# Brief group therapy for psychosis

# in acute care

Mary Forsey

Submitted in partial fulfilment of the degree of Doctorate in Clinical Psychology at the Division of Clinical Psychology, Liverpool University

June 2013

# Chapter One: Introduction

1		Definitions of mental health and illness
	1.1	Historical origins of schizophrenia6
	Current definition of schizophrenia	
	1.2	2.1 Reliability
	1.2	2.2 Validity
2		Theories of causation
	2.1	Biological explanations10
	2.2	Socio-cultural explanations11
	2.3	Psychological explanations12
	2.4	Integrative approach14
3		Treatment and outcomes
	3.1	Medication
	3.2	Stigma, discrimination and social exclusion16
	3.3	The hearing voices movement17
	3.4	Talking therapies
4		Considerations for inpatient care
5		References

## Chapter Two: Systematic review

Abstract		
1	Introduction	33
2	Methods	36
2.1	Inclusion criteria	
2.2	Exclusion criteria	
3	Search strategy	37
3.1	Quality assessment	
4	Results	
4.1	Randomised controlled trials	
4.2	Non-randomised experimental studies	
4.3	Naturalistic studies	47
5	Discussion	49
6	Conclusion	51
7	References	53

## Chapter Three: Empirical Paper

Abstract		
1	Introduction64	
2	Methods67	
2.1	Design67	
2.2	Participants67	
2.3	Intervention67	
2.4	Measures	
2.5	Procedure	
2.6	Analysis70	
2.6.1 Quantitative		
2.	6.2 Qualitative70	
3	Results71	
3.1	Sample demographics	
3.2	Exploring drop out73	
3.3	Comparing differences between groups74	
4	Qualitative analysis	
5	Discussion	
5.1	Limitations and feasibility	
5.2	Clinical implications	
6	References	

## Chapter Four: Conclusions

1	Discussion overview	94
1.1	How the groups fit with current services	95
1.2	Reflecting on my role within the research	96
1.3	Reflections from group facilitators	98
2	What we learnt from our experience of running the groups	101
3	What could be next?	.103
4	Lay Summary	.108
5	References	.108

# Chapter Five: Future research proposal

1	I	Backg	ground	111
2	I	Propo	osed research design	114
2.	.1	Aim	ns and objectives	114
	ľ	Metho	ods	115
3.	.1	Desi	ign	115
3.	.2	Parti	ticipants	115
3.	.3	Mea	asures	115
3.	.4	Ethi	ics	116
3.	.5	Proc	cedure	116
	3.5.	1	Phase One	116
	3.5.	2	Phase Two	117
	3.5.	3	Sample size	117
	3.5.	4	Analysis	117
	3.5.	5	Clinical Implications	118
4	I	Refere	ences	119
5	V	Word	count evidence	121

# Appendices

1.	Database coverage	.123
2.	Quality review of studies in systematic review	124
3.	Group Manual	127
4.	Ethical approval	167
5.	Participant information sheets and consent form	168
6.	Distribution of outcome measures	176
7.	Responses to satisfaction questionnaire	177
8.	Example of qualitative coding structure	181

# **Chapter One: Introduction**

Many great and well known characters throughout history have reported unusual experiences. Joan of Arc is said to have heard the voices of angels that led to her into battle, Gandhi relied on his inner voice to lead India to independence from Britain, and the Nobel prize winning mathematician John Nash heard voices and believed there were political conspiracies against him; to name but a few (Intervoice, 2011). These experiences have been interpreted differently depending on time, culture and context (Tobert, 2010). For example, in many cultures Shamans, people who intentionally communicate with the non-physical world (i.e. voices and spirits) are considered spiritual healers who are invited to cure illness in others (Humphrey, 1996). Alternatively, in Western cultures, people who speak to voices that no one else can hear, are more likely to be considered disturbed and receive a diagnosis of a mental disorder, such as schizophrenia.

This thesis explores a particular type of therapy for people who have, in Western traditions, been considered 'mentally ill' and diagnosed with schizophrenia. What follows in this section is a brief introduction to the conceptualisation of schizophrenia over time in order to understand the current social, medical and psychological context in which this study is situated.

### 1 Definitions of mental health and illness

Traditionally, 'mental health' has been thought of as the absence of symptoms of mental illness. Mental illness has been defined as '*a health condition that changes a person's thinking, feelings, or behaviour (or all three) and that causes the person distress and difficulty in functioning*' (National Institute for Mental Health, 2005). However, this definition is problematic for people who may experience 'symptoms' but who are not distressed by these, and do not have difficulties functioning. These people do not seem to fit with traditional descriptions of mental health as an absence of symptoms, and may often be stigmatised and 'labelled' within current healthcare systems and society. In addition, this definition relies on the disappearance of symptoms to indicate recovery, which may be unrealistic and difficult to achieve for some people. Instead a holistic approach might be preferable, considering what mental health actually means for individuals. Encouragingly, the World Health Organisation (WHO, 2011) defined mental health as '*a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community'.* This shows promise of a more optimistic and integrative approach towards mental health and illness, independent of signs or symptoms.

#### 1.1 Historical origins of schizophrenia

In Western medicine the idea of separate physical and mental health systems are based on the dualistic separation between 'mind' and 'body', first considered by Descartes in the 1600s. Early understandings of mental disorder were largely based on biological models of disease processes. Based on positivist philosophies of scientific realism, it was believed that a 'real' world exists and knowledge is created through the collection of 'facts' about the world (Lincoln & Guba, 2000). Physical illness is still identified using positivist methods to discover 'facts' about biological systems, and classify these according to observable qualities and quantities, such as blood tests or physical examinations. For example, based on observable changes in one bodily system (e.g. low levels of insulin in the blood), we can make predictions about changes in another system (e.g. high glucose levels), allowing us to assess for a particular condition associated with this symptom (i.e. diabetes), which influences our choice of treatment. Mental illness has been interpreted in a similar way as it was traditionally assumed to be the result of bodily dysfunction, although we cannot identify it using a blood test (Romme, 2009).

In the late 1880s Kraepelin first described a classification system of mental disorders which were grouped according to pathological anatomy, symptomology or aetiology (Bentall, 2003). Different patterns of symptoms were thought to reflect different disorders; therefore patients were diagnosed with a particular condition based on their symptoms. Kraepelin described three major illness types: dementia praecox, manic depressive illness and paranoia; and although these illness types have changed considerably over time, the mental health classification system used today is based on these early ideas regarding diagnosis (Bentall, 2006). The origins of the disorder now called schizophrenia

come from Kraepelin's observation of 'dementia praecox', describing difficulties in: displaying emotion; behaviour; catatonia; attention; perception (including auditory and tactile hallucinations); irrational beliefs (including persecution or grandiosity) and cognitive decline.

The term 'schizophrenia' was first introduced by Bleuer in the early 1900s to replace 'dementia praecox' as he did not believe that cognitive deterioration was inevitable (as in dementia), or that the disorder always occurred in early adulthood, and so could not be considered a praecox (Bentall, 2003). Instead Bleuer argued that association, ambivalence, autism and affect were key features in schizophrenia. Since then the term 'schizophrenia' has continued to be used, although there have been changes to its definition. In 1959 Schnider described what he called the 'first rank symptoms' of schizophrenia (see Figure 1). The changes in the description of this single disorder from Kraepelin's focus on intellectual features, to Bleuer's focus on emotional and cognitive features, to Schnider's focus solely on hallucinations and delusions has raised questions about whether they are describing the same disorder (Bentall, 2003).

#### Schnider's first rank symptoms of schizophrenia

- 1. Audible thoughts
- 2. Voices heard arguing
- 3. Voices heard commenting on ones actions
- 4. Experiences of influences playing on the body
- 5. Thought withdrawal
- 6. Thoughts are ascribed to other people who intrude their thoughts upon the patient
- 7. Thought diffusion
- 8. Delusional perception

9-11. Feelings, impulses (drives) and volitional acts that are experienced by the patient as the work or influence of others.

Figure 1. Schnider's first rank symptoms of schizophrenia (Bentall, 2003 pp.32-33)

Moreover, some authors have considered alternative explanations to account for the differences in observations of clinical features, and considered whether Kraepelin's dementia praecox may actually have been a brain infection known as encephalitis lethargica (Boyle, 1990). In an attempt to reach a consensus about the features of clinical disorders, including schizophrenia, the American Psychiatric Association (APA) published the first Diagnostic and Statistical Manual of Mental Disorders (DSM) in 1952.

#### 1.2 Current definition of schizophrenia

The purpose of 'diagnosis' is to identify a disease, based on observation of a person's signs and symptoms, so as to ascertain the underlying cause and probable outcome, and predict response to a set of treatments (Moncrieff, 2010). The current classification systems of mental disorder are the DSM-IV (APA, 2000) and the International Classification of Disorders (WHO, 2010), which both use symptom clusters to identify different conditions. In order to diagnose schizophrenia, symptoms must be classified from three main domains, which clearly draw on Schneider's symptom descriptions (Norgaard, Arnfred, Handest, & Parnas, 2008). These are:

- Psychotic symptoms such as auditory hallucinations (hearing voices), delusions (paranoia and telepathy) and thought disorder (incomprehensible speech);
- Negative symptoms such as poor self-care, reduced motivation, reduced ability to experience pleasure, alogia (reduced production of thought), affective blunting (lack of emotional expression) and reduced social functioning;
- Catatonia (abnormality or immobility of movement)

In order to receive a diagnosis a person must have consistently experienced at least one symptom, for at least one month, although other symptoms may have been present for longer (National Institute for Health and Clinical Excellence (NICE), 2010 p.19).

However, there is considerable controversy surrounding the validity of psychiatric diagnoses, particularly schizophrenia (Kinderman, Read, Moncrieff & Bentall, 2013). Indeed some researchers have questioned why we are still considering this debate when there is overwhelming evidence to discredit this classification system (Pilgrim, 2007). The publication of DSM-V in 2013 which includes lower diagnostic thresholds and introduces new diagnostic categories has reignited the extensive debate regarding the reliability, validity and safety of the current diagnostic classification system of mental disorders (The International DSM-5 Response Committee, 2013). There is a huge amount of research in this area so only some of the main criticisms are outlined below.

#### 1.2.1 Reliability

Reliability in psychiatric diagnosis refers to the probability that different people will consistently assign the same diagnosis, based on the observation of particular symptoms. There is a wealth of evidence to suggest that the diagnosis of schizophrenia is not reliable (Brockington, 1992). Researchers have found big differences in the presence of psychotic symptoms, and in rates of diagnosis for different disorders, between countries (Neuvo, et al., 2012). In the 1970s, the US rates of schizophrenia were much higher than in the UK, where diagnoses of mania, depression or neurosis were more common (Kendell, et al., 1971). The difference was attributed to the overlap in symptoms of different disorders, such as schizophrenia and manic depression, making it difficult for people to draw boundaries between different diagnoses (Kendell, et al., 1971). Guidelines for professionals emphasise that each individual's experience of these symptoms is different and that not all people with a diagnosis of schizophrenia will experience the same difficulties (NICE, 2010); but it has been argued that two people can be diagnosed with schizophrenia without sharing a single symptom (Bentall, Jackson & Pilgrim, 1988). Tighter definitions have reportedly led to improvements in the reliability of the diagnostic process for schizophrenia (Kendall & Jablinksky, 2003). Nevertheless, improved consistency in labelling of a particular disorder does not make it more meaningful or neccesarily helpful to the person being diagnosed (Boyle, 1990).

#### 1.2.2 Validity

Validity considers whether or not diagnostic categories reflect a meaningful construct and pattern of symptoms (Boyle, 2002). Statistical analysis highlights that symptoms do not cluster together in ways predicted by diagnostic frameworks (Kinderman & Cooke, 2000) and diagnostic labels do not indicate a cause for a person's psychological distress (van Os, 2010). Therefore, if the purpose of diagnosis is

to help identify the cause of a person's difficulties, there is evidence to suggest that this has not been achieved with regard to schizophrenia (see Section 2 below). Similarly, if diagnosis is supposed to predict response to treatment, there is also evidence that this has not been accomplished, as considerable controversy remains regarding treatment for schizophrenia (Pilgrim, in press), see Section 3 below. The course of the 'illness' and outcomes for people who are diagnosed with schizophrenia are unpredictable and extremely variable (Bentall, 2003). Taken together these arguments raise questions about the utility of a classification system at all, as it appears to be based on blurred concepts; some consider that the concept of schizophrenia is "*not a valid object of scientific enquiry*" (Bentall, Jackson & Pilgrim, 1988). If diagnostic labels do not help understand the cause of a person's psychological distress, or indicate a particular treatment, then it seems appropriate to question why psychiatric diagnosis is still the dominant framework used to conceptualise distress in mental health services.

