal consistency reliability with a Cronbach’s alpha of higher than 0.90 (and good test re-test reliability (86% shared variance over time; Sibley et al., 2004). Sibley et al., (2005) also show that the ECR-R has significant associations with the Relationships Questionnaire (RQ; Bartholomew & Horowitz, 1991): the ECR-R and RQ measures of anxiety were moderately positively correlated, $r = .69$ ($p < .001$), as were measures of avoidance, $r = .45$ ($p < .001$), indicative of construct validity.

The Patient Health Questionnaire (PHQ-9) Kroenke et al., (2001)

The PHQ-9 is a screening measure for depression. The PHQ-9 has high internal consistency reliability (Cronbach’s alpha = .80 Lee et al., 2007), good test-retest reliability ($r = .84$, Kroenke et al., 2001) and construct validity ($r = .73$, Martin et al., 2006). Items are based on experience of a range of problems, presenting in the last two weeks, which are signs of depressed mood such as ‘little interest of pleasure doing things’ and ‘feeling tired and having little energy’. Items are on a four-point Likert scale from ‘not at all’ to ‘nearly every day’.

Generalized Anxiety Disorder assessment (GAD-7)

This is a 7-item self-report measure of anxiety which is used as a screening instrument to measure generalised anxiety disorder. The GAD-7 has a scale of 0-3, with higher scores indicating greater symptoms of anxiety in the past two weeks: 0 corresponds to “not at all” and 3 to “nearly every day”. The GAD-7 has high internal consistency reliability (Cronbach’s alpha = .92, Spitzer et al., 2006), good test-retest reliability ($r =$
.83, Spitzer et al., 2006) and construct validity (r = 0.72 to r = 0.74, Spitzer et al., 2006).

**Procedure**

2. Participants are to be recruited through the hearing voices support organisations such as the Hearing Voices Network (HVN), Rethink and Intervoice. An invitation letter to organisations is enclosed.

3. Support organisations will be asked to put a link to the study website on their own websites and a donation of up to £50 will be made to thank organisations for their support.

4. A participant information document (attached) will be given to support organisations to distribute to their members. This will include the study website address. Visits to support group meetings can be made, if necessary, to bolster participant numbers.

5. Participants who wish to take part will be directed to the study website. The first page on the website will contain the attached participant information, followed by the consent screen (also attached). Participants will be assured of the anonymity of their responses and their right to withdraw at any time without giving a reason.

6. Participants will be informed that they will be entered into a prize draw for three prizes: £50, £40 or £30 worth of Amazon vouchers to thank them for their participation.

7. Participants will not be able to proceed to the self-report questionnaires until they have agreed to all statements on the consent form.

8. Once the consent form has been completed, participants will be able to proceed to the attached study questionnaires in the following order:

   a. Background information screen (attached)
   b. The Brief Core Schema Scales (24 items)
   c. Beliefs About Voices Questionnaire-Revised (35 items)
   d. The Hamilton Program for Schizophrenia Voices Questionnaire (13 items)
   e. The Voice Acceptance and Action Scale – 9 (9 items)
   f. The Recovery Assessment Scale Revised (24 items)
   g. The Experiences in Close Relationships-Revised (36 items)
h. The Patient Health Questionnaire (9 items)
   i. The Generalized Anxiety Disorder (GAD-7) measure of anxiety (7 items)

9. Once all study questionnaires have been completed participants will be directed to a screen thanking them for their participation and giving debriefing information. This includes information about support organisations.

10. If participants choose to abandon the questionnaires prematurely, possibly due to finding the questions distressing, they will also be re-directed to the final screen. *In order to do this, participants can choose to exit the study by clicking where indicated on a grey bar end of each screen. This reads:*-

   ‘If you want to exit the study, click here. This will take you to the information screen.’

As explained above, this will provide them with the study debriefing information as well as information about support organisations.

11. Participants will also be asked to forward a link to our website if they know anyone else who might be interested in participating:

   ‘If you know anyone who may be interested in participating with our research, please suggest they visit our website:

   http://www.fahs.surrey.ac.uk/survey/voices’

**Planned Data Analysis**

Please note that a proportion of responses from all participants will be used for data analysis in both studies.

**Part A**

Descriptive statistics will be presented and described. Correlational analyses between variables will be reported and discussed in relation to the study hypotheses. Where data do not meet assumptions for multiple regression analyses, attempts to transform data will be made.

A mediation analysis using the Baron and Kenny (1986) method will be used. This will test if the ACT/CBT variables fully or partially
mediate the relationship between HPSVQ (symptoms) and RAS-R (recovery).

**Part B - Data analysis and hypotheses**

1) **Hypothesis 1:** Attachment anxiety and avoidance, as measured by the ECR-R, will predict negative beliefs about the self and others, as measured by the Brief Core Schema Scales (BCSS).

Two multiple regression analyses with negative self-schema and negative other-schema as dependent variables respectively and attachment anxiety and attachment avoidance as predictors.

2) **Hypothesis 2:** Negative core beliefs about the self and others will predict beliefs about voice malevolence and voice omnipotence, as measured by the Beliefs about Voices Questionnaire (BAVQ-R).

Two multiple regression analyses with (1) BAVQ-R malevolence (2) BAVQ-R omnipotence as dependent variables respectively, and the two negative BCSS scores as dependent variables.

3) **Hypothesis 3:** Voice malevolence and voice omnipotence will predict distress, as measured by the HPSVQ.

A multiple regression analysis with voice hearing distress as the dependent variable and BAVQ-R malevolence and omnipotence as predictors.

4) **Hypothesis 4:** Negative core beliefs about self and others will mediate the association between attachment anxiety and avoidance and beliefs about voice malevolence and omnipotence.

Baron and Kenny’s (1986) method for evaluating mediation will be used to test the following:

1. Attachment anxiety and avoidance will predict BAVQ-R malevolence and BAVQ-R omnipotence
2. Attachment anxiety and avoidance will predict BCSS scores
3. BCSS scores will predict BAVQ-R malevolence and omnipotence
4. (1) will no longer hold true, or association will be reduced, when first entering BCSS scores into regression. This will test if the BCSS scores fully or partially mediate the relationship between attachment and beliefs about voices.

5) PHQ-9 depression will be added to the model as a covariate and it is predicted that this will reduce but not eliminate the above associations.

6) GAD-7 anxiety will be added to the model as a covariate and it is predicted that this will reduce but not eliminate the above associations.

7) If 1-4 are supported, we would test the model in Figure 2 using structural equation modelling (SEQ).

Figure 2: Model of seven variables to be tested using stepwise multiple regression, controlling for effects of anxiety and depression.
References


Dear _______________.

RE: Research into Relationships and Recovery in Psychosis

We are a research team at the University of Surrey with a passion for clinical work and research with people with psychosis. Our team consists of two Trainee Clinical Psychologists, Alison Holt and Esther Clarke, as well as Dr. Clara Strauss, Clinical Psychologist. We are aware of the substantial support that organisations such as the Hearing Voices Network and hearing voices support groups provide for their members and the wider community.

We are conducting research into the factors associated with relationships and recovery in people who hear voices. Specifically we want to discover what factors may promote recovery from, and coping with, distressing voices. We would like to invite people who hear voices to participate in our internet-based research. We feel this is best achieved through advertising our research on popular and informative websites such as yours.

Participants will be asked to complete a questionnaire through our website. This should take about 25 minutes and responses would remain anonymous. To thank people for their time, participants can choose to enter into a prize draw for a chance to win a £50, £40 or £30 Amazon voucher.

We would like to ask if we could post a description and link to our electronic survey on your website. Where possible, it would also help to include information of our study in any newsletters or forums linked to your organisation. Our webpage is as follows: http://www.fahs.surrey.ac.uk/survey/voices/. Please visit the site to find out more about our study.