#### 2 Theories of causation

"No specific gene has yet been found; no biochemical defect has been proven responsible; and no specific stressful event seems sufficient, by itself, to produce schizophrenia" (BBC News, 1999).

A major criticism of the concept of schizophrenia is that there is no agreed cause, although there has been a considerable amount of research which has considered different possibilities. As a consequence there is no agreed mechanism of action, despite there being a number of proposed theories.

#### 2.1 Biological explanations

Despite the historical assumption that schizophrenia is caused by biological dysfunction there has been no clear evidence to support this (Boyle, 2002). While differences have been found in the brain structure and volume of some people diagnosed with schizophrenia (Meltzer, 1987), there is evidence of similar changes in people diagnosed with mood disorders and in the general population (Chua & McKenna, 1995). Similarly, there is evidence of 'hypofrontality' (a reduction in blood flow to the frontal cortex) in people who are acutely psychotic (Spence, Hirsch, Brooks & Grasby, 1998), but it is not clear: whether this is a cause or consequence of some other event, such as injury or trauma; how this compares to people diagnosed with other conditions; or with regards to the potential confounds of medication.

Neurotransmitters, particularly dopamine, have been widely researched following the observation of the effects of neuroleptics (which reduce) and psychostimulants (which increase) the transmission of dopamine, in people diagnosed with schizophrenia (van Kammen & Kelly, 1991). This theory, known as 'the dopamine hypothesis' held favour for many years, despite being designed around the action of particular drugs rather than the aetiology of schizophrenia (Moncrieff, 2009). Some argue this theory may have been encouraged by the pharmaceutical industry, with a financial interest (Healy, et al. 2012). However, newer atypical anti-psychotics, such as respiridone, which have less effect on the dopamine system (Moncrieff, 2009) have been shown to have the similar effects on psychotic symptoms as neuroleptics, but with fewer side effects. Overall, the dopamine hypothesis has been heavily criticised, and the continued belief that antipsychotics are disease-specific treatments has been seen as demonstrating psychiatry's attempt to continue to approach mental health problems in the same way as physical illness (Moncrieff, 2009).

There is a wealth of complex research which has investigated the possibility of a genetic predisposition to schizophrenia (Andresen & Black, 1996). Studies have replicated findings that the relatives of people with schizophrenia are more likely to also develop the disorder, with highest rates found in children whose parents have schizophrenia (Gottesman & Shields, 1972; 1982). However, a close familial relationship also implies environmental similarities which may affect rates. Bentall (2003) summarises the literature in this area suggesting that although evidence for a familial inheritance is relatively consistent, it is likely to be overstated, heterogeneous and that any genetic contribution is likely to be minor and from a number of different genes.

#### 2.2 Socio-cultural explanations

Family functioning has long been considered an important factor in the development and maintenance of psychotic symptoms in people diagnosed with schizophrenia. The concept of expressed emotion (involving critical comments, hostility and emotional over-involvement) is used to consider the response of a relative to the person with schizophrenia (Hooley, 1985). Evidence has shown that people with schizophrenia who spent more time in families with high levels of expressed emotion following discharge from hospital were more likely to relapse (Brown, Birley & Wing, 1972). However, this association is not specific to schizophrenia and has also been demonstrated across other diagnoses (Vaughn & Leff, 1976). Some theories have also pointed to social deficits in people diagnosed with schizophrenia, such as poorer social skills, following observations that social isolation and withdrawal are common (Hooley, 2010). However, impaired social functioning is part of the clinical diagnosis of schizophrenia so although there are clearly associations between social and family functioning, it is not possible to make any causal links.

Researchers have also found associations between deficits in theory of mind (the ability to infer mental states in others) and people experiencing acute episodes of paranoia (Frith & Corcoran, 1996). It was suggested that when people lost the ability to understand the thoughts and feelings of others, they assume other people are trying to hide their intentions, leading to paranoia. However, this finding has not been consistently replicated and has also been demonstrated in people diagnosed with other mental health problems (Kerr, Dunbar & Bentall, 2003). Therefore, it does not appear specific to schizophrenia.

#### 2.3 Psychological explanations

More recently the role of childhood trauma has been implicated in the development of psychosis and schizophrenia (Read, van Os, Morrison & Ross, 2005). Reviews have shown consistent findings that the majority of people diagnosed with schizophrenia have experienced childhood trauma, such as physical, sexual or emotional abuse or neglect (Read, 1997; Varese, et al., 2012). Symptoms most strongly associated with childhood trauma are voices commenting (Ross, Anderson & Clark, 1994), and the strongest predictor of distress is the interpretation of voices as malevolent (Andrew, Gray & Snowden, 2008). Moreover, it has been argued that many of the brain abnormalities reported in

people diagnosed with schizophrenia may be explained by brain plasticity in childhood (Read, Perry, Moskowitz & Connolly, 2001), supporting the crucial role of trauma, and particularly childhood sexual abuse, as one of the most influential current theories of causation (Read & Bentall, 2012). Most of these findings can only demonstrate associations between symptoms and trauma due to methodological considerations; but there are a growing number of large scale, well controlled studies which suggest that a causal link may be possible (Janssen, et al., 2004; Bebbington, et al., 2004; Whitfield, Dube, Feletti & Anda, 2005). Moreover, a dose-response model may be appropriate, suggesting that increased severity of abuse in childhood leads to increased severity of distress in adults diagnosed with schizophrenia (Janssen, et al. 2004).

However, perhaps some of the most interesting and compelling research of a causal link (McCarthy, 2011) comes from the individual accounts of voice hearers themselves. Romme and Escher (1993) interviewed hundreds of voice hearers to discover their interpretations of their experiences and found overwhelmingly that traumatic events influenced their understanding of their voices and were often the trigger for their first episode of voice hearing (Romme & Escher, 1993). A number of cognitive explanations have focussed on how people interpret their experiences as important in the development or maintenance of psychotic symptoms. The source monitoring hypothesis suggests that people often confuse external and internal stimuli, and that symptoms, such as hearing voices are the result of misattributing inner speech as coming from an external source (Bentall, 2013). Similarly, theories proposed to explain paranoid delusions suggest that paranoia is an exaggerated but understandable wariness about the intentions of others (Freeman, et al. 2005), which often occurs following an actual experience of victimisation (Janssen et al., 2003), or early life experience which disrupts the development of attachment relationships (Bentall, Wickham, Shevlin & Varese, 2012). Other cognitive explanations suggest that delusions are an attempt to explain anomalous experiences, such as hearing voices, or biased reasoning resulting in the person 'jumping to conclusions' (Bentall, 2013). It has also been suggested that delusions can serve to protect the individual from low selfesteem through a tendency to attribute negative experiences to the actions of others (Kinderman & Bentall, 1997).

#### 2.4 Integrative approach

The fact that there is no accepted cause of schizophrenia or its symptoms, adds weight to arguments that the concept of schizophrenia is not particularly valid or useful. Of the psychiatric population about a quarter of people report hearing voices, who have a range of different diagnoses, indicating that symptoms are not specific to one diagnosis (Bentall, 2003). These findings have led to a different conceptualisation of the 'symptoms' associated with schizophrenia and an exploration of how common these experiences may be in the general population. Evidence suggests that between 10 and 15% of ordinary healthy people hear voices and are not distressed by them or in contact with psychiatric services (Johns & van Os, 2001). Following a bereavement it can be considered "normal and helpful" to hallucinate the dead spouse, most commonly soon after their death, but for some people for many years later (Fenwick, 2010). Similarly, studies suggest that 45% of the general population have 'unusual' beliefs such as believing in telepathy (Knight, 2006); that many have experienced intrusive disturbing thoughts, 54% admitted thoughts of hitting someone with their car, and 52% of committing a disgusting sex act (Purdon & Clark, 1992); and that people with strong religious beliefs could also be considered to have delusions similar to people diagnosed with psychosis (Peters, Day, McKenna, & Orbach, 1999). This research strongly suggests that psychotic symptoms are on a continuum, and are present in the general population as well as those diagnosed with a mental disorder (van Os, Hanssen, Bijl & Ravelli, 2000); and the 'continuum model' of psychosis has now received widespread support (Kinderman, et al., 2013; Neuvo, et al., 2012; Read, et al., 2005; Johns & van Os, 2001). Changing the way we describe psychosis; from 'symptoms' to 'experiences', 'hallucinations' to 'hearing voices', and 'delusions' to 'unusual beliefs', helps to normalise people's experiences. This new language moves away from biomedical, psychiatric interpretations of distress and supports the interpretation that all experience is on a continuum from ordinary to extraordinary (Kinderman & Cooke, 2000).

Psychological models which attempt to integrate the above approaches include the stress-vulnerability model proposed by Zubin and Spring (1977). This model states that when a person experiences stress their underlying vulnerability (which may have ecological, genetic, developmental or

neuropsychological origins) is the factor which affects whether they are able to tolerate the situation, or whether they become overwhelmed and experience symptoms (Zubin & Spring, 1977). Another integrative model suggests that psychological processes mediate the effects of biological, social and circumstantial factors to explain why some people do and some do not experience symptoms, when they have had similar vulnerabilities and life experiences (Kinderman & Tai, 2009). These models offer a trans-diagnostic approach towards people diagnosed with any mental disorder, and fit with a normalising, humanistic perspective which takes into account the individual's social and cultural context, as well as their specific difficulties.

#### **3** Treatment and outcomes

#### 3.1 Medication

Despite the considerable controversy regarding biomedical approaches towards mental disorder, particularly schizophrenia, the first line of treatment for someone experiencing symptoms of psychosis is still medication (NICE, 2010). Critiques of antipsychotics have shown that they only work for some, and around 40% of people have a poor response (Kane, et al. 1996). Moncrieff (2008) has argued that antipsychotics are essentially major tranquilisers and are effective in treating symptoms of psychosis in some people due to their sedative effects rather than any specific action on particular symptoms (Moncrieff, 2009). She argues that our understanding of what psychiatric drugs do is fatally flawed and that this has led to the misinterpretation of evidence and obstruction of alternative explanations (Moncrieff, 2008). More importantly, this misunderstanding has had significant and damaging effects on huge numbers of people due to the iatrogenic effects of medication and the oppressive practices of traditional psychiatric care (Whitaker, 2002).

Extra pyramidal side effects including Parkinsonian symptoms, acute dystonais, restlessness and tardive dyskinesia are common in the older neuroleptics such as chlorpromazine. But newer atypical antipsychotics have metabolic and antimuscarinic side effects, such as dry mouth, blurred vision, constipation, difficult swallowing drowsiness and weight gain. More severe side effects can include agranulocytosis, anaemia, neutropenia, hypertension, diabetes and increased risk of cardiovascular diseases (Ucok & Gaebel, 2008). Moreover, suicide rates have been shown to increase as a result of

anti-psychotic medication (Healy, et al. 2012). Considering that: response rates to antipsychotics vary; that many people do not respond at all, that side effects adversely affect physical health and quality of life, and that risk of suicide increases; it is concerning that some attitudes towards treatment have not changed. Despite evidence to the contrary many still describe antipsychotics as "indisputably effective" in treating schizophrenia (Pomili, et al. 2013). Perhaps even more worrying is that electroconvulsive therapy is still being used to treat people diagnosed with schizophrenia (Pomili, et al. 2013), in the face of evidence which suggests it may be even less effective than antipsychotic medication (NICE, 2003).

#### 3.2 Stigma, discrimination and social exclusion

"People with psychiatric diagnoses are arguably one of the most socially excluded groups in society" (Kinderman & Cooke, 2000 p.53). Research suggests that 71% of people with a mental health problem are victimised in their community; that 36% did not report this due to fears of not being believed; and 60% of those who did report it felt they were not taken seriously (Mind, 2007). People diagnosed with schizophrenia are likely to die 10 years younger than the general population, often attributed to high suicide rates and increased physical health problems, such as cardiovascular disease and diabetes (Connolly & Kelly, 2005). Although medication and lifestyle factors are likely to play a large role in health outcomes, so do stress levels and relative poverty (Wilkinson & Pickett, 2010). The impact of social factors such as housing, social support, education and employment cannot be underestimated, and are all affected by the stigma and discrimination associated with mental health problems (Corry, 2008).