Thank you for taking time to read about our research and for considering our request. Please get in touch on any of the contact details below to discuss how we could proceed with publicising our research.
Yours sincerely,

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Alison Holt  
Trainee Clinical Psychologist  
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Supervised by:

Dr. Clara Strauss  
Research Tutor (University of Surrey)  
Email: c.strauss@surrey.ac.uk
6.2. Appendix 2: Summary of Results for Dissemination

It is not unusual to hear voices. Research has shown that many people are comforted by the voices that they hear, but there are other people who are distressed by hearing voices (Sorrell et al., 2010). People who have a positive experience of hearing voices tend to believe the voice to be kind and reassuring. In contrast, those distressed from hearing voices often believe the voices have bad intentions and are powerful (Chadwick & Birchwood, 1994). Distress from hearing voices has been also been associated with feeling insecure in close relationships (Berry et al., 2011).

This research study looked at why feeling insecure in close relationships ("insecure attachment"; Bowlby, 1973) is associated with feeling distressed by hearing voices. The aim of the study was to find out whether beliefs about voice power and bad intentions as well as negative beliefs about oneself and others helped to explain the relationship between feeling insecure in close relationships and distress from hearing voices. This is shown in the diagram below:

![Diagram showing the relationship between attachment style, negative schema, beliefs about voices, and voice distress.]

The study found that the pathways shown in the diagram were all supported. This means that, for people who hear voices, feeling insecure in close relationships tends to be linked to having negative beliefs about oneself (low self-esteem) and other people. These negative beliefs about oneself and other people were also found to
be linked to believing that voices are powerful and have bad intentions. Finally, this study found that having these beliefs is linked to feeling distressed by the voices. These types of beliefs therefore seem to pose as risk factors for feeling distressed by voices. This suggests that psychological therapies which aim at modifying and distancing from negative beliefs about oneself, other people and voices could be effective.

References


A large proportion of people who hear voices are not distressed by them and lead valued and meaningful lives despite hearing voices. A number of researchers are currently exploring different ways of supporting those people distressed by hearing voices.

Some therapies work by encouraging clients to develop skills (such as alternative ways of thinking, or planning valued activities), that have been found to reduce distress and increase self-esteem. This study looked more closely at the ways in which two different types of therapy work, namely Cognitive Behavioural Therapy (CBT) and Acceptance and Commitment Therapy (ACT). It aimed to see whether people who hear voices and who naturally use the skills that these therapies promote do indeed experience less distress and/or feel they live meaningful lives.

The results found that seven out of the nine proposed therapy variables did impact the relationship between voice hearing and levels of distress and recovery. These were as follows:

- Positive perceptions of oneself (high self-esteem)
- Negative perceptions of oneself (low self-esteem)
- Negative perceptions of others
- Believing that the voice has bad intentions
- Believing the voice is powerful
- Ability to live with voices rather than struggle with them (acceptance)
- Ability to act purposefully and live well, even as voices persist (independence)

This means that changing these ways of thinking and doing might help voice hearers to manage their experiences better. Sometimes this might involve thinking in different ways about the voices, and other times this might mean doing things that make them feel good about themselves *despite* hearing voices.

‘Recovery’ has different meanings for different people. Another part of this research demonstrated that recovery is not just about making
people feel less distressed and low. In fact, recovery involves hope, optimism for the future, and doing everyday activities such as looking after family and running errands. These are important areas for anyone to strive towards, both in and outside of therapy. The important change factors are slightly different for each type of recovery, and therefore both ‘symptoms’ and ‘general life quality’ need to be addressed for a holistic and rounded recovery to be achieved.
6.3. Appendix 3: Recruitment Flow Diagram
Figure 3: Recruitment Flow Chart

* Indicates the two changes which were made to the study criteria when recruitment changed from a UK-only to an international study to increase the statistical power of the study. When recruitment changed to encompass an international sample, the criteria for hearing voices changed from a minimum of 6 months, in line with the DSM-IV (APA, 2000), to a minimum of 3 months, in line with the International Classification of Diseases and Related Health Problems, 10th Revision (ICD-10, 1993).
6.4. Appendix 4: Participant Demographics
### Table 1: Participant Demographics A

<table>
<thead>
<tr>
<th></th>
<th>N (% of total sample)</th>
<th>Mean (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>55 (36.7)</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>94 (62.7)</td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>1 (0.7)</td>
<td></td>
</tr>
<tr>
<td><strong>Age (years)</strong></td>
<td>149 (99.3)</td>
<td>37.09</td>
</tr>
<tr>
<td></td>
<td>1 (0.7)</td>
<td>(11.08)</td>
</tr>
<tr>
<td><strong>Marital status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>68 (45.3)</td>
<td>45.3</td>
</tr>
<tr>
<td>In relationship, married or in a civil partnership</td>
<td>63 (42.0)</td>
<td>42.0</td>
</tr>
<tr>
<td>Divorced or separated</td>
<td>14 (9.3)</td>
<td>9.3</td>
</tr>
<tr>
<td>Other</td>
<td>4 (2.7)</td>
<td>2.7</td>
</tr>
<tr>
<td>Missing</td>
<td>1 (0.7)</td>
<td></td>
</tr>
<tr>
<td><strong>Formal qualifications</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>29 (19.3)</td>
<td></td>
</tr>
<tr>
<td>Left school at 16 with qualifications</td>
<td>29 (19.3)</td>
<td></td>
</tr>
<tr>
<td>Undergraduate degree</td>
<td>54 (36.0)</td>
<td></td>
</tr>
<tr>
<td>Post-graduate degree</td>
<td>24 (16.0)</td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>1 (0.7)</td>
<td></td>
</tr>
<tr>
<td><strong>Occupation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full or part-time education</td>
<td>24 (16.0)</td>
<td></td>
</tr>
<tr>
<td>Full or part-time paid work</td>
<td>42 (28)</td>
<td></td>
</tr>
<tr>
<td>Full or part-time voluntary work</td>
<td>13 (8.7)</td>
<td></td>
</tr>
<tr>
<td>Not in education or work</td>
<td>57 (38)</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>13 (8.7)</td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>1 (0.7)</td>
<td></td>
</tr>
<tr>
<td><strong>Housing</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Living with partner, family or friends</td>
<td>90 (60.0)</td>
<td></td>
</tr>
<tr>
<td>Living alone</td>
<td>47 (31.3)</td>
<td></td>
</tr>
<tr>
<td>Supported housing/hostel</td>
<td>3 (2.0)</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>9 (6.0)</td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>1 (0.7)</td>
<td></td>
</tr>
</tbody>
</table>
**Table 2: Participant Demographics B**

<table>
<thead>
<tr>
<th></th>
<th>N (% of total sample)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>English as a first language</strong></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>139 (92.7)</td>
</tr>
<tr>
<td>No</td>
<td>10 (6.7)</td>
</tr>
<tr>
<td>Missing</td>
<td>1 (0.7)</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
</tr>
<tr>
<td>White English/ Welsh/ Scottish/ Northern Irish/ British</td>
<td>98 (65.3)</td>
</tr>
<tr>
<td>Irish</td>
<td>3 (2.0)</td>
</tr>
<tr>
<td>Any other White background</td>
<td>24 (16)</td>
</tr>
<tr>
<td>White and Black Caribbean</td>
<td>1 (0.7)</td>
</tr>
<tr>
<td>White and Black African</td>
<td>1 (0.7)</td>
</tr>
<tr>
<td>White Asian</td>
<td>3 (2.0)</td>
</tr>
<tr>
<td>Any other mixed background</td>
<td>9 (6.0)</td>
</tr>
<tr>
<td>Asian/ Asian British</td>
<td>1 (0.7)</td>
</tr>
<tr>
<td>Chinese</td>
<td>1 (0.7)</td>
</tr>
<tr>
<td>Any other Asian background</td>
<td>1 (0.7)</td>
</tr>
<tr>
<td>African</td>
<td>2 (1.3)</td>
</tr>
<tr>
<td>Any other black/ African/ Caribbean background</td>
<td>1 (0.7)</td>
</tr>
<tr>
<td>Any other ethnic group</td>
<td>4 (2.7)</td>
</tr>
<tr>
<td>Missing</td>
<td>1 (0.7)</td>
</tr>
<tr>
<td><strong>Country of residence</strong></td>
<td></td>
</tr>
<tr>
<td>UK</td>
<td>88 (58.7)</td>
</tr>
<tr>
<td>USA</td>
<td>30 (20.0)</td>
</tr>
<tr>
<td>Canada</td>
<td>11 (7.3)</td>
</tr>
<tr>
<td>Australia</td>
<td>10 (6.7)</td>
</tr>
<tr>
<td>New Zealand</td>
<td>1 (0.7)</td>
</tr>
<tr>
<td>Other</td>
<td>9 (6.0)</td>
</tr>
<tr>
<td>Missing</td>
<td>1 (0.7)</td>
</tr>
</tbody>
</table>
### Table 3: Participant Demographics C

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>N (% of total sample)</th>
<th>Mean (SD; range)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>15 (10)</td>
<td></td>
</tr>
<tr>
<td>Schizophrenia</td>
<td>42 (28.0)</td>
<td></td>
</tr>
<tr>
<td>Schizoaffective disorder</td>
<td>29 (19.3)</td>
<td></td>
</tr>
<tr>
<td>Any form of psychosis</td>
<td>16 (10.7)</td>
<td></td>
</tr>
<tr>
<td>Borderline Personality Disorder</td>
<td>18 (12)</td>
<td></td>
</tr>
<tr>
<td>Bipolar Disorder</td>
<td>24 (16)</td>
<td></td>
</tr>
<tr>
<td>Depression</td>
<td>35 (23.3)</td>
<td></td>
</tr>
<tr>
<td>Anxiety disorder e.g. OCD/PTSD</td>
<td>29 (19.3)</td>
<td></td>
</tr>
<tr>
<td>Any other diagnosis</td>
<td>23 (15.3)</td>
<td></td>
</tr>
<tr>
<td>Not sure</td>
<td>4 (2.7)</td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>1 (0.7)</td>
<td></td>
</tr>
</tbody>
</table>

**Current use of mental health services**

| None                                           | 37 (24.7)             |                  |
| Using mental health service but not sure of the name | 10 (6.7)             |                  |
| Community mental health team                    | 52 (34.7)             |                  |
| Assertive outreach team                         | 2 (1.3)               |                  |
| Early intervention team                         | 3 (2.0)               |                  |
| Inpatient or residential service                | 2 (1.3)               |                  |
| Psychological therapy service                   | 15 (10.0)             |                  |
| Other mental health service                     | 28 (18.7)             |                  |
| Missing                                        | 1 (0.7)               |                  |

**Past use of mental health services**

| Never used MH services and not currently        | 10 (6.7)              |                  |
| Community mental health team                    | 8 (12)                |                  |
| Assertive outreach                              | 2 (1.3)               |                  |
| Early intervention                              | 3 (2)                 |                  |
| Inpatient                                       | 12 (8)                |                  |
| Psychological therapies                         | 11 (7.3)              |                  |
| Other                                           | 7 (4.7)               |                  |
| Referred but unused                             | 3 (2)                 |                  |
| Missing                                         | 112 (75.7)            |                  |

**Duration (years) of use of mental health services**

| 4.30 (5.66; 0-24) | 37 (24.7) |                  |
| Missing           | 113 (75.3) |                  |

---

*People were able to endorse as many diagnoses as were applicable to them. Fifty-one (34%) participants endorsed more than one diagnosis: 29 (19.3%) endorsed 2 diagnoses, 15 (10%) endorsed three diagnoses, 6 (4%) endorsed four diagnoses and one person (0.7%) endorsed six diagnoses.*
6.5. Appendix 5: Website Questionnaire Screens
Hearing Voices: Research into Relationships and Recovery

Thank you very much for your interest in our study, which aims to look at relationships and recovery in people who hear voices.

If you would like to see whether you can help us with our research, and the chance to win Amazon vouchers worth up to (US) $75 in your preferred currency, please click on the arrow below.

If you want to exit the study, click here. This will take you to the information screen.
Hearing Voices: Research into Relationships and Recovery

Thank you for your interest in our study.

Are you between the ages of 18 and 65?
- [ ] Yes
- [ ] No

Can you read and speak English fluently?
- [ ] Yes
- [x] No

Have you heard a voice in the last week?
- [ ] Yes
- [ ] No

When did you first start hearing voices?
- [ ] I have never heard voices
- [ ] Less than 3 months ago
- [ ] Between 3 and 6 months ago
- [ ] 6 months ago or more

If you want to exit the study, click here. This will take you to the information screen.
Our names are Alison Holt, Esther Clarke and Dr Clara Strauss. We are members of a hearing voices research group based at the University of Surrey, England. We have secured ethical approval for our current project from the Faculty of Arts and Human Sciences. We hope that this research will improve treatments offered to people in the future, to help them manage their experiences.

We are looking for people who have been hearing voices for at least three months. Setting this minimum time-frame helps us measure comparable experiences of voice hearing. If this is true for you, we would like to ask you to complete a series of short questionnaires. This should take no longer than 25 minutes.

To show our appreciation we will enter those who email their contact details into a prize draw for three Amazon vouchers worth up to (US) $75 in your preferred currency.

Hearing voices impacts people in different ways and we are interested in understanding why some people are more able to cope than others. The questionnaires will ask you about your experiences of hearing voices as well as other aspects of your life. Your responses will be used in two separate projects which both look at different aspects of recovery from hearing voices. All identifiable information and data will be kept confidential and secure.

It is possible that answering some of the questions could be upsetting and you are free to stop at any point. It may be helpful for you to have a person you trust close by, to support you if you become distressed. If you are unsettled by taking part, we provide details of support organisations at the end of the study that might be able to help. You will also have the option of receiving information on the findings of the project once the research has been completed.

The services and support you receive from professionals will not be affected by how you answer the questions, nor if you choose to withdraw part-way through the study.

If you have any questions you would like to ask us before you take part, please feel free to email us at a.holt@surrey.ac.uk or e.clarke@surrey.ac.uk.

Many thanks for your time.

If you would like to take part in the study, please click on the arrow below to go to the next page:
0 Consent

Please read the following statements and click 'yes' at the end of the page if you are in agreement or 'no' if you do not wish to take part in this study:

I voluntarily agree to take part in the study run by Esther Clarke, Alison Holt and Dr Clara Strauss on examining the experiences of people who hear voices.

I have read and understood the information provided. I have been given a full explanation of the nature, purpose, and likely duration of the study, and of what I will be expected to do.

I have been advised about any discomfort and possible ill-effects on my health and well-being which may result. I have been given the opportunity to ask questions on all aspects of the study and have understood the advice and information given as a result.

I understand that all personal data is held and processed in the strictest confidence, and in accordance with the UK Data Protection Act (1998). I agree that I will not seek to restrict the use of the results of the study on the understanding that my anonymity is preserved.

I understand that I am free to withdraw from the study at any time without needing to justify my decision and without prejudice.

I acknowledge that in consideration for completing the study I shall be placed in a draw for vouchers for Amazon.com worth up to (US) $75 in your preferred currency.

I confirm that I have read and understood the above and freely consent to participating in this study. I agree to comply with the instructions and restrictions of the study.

Do you consent to take part in this study?

[ ] Yes
[ ] No

If you want to exit the study, click here. This will take you to the information screen.
You will now be guided through eight questionnaires that will ask you about your experiences. There are no right or wrong answers to any of the questions. If you are not sure how to answer a question please make your best guess.

Please remember that your responses are anonymous.
The statements below are concerned with how you generally feel in your relationships with people you are close to. We are interested in how you generally experience close relationships, not just what is happening in a current relationship.

Respond to each statement by clicking a circle to indicate how much you agree or disagree with the statement.

Please answer these questions about people you are close to (e.g. partner, parents, and close friends).