The impact of being diagnosed with a mental disorder, particularly schizophrenia, has significant psychological consequences for individuals. Romme (2009) describes the harmful effects of labelling someone with an illness as "alienating the person from their experience", making them a "passive recipient of disease", which "inhibits their existing capability and potential", and slows recovery. In addition people usually receive negative, pessimistic, even hopeless messages about the likelihood of recovery and are subjected to frightening, and sometimes traumatising, experiences such as admission to psychiatric hospital and limited provision of treatment options (Dillon, 2009). First hand accounts

from people who hear voices demonstrate just how devastating these messages can be, particularly at a time when people are already experiencing extreme distress (Romme, 2009).

#### 3.3 The hearing voices movement

Service users have long campaigned for a different approach towards the treatment and care of people diagnosed with schizophrenia (James, 2001). The pioneering research of Romme & Escher, which discovered that some people who experience 'auditory hallucinations' are not in contact with psychiatric services, cope well with daily life, and even find some voices helpful or benevolent, helped to facilitate change (Romme & Escher, 1993). A different approach towards 'hearing voices' emphasising that hearing voices 'is a sign of a problem', rather than a mental illness, and encouraging acceptance and understanding of a person's experience was embraced by voice hearers. The first hearing voices group in the UK took place in 1988 and developed into the Hearing Voices Network (www.hearing-voices.org); this network has continued to grow nationally and internationally (www.intervoiceonline.org) ever since. Listening to 'cure' people of mental illness, to instead promoting 'recovery', emphasising hope, optimism, personal meaning and potential (Roberts & Wolfson, 2004). This recovery focussed approach views service users as 'experts by experience' whose voices and opinions are just as important as 'experts by profession' such as psychiatrists or psychologists, when considering how to help people who have mental health problems.

Encouragingly, since 1998 health services in the UK have prioritised service user involvement in planning and delivery of care and in health services research (Department of Health, 1998; Frankham, 2009) in order to develop more relevant, meaningful approaches for clients. There is growing evidence that this is actually happening and has been demonstrated to show benefit to service users (Thornicroft & Tansella, 2005). One of the main areas highlighted in this change has been the call from service users for more access to talking therapies (National Institute for Mental Health in England (NIMHE), 2005).

17

#### 3.4 Talking therapies

The cognitive interpretation of experiences is central to understanding how people respond to unusual 'symptoms' (Morrison, Renton, Dunn, Williams & Bentall, 2004). For example, people who perceive voices as benevolent are more likely to engage with them and find them reassuring; compared to people who perceive voices as malevolent, who are more likely to feel frightened and try to resist the voices (Chadwick & Birchwood, 1995). Cognitive behaviour therapy (CBT) originally designed for people diagnosed with depression (Beck, 1967) has been adapted to the experiences associated with psychosis (Garety, Fowler & Kuipers, 2000). CBT helps the person understand how their interpretation of an experience (based on their underlying assumptions about the world), links to their emotional and behavioural responses. It also shows how they might inadvertently maintain their problematic experience by their interpretation and use of behaviours which help them to feel safe (see Figure 2). For example, following a trigger (internal or external) someone hears a voice (or perceives a thought to be a voice), which they misinterpret as threatening (e.g. "the devil is talking to me"), then they are likely to experience low mood and physiological arousal which lead to a vicious circle in which they continue to hear more voices. If they also attempt to stay safe by constantly checking for more signs of voices (hypervigilance) this is also likely to increase the occurrence of voices and prevent disconfirmation of their misinterpretation (Morrison, 1998).

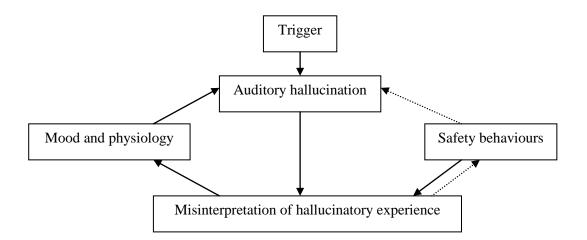


Figure 2. Cognitive behavioural interpretation of voice hearing (Morrison, 1998 p. 296)

In psychological therapy the collaborative development of an idiosyncratic formulation of the client's experience is a normalising, person-centred approach to reducing distress, which is compatible with recovery models of care (Kinderman, 2009). There is now significant evidence that CBT can be effective for people experiencing psychosis; in terms of reducing rehospitalisation rates, duration of hospitalisation, symptom severity and improving mood; and it is now a suggested approach in guidance for professionals on the treatment of schizophrenia (NICE, 2010).

#### 4 Considerations for inpatient care

While the evidence is promising for psychological therapy based on studies of people with psychosis living in the community, there has been less attention paid to the provision of such therapy for people in hospital. CBT therapy is not routinely available to people while they are in hospital and specific interventions for psychosis are often not offered at all (Hanna, 2009). However, NICE guidance suggests that psychological interventions should be an option for people, even in acute phases of distress (NICE, 2010).

There are clearly challenges in providing psychological therapy for people in acute services. The biomedical model is dominant, treatment is usually based on medication, and the chaos and unpredictability of the ward setting do not create ideal conditions for the "cool reflection" needed for CBT (Clarke, 2009). Containing crisis and providing safety are essential in acute inpatient stays, but it is questionable whether acute inpatient stays can be considered truly therapeutic when many people do not learn further coping skills to face the problems they are discharged back into, and are later readmitted (commonly known as 'revolving door' patients). But what if they could be? There are examples of developing good practice which suggest that it is possible to make inpatients stays more therapeutic (Clarke, 2009) and standards are being set by the Royal College of Psychiatrists to encourage this (Cresswell & Beavon, 2010). Meeting the most basic of these standards requires that simple CBT-based interventions are available for patients in line with NICE guidance, but to achieve the highest standards wards must provide specialist interventions, such as CBT for psychosis (Hanna, 2009).

19

This thesis focuses on further exploration of this new approach towards psychological care for inpatients. The first step in developing this work was to undertake a systematic review of the literature to understand what current evidence exists for CBT for psychosis with acute inpatients. This review is presented in Chapter 2. Based on the findings of the systematic review and exploration of other similar research, we designed a mixed methods study involving a controlled trial to examine the clinical application of a group CBT intervention. A paper describing this study and its results comprises Chapter 3. The conclusions of this work are discussed in Chapter 4 which reflects on findings of the intervention study, the process of conducting the groups, and how the findings can be fed back to the research participants. The final section of this thesis considers how the knowledge gathered as part of this work could be used to develop further research and presents a proposal in Chapter 5.

Word Count: 5,151

#### **5** References

- American Psychiatric Association (2000). *Diagnostic and statistical manual of mental disorder:* DSM-IV-TR (4th ed). Washington: American Psychiatric Association.
- Andresen, N.C. & Black, D.W. (1996). *Introductory textbook of psychiatry* (2<sup>nd</sup>ed). Washington: American Psychiatric Press.
- Andrew, E.M., Gray, N.S. & Snowden, R.J. (2008). The relationship between trauma and beliefs about hearing voices: a study of psychiatric and non-psychiatric voice hearers. *Psychological Medicine*, 38, 1409-1417.
- BBC News (1999). Schizophrenia: The facts, BBC News. Retrieved May 18, 2013, from http://news.bbc.co.uk/1/hi/health/medical\_notes/218389.stm
- Bebbington, P.E., Bhugra, D., Brugha, T.S., Brugha, T., Singleton, N., Farrell, M., et al., (2004).
  Psychosis, victimisation and childhood disadvantage: Evidence from the second British
  National Survey of Psychiatric Morbidity. *British Journal of Psychiatry*, 185, 220–6.
- Beck, A.T. (1967). Depression: Clinical, experimental, and theoretical aspects. New York: Hoeber
- Bentall, R.P. (2003). Madness explained: psychosis and human nature. London: Penguin Books Ltd.
- Bentall, R. (2006). Madness explained: why we must reject the Kraepelinian paradigm and replace it with a `complaint-orientated' approach to understanding mental illness. *Medical Hypotheses*, 66, 220-233.
- Bentall, R., Wickham, S., Shevlin, M. & Varese, F. (2012). Do specific early life adversities lead to specific symptoms of psychosis? *Schizophrenia Bulletin*, 38, 534-540.
- Bentall, R. (2013). Understanding psychotic symptoms: Cognitive and integrative models. In J. Read & J. Dillon (Eds.). *Models of Madness: Psychological, social and biological approaches to psychosis,* (2<sup>nd</sup> ed., pp. 220-237). Sussex: Routledge.

Bentall ,R.P., Jackson, H.F. & Pilgrim, D. (1988). Abandoning the concept of 'schizophrenia': some implications of validity arguments for psychological research into psychotic phenomena. *British Journal of Clinical Psychology*, 27, 303-324.

Boyle, M. (1990). Schizophrenia: A Scientific Delusion. London: Routledge.

- Boyle, M. (2002). It's all done with smoke and mirrors. Or, how to create the illusion of a schizophrenic brain disease. *Clinical Psychology*, 12, 9-16.
- Brockington, I. (1992). Schizophrenia: yesterday's concept. European Psychiatry, 7, 203-207.
- Brown, G.W., Birley, J.L.T. & Wing, J. K. (1972). Influence of family life on the course of schizophrenic disorders: A replication. *British Journal of Psychiatry*, 121, 241-258.
- Chadwick, P.D.J. & Birchwood, M.J. (1995). The omnipotence of voices II. The beliefs about voices questionnaire (BAVQ). *British Journal of Psychiatry*, 166, 773-776.
- Chua, S. E. & McKenna, P. J. (1995). Schizophrenia–a brain disease: A critical review of structural and functional cerebral abnormality in the disorder. *British Journal of Psychiatry*, 166, 563-582.
- Clarke, I. (2009). Introduction: The case for optimism. In I. Clarke & H. Wilson (Eds.) *Cognitive behaviour therapy for acute inpatient mental health units: Working with staff, clients and the milieu,* (pp.1-9). London & New York: Routledge, Taylor & Francis Group.
- Connolly, M. & Kelly, C. (2005). Lifestyle and physical health in schizophrenia. *Advances in Psychiatric Treatment*, 11, 125-132.
- Corry, P. (2008). *Stigma Shout: Service user and carer experiences of stigma and discrimination*. London: Time to Change.
- Cresswell, J. & Beavon, M. (2010). Accreditation for Inpatient Mental Health Services (AIMS). London: The Royal College of Psychiatrists Centre for Quality Improvement.
- Department of Health (DoH) (1998). In the Public Interest: Developing a Strategy for Public Participation in the NHS. London: DoH.

- Dillon, J. (2009). The Fifty Stories. In M. Romme, S. Escher, J. Dillon, D. Corstens & M. Morris(Eds.) *Living with Voices: 50 stories of recovery (pp.188-193)*. Ross-on-Wye: PCCS Books.
- Fenwick, P. (2010). The neurophysiology of religious experience. In I. Clarke (Ed.), *Psychosis and Spirituality: Consolidating the New Paradigm* (2<sup>nd</sup> ed. pp. 9-19). Sussex: Wiley-Blackwell.
- Frankham, J. (2009). Partnership research: a review of approaches and challenges in conducting research in partnership with service users. Discussion Paper. NCRM. (Unpublished). Retrieved 24 April, 2013 from http://eprints.ncrm.ac.uk/778/
- Freeman, D., Garety, P.A., Bebbington, P.E., Smith, B., Rollinson, R., Fowler, D. et al., (2005).
  Psychological investigation of the structure of paranoia in a non-clinical population. *British Journal of Psychiatry*, 186, 427-435.
- Frith, C. D., & Corcoran, R. (1996). Exploring "theory of mind" in people with schizophrenia. *Psychological Medicine*, 26, 521-530.
- Garety, P. A., Fowler, D. & Kuipers, E. (2000) Cognitive-behavioral therapy for medication-resistant symptoms. *Schizophrenia Bulletin*, *26*, 73–86.
- Gottesman, I. I. & Shields, J. (1972). *Schizophrenia and Genetics: A Twin Vantage Point*. New York: Academic Press.
- Gottesman, I. I. & Shields, J. (1982). *Schizophrenia: The Epigenetic Puzzle*. Cambridge: Cambridge University Press.
- Hanna, J. (2009). CBT on the wards: standards and aspirations. In I. Clarke & H. Wilson (Eds.)
   *Cognitive behaviour therapy for acute inpatient mental health units: Working with staff, clients and the milieu,* (pp.11-22). London & New York: Routledge, Taylor & Francis Group.
- Healy, D., Le Noury, J., Harris, M., Butt, M., Linden, S., Whitaker, C., et al., (2012). Mortality in schizophrenia and related psychoses: data from two cohorts, 1875–1924 and 1994–2010. *British Medical Journal Open*, 2, e001810. DOI: 10.1136/bmjopen-2012-001810.