### 1. I'm afraid that I will lose others' love.

### 2. I often worry that others will not want to stay with me.

### 3. I often worry that others do not really love me.

### 4. I worry that others won't care about me as much as I care about them.

### 5. I often wish that others' feelings for me were as strong as my feelings for them.

### 6. I worry a lot about my relationships.

### 7. When others are out of sight, I worry that they might become interested in someone else.

### 8. When I show my feelings for others, I'm afraid they will not feel the same about me.

### 9. I rarely worry about others leaving me.

### 10. Others make me doubt myself.

### 11. I do not often worry about being abandoned.

### 12. I find that others don't want to get as close as I would like.

### 13. Sometimes others change their feelings about me for no apparent reason.

### 14. My desire to be very close sometimes scares
<p>| | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>15.</td>
<td>I'm afraid that once others get to know me, they won't like who I really am.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>It makes me mad that I don't get the affection and support I need from others.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>I worry that I won't measure up to other people.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>Others only seem to notice me when I'm angry.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>I prefer not to show others how I feel deep down.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>I feel comfortable sharing my private thoughts and feelings with others.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>I find it difficult to allow myself to depend on others.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22.</td>
<td>I am very comfortable being close to others.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23.</td>
<td>I don't feel comfortable opening up to others.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24.</td>
<td>I prefer not to be too close to others.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25.</td>
<td>I get uncomfortable when others want to be very close.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26.</td>
<td>I find it relatively easy to get close to others.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27.</td>
<td>It's not difficult for me to get close to others.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28.</td>
<td>I usually discuss my problems and concerns with others.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29.</td>
<td>It helps to turn to others in times of need.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30.</td>
<td>I tell others just about everything.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31.</td>
<td>I talk things over with others.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32.</td>
<td>I am nervous when others get too close to me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33.</td>
<td>I feel comfortable depending on.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
34. I find it easy to depend on others.

35. It's easy for me to be affectionate with others.

36. Others really understand me and my needs.

(Used with permission: Fraley, R. C., Waller, N. G., & Brennan, K. G., 2000)
Please choose the ONE response that best describes your experience of voices DURING THE PAST WEEK including today.

### How frequently did you hear a voice or voices?

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>No voices</td>
<td>![radio button]</td>
</tr>
<tr>
<td>Less than once a day</td>
<td>![radio button]</td>
</tr>
<tr>
<td>Once or twice a day</td>
<td>![radio button]</td>
</tr>
<tr>
<td>Several times a day</td>
<td>![radio button]</td>
</tr>
<tr>
<td>All of the time/Constantly</td>
<td>![radio button]</td>
</tr>
</tbody>
</table>

### How bad are the things the voices say to you?

<table>
<thead>
<tr>
<th>Barriness</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>No voices saying bad things</td>
<td>![radio button]</td>
</tr>
<tr>
<td>Not bad</td>
<td>![radio button]</td>
</tr>
<tr>
<td>Fairly bad</td>
<td>![radio button]</td>
</tr>
<tr>
<td>Very bad</td>
<td>![radio button]</td>
</tr>
<tr>
<td>Horrible</td>
<td>![radio button]</td>
</tr>
</tbody>
</table>

### How loud are the voices?

<table>
<thead>
<tr>
<th>Loudness</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voices not present</td>
<td>![radio button]</td>
</tr>
<tr>
<td>Very quiet (like whispering)</td>
<td>![radio button]</td>
</tr>
<tr>
<td>Average (same as my own voice)</td>
<td>![radio button]</td>
</tr>
<tr>
<td>Fairly loud (yelling or shouting)</td>
<td>![radio button]</td>
</tr>
</tbody>
</table>

### How long do the voices usually last?

<table>
<thead>
<tr>
<th>Duration</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voices not present</td>
<td>![radio button]</td>
</tr>
<tr>
<td>A few seconds to 1 minute</td>
<td>![radio button]</td>
</tr>
<tr>
<td>A few minutes</td>
<td>![radio button]</td>
</tr>
<tr>
<td>More than 10 minutes but less than an hour</td>
<td>![radio button]</td>
</tr>
<tr>
<td>Longer than 1 hour/they just seem to persist</td>
<td>![radio button]</td>
</tr>
</tbody>
</table>

### How much do the voices interfere with your daily activities?

<table>
<thead>
<tr>
<th>Interference</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>No interference</td>
<td>![radio button]</td>
</tr>
<tr>
<td>A little bit</td>
<td>![radio button]</td>
</tr>
<tr>
<td>Moderately</td>
<td>![radio button]</td>
</tr>
<tr>
<td>Quite a bit</td>
<td>![radio button]</td>
</tr>
<tr>
<td>Extremely interfering</td>
<td>![radio button]</td>
</tr>
</tbody>
</table>

### How distressing are the voices that you hear?

<table>
<thead>
<tr>
<th>Distressfulness</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>No voices are distressing me</td>
<td>![radio button]</td>
</tr>
<tr>
<td>A little bit</td>
<td>![radio button]</td>
</tr>
<tr>
<td>Moderately</td>
<td>![radio button]</td>
</tr>
<tr>
<td>Quite a bit</td>
<td>![radio button]</td>
</tr>
<tr>
<td>Extremely distressing</td>
<td>![radio button]</td>
</tr>
</tbody>
</table>

### How bad (worthless/useless) do the voices make you feel about yourself?

<table>
<thead>
<tr>
<th>Badness</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>No voices make me feel bad</td>
<td>![radio button]</td>
</tr>
<tr>
<td>A little bit</td>
<td>![radio button]</td>
</tr>
<tr>
<td>Fairly bad</td>
<td>![radio button]</td>
</tr>
<tr>
<td>Very bad</td>
<td>![radio button]</td>
</tr>
<tr>
<td>Extremely bad (as bad as I can feel)</td>
<td>![radio button]</td>
</tr>
</tbody>
</table>
How clearly do you hear the voices?

- Voices not present
- Very mumbled
- Fairly mumbled
- Clear voices

How often do you **do** what the voices say?

- Never
- Rarely
- Sometimes
- Often
- Always

(Used with permission: Van Lieshout, R. J. & Goldberg, J. O., 2007)

If you want to exit the study, **click here**. This will take you to the information screen.
This questionnaire lists beliefs that people can hold about themselves and other people. Please indicate how strongly you hold each belief.

Try to judge the beliefs on how you have generally, over time, viewed yourself and others. Do not spend too long on each belief. There are no right or wrong answers and the first response to each belief is often the most accurate.

<table>
<thead>
<tr>
<th>MYSELF</th>
<th>Do not believe it at all</th>
<th>Believe it slightly</th>
<th>Believe it moderately</th>
<th>Believe it very much</th>
<th>Believe it totally</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am unloved</td>
<td>bcssl_r1=1</td>
<td>bcssl_r1=2</td>
<td>bcssl_r1=3</td>
<td>bcssl_r1=4</td>
<td>bcssl_r1=5</td>
</tr>
<tr>
<td>I am worthless</td>
<td>bcssl_r2=1</td>
<td>bcssl_r2=2</td>
<td>bcssl_r2=3</td>
<td>bcssl_r2=4</td>
<td>bcssl_r2=5</td>
</tr>
<tr>
<td>I am weak</td>
<td>bcssl_r3=1</td>
<td>bcssl_r3=2</td>
<td>bcssl_r3=3</td>
<td>bcssl_r3=4</td>
<td>bcssl_r3=5</td>
</tr>
<tr>
<td>I am vulnerable</td>
<td>bcssl_r4=1</td>
<td>bcssl_r4=2</td>
<td>bcssl_r4=3</td>
<td>bcssl_r4=4</td>
<td>bcssl_r4=5</td>
</tr>
<tr>
<td>I am bad</td>
<td>bcssl_r5=1</td>
<td>bcssl_r5=2</td>
<td>bcssl_r5=3</td>
<td>bcssl_r5=4</td>
<td>bcssl_r5=5</td>
</tr>
<tr>
<td>I am a failure</td>
<td>bcssl_r6=1</td>
<td>bcssl_r6=2</td>
<td>bcssl_r6=3</td>
<td>bcssl_r6=4</td>
<td>bcssl_r6=5</td>
</tr>
<tr>
<td>I am respected</td>
<td>bcssl_r7=1</td>
<td>bcssl_r7=2</td>
<td>bcssl_r7=3</td>
<td>bcssl_r7=4</td>
<td>bcssl_r7=5</td>
</tr>
<tr>
<td>I am valuable</td>
<td>bcssl_r8=1</td>
<td>bcssl_r8=2</td>
<td>bcssl_r8=3</td>
<td>bcssl_r8=4</td>
<td>bcssl_r8=5</td>
</tr>
<tr>
<td>I am talented</td>
<td>bcssl_r9=1</td>
<td>bcssl_r9=2</td>
<td>bcssl_r9=3</td>
<td>bcssl_r9=4</td>
<td>bcssl_r9=5</td>
</tr>
<tr>
<td>I am successful</td>
<td>bcssl_r10=1</td>
<td>bcssl_r10=2</td>
<td>bcssl_r10=3</td>
<td>bcssl_r10=4</td>
<td>bcssl_r10=5</td>
</tr>
<tr>
<td>I am good</td>
<td>bcssl_r11=1</td>
<td>bcssl_r11=2</td>
<td>bcssl_r11=3</td>
<td>bcssl_r11=4</td>
<td>bcssl_r11=5</td>
</tr>
<tr>
<td>I am interesting</td>
<td>bcssl_r12=1</td>
<td>bcssl_r12=2</td>
<td>bcssl_r12=3</td>
<td>bcssl_r12=4</td>
<td>bcssl_r12=5</td>
</tr>
</tbody>
</table>
### OTHER PEOPLE

<table>
<thead>
<tr>
<th></th>
<th>Do not believe it at all</th>
<th>Believe it slightly</th>
<th>Believe it moderately</th>
<th>Believe it very much</th>
<th>Believe it totally</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other people are hostile</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Other people are harsh</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Other people are unforgiving</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Other people are bad</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Other people are devious</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Other people are fair</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Other people are good</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Other people are trustworthy</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Other people are accepting</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Other people are supportive</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Other people are truthful</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
</tbody>
</table>

(Used with permission: Fowles, D., Freeman, D., Smith, B., Kuipers, E., & Bebbington, P., 2006)

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If you want to exit the study, click [here](#). This will take you to the information screen.
Over the **LAST 2 WEEKS**, how often have you been bothered by any of the following problems?

<table>
<thead>
<tr>
<th>Problem</th>
<th>Not at all</th>
<th>Several days</th>
<th>More than half the days</th>
<th>Nearly every day</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Little interest or pleasure in doing things</td>
<td>phq_r1=1</td>
<td>phq_r1=2</td>
<td>phq_r1=3</td>
<td>phq_r1=4</td>
</tr>
<tr>
<td>2. Feeling down, depressed or hopeless</td>
<td>phq_r2=1</td>
<td>phq_r2=2</td>
<td>phq_r2=3</td>
<td>phq_r2=4</td>
</tr>
<tr>
<td>3. Trouble falling or staying asleep, or sleeping too much</td>
<td>phq_r3=1</td>
<td>phq_r3=2</td>
<td>phq_r3=3</td>
<td>phq_r3=4</td>
</tr>
<tr>
<td>4. Feeling tired or having little energy</td>
<td>phq_r4=1</td>
<td>phq_r4=2</td>
<td>phq_r4=3</td>
<td>phq_r4=4</td>
</tr>
<tr>
<td>5. Poor appetite or overeating</td>
<td>phq_r5=1</td>
<td>phq_r5=2</td>
<td>phq_r5=3</td>
<td>phq_r5=4</td>
</tr>
<tr>
<td>6. Feeling bad about yourself - or that you are a failure or have let yourself or your family down</td>
<td>phq_r6=1</td>
<td>phq_r6=2</td>
<td>phq_r6=3</td>
<td>phq_r6=4</td>
</tr>
<tr>
<td>7. Trouble concentrating on things, such as reading the newspaper or watching television</td>
<td>phq_r7=1</td>
<td>phq_r7=2</td>
<td>phq_r7=3</td>
<td>phq_r7=4</td>
</tr>
<tr>
<td>8. Moving or speaking so slowly that other people could have noticed? Or the opposite - being so fidgety or restless that you have been moving around a lot more than usual</td>
<td>phq_r8=1</td>
<td>phq_r8=2</td>
<td>phq_r8=3</td>
<td>phq_r8=4</td>
</tr>
<tr>
<td>9. Thoughts that you would be better off dead or of hurting yourself in some way</td>
<td>phq_r9=1</td>
<td>phq_r9=2</td>
<td>phq_r9=3</td>
<td>phq_r9=4</td>
</tr>
</tbody>
</table>

(Used with permission: Kroenke, K., Spitzer, R.L., & Williams, J.B., 2001)

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If you want to exit the study, **click here**. This will take you to the information screen.
Please answer these items according to how much you currently agree with the following statements, from 'strongly disagree' to 'strongly agree'.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Not Sure</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I have a desire to succeed.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I have my own plan for how to stay or become well.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I have goals in life that I want to reach.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. I believe that I can meet my current personal goals.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. I have a purpose in life.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Even when I don't care about myself, other people do.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Fear doesn't stop me from living the way I want to.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. I can handle what happens in my life.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. I like myself.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. If people really knew me, they would like me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. I have an idea of who I want to become.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Something good will eventually happen.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. I’m hopeful about my future.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. I continue to have new interests.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Coping with my mental illness is no longer the main focus of my life.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. My symptoms interfere less and less with my life.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. My symptoms seem to be a problem for shorter periods of time each time they occur.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. I know when to ask for help.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Not Sure</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>---</td>
<td>------------------</td>
<td>---------</td>
<td>---------</td>
<td>-------</td>
<td>----------------</td>
</tr>
<tr>
<td>19. I am willing to ask for help.</td>
<td>rasr_r19=1</td>
<td>rasr_r19=2</td>
<td>rasr_r19=3</td>
<td>rasr_r19=4</td>
<td>rasr_r19=5</td>
</tr>
<tr>
<td>20. I ask for help when I need it.</td>
<td>rasr_r20=1</td>
<td>rasr_r20=2</td>
<td>rasr_r20=3</td>
<td>rasr_r20=4</td>
<td>rasr_r20=5</td>
</tr>
<tr>
<td>21. I can handle stress.</td>
<td>rasr_r21=1</td>
<td>rasr_r21=2</td>
<td>rasr_r21=3</td>
<td>rasr_r21=4</td>
<td>rasr_r21=5</td>
</tr>
<tr>
<td>22. I have people I can count on.</td>
<td>rasr_r22=1</td>
<td>rasr_r22=2</td>
<td>rasr_r22=3</td>
<td>rasr_r22=4</td>
<td>rasr_r22=5</td>
</tr>
<tr>
<td>23. Even when I don’t believe in myself, other people do.</td>
<td>rasr_r23=1</td>
<td>rasr_r23=2</td>
<td>rasr_r23=3</td>
<td>rasr_r23=4</td>
<td>rasr_r23=5</td>
</tr>
<tr>
<td>24. It is important to have a variety of friends.</td>
<td>rasr_r24=1</td>
<td>rasr_r24=2</td>
<td>rasr_r24=3</td>
<td>rasr_r24=4</td>
<td>rasr_r24=5</td>
</tr>
</tbody>
</table>

(Used with permission: Corrigan, P. W., Gifford, D., Rashid, F., Leary, M., & Okeke, I., 1999)
Please read each statement and tick the box which best describes the way you have been feeling **IN THE PAST WEEK**