- Hooley, J.M. (1985). Expressed emotion: A review of the critical literature. *Clinical Psychology Review*, 5, 119-139.
- Hooley, J.M. (2010). Social factors in schizophrenia. *Current Directions in Psychological Science*, 19, 238-242.

Humphrey, C. (1996). Shamans and Elders. Oxford: Clarendon Press.

- Intervoice (2011). *John Forbes Nash*. The International Community for Hearing Voices. Retrieved 1 May 2013, from http://www.intervoiceonline.org/2483/voices/famous-people/john-forbesnash.html
- James, A. (2001). *Raising Our Voices: an account of the Hearing Voices Movement*. Gloucester: Hansell.
- Janssen, I., Hanssen, M., Bak, M., Bijl, R.V., de Graaf, R. Vollebergh, W., et al (2003).Discrimination and delusional ideation. *British Journal of Psychiatry*, 182, 71–76.
- Janssen, I., Krabbendam, L., Bak, M., Hanssen, M., Vollebergh, W., de Graaf, R., et al., (2004). Childhood abuse as a risk factor for psychotic experiences. *Acta Psychiatria Scandanavica*, 109, 38–45.
- Johns, L. C., & van Os, J. (2001). The continuity of psychotic experiences in the general population. *Clinical Psychology Review*, 21, 1125-1141.
- Kane, J. M., Schooler, N. R., Marder, S., Wirshing, W., Ames, D., Umbricht, D., et al. (1996)
   Efficacy of clozapine versus haloperidol in a long-term clinical trial. *Schizophrenia Research*, 18, 127.
- Kendell, R.E., Cooper, J.E., Gourlay, A.J., Copeland, J. R. M., Sharpe, L. & Gurland, B. J. (1971).
   Diagnostic criteria of American and British psychiatrists. *Archives of General Psychiatry*, 25, 123-130.
- Kendell, R., & Jablensky, A. (2003). Distinguishing between the validity and utility of psychiatric diagnoses. The American Journal of Psychiatry, 160, 4-11.

- Kerr, N., Dunbar, R.I.M. & Bentall, R.P. (2003). Theory of mind deficits in bipolar affective disorder. *Journal of Affective Disorders*, 73, 253-259.
- Kinderman, P. (2009). New ways of working and the provision of CBT in the inpatient setting. In I.
  Clarke & H. Wilson (Eds.) *Cognitive behaviour therapy for acute inpatient mental health units: Working with staff, clients and the milieu,* (pp.22-30). London & New York: Routledge, Taylor & Francis Group.
- Kinderman, P. & Bentall, R. (1997). Causal attributions in paranoia: Internal, personal and situational attributions for negative events. *Journal of Abnormal Psychology*, 106, 341-345.
- Kinderman, P. & Cooke, A. (2000). *Recent advances in advances in understanding mental illness and psychotic experiences.* Leicester: The British Psychological Society.
- Kinderman, P. & Tai, S. (2009). Psychological Health and Well-being-A New Ethos for Mental Health. British Psychological Society. Retrieved 2 May 2013, from http://www.bps.org.uk/sites/default/files/images/psychological\_health\_and\_well-being\_-\_a\_new\_ethos\_for\_mental\_health.pdf
- Kinderman, P., Read, J., Moncrieff, J. & Bentall, R. (2013). Drop the language of disorder. *Evidenced Based Mental Health*, 16, 2-3.
- Knight, T. (2006) Beyond Belief. Peter Lehmann Publishing. Retrieved Jan 17, 2013, from http://www.peter-lehmann-publishing.com/books/beyond-belief.pdf
- Lincoln, Y.S., & Guba, E.G. (2000). Paradigmatic controversies, contradictions, and emerging confluences. In N.K. Denzin, & Y.S. Lincoln (Eds.), *Handbook of Qualitative Research* (2<sup>nd</sup> ed. pp.163-189). London: Sage Publications.
- Mc Carthy, S. (2011). Voices form the storm: A critical review of the quantitative studies of auditory verbal hallucinations and childhood sexual abuse. *Clinical Psychology Review*, 33, 983-992.

Meltzer, H.Y. (1987). Biological studies of in schizophrenia. Schizophrenia Bulletin, 13, 77-111.

- Mind (2007). Another Assault. Mind's campaign for equal access to justice for people with mental health problems. London: Mind publications.
- Moncrieff, J. (2008). *The Myth of the Chemical Cure: A critique of psychiatric drug treatment*. Hampshire: Palgrave Macmillan.
- Moncrieff, J. (2009). A critique of the dopamine hypothesis of schizophrenia and psychosis. *Harvard Review of Psychiatry*, 17, 214-225.

Moncrieff, J. (2010). Psychiatric diagnosis as a political device. Social Theory & Health, 8, 370-382.

- Morrison, A. P. (1998). A cognitive analysis of auditory hallucinations: Are voices to schizophrenia what bodily sensations are to panic? *Behavioural and Cognitive Psychotherapy*, 26, 289–302.
- Morrison, A.P., Renton, J.C., Dunn, H., Williams, S. & Bentall, R.P. (2004). *Cognitive therapy for psychosis: A formulation based approach*. Hove & New York: Brunner-Routledge, Taylor & Francis Group.
- National Institute for Health and Clinical Excellence (NICE) (2003). *Guidance on the use of electroconvulsive therapy. Technology Appraisal 59.* London: NICE.
- National Institute for Health and Clinical Excellence (NICE) (2010). *Schizophrenia: The NICE* guideline on core interventions in the treatment and management of schizophrenia in adults in primary and secondary care. London: The British Psychological Society and the Royal College of Psychiatrists.

 National Institute for Mental Health (2005). *The Science of Mental Illness*. Retrieved, 1 May, 2013 from http://science.education.nih.gov/supplements/nih5/mental/guide/info-mental-a.htm
 National Institute for Mental Health in England (NIMHE) (2005). *NIMHE Guiding Statement on Recovery*. London: NIMHE.

- Neuvo, R., Chatterji, S., Verdes, E., Naidoo, N., Arango, C. & Ayuso-Mateos, J.L. (2012). The continuum of psychotic symptoms in the general population: A cross national study. *Schizophrenia Bulletin*, 38, 475-485.
- Norgaard, J., Arnfred, S.M., Handest, P. & Parnas, J. (2008). The Diagnostic Status of First-Rank Symptoms. *Schizophrenia Bulletin*, 34, 137–154.
- Peters, E., Day, S., McKenna, J. & Orbach, G. (1999). Delusional ideation in religious and psychotic populations. *British Journal of Clinical Psychology*, 38, 83-96.
- Pilgrim, D. (2007). The survival of psychiatric diagnosis. Social Science and Medicine, 65, 536-547.
- Pilgrim, D. (in press). The failure of modern psychiatry and some prospects of scientific progress offered by critical realism. *Journal of Critical Realism*.
- Pomili, M., Lester, D., Dominici, G., Longo, L., Marconi, G., Forte, A. et al., (2013). Indications for electroconvulsive treatment in schizophrenia: A systematic review. *Schizophrenia Research*, 146, 1-9.
- Purdon, C. & Clark, D.A. (1992) Obsessive intrusive thoughts in nonclinical subjects. Part 1: Content and relation with depressive, anxious and obsessional symptoms. *Behaviour Research and Therapy*, 31, 713-720.
- Read, J. (1997). Child abuse and psychosis: a literature review and implications for professional practice. *Professional Psychology: Research and Practice*, 28, 448-456.
- Read, J. & Bentall, R. (2012). Negative childhood experiences and mental health: theoretical, clinical, and primary prevention implications. *British Journal of Psychiatry*, 200, 89-91.
- Read, J., Perry, B., Moskowitz, A. & Connolly, J. (2001). The contribution of early traumatic events to schizophrenia in some patients: a Traumagenic Neurodevelopmental model. *Psychiatry*, 64, 319–345.

- Read, J., van Os, J., Morrison, A.P. & Ross, C.A. (2005). Childhood trauma, psychosis and schizophrenia: a literature review with theoretical and clinical implications. *Acta Psychiatria Scandanavica*, 112, 330–50.
- Roberts, G. & Wolfson, P. (2004). The rediscovery of recovery: open to all. *Advances in Psychiatric Treatment*, 10, 37-48.
- Romme, M. (2009). The disease concept of hearing voices and its harmful aspects. In M. Romme, S. Escher, J. Dillon, D. Corstens & M. Morris (Eds.). *Living with Voices: 50 stories of recovery* (pp.23-39). Ross-on-Wye: PCCS Books.

Romme, M. & Escher, S. (1993). Accepting Voices. London: Mind Publications.

- Ross, C.A., Anderson, G. & Clarke, P. (1994). Childhood abuse and the positive symptoms of schizophrenia. *Hospital & Community Psychiatry*, 42, 489-491.
- Spence, S.A., Hirsch, S.R., Brooks, D.J. & Grasby, P.M. (1998). Prefrontal cortex activity in people with schizophrenia and control subjects: evidence from positron emission tomography for remission of "hypofrontality" with recovery from acute schizophrenia. *British Journal of Psychiatry*, 172, 316-323.
- The International DSM-5 Response Committee (2013). Statement of Concern about the Reliability, Validity, and Safety of DSM-5. Retrieved 24 April 2013, from http://dsm5response.com/statement-of-concern
- Thornicroft, G. & Tansella, M. (2005). Growing recognition of the importance of service user involvement in mental health service planning and evaluation. *Epidemiologia e Psichiatria Sociale*, 14, pp 1-3.
- Tobert, N. (2010). The polarities of consciousness. In I. Clarke (Ed.) *Psychosis and Spirituality: Consolidating the New Paradigm* (2<sup>nd</sup> ed. pp. 37-48). Sussex: Wiley-Blackwell.
- Ucok, A. & Gaebel, W. (2008). Side effects of atypical antipsychotics: a brief overview. *World Psychiatry*, 7, 58-62.

- Van Kammen, D.P. & Kelly, M. (1991). Dopamine and norepinephrine activity in schizophrenia: an integrated perspective. *Schizophrenia Research*, 4, 173-191.
- Van Os, J. (2010). Are psychiatric diagnoses of psychosis scientifically useful? The case of schizophrenia. *Journal of Mental Health*, 19, 305-317.
- Van Os, J., Hanssen, M., Bijl, R.V., & Ravelli, A. (2000). Strauss (1969) revisited: A psychosis continuum in the normal population? *Schizophrenia Research*, 45, 11–20.
- Varese, F., Smeets, F., Drukker, M., Lieverse, R., Lataster, T., Viechtbauer, W., et al. (2012).
  Childhood adversities increase the risk of psychosis: A meta-analysis of patient-control, prospective and cross-sectional cohort studies. *Schizophrenia Bulletin*, 38, 661-671.
- Vaughn, C.E. & Leff, J.P. (1976). The influence of family and social factors on the course of psychiatric illness. *British Journal of Psychiatry*, 129, 125-137.
- Whitaker, R. (2002). Mad in America: Bad science, bad medicine and the enduring mistreatment of the mentally ill. New York: Perseus Books.
- Whitfield, C. L., Dube, S.R., Felitti, V.J. & Anda, R.F. (2005). Adverse childhood experiences and hallucinations. *Child Abuse and Neglect*, 29, 797-810.
- Wilkinson, R. & Pickett, K. (2010). The Sprit Level: Why Equity is Better for Everyone. London: Penguin Books.
- World Health Organisation (WHO) (2010). *ICD-10 :International Classification of Diseases and Related Health Problems.* 10<sup>th</sup> Edition. Malta: WHO.
- World Health Organisation (2011). Mental Health: A state of wellbeing. Retrieved May 18, 2013 from: http://www.who.int/features/factfiles/mental\_health/en/
- Zubin, J. & Spring, B. (1977). Vulnerability; a new view of schizophrenia. Journal of Abnormal Psychology, 86, 103-126.