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral or Unsure</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>There are worse things in life than hearing voices</td>
<td>vaas_r1=1</td>
<td>vaas_r1=2</td>
<td>vaas_r1=3</td>
<td>vaas_r1=4</td>
</tr>
<tr>
<td>When I disagree with a voice, I simply notice it and move on</td>
<td>vaas_r2=1</td>
<td>vaas_r2=2</td>
<td>vaas_r2=3</td>
<td>vaas_r2=4</td>
</tr>
<tr>
<td>There is no point in getting on with life while I hear voices</td>
<td>vaas_r3=1</td>
<td>vaas_r3=2</td>
<td>vaas_r3=3</td>
<td>vaas_r3=4</td>
</tr>
<tr>
<td>My voices are just one part of my life</td>
<td>vaas_r4=1</td>
<td>vaas_r4=2</td>
<td>vaas_r4=3</td>
<td>vaas_r4=4</td>
</tr>
<tr>
<td>I can't have a good life while I hear voices</td>
<td>vaas_r5=1</td>
<td>vaas_r5=2</td>
<td>vaas_r5=3</td>
<td>vaas_r5=4</td>
</tr>
<tr>
<td>My voices stop me doing the things I want to do</td>
<td>vaas_r6=1</td>
<td>vaas_r6=2</td>
<td>vaas_r6=3</td>
<td>vaas_r6=4</td>
</tr>
<tr>
<td>Hearing voices has taken over my life</td>
<td>vaas_r7=1</td>
<td>vaas_r7=2</td>
<td>vaas_r7=3</td>
<td>vaas_r7=4</td>
</tr>
<tr>
<td>I have learned to live with my voices</td>
<td>vaas_r8=1</td>
<td>vaas_r8=2</td>
<td>vaas_r8=3</td>
<td>vaas_r8=4</td>
</tr>
<tr>
<td>I struggle with my voices</td>
<td>vaas_r9=1</td>
<td>vaas_r9=2</td>
<td>vaas_r9=3</td>
<td>vaas_r9=4</td>
</tr>
</tbody>
</table>

[Used with permission: Ratcliff, K., 2010]
Over the LAST 2 WEEKS, how often have you been bothered by the following problems?

<table>
<thead>
<tr>
<th>Problem</th>
<th>Not at all</th>
<th>Several days</th>
<th>More than half the days</th>
<th>Nearly every day</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Feeling nervous, anxious or on edge</td>
<td>gad7_r1=1</td>
<td>gad7_r1=2</td>
<td>gad7_r1=3</td>
<td>gad7_r1=4</td>
</tr>
<tr>
<td>2. Not being able to stop or control worrying</td>
<td>gad7_r2=1</td>
<td>gad7_r2=2</td>
<td>gad7_r2=3</td>
<td>gad7_r2=4</td>
</tr>
<tr>
<td>3. Worrying too much about different things</td>
<td>gad7_r3=1</td>
<td>gad7_r3=2</td>
<td>gad7_r3=3</td>
<td>gad7_r3=4</td>
</tr>
<tr>
<td>4. Trouble relaxing</td>
<td>gad7_r4=1</td>
<td>gad7_r4=2</td>
<td>gad7_r4=3</td>
<td>gad7_r4=4</td>
</tr>
<tr>
<td>5. Being so restless that it is hard to sit still</td>
<td>gad7_r5=1</td>
<td>gad7_r5=2</td>
<td>gad7_r5=3</td>
<td>gad7_r5=4</td>
</tr>
<tr>
<td>6. Becoming easily annoyed or irritable</td>
<td>gad7_r6=1</td>
<td>gad7_r6=2</td>
<td>gad7_r6=3</td>
<td>gad7_r6=4</td>
</tr>
<tr>
<td>7. Feeling afraid as if something awful might happen</td>
<td>gad7_r7=1</td>
<td>gad7_r7=2</td>
<td>gad7_r7=3</td>
<td>gad7_r7=4</td>
</tr>
</tbody>
</table>

(Used with permission: Spitzer, R. L., Kroenke, K., Williams, J. B. W. & Löwe, B., 2006)
Please read each statement and tick the box which best describes the way you have been feeling in the PAST WEEK.

If you hear more than one voice, please complete the questions for the voice that is dominant.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Disagree</th>
<th>Unsure</th>
<th>Slightly Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>My voice is punishing me for something I have done</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My voice wants to help me</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My voice is very powerful</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My voice is persecuting me for no good reason</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>My voice wants to protect me</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My voice seems to know everything about me</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My voice is evil</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My voice is helping to keep me sane</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My voice makes me do things I really don't want to do</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My voice wants to harm me</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My voice is helping me to develop my special powers or abilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I cannot control my voices</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My voice wants me to do bad things</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My voice is helping me to achieve my goal in life</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My voice will harm or kill me if I disobey or resist it</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My voice is trying to corrupt or destroy me</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am grateful for my voice</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My voice rules my life</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My voice reassures me</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My voice frightens me</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My voice makes me happy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
22. My voice makes me feel down
23. My voice makes me feel angry
24. My voice makes me feel calm
25. My voice makes me feel anxious
26. My voice makes me feel confident

(Used with permission: Chadwick, P., Lees, S., & Birchwood, M., 2000)
Participant Information

1. How old are you?  

2. Gender
   - Female
   - Male
   - Other (please specify):

3. What is your current relationship status?
   - Single
   - In relationship, married or in a civil partnership
   - Divorced or separated
   - Widowed
   - Other (please specify):

4. Which qualifications do you have? (please tick all that apply)
   - No formal qualifications
   - Left school at 16 with qualifications
   - Left school at 18 with qualifications
   - Undergraduate degree
   - Postgraduate degree

5. Are you currently working or studying?
   - Full time or part time education
   - Full time or part time paid work
   - Full time or part time voluntary work
   - Not currently in education or work
   - Other (please specify):
6. What are your current living arrangements?
- Living with partner, parents, family or friends
- Living on own
- Living in supported accommodation or hostel
- Other (please specify): 

7a. Is English your first language?
- Yes
- No

7b. If no, what is your first language?

8. How would you define your ethnic background?
- English/Welsh/Scottish/Northern Irish/British
- Irish
- Gypsy or Irish Traveller
- Any other white background, please write in
- White and Black Caribbean
- White and Black African
- White Asian
- Any other mixed background, please write in
- Asian/Asian British
- Indian
- Pakistani
- Bangladeshi
- Chinese
- Any other Asian background, please write in
- Black British Caribbean
- Black British African
- African
- Caribbean
- Any other black/African/Caribbean background
- Arab
- Any other ethnic group, please write in

What is your current country of residence?
- UK
9. Sometimes people who hear voices experience mental health problems, but this is not always the case. Do you have a current mental health diagnosis given by a psychiatrist?

- No
- Not sure
- Schizophrenia
- Schizoaffective disorder
- Another form of psychosis
- Borderline personality disorder
- Bipolar disorder
- Depression
- Anxiety (e.g. Post-traumatic stress disorder (PTSD), obsessive compulsive disorder (OCD))
- Other diagnosis (please specify)

10a. We are interested in your experience of hearing voices. How old were you when you first started to hear voices?

10b. Are you currently taking any medication because you are hearing voices?

- Yes
- No

11a. Some people who hear voices access mental health services, other people do not. Which mental health services are you currently accessing, if any?

- None
- Using mental health service but not sure of the name
- Community mental health team
Psych. D. Research Dossier

[ ] Assertive outreach team
[ ] Early intervention team
[ ] Inpatient or residential service
[ ] Psychological therapy service
[ ] Other mental health service (please specify): 

If you want to exit the study, click here. This will take you to the information screen.
11b. If you are not currently accessing mental health services, which mental health services have you accessed in the past, if any? (please tick all that apply)

- None
- Using service but not sure of the name
- Community mental health team
- Assertive outreach team
- Early intervention team
- Inpatient or residential service
- Psychological therapy service
- Other mental health service (please specify): [ ]
- I have been referred but did not use the service
11c. If you have accessed mental health services, for how many years in total have you accessed these services? (Your best guess is fine)

12a. Have you had psychological therapy, either now or in the past?

- [ ] Yes
- [ ] No

12b. If yes, what kind of psychological therapy have you had? (Please specify)
Where did you hear about this study?