# Chapter Two: Systematic Review

## Journal

Clinical Psychology Review<sup>1</sup>

### Title

Group CBT for psychosis in acute care: A review of outcome studies

### Authors

Mary Forsey\*, Thomas Speight, May Sarsam, William Sellwood

\*Department of Clinical Psychology, University of Liverpool UK

### Address

School of Health and Wellbeing, Institute of Psychology, Health and Society, University of Liverpool,

Whelan Building, Brownlow Hill, Liverpool, L69 3GB, UK. Tel: +44 151 794 5525; Fax: +44 151

794 5537; Email: mforsey@liv.ac.uk

<sup>&</sup>lt;sup>1</sup> Journal requirements – Abstract (200 words), Highlights (85 characters with spaces), Article (50 pages including references and tables ).

#### Abstract

#### Background and aim

There is evidence that group cognitive behavioural therapy for psychosis (CBTp) is an effective treatment, but much of this research has been conducted with outpatient populations. The aim of this review was to determine the utility of group CBTp for inpatients.

#### Method

We systematically searched Scopus, Web of Science and EBSCO electronic databases to identify relevant research. We reviewed the resulting articles and excluded those which did not meet inclusion criteria. We independently reviewed the quality of the resulting papers.

#### Results

Fourteen articles relating to ten studies were identified. Two were randomised controlled trials; two were cohort studies and the rest were pre-post intervention studies. There was considerable heterogeneity between the studies and all had methodological limitations resulting in many which were poor quality.

#### Conclusion

There is not enough evidence to draw any strong conclusions regarding the utility of group CBTp for inpatients due to the small number of studies and limitations in quality and generalisability. However, the evidence suggests positive trends towards the reduction of distress associated with psychotic symptoms, increased knowledge, decreased affective symptoms and reduced readmissions. Further research is needed using more rigorous methodology.

## Highlights

- This is the first systematic review of the evidence for group CBTp with inpatients.
- Current evidence from small scale studies of group CBTp show promise.
- Further research is needed from well designed, longitudinal, controlled studies.

### Key words

Group therapy, cognitive-behaviour therapy (CBT), psychosis, inpatient, acute care

#### **1** Introduction

The current global financial crisis is a macroeconomical factor leading to cuts in funding for mental health care provision around the world (World Health Organisation (WHO), 2013). The impact of fewer available resources in health and social care are likely to increase the level of need for those with mental health problems and create new groups of vulnerable people, such as the young unemployed (WHO, 2013). Changing the way services are delivered in order to improve quality and reduce costs is a key feature of governmental strategies for mental health services in the UK (Department of Health (DoH), 2011), Europe (European Commission, 2005) and around the world (Kirby, 2006; National Institute for Mental Health (NIMH), 2008). A common objective of these strategies is that people should be empowered to lead the lives they want to, offered choice of psychological therapies, supported in their recovery from mental health difficulties and that services should tackle inequalities in service provision (DoH, 2011).

The costs of mental ill health are high, approximating to 3-4% of GDP in the EU, mainly through lost productivity (European Commission, 2005). The costs of severe mental health problems, such as those diagnosed with schizophrenia, have been estimated at \$65 billion in the US (American Psychiatric Association, 2009), and at £6.7 billion across the life course in the UK (Centre for Mental Health, 2010). Acute inpatient hospital stays are one of the most expensive interventions accounting for around 56% of the total money spent caring for people with a diagnosis of schizophrenia (Knapp, et al., 2002). The treatment of severe and complex mental illnesses is particularly expensive as those patients with so called 'treatment-resistant' symptoms are likely to have repeated hospital admissions which can last for several months or longer each year. Patients diagnosed with schizophrenia have some of the highest readmission rates (Haywood, et al., 1995) and account for half of all prolonged hospital admissions of more than 90 days (Thompson, et al., 2004). Overall, 4.5 out of every 1000 people in the UK are thought to be affected by symptoms associated with schizophrenia (Tandon, Keshavan & Nasrallah, 2008), and cost around a quarter of the National Health Service (NHS)'s annual spend on mental health (National Institute for Health and Clinical Excellence (NICE), 2010).

However, labelling patients as 'treatment-resistant' sends a rather disempowering, hopeless message that they are unlikely to recover and cannot be helped by current treatment. Instead it is important to consider what treatment and recovery focussed support services are being offered to this group of people. Currently, the main treatments offered to people diagnosed with schizophrenia are pharmacological (van Os & Kapur, 2009) and evidence suggests that around 50% of people with a diagnosis of schizophrenia in the UK (Harrington, et al., 2002), and up to 70% worldwide (Tani, Uchida, Suzuki, Fujii & Mimura, 2013) are prescribed more than one antipsychotic medication, despite guidelines which recommend monotherapy (NICE, 2010). Yet antipsychotic medication is only effective in reducing symptoms for around one third of patients (Meuser & McGurk, 2004) and for the majority specialist psychological therapies are not available (Pilling, et al., 2002; van Os & Kapur, 2009). Therefore, the label 'treatment-resistant' may actually mean 'medication-resistant', or more simply that medication has limited effects.

There is growing evidence that talking therapies, particularly cognitive behaviour therapy for psychosis (CBTp) are useful in treating the 'symptoms' of schizophrenia and a number of metaanalyses have shown robust positive findings for the effectiveness of treatment approaches aimed different positive and negative symptoms, depression and anxiety (Dickerson, 2000 & 2004; Pilling, et al., 2002; Zimmerman, Favrod, Trieu & Pomini, 2005; Wykes, Steel, Everitt & Tarrier, 2008). Trials combining CBTp with drug treatment have shown particularly large effect sizes (Turkington, Dudley, Warman, & Beck, 2004). However, there is variability in the degree to which this evidence has been incorporated in professional guidance (Gaebel, Weinmann, Sartorius, Rutz & McIntyre, 2005). In the U.S. and Canada psychological interventions are not recommended until after the acute phase (NIMH, 2004; Canadian Psychiatric Association, 2005); but in the UK and Australasia, CBTp is recommended starting in the acute phase or later (Royal Australian and New Zealand College of Psychiatrists (RANZCP), 2005; NICE, 2010). This demonstrates a considerable step forward in terms of offering patients choice and a more hopeful message about recovery, regardless of their current circumstances. Although the evidence is mixed as to whether CBTp is more effective than other psychosocial interventions (Jones, Hacker, Cormac, Meaden, & Irving, 2012), there is promising evidence that CBTp may have superior effects in the long term by reducing hospital readmissions (Sarin, Wallin & Widerlöv, 2011) and reducing the length of inpatient stays (NICE, 2010).

Most research into the effectiveness of CBTp has been conducted with patients living in the community and has examined the delivery of individual CBT, in which the patient meets the therapist for one to one sessions, usually once a week. But there are questions about the generalisability of outpatient research to inpatients, who are distinct in a number of ways, notably that they are more distressed, often suffering from more severe problems and are more likely to have co-morbid difficulties (Kosters, Burlinghame, Nachtigall, & Strauss, 2006). With the NHS attempting to cut costs, offering individual therapy to all patients with a diagnosis of schizophrenia is expensive and unrealistic without significantly more resources (Guaiana, Morelli & Chiodo, 2012). Instead group CBTp offers a way of streamlining resources so that one therapist can see multiple patients in one session and improve access to therapy for a greater number of people (Lawrence, Bradshaw & Mairs, 2009).

There has been growing interest in group CBT for people with severe and complex mental health problems; whether this is as effective as individual therapy (Morrison, 2001), or whether it may provide important peer support which is not accessible through individual therapy alone (Newton, Larkin, Melhuish, & Wykes, 2007). Reviews have found that group CBTp is as effective as individual therapy for patients with a diagnosis of schizophrenia living in the community (Wykes, et al., 2008), and is possibly more effective if used as an early intervention (Saksa, Cohen, Srihari, & Woods, 2009), although further evidence is needed (Lockwood, Page & Conroy-Hiller, 2004). However, little research has examined the effectiveness of group CBTp with people while they are inpatients.

Previous arguments that patients in the acute phase of psychosis are not able to engage in talking therapies have been challenged by counter arguments from experienced clinicians (Hanna, 2009; Freemantle & Clarke, 2009; Fagin, 2010) and guidance which recommends CBTp in the acute stages of psychosis (RANZCP, 2005; NICE, 2010). In line with arguments from service users and carers that there must be more choice of treatment available to patients while they are in hospital (DoH, 2007),

recent government schemes have offered incentives for rewarding best practice on hospital wards, such as the 'star wards' scheme which encourages all hospitals to offer ward based talking therapy groups (Bright, 2006). However, the evidence base for some therapies is still developing and there has been little research evaluating the use of group CBTp for inpatients. This led to the question of this review: Is group CBTp more effective for inpatients (in terms of reducing distress or unwanted symptoms or improving coping, self-efficacy or quality of life) than receiving standard hospital care?

Further the objectives of this paper are to:

- Identify all studies published in peer reviewed journals which provide evidence relevant to the research question;
- Review these studies with regards to their research findings and the quality of evidence;
- Identify gaps in the evidence base which can be explored through further research.

#### 2 Methods

#### 2.1 Inclusion criteria

We included comparison studies which used a CBT intervention (or interventions which were described as psycho-educational but were based on cognitive behavioural material), delivered in a group format, to inpatients with psychosis or a diagnosis of schizophrenia.

#### 2.2 Exclusion criteria

We excluded studies which: were not comparison studies (including those which only gave qualitative descriptions of groups); delivered individual therapy or provided group therapy that was not CBT based; used community or outpatient samples; used inpatients without psychosis or a diagnosis of schizophrenia; or were not written in English.

## **3** Search strategy

We searched Scopus, Web of Science and EBSCO (including Medline and PsychInfo) electronic databases (see Appendix 1 for detailed database coverage) using the following terms: Group AND (CBT OR cognitive behav\* therapy) AND (psychosis OR schizophren\* OR hearing voices) AND (inpatient OR hospital OR mental OR acute patient). The searches were not limited by year of publication and included MeSH headings if used by the database.

These searches, conducted in January 2013, generated 1,959 articles which were reviewed via title and abstract and excluded articles which were obviously not relevant or did not meet our inclusion criteria. We reviewed the resulting 183 articles after collecting the full text (and identified a further 4 articles from article reference lists) and further excluded articles which did not meet our inclusion criteria, recording the reason for exclusion. Following this process we included the remaining 14 relevant articles in our review (see Figure 1).

#### 3.1 Quality assessment

All 14 papers included in our final sample were assessed for quality of evidence. There is a wealth of tools available to evaluate the quality of evidence, such as the GRADE guidelines for individual studies (Atkins, et al., 2005), and the PRISM guidelines for systematic reviews (Moher, Liberati, Tezlaff, Altman & The PRISMA Group, 2009). However, given the small scale or pilot nature of many studies included in the review, these comprehensive tools were considered overly complex and exclusive, therefore a simple quality assessment protocol was devised based on general principles of evaluating research evidence (Gugiu & Gugiu, 2010). Authors MF and TS independently reviewed and scored each article in order to control for bias in assessment. Inter-rater agreement was found to be highly correlated using Pearson's (r=0.99, p<0.01), but the Kappa coefficient only showed moderate agreement (Kappa= 0.54, p<0.001) (Peat, 2001). Therefore, discrepancies in scoring were discussed and a joint decision was reached with regards to the overall quality score. All studies identified were included in the review and the ratings were used to indicate the relative value of evidence each study provided (see Appendix 2).

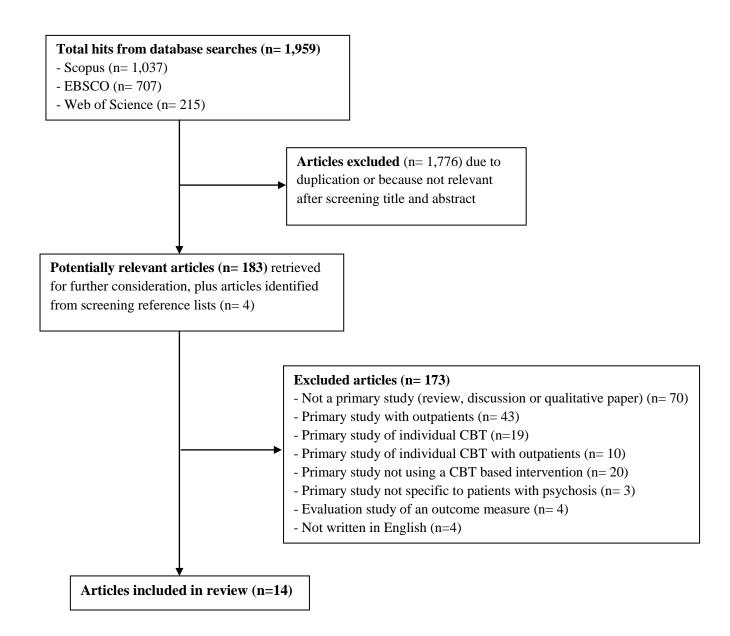


Figure 1. Electronic database search and review process

# 4 Results

The 14 papers reviewed related to 10 studies; four studies took place in the UK and one each from Finland, Germany, Italy, Norway, Turkey and America. There were a variety of designs; the majority were within-subject experimental studies (two involved randomized controlled trials and the rest used pre and post intervention measures). Two were between-subjects cohort studies. Table 1 shows the characteristics of studies included in the review and their quality review score.

#### 4.1 Randomised controlled trials

The largest experimental study was conducted in Germany (Bechdolf, at al., 2004; Bechdolf, Kohn, Knost, Pukrop & Klosterkotter, 2005; Bechdolf, et al., 2010) involving 88 inpatients who participated in either 16 sessions of manualised group CBTp or 8 sessions of group psychoeducation (PE) over 8 weeks and were followed up at six months and again at two years. Participants in the CBTp group had significantly lower readmission rates at 6 months (p=0.04), which held at two years (6/16 in CBT group versus 16/27 in PE group) but were no longer statistically significant (p=0.114). The authors also report significant improvement (p < 0.01) in general psychopathology, and (p < 0.05) self-reported quality of life (OoL), with small effect sizes (CBT=0.25; PE=0.29) in both experimental groups at 6 month follow up; but no differences between the two groups. At two years the CBTp group descriptively had 71 fewer days in hospital than the PE group and showed better compliance with medication, but these findings were not statistically significant. Overall the study demonstrated that CBTp and PE had a positive impact on participants, and that CBTp significantly reduced readmission rates more than PE. But, as the study did not include a treatment as usual control group we cannot assume that these improvements would not have been demonstrated anyway over time or are not due to some other extraneous variable. Another limitation is that the group of participants retained in the study at two years (n=43) were no longer a representative sample due to the high drop out rate of 45% (CBT group n=16; PE group n=27). This suggests that the statistical analyses at two years may be biased, and limited by reduced power, making it difficult to assess the longitudinal impact of CBTp.

Table 1. Summary characteristics of included studies

No	Authors & Year	Place of study	Sample	Comparison groups	Intervention(s)	Measures	Follow up	Reported significant findings	Quality score
					Experiment	al studies – within subjects			
1	Aho- Mustonen et al. (2008) - pilot	Finland	15 male (forensic) inpatients	-7 PE group - 8 matched TAU group	8 session manualised group PE Modified from Ascher-Svanum & Krause (1991)- based on stress vulnerability model Groups run by two trained psychologists	Knowledge about schizophrenia Questionnaire (KASQ) Beck Depression Inventory (BDI-II) Self report questionnaire on awareness and attitudes towards treatment & medication (designed by authors)	None	Significant increase in: knowledge about schizophrenia; awareness of mental illness. No significant difference in: attitudes towards treatment & medication. Non significant improvement in depression scores in intervention group.	19/30
2	Aho- Mustonen et al. (2011)		39 (forensic) inpatients -35 male -4 female	- 19 PE group -20 TAU group	As above	KASQ Scale to Assess Unawareness of Mental Disorder (SUMD) Compliance Rating Scale (CRS) Drug Attitude Inventory-10 Brief Psychiatric Rating Scale (BPRS) Nurses Observation Scale for Inpatient Evaluation (NOISE- 30) Beck Depression Inventory (BDI) Rosenberg Self-esteem Scale (RSS) Sintonen (2001) health related QoL – single index score Perceived Stigma Questionnaire (PSQ)	3 months	Significant increase in KASQ and insight into illness at follow up (but not post treatment) in intervention group. Significant increase in self-esteem post-treatment(but not at follow up) in intervention group. Health related QoL significantly improved in control group (not in intervention group) & perceived stigma decreased in both groups but more in the control group. Irritability significantly increased in the intervention group from baseline to follow up.	24/30

3	Bechdolf et al. (2004)	Germany	88 inpatients - 38 male - 46 female	- 40 CBT group - 48 PE group	16 session group CBT (over 8 wks) - manual based on Tarrier (1990) 8 weekly sessions of PE Groups run by trained CBT therapist	Modular System for Quality of Life (MSQoL) Medication compliance Positive & Negative Symptoms Scale (PANSS) Readmission rates	6 months	Significantly lower readmission rates in CBT group at follow up (but not post treatment). Significantly (large) improvement on the PANSS in both groups post- treatment& at follow up. No significant differences between CBT and PE groups on symptoms.	21/30
4	Bechdolf et al. (2010)		As above	As above	or clinical psychologist As above	MSQOL	6 months	Significant improvement in QoL in both groups. No significant differences between CBT & PE group on QoL at post-treatmentor follow up.	24/30
5	Bechdolf et al. (2005)		43 outpatients -20 female -23 male	-16 CBT group -27 PE group	Repeated above interventions	Medication compliance PANSS Readmission rates	24 months	No significant differences between groups. But descriptively CBT group had average 21% less readmissions, 71 fewer days in hospital & higher compliance with medication.	20/30
6	Bickerdike & Matias (2010)	UK	5 male inpatients (medium secure)	None	17 session group CBT for psychosis (designed by authors) Groups run by 2 clinical psychologists	Psychotic symptoms rating scales (PSYRATS), BDI, Beck Anxiety Inventory (BAI), RSS Satisfaction questionnaire (designed by supervising author)	None	No significant results. Interpretation of the PSYRATS difficult given low level of symptoms reported pre treatment. Overall high levels of satisfaction.	8/30
7	Chadwick et al. (2000)	UK	22 patients - 8 inpatients -14 outpatients (mixed gender)	None	8 session manualised group CBT (designed by authors) Groups run by 2 trained therapists	Hospital anxiety and depression scale (HADS) Belief conviction: omnipotence, control & personal meaning Satisfaction questionnaire (designed by authors) Topography of voices rating scale, independent assessment, therapeutic factors	Within 1 month	Significant reduction in conviction in beliefs about omnipotence and control of voices No changes in affective symptoms. Positive responses to process measures	16/30

8	Hagen et al. (2005)	Norway	19 patients (in & out patients) - 80% male - 20% female	None	16 session group CBT over 8 weeks (manual based on Free (1999) & modified by authors Groups run by 2 experienced psychologists	Calgary Depression Scale for Schizophrenia (CDSS) BDI Beck Hopelessness Scale (BHS) Global Assessment of Functioning (GAF) Millon Clinical Multiaxial Inventory (MCMI-III) Young Schema Questionnaire- Short Form (YSQ-SF)	6 months	Significant (large) reduction in depression post-treatment& follow up. Significant increase in psychosocial functioning post-treatment& at follow up. No change in hopelessness or self esteem. Some significant changes in personality patterns but did not hold up at follow up.	21/30
9	McInnis et al. (2006)	UK	9 inpatients (low secure) - 7 male - 2 female	None	'Recovery' CBTp group (designed by authors) Groups run by a clinical psychologist & an OT	Insight Scale (IS) Culture Free Self-Esteem Scale (CFSE-II) KASQ Compliance with medication Experience of Schizophrenia	6 months (file review)	Significant improvement in insight post treatment. No effect on self esteem. General trend for increased knowledge (not significant) post treatment. Informal feedback generally positive post-treatment& general increase in access to community at follow up.	10/30
10	Mortan et al. (2011)	Turkey	12 male inpatients	- 7 CBT group - 5 TAU group	9-10 twice weekly group CBT sessions (designed by authors) Groups run by 2 psychologists	Scale for Aessment of Positive Symptoms (SAPS), Scale for the Assessment of Negative Symptoms (SANS), Problem/Symptoms checklist, KASQ	1 year	Significant improvement in positive & negative symptoms & distress associated with psychosis in treatment group, held at follow up. No change in control group. No change in knowledge in either group.	15/30
11	Pinkham et al. (2004)	US	11 inpatients - 8 male - 2 female	- 5 CBT group (7 session) - 5 CBT group (20 session) - No TAU	7 or 20 session group CBT (based on Wykes 1999 & 2004 formats)	PSYRATS BAVQ-R PANSS Wide range achievement test III (WRAT3)	None	No significant differences on BAVQR or PSYRATS between groups post treatment. Combined findings showed significant effect of CBT on BAVQR. PSYRATS & PANSS decreased post- treatment(not significant) Pre-morbid intellectual functioning not related to treatment response.	13/30
Mar	y Forsey		Brief group	p therapy for p	sychosis in acute care	42			

12	Ruane & Daddi (2011)	UK	137 inpatients (61% had psychosis) - 51% male - 49% female	None	Group CBT – based on Bieling et al. (2006) manual (not specific for psychosis) Standalone weekly sessions -group chose topic each	Attendance/ re-attendance rates Patient feedback on 5 point likert scale – useful, enjoyable, will re-attend, learned something to help distress	None	<ul><li>75% of group participants agreed positively with each evaluation dimension.</li><li>Females significantly more likely to re-attend, females with bipolar significantly most likely to re-attend.</li><li>Suggests group is feasible, acceptable</li></ul>	10/30
					week Groups run by 1 clinical psychologist			and that patients find it effective.	
13	Veltro et al. (2006)	Italy	90% of inpatients in 3 year period (approx 40% psychosis) Yr 0- 150 Yr 1- 171 Yr 2- 181	Used historical controls – based on data collected year before the group was introduced	Group CBT started on wards (not specific for psychosis) Standalone daily sessions – staff chose topic each day Groups run by 2	Readmission rates Length of hospital stay Patient satisfaction survey Ward atmosphere- rated by nurses Frequency in use of physical restraints	2 years	Significant reduction in readmission rates over 2 years Non significant reduction in mean length of stay Significant reduction in compulsory admissions over 3 years & violent episodes Significant improvements in patient satisfaction & ward atmosphere Use of physical restraints reduced	13/30
14	Veltro et al. (2008)		Yr 3- 129 Yr 4- 102	As above	members of multidisciplinary team (usually one doctor) As above	As above	4 years	Significant reduction in readmission rates overall and significantly for patients with diagnosis of schizophrenia or bipolar disorder. Improvements held at follow up in the other dependent variables which showed significant improvements in original study.	14/30

## **Cohort studies – between subjects**

The second largest experimental study was conducted in Finland (Aho-Mustonen, Miettinen, Koivisto, Timonen & Raty, 2008; Aho-Mustonen, et al., 2011) and involved 39 forensic inpatients who participated in either a psychoeducation group (based on 8 session manualised CBTp; including discussion of the stress-vulnerability model) or treatment as usual (TAU), and were followed up at three months. The authors described a significant increase in knowledge about schizophrenia at follow up (p=0.04) in the intervention group (but not immediately after treatment), with medium effect size (d=0.68), and a significant increase in self-esteem (p=0.03) with medium effect size (d=0.71) post treatment, but this was not held at follow up. Only minor changes were reported in relation to insight as a result of the intervention. However, this study also found some changes in favour of the TAU group, including perceived stigma which reduced significantly in both groups but more in the control group, and health related QoL which significantly improved in the TAU group but not the PE group. Interestingly the authors also reported a statistically significant increase in irritability in the PE group (p=0.04, d=-0.69), which they suggest may be associated with patients' improved realisation of their circumstances (long term secure inpatient setting) and the psychological work required to cope leading to irritation and impatience. Overall the study showed mixed findings but did indicate that the intervention may make a lasting improvement on knowledge and insight. However, as the follow up was only three months post-treatmentit is hard to know whether these changes would have been sustained in the longer term and whether they may have led to changes in mood or psychotic symptoms.

# 4.2 Non-randomised experimental studies

All of the non-randomised experimental studies had small sample sizes and most did not incorporate blinded assessments or raters; therefore all should be considered pilot studies and their reported outcomes treated as preliminary findings. Hagen and colleagues (2005) used 16 session manualised group therapy containing mixed psychoeducation and cognitive therapy for depression and psychosis to try and reduce depressive symptoms in 19 patients with psychosis (from in and outpatient populations in Norway). Controlling for changes in medication, the study found significant reductions in depressive symptoms (p<0.01) with a large effect size post-treatment and six month follow up, and

a significant increase in psychosocial functioning (p < 0.001) at follow up (Hagen, Nordahl & Grawe, 2005). However, the study did not include any comparison group so it is not possible to assume the changes seen were due to the group intervention. It also did not measure any specific symptoms of psychosis so it is difficult to determine whether the intervention effects were specific to people with psychosis or whether they may have had a more general effect for people with depression.