- Through the Hearing Voices Network
- Through MIND
- Through Rethink
- Through a friend
- Other (please specify): ____________________________
- Through Intervoice

Please send an e-mail to a.holt@surrey.ac.uk if you would like to be entered into the prize draw for Amazon vouchers, and/or receive the results of these studies.

We ask you to do this so that your contact details can be held securely separate to your questionnaire responses. This ensures that what you have entered on this site remains anonymous. Your details will be deleted once the study is finished.

Many thanks for your participation in this research. If you would like to leave an anonymous comment about this study, please write in the comments box below:

If you want to exit the study, click here. This will take you to the information screen.
Thank you very much for participating in our research project!

Interested why we were asking those questions?

The way people describe the experience of hearing voices is often mixed: some people report finding their voices a source of support and comfort, yet others find their voices very upsetting and distressing. Our project aims to take a closer look at this, and see whether we can find patterns that might explain these different experiences. Some of the questions ask about your beliefs about yourself and others. There is some research to suggest that the way someone sees the world could also influence the way they make sense of their voices. Secondly, some of the questions look at different skills, which certain therapies aim to develop in people. The research project aims to look at whether those people that find their voices easy to cope with are particularly good at these skills, as this would prove a good argument for promoting these therapies.

We will send results of our project to all those who have e-mailed us indicating they are interested.

How are you feeling?

If you feel distressed or discomforted by answering the previous questions, you can contact your Doctor. Outside of working hours you can go to the nearest hospital’s Accident and Emergency department in your area. Tell a member of staff how you are feeling and they should be able to put you in touch with people that can help.

Please find below a list of suggested organisations who might be able to provide you with support:

NHS Direct 0845 46 47
This telephone line is manned 24 hours a day by nurses. They can suggest what you can do next if you are feeling at risk. This organisation is only accessible in the UK.

Samaritans 08457 90 90 90
A 24 confidential telephone line to access emotional support. The number above is for support for those living in the UK. Please visit their website at http://www.samaritans.org to find out about 24 hour emotional support telephone numbers in your country.

Hearing Voices Network (HVN)
http://www.hearing-voices.org
This organisation aims to promote and develop understanding of the voice hearing experience. Their website also provides information on support groups across the UK.

Rethink
http://www.rethink.org
This organisation provides helpful information and some practical support to people who are experiencing severe mental health problems. Rethink’s advice and information line is 0845 456 0455. It is open 10am - 1pm and experienced staff can provide information on a range of emotional, financial, and practical issues to people in the UK.

Intervoice
http://www.intervoiceonline.org
Intervoice is an international organisation providing information and support to voice hearers. The website also contains links to helpful websites for national organisations for people who hear voices in many different countries throughout the world.

If you would like to enter into our prize draw to win vouchers for Amazon.com worth up to (us) $75 in your preferred currency, then please email a.holt@surrey.ac.uk. Many thanks for your participation in this research!

If you know anyone who may be interested in participating in our research, please suggest they visit our website:

http://www.fabs.surrey.ac.uk/survey/voices
The questionnaires used in this study can be found in the following research papers. We would like to extend our thanks to the authors for allowing us to use their questionnaires in our study.


Thank you for offering to take part in our research study.

We apologise for any inconvenience but, unfortunately, the study requires people to be between the ages of 18 and 65 to have at least three months experience of hearing voices and to have heard a voice in the last week. This is to help us compare a similar population sample. We also need participants to be fluent English speakers so they can answer all the questions accurately.

**Interested in what our study is about?**
The way people describe the experience of hearing voices is often mixed: some people report finding their voices a source of support and comfort, yet others find their voices very upsetting and distressing. Our study aims to take a closer look at this, and see whether we can find patterns that might explain these different experiences. There is some research to suggest that the way someone sees the world could also influence the way they make sense of their voices. Secondly, some of the questions look at different skills, which certain therapies aim to develop in people. The research project aims to look at whether those people that find their voices easy to cope with are particularly good at these skills, as this would prove a good argument for promoting these therapies.

**How are you feeling?**
If you feel distressed or discomforted by answering the previous questions, you can contact your Doctor.

Outside of working hours you can go to the nearest hospital’s Accident and Emergency department in your area. Tell a member of staff how you are feeling and they should be able to put you in touch with people that can help.

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  A 24 confidential telephone line to access emotional support. The number above is for support for those living in the UK. Please visit their website at [http://www.samaritans.org](http://www.samaritans.org) to find out about 24 hour emotional support telephone numbers in your country.
- **Hearing Voices Network (HVN)**
  [http://www.hearing-voices.org](http://www.hearing-voices.org)
  This organisation aims to promote and develop understanding of the voice hearing experience. Their website also provides information on support groups across the UK.
- **Rethink**
  [http://www.rethink.org](http://www.rethink.org)
  This organisation provides helpful information and some practical support to people who are experiencing severe mental health problems. Rethink’s advice and information line is 0845 456 0455. It is open 10am – 1pm and experienced staff can provide information on a range of emotional, financial, and practical issues to people in the UK.
- **Intervoice**
  [http://www.intervoiceonline.org](http://www.intervoiceonline.org)
  Intervoice is an international organisation providing information and support to voice hearers. The website also contains links to helpful websites in for national organisations for people who hear voices in many different countries throughout the world.

**If you know anyone who may be interested in participating in our research, please suggest they visit our website:**

[http://www.fahs.surrey.ac.uk/survey/voices](http://www.fahs.surrey.ac.uk/survey/voices)
Thank you for your interest

Your response indicated that you did not click the consent box to take part in this study. If you need to ask us any questions, please contact us on e.clarke@surrey.ac.uk or a.holt@surrey.ac.uk. If you would like to try again, please click the following link:

http://www.fahs.surrey.ac.uk/survey/voices
6.6. Appendix 6: List of International Mental Health Charities
## MENTAL HEALTH CHARITIES

### INTERNATIONAL
- Hearing Voices Network
- International Society for Psychological and Social Approaches to Psychosis (ISPS)
- Intervoice

### UNITED KINGDOM
- "Changes" Charity
- A Time to Change
- Mental Health Forum
- Mental Health Foundation
- MIND
- National Paranoia Network
- Rethink
- SANE

### U.S.A
- Asylum Online
- Daily Strength
- Freedom Centre Holyoke USA
- Icarus Project
- International Bipolar Foundation
- Mind Freedom
- National Alliance on Mental Illness
- Neuropathic Medical Research Clinic
- Safe Harbour
- Schizophrenia.com
- Shineonline.com
- Western Mass Recovery Learning Community

### AUSTRALIA
- Prahan Mission

### CANADA
- Schizophrenia Society of Canada - Alberta
6.7. Appendix 7: Negative Schema and Beliefs about Voices as Single (Model 2) and Multiple (Model 3) Mediators of the Relationship between Attachment Style and Voice Distress
Figure 7: Model 2 - Negative Schema and Beliefs about Voices Mediate the Relationship between Attachment Style and Voice Distress as Single Mediators
Table 8: Unstandardised Beta Coefficients of Mediation Analyses in Model 2 with Single Mediators (N=150, 5000 bootstraps)