A similar study by Chadwick, Sambrooke, Rasch & Davies (2000) in the UK used 8 session manualised group CBTp, which aimed to challenge the omnipotence of voices, and increase a sense of personal control, with 8 inpatients and 11 outpatients who heard voices. Again, without a control group it is difficult to conclude that the changes seen were due to the intervention, but the authors report significant reduction in beliefs about the power (p=0.002) and control (p=0.001) of voices post-treatment(Chadwick, et al. 2000). Follow up measures (including an interview with an independent assessor and a self-report satisfaction questionnaire) suggested that participants valued the groups and felt they benefited from them. In contrast to Hagen and colleagues (2005) the intervention appeared to have no effect on affective symptoms, although these were not the target of therapy.

One small Turkish inpatient comparison study reported improvements in both positive and negative symptoms of psychosis following 9-10 sessions of manualised group CBTp (n=7) compared with treatment as usual (n=5) (Mortan, Tekinsav Sutcu & German Kose, 2011). The authors report significant (p<0.05) reductions in the severity and frequency of hallucinations, delusions, distress, occupation with auditory hallucinations, negative symptoms, and anxiety in the CBTp group after treatment, which held at one year follow up (CBT n=3; TAU n=3). They also report significant (p<0.05) reductions in the control group, but not the CBT group. However, the use of statistical analysis is questionable on a sample this size. So although the study findings are suggestive of positive effects from the group intervention, they should be treated cautiously without further research.

In an American pilot study Pinkham, Gloege, Flanagan & Penn (2004) compared the effects of either 7 or 20 sessions of manualised group CBTp for 10 inpatients (n=5 per group). They found no differences between groups but significant improvements in both on distress associated with voices (p<0.05) with a moderate effect size (d=0.51). They also reported that improvements in psychotic symptoms approached significance (p=0.06; d=0.72). However, the study did not include a control group or any follow up so it not possible to conclude whether these changes were due to the intervention or sustained over time.

Another small scale UK study involving nine inpatients was conducted by McInnis, Sellwood and Jones (2006) in a low secure setting. Participants with psychosis took part in group CBT sessions which had a 'recovery' theme (including identifying positive and negative symptoms, maintenance factors, coping strategies and triggers and relapse patterns). The authors report a significant increase in insight (p<0.05) following 15 group sessions, but no change in self-esteem or knowledge about schizophrenia. They also found generally positive changes in informal qualitative feedback from patients regarding worry, control and optimism. However, the study had no control group and the follow up performed one year later involved a file review and discussion of patient progress with multi-disciplinary staff rather than repetition of the outcome measures. There are signs that participants found the group helpful and had more access to the community at follow up but these must be considered tentative findings given the limitations of the study.

The smallest experimental study in this review involved just four inpatients in a medium secure setting in the UK who took part in a 17 session CBTp group (designed by the authors) which used a meta-cognitive approach to help participants "think about thinking" rather than challenge their voice or beliefs directly (Bickerdike & Matias, 2011). The study measured psychotic and affective symptoms before and after the intervention in order to assess change. Post-treatment two participants reported increased 'controllability' of voices, and two reported decreased distress from voices or delusions. However, the authors admit that the majority of patients did not report frequent distressing symptoms of psychosis in the pre-treatment condition and only one participant scored in the severe

range for depression pre-treatment, with the rest scoring within normal ranges. This makes the interpretation of the study findings difficult and questions validity of the 'pre-group assessment interview' which was designed to help select suitable participants. Additionally, the small sample and lack of analysis provided in the paper make it difficult to draw any conclusions regarding outcomes. However, the authors report that all participants reported high levels of satisfaction with the group including feeling they had more understanding and control over their psychotic symptoms.

#### 4.3 Naturalistic studies

Two studies in this review used a naturalistic design, in which an intervention was introduced as part of routine care on the ward, and effectiveness was judged by comparison with outcomes from the previous year, providing a historical control. In Italy, Veltro and colleagues (2006 & 2008) introduced manualised group CBT, based on the stress-vulnerability hypothesis. The groups aimed to normalise patients' experiences, reduce isolation, increase compliance, help with recognition of early warning signs and improve self-control and self-esteem. Groups ran every day on the ward as stand alone sessions, with the topic chosen each day by staff (although the majority of the content was generic, several sessions dealt specifically with psychosis). The authors suggest that over a three year period 90% of inpatients attended (150-180 participants per year) and that approximately 40% had symptoms of psychosis.

The findings show a significant reduction (p<0.02) in readmission rates from 38% in 2001 to 24% in 2005 following the intervention; 17% of those readmissions were compulsory in 2001, compared with 0% in 2005 (p<0.02). The reduction in readmissions was only significant for patients diagnosed with schizophrenia (p<0.001) or bipolar disorder (p<0.04) at four year follow up. However, there were also significant improvements in patient satisfaction (p<0.001), mainly observed in the first two years following the intervention, and the ward atmosphere as rated by staff (p<0.001), both of which held at four year follow up. The frequency of violence and aggression also reduced, as did the use of physical restraints, although this did not reach significance given the infrequency of incidence pre-intervention (five incidents per year pre-intervention which reduced to one per year, every year after the

intervention). Overall the study shows promise that adding group CBT to part of routine therapy on the ward can have benefits for patients, particularly those known as 'revolving door' patients who have frequent admissions to hospital. The authors add weight to their findings from comparison with another comparable Italian study (Bazzoni, Morosini, Polidori, Rosicarelli & Fowler, 2001) which reports achieving similar reductions in readmission rates (from 17% to 12%), compulsory readmissions (from 72% to 25%) and violent episodes (from 42% to 25%) in the first year group CBT was introduced on an inpatient ward compared with the previous years' rates. However, this study has not been included in this review as it was written in Italian and we were not able to assess the study quality.

Finally, Ruane and Daddi (2011) also introduced group CBT to a heterogeneous group of inpatients on a weekly basis on two acute wards in the UK. One hundred and thirty seven patients attended a total of 291 times over 31 groups; approximately 61% of the sample had a diagnosis of psychosis, with roughly equal numbers of men (51%) and women (49%) attending. The manualised group format was not specific to psychosis but commonly addressed stress management and coping. The topic was chosen each week by the patients, and each group ran as a stand alone session, although 43% of patients attended more than one session. Women with a diagnosis of bipolar disorder were significantly more likely to re-attend than men or those with other diagnoses. At the end of each session participants were asked for feedback on whether they found the group useful, enjoyable, would re-attend, or learned something to help distress. The authors report that 75% of participants responded positively to each evaluation statement, and conclude that the group was feasible and useful for inpatients. However, the study has several methodological limitations such as a lack of comparison group or use of historical controls. It also lacked blinded data collection, as the therapist who ran the group also collected feedback at the end of the sessions and it lacked any validated outcome measures. Whilst measuring satisfaction is helpful in assessing the acceptability of the group it does not assess whether CBT had any specific, clinical effect or whether it was used and understood outside of the group sessions. However, as a clinical pilot one of this study's strengths was that it ensured that the weekly topic was congruent with the patients' aims by allowing them to choose the

topic, rather being chosen by staff. This helps ensure ecological validity and was not considered by any of the other studies in this review.

# **5** Discussion

The majority of studies in this review described positive change in favour of group CBTp for inpatients and those which were not significant tended to show positive trends. However, caution is necessary in drawing any strong conclusions given the small number of studies identified, and the considerable heterogeneity in the methodologies, and quality, of the studies included in the review. Given that inpatients are often highly distressed it is often a difficult time to recruit people to participate in research studies and it is therefore not surprising that many studies had small sample sizes. Understandably, non-parametric analyses and underpowered statistical calculations were a feature of most studies, with the exception of the longitudinal cohort studies. In particular the lack of comparison groups was widespread and few studies included a treatment as usual group, making it difficult to interpret whether any changes seen are due to the intervention, or extraneous variables such as time spent in hospital or medication. There was also considerable heterogeneity in terms of the manuals used to deliver the CBTp intervention; in most cases the original manual had been adapted by the authors and in others uniquely developed by the authors. Although any manual for CBTp should include the same basic principles, variations in terms of the information delivery makes it difficult to know if two different manuals are delivering the same 'active' components and whether they are directly comparable. Similarly there were considerable differences in terms of the length of treatment delivered, ranging from individual stand alone sessions, 8-10 weekly or twice weekly sessions, or up to 15-20 sessions at the longest. Again this makes it difficult to directly compare studies and generalise from the findings. Finally, the variability in the outcome measures used makes it difficult to compare what is being measured; in particular some studies lacked any validated measures and relied instead on demographic or routinely collected data (such as readmission rates), and some used newly developed scales which have yet to be validated and may not have been tested for reliability. These differences make it difficult to generalise across study findings which may have implemented similar interventions.

However, despite the limitations it is important to explore what conclusions can be drawn from the studies in this review. Four research studies used the knowledge about schizophrenia questionnaire (KASQ; Ascher-Svanum, 1999). Two studies of reasonable quality found significant improvements following the intervention (Aho-Mustonen, et al., 2008 & 2011), one small study found a positive trend towards improvements (McInnis, et al., 2006) and only one lower quality study found no change (Mortan, et al., 2011). Therefore, there is some indication that the CBTp can improve knowledge about schizophrenia.

Six studies included a measure of distress associated with the positive symptoms of psychosis. Two studies (Chadwick, et al., 2000; Pinkham, et al., 2004) found significant reductions on the the beliefs about voices questionnaire (BAVQ-R; Chadwick, Lees & Birchwood, 2000). Two studies (Bechdolf, et al., 2004; Mortan, et al., 2011) found significant reductions on the scale for the assessment of positive symptoms, (SAPS; Andreasen, 1984a) and the positive and negative symptoms scale (PANNS; Kay, Opler, & Lindenmayer, 1989) respectively. One study (Pinkham, et al., 2004) found a positive trend towards lower symptoms in the PANSS and the psychotic symptom rating scales (PSYRATS; Haddock, Mc Carron, Tarrier & Faragher, 1999) and one found reductions on the brief psychiatric rating scale (BPRS; Overall & Gorham, 1962), although similar reductions were seen in controls (Aho-Mustonen et al., 2011). In addition, the three studies that included a measure of insight all found significant improvements following the group intervention (Aho-Mustonen, et al., 2008 & 2011; McInnis, et al., 2006). Therefore, despite the use of different measures, overall CBTp appears to lead to improvements in distress associated with positive symptoms of psychosis.

Similarly, six studies included a measure of depression or anxiety associated with psychosis. Two studies (Hagen, et al., 2005; Mortan, et al., 2011) found significant reductions in negative symptoms on the Beck depression inventory (BDI-II; Beck, Steer & Brown, 1996) and the scale for the assessment of negative symptoms (SANS; Andreasen, 1984b) respectively. Two studies (Aho-Mustonen et al., 2008 & 2011) found positive trends towards improvements on the BDI-II and two studies (Chadwick et al., 2000; Bikerdike & Matias, 2010) found no change on the hospital anxiety

and depression scale (HADS; Zigmond & Snaith, 1983) or BDI-II. Therefore, although it is more difficult to draw firm conclusions regarding the effect of CBTp on affective symptoms there is indication of a positive effect.

All of the five studies which included a measure of patient satisfaction reported positive findings (Chadwick et al., 2000; Veltro et al., 2006 & 2008; Bikerdike & Matias, 2010; Ruane & Daddi, 2011) although only one of these studies used an independent person to collect this data (Chadwick et al., 2000), leading to questions of bias. However, it does suggest that participants found CBTp acceptable, accessible, and found elements of the groups helpful.

Other variables which were measured by only a few studies showed more equivocal treatment outcomes. One study found significant improvements in self esteem following the group intervention (Aho-Mustonen et al., 2011), but two found no change (Hagen et al., 2005; McInnis et al. 2006). Similarly, two studies found significant improvements in quality of life (Bechdolf et al., 2004 & 2010) but in another, health related quality of life improved significantly in the control group and not in the intervention group (Aho-Mustonen et al., 2011). Perceived stigma significantly improved in one study (Aho-Mustonen et al., 2008) and showed a positive trend towards reduction in another study, although the control group showed greater improvement (Aho-Mutonen et al., 2011). Encouragingly two studies found significant reductions in readmission rates (Bechdolf et al., 2004; Veltro et al., 2006) which held at follow up (Bechdolf et al., 2005; Veltro et al., 2008). Finally, three found improvements in compliance with, or attitudes towards, medication (Bechdolf et al., 2004 & 2005; McInnis, et al., 2006; Aho-Mustonen et al., 2008 & 2011), although none of these reached significance, so the impact on adherence is questionable.