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Mediating variable</th>
<th>Dependent variable</th>
<th>Effect of IV on M</th>
<th>Effect of DV on M</th>
<th>Direct Effect</th>
<th>Indirect Effect (ab) 95% CI</th>
<th>Total Effect</th>
<th>Mediator Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECR-R Attachment Anxiety</td>
<td>BCSS - NSS Impact</td>
<td>BCSS - NOS Impact</td>
<td>2.75**</td>
<td>0.35**</td>
<td>0.01</td>
<td>0.96**</td>
<td>0.62-1.37</td>
<td>0.96**</td>
</tr>
<tr>
<td></td>
<td>BAVQ-R Malevolence</td>
<td></td>
<td>2.28**</td>
<td>0.09</td>
<td>0.75**</td>
<td>0.22</td>
<td>-0.09-0.52</td>
<td>0.96**</td>
</tr>
<tr>
<td></td>
<td>BAVQ-R Omnipotence</td>
<td></td>
<td>0.67**</td>
<td>0.50**</td>
<td>0.55**</td>
<td>0.41**</td>
<td>0.13-0.69</td>
<td>0.96**</td>
</tr>
<tr>
<td>ECR-R Attachment Avoidance</td>
<td>BCSS - NSS Impact</td>
<td>BCSS - NOS Impact</td>
<td>2.56**</td>
<td>0.36**</td>
<td>-0.11</td>
<td>0.92**</td>
<td>0.56-1.36</td>
<td>0.81**</td>
</tr>
<tr>
<td></td>
<td>BAVQ-R Malevolence</td>
<td></td>
<td>2.13*</td>
<td>0.15*</td>
<td>0.49</td>
<td>0.32</td>
<td>0.06-0.70</td>
<td>0.81**</td>
</tr>
<tr>
<td></td>
<td>BAVQ-R Omnipotence</td>
<td></td>
<td>0.63</td>
<td>0.51*</td>
<td>0.49*</td>
<td>0.32</td>
<td>-0.07-0.73</td>
<td>0.81**</td>
</tr>
</tbody>
</table>

339
Figure 8: Model 3 - Negative Schema and Beliefs about Voices Mediate the Relationship between Attachment Style and Voice Distress as Multiple Mediators
Table 9: Unstandardised Beta Coefficients of Mediation Analyses in Model 3 with Multiple Mediators: N=150, 5000 bootstraps

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Mediating variable</th>
<th>Dependent variable</th>
<th>Effect of IV on M (a)</th>
<th>Effect of DV on M (b)</th>
<th>Direct Effect (c')</th>
<th>Indirect Effect (ab) 95% CI</th>
<th>Total Effect (c)</th>
<th>Mediator Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attachment Anxiety</td>
<td>ECR-R</td>
<td>BCSS - NSS Impact</td>
<td>2.75**</td>
<td>0.15**</td>
<td>0.35</td>
<td>0.41** 0.11-0.70</td>
<td>0.96**</td>
<td>Complimentary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BAVQ-R Malevolence</td>
<td>2.28**</td>
<td>-0.12*</td>
<td></td>
<td>-0.27* -0.51 -0.09</td>
<td></td>
<td>Competitive</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BAVQ-R Omniscience</td>
<td>0.85**</td>
<td>0.28**</td>
<td></td>
<td>0.23* 0.08-0.50</td>
<td></td>
<td>Complimentary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Omniscience</td>
<td>0.67**</td>
<td>0.36**</td>
<td></td>
<td>0.10* 0.08-0.47</td>
<td></td>
<td>Complimentary</td>
</tr>
<tr>
<td>Attachment Avoidance</td>
<td>ECR-R</td>
<td>BCSS - NSS Impact</td>
<td>2.56**</td>
<td>0.18**</td>
<td>0.15</td>
<td>0.47** 0.22-0.78</td>
<td>0.81**</td>
<td>Complimentary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BAVQ-R Malevolence</td>
<td>2.13**</td>
<td>-0.10*</td>
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<td>-0.21* -0.42 -0.08</td>
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<td>Competitive</td>
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<td></td>
<td>BAVQ-R Omniscience</td>
<td>0.63</td>
<td>0.28**</td>
<td></td>
<td>0.18 -0.03 -0.47</td>
<td></td>
<td>Non-mediation</td>
</tr>
</tbody>
</table>


ASSIGNMENT: Qualitative Research Project

TITLE: Celebrities, Marriage and Infidelity: Perceptions of Young Females

Year 1

DATE: June 2010
ABSTRACT

Background: Celebrity culture continues to fascinate young females and in the recent media there has been a host of cases of celebrity infidelity.

Aims: The current research was aimed at exploring young females' perceptions of marriage and infidelity in celebrities and non-celebrities; and whether celebrity culture impacted on young females' perceptions of relationships.

Participants: Each of the five female researchers recruited a female participant from their social network, in their twenties or thirties.

Method: Semi-structured interviews were digitally recorded and transcribed. Interpretative Phenomenological Analysis (IPA) was utilised to make sense of the meaning participants' made of marriage, infidelity and celebrity culture. There is an acknowledgement within IPA methodology that researchers bring their own interpretations and experiences to the work; a reflective section was incorporated to illuminate this.

Results: The findings demonstrated the emergence of three superordinate themes: 'Movement of Marriage', 'Levels of Infidelity' and 'The Wider Impact of Celebrity'. This report focussed on the in-depth analysis of the theme 'Levels of Infidelity' as this was most relevant to the research question. This theme included four subordinate themes: 'justification for infidelity', 'hierarchy of infidelity', 'othering' (describing people as 'other' to oneself) and the 'role of technology'.

Discussion: The topic of infidelity may be fuelled with emotion for some clinicians, making it difficult to avoid making personal judgements of service users. Further clinical implications and recommendations for good and ethical practice are outlined.
## RESEARCH LOG

<table>
<thead>
<tr>
<th>Research Log</th>
<th>Achieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Formulating and testing hypotheses and research questions</td>
</tr>
<tr>
<td>2</td>
<td>Carrying out a structured literature search using information technology and literature search tools</td>
</tr>
<tr>
<td>3</td>
<td>Critically reviewing relevant literature and evaluating research methods</td>
</tr>
<tr>
<td>4</td>
<td>Formulating specific research questions</td>
</tr>
<tr>
<td>5</td>
<td>Writing brief research proposals</td>
</tr>
<tr>
<td>6</td>
<td>Writing detailed research proposals/protocols</td>
</tr>
<tr>
<td>7</td>
<td>Considering issues related to ethical practice in research, including issues of diversity, and structuring plans accordingly</td>
</tr>
<tr>
<td>8</td>
<td>Obtaining approval from a research ethics committee</td>
</tr>
<tr>
<td>9</td>
<td>Obtaining appropriate supervision for research</td>
</tr>
<tr>
<td>10</td>
<td>Obtaining appropriate collaboration for research</td>
</tr>
<tr>
<td>11</td>
<td>Collecting data from research participants</td>
</tr>
<tr>
<td>12</td>
<td>Choosing appropriate design for research questions</td>
</tr>
<tr>
<td>13</td>
<td>Writing patient information and consent forms</td>
</tr>
<tr>
<td>14</td>
<td>Devising and administering questionnaires</td>
</tr>
<tr>
<td>15</td>
<td>Negotiating access to study participants in applied NHS settings</td>
</tr>
<tr>
<td>16</td>
<td>Setting up a data file</td>
</tr>
<tr>
<td>17</td>
<td>Conducting statistical data analysis using SPSS</td>
</tr>
<tr>
<td>18</td>
<td>Choosing appropriate statistical analyses</td>
</tr>
<tr>
<td>19</td>
<td>Preparing quantitative data for analysis</td>
</tr>
<tr>
<td>20</td>
<td>Choosing appropriate quantitative data analysis</td>
</tr>
<tr>
<td>21</td>
<td>Summarising results in figures and tables</td>
</tr>
<tr>
<td>22</td>
<td>Conducting semi-structured interviews</td>
</tr>
<tr>
<td>23</td>
<td>Transcribing and analysing interview data using qualitative methods</td>
</tr>
<tr>
<td>24</td>
<td>Choosing appropriate qualitative analyses</td>
</tr>
<tr>
<td>25</td>
<td>Interpreting results from quantitative and qualitative data analysis</td>
</tr>
<tr>
<td>26</td>
<td>Presenting research findings in a variety of contexts</td>
</tr>
<tr>
<td>27</td>
<td>Producing a written report on a research project</td>
</tr>
<tr>
<td>28</td>
<td>Defending own research decisions and analyses</td>
</tr>
<tr>
<td>29</td>
<td>Submitting research reports for publication in peer-reviewed journals or edited book</td>
</tr>
<tr>
<td>30</td>
<td>Applying research findings to clinical practice</td>
</tr>
</tbody>
</table>

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