# 6 Conclusion

Overall, there is currently not enough high quality evidence to draw firm conclusions regarding the effectiveness of group CBTp for inpatients. However, there are positive indications that in acute

settings CBTp can lead to alleviation of distress associated with the positive symptoms and an increase in knowledge about schizophrenia. It may also reduce negative symptoms and readmission rates and possibly lead to improved quality of life, perceived stigma and compliance with medication. However, all of the studies included in this review had methodological limitations therefore the findings must be seen as tentative as they require further research and replication. If future research supports these positive findings then group CBTp for acute inpatients may be a cost effective way of delivering effective treatment and reducing the length of time patients with psychosis spend in hospital.

## 6.1 Acknowledgement

The project was jointly funded by the University of Liverpool and XXXX NHS Trust who provided funding as part of MF's doctoral training in Clinical Psychology.

Word count: 6,403

# 7 References

- Aho-Mustonen, K., Miettinen, R., Koivisto, H., Timonen, T. & Raty, H. (2008). Group psychoeducation for forensic and dangerous non-forensic long-term patients with schizophrenia. A pilot study. *European Journal of Psychiatry*, 22, 84-92.
- Aho-Mustonen, K., Tilonen, J., Repo-Tiihonen, E., Ryynanen, O.P., Miettinen, R. & Raty, H. (2011). Group psychoeducation for long-term offender patients with schizophrenia: An exploratory randomised controlled trial. *Criminal Behaviour and Mental Health*, 21, 163-176.
- American Psychological Association (APA) (2009). Proficiency in Psychology: The Assessment and Treatment of Serious Mental Illness. APA. Retrieved June 13, 2013 from: http://ispsus.org/blog/wp-content/uploads/2011/08/smi-proficiency.pdf
- Andreasen, N.C. (1984a). *The Scale for the Assessment of Positive Symptoms (SAPS)*. Iowa City: University of Iowa.
- Andreasen, N.C. (1984b). *The Scale for the Assessment of Negative Symptoms (SANS)*. Iowa City: University of Iowa.
- Ascher-Svanum, H. (1999). Development and validation of a measure of patients' knowledge about schizophrenia. *Psychiatric Services*, 50, 561-3.
- Atkins, D., Briss, P.A., Eccles, M., Flottorp, S., Guyatt, G.H., Harbour, R.T. et al. (2005). Systems for grading the quality of evidence and the strength of recommendations II: pilot study of a new system. *BMC Health Service Research*, 5, 1-12.
- Bazonni , A., Morosini, P., Polidori, G., Rosicarelli, M.L. & Fowler, D. (2001). The use of group cognitive behaviour therapy in a routine acute inpatient setting. *Epidemiologiia e Psychiatria Sociale*, 10, 27-36.

- Bechdolf, A., Knost, B., Kuntermann, C., Schiller, S., Klosterkotter, J., Hambrecht M. et al. (2004). A randomised comparison of group cognitive-behavioural therapy and group psychoeducation in patients with schizophrenia. *Acta Psychiatrica Scandinavica*, 110, 21-28.
- Bechdolf, A., Kohn, D., Knost, B., Pukrop, R. & Klosterkotter, J. (2005). A randomized comparison of group cognitive-behavioural therapy and group psychoeducation in acute patients with schizophrenia: outcome at 24 months. *Acta Psychiatrica Scandinavica*, 112, 173-179.
- Bechdolf, A., Knost, B., Nelson, B., Schneider, N., Veith, V, Yung, A.R. et al. (2010). Randomized comparison of group cognitive behaviour therapy and group psychoeducation in acute patients with schizophrenia: effects on subjective quality of life. *The Royal Australian and New Zealand College of Psychiatrists*, 44, 144-150.
- Beck, A.T., Steer, R.A. & Brown, G.K. (1996). *Manual for the Beck Depression Inventory-II*. San Antonio, TX: Psychological Corporation.
- Bickerdike, A. & Matias, L. (2010). Thinking about thinking: developing a meta-cognitive approach to group-based cognitive behavioural therapy for psychosis in a medium secure setting. *Clinical Psychology Forum*, 214, 31-35.
- Bright (2006). Star Wards: practical ideas for improving the daily experiences and treatment outcomes of acute metal health inpatients. London: Bright.
- Canadian Psychiatric Association (2005). Clinical practice guidelines: The treatment of schizophrenia. *The Canadian Journal of Psychiatry*, 50, S1.

Centre for Mental Health (2010). *The Economic and Social Costs of Mental Health Problems in 2009/10*. Retrieved January 13, 2013 from http://www.centreformentalhealth.org.uk/pdfs/Economic and social costs 2010.pdf

- Chadwick, P., Lees, S. & Birchwood, M. (2000). The revised Beliefs About Voices Questionnaire (BAVQ-R). *The British Journal of Psychiatry*, 177, 229-232.
- Chadwick, P., Sambrooke, S., Rasch, S. & Davies, E. (2000). Challenging the omnipotence of voices: group cognitive behaviour therapy for voices. *Behaviour Research and Therapy*, 38, 993-1003.
- Department of Health (2007). *New ways of working for everyone: A best practice implementation guide*. London: Department of Health.
- Department of Health & HM Government (2011). *No health without mental health: A cross government mental health strategy for people of all ages*. London: Crown Copyright.
- Dickerson, F.B. (2000). Cognitive behavioral psychotherapy for schizophrenia: a review of recent empirical studies. *Schizophrenia Research*, 43, 71–90.
- Dickerson, F.B. (2004). Update on cognitive behavioural psychotherapy for schizophrenia: Review of recent studies. *Journal of Cognitive Psychotherapy*, 18, 189-205.
- European Commission (2005). *Green Paper. Improving the mental health of the population: Towards a strategy on mental health for the European Union.* Brussels: Health & Consumer Protection, Directorate-General.
- Fagin, L. (2010). Is it possible to make acute wards into therapeutic communities? In J. Radcliffe, K. Hajek, J. Carson & O. Manor (Eds.). *Psychological groupwork with acute psychiatric inpatients*. (pp. 21-36). London: Whiting & Birch, Ltd.
- Freemantle, B. & Clarke, I. (2009). Making sense of psychosis in crisis. In I. Clarke & H. Wilson (Eds.) Cognitive Behaviour Therapy for Acute Inpatient Mental Health Units: Working with Clients, Staff and the Mileu (pp.84-92). London: Routledge, Taylor & Francis Group.

- Gaebel, W., Weinmann, S., Sartorius, N., Rutz, W. & McIntyre, J.S. (2005). Schizophrenia practice guidelines: international survey and comparison. *British Journal of Psychiatry*, 187, 248-255.
- Guaiana, G., Morelli, A.C. & Chiodo, D. (2012). Cognitive behaviour therapy (group) for schizophrenia (Protocol). *Cochrane Database of Systematic Reviews*, 2, DOI: 10.1002/14651858.CD009608.
- Gugiu, C.P. & Gugiu, R.M. (2010). A critical appraisal of standard guidelines for grading levels of evidence. *Evaluation & the Health Professions*, 33, 233-255.
- Haddock, G., Mc Carron, J., Tarrier, N. & Faragher, E.B. (1999). Scales to measure dimensions of hallucinations and delusions: the psychotic symptom rating scales (PSYRATS). *Psychological Medicine*, 29, 879-889.
- Hagen, R., Nordahl, H.M. & Grawe, R.W. (2005). Cognitive-behavioural group treatment of depression in patients with psychotic disorders. *Clinical Psychology and Psychotherapy*, 12, 465-474.
- Hanna, J. (2009). CBT on the wards: standards and aspirations. In I. Clarke & H. Wilson (Eds.),
   *Cognitive Behaviour Therapy for Acute Inpatient Mental Health Units: Working with Clients, Staff and the Mileu* (pp.11-21). London: Routledge, Taylor & Francis Group.
- Harrington, M., Lelliot, P., Paton, C., Konsolaki, M., Sensky, T. & Okocha, T. (2002). Variation between services in polypharmacy and combined high dose of antipsychotic drugs prescribed for inpatients. *Psychiatric Bulletin*, 26, 418–420.
- Haywood, T.W., Kravitz, H.M., Grossman, L.S., Cavanaugh, J.L., Davis, J.M. & Lewis, D.A. (1995).
  Predicting the "Revolving Door" phenomenon among patients with schizophrenia, schizoaffective and affective disorders. *The American Journal of Psychiatry*, 152, 856-861.

- Jones, C., Hacker, D., Cormac, I., Meaden, A. & Irving, C.B. (2012). Cognitive behaviour therapy versus other psychosocial treatments for schizophrenia. *Cochrane Database of Systematic Reviews*, 4, DOI: 10.1002/14651858.CD008712.pub2.
- Kay, S.R., Opler, L.A. & Lindenmayer, J.P. (1989). The positive and negative syndrome scale (PANSS): Rationale and standardisation. *British Journal of Psychiatry*, 155, 59–65.
- Kirby, M. J.L. (2006). Out of the Shadows at Last: Highlights and Recommendations. The Standing Senate Committee on Social Affairs, Science and Technology. Retrieved June 13, 2013, from: http://www.parl.gc.ca/Content/SEN/Committee/391/soci/rep/pdf/rep02may06high-e.pdf
- Knapp, M., Chisholm, D., Leese, M., Amaddeo, F., Tansella, M., Schene, A., et al. (2002).
  Comparing patterns and costs of schizophrenia care in five European countries: the EPSILON study. *Acta Psychiatrica Scandinavica*, 105, 42–54.
- Kosters, M., Burlinghame, G.M., Nachtigall, C. & Strauss, B. (2006). A meta-analytic review of the effectiveness of inpatient group psychotherapy. *Group Dynamics: Theory, Research and Practice*, 10, 146-163.
- Lawrence, R., Bradshaw, T. & Mairs, H. (2006). Group cognitive behavioral therapy for schizophrenia: a systematic review of the literature. *Journal of Psychiatric and Mental Health Nursing*, 13, 673-81.
- Lockwood, C., Page, T. & Conroy-Hiller, T. (2004). Effectiveness of individual therapy and group therapy in the treatment of schizophrenia. *Joanna Briggs Institute Reports*, 2, 309-338.
- McInnis, E., Sellwood, W. & Jones, C. (2006). A cognitive behavioural group-based educational programme for psychotic symptoms in a low secure setting: a pilot evaluation. *The British Journal of Forensic Practice*, 8, 36-46.

- Moher, D., Liberati, A., Tetzlaff, J., Altman, D.G. & the PRISMA Group. (2009). Preferred reporting items for systamtic reviews and meta-analyses: The PRISMA statement. *PLoS Medicine*, 6, doi:10.1371/journal.pmed.1000097.
- Morrison, N. (2001). Group cognitive therapy: Treatment of choice of suboptimal option? Behavioural and Cognitive Psychotherapy, 29, 311-332.
- Mortan, O., Tekinsav Sutcu, S. & German Kose, G. (2011). A pilot study on the effectiveness of a group-based cognitive-behavioral therapy program for coping with auditory hallucinations. *Turkish Journal of Psychiatry*, 22, 1-8.

Mueser, K.T. & McGurk, S.R. (2004). Schizophrenia. Lancet, 362, 2063-72.

- National Institute of Clinical Excellence. (2010). Schizophrenia: Core Interventions in the Treatment and Management of Schizophrenia in Primary and Secondary Care (Updated Edition). Leicester & London: The British Psychological Society & the Royal College of Psychiatrists.
- National Institute of Mental Health (2008). *Strategic Action Plan. NIH Publication No. 08-6368*. U.S. Department of Health and Human Services: National Institutes of Health.
- Newton, E., Larkin, M., Melhuish, R., & Wykes, T. (2007). More than just a place to talk: Young people's experiences of group psychological therapy as an early intervention for auditory hallucinations. *Psychology and Psychotherapy: Theory, Research and Practice*, 80, 127–149.
- Overall, J.E. & Gorham, D.R. (1962). The brief psychiatric rating scale. *Psychological Reports*, 10, 799-812.
- Peat, J. (2001). *Health science research: A handbook of quantitative methods*. Sydney: Allen & Unwin.

- Pilling, S., Bebbington, P., Kuipers, E., Garety, P., Orbach, G. & Morgan, C. (2002). Psychological treatments in schizophrenia: I. Meta analysis of family intervention and cognitive behaviour therapy. *Psychological Medicine*, 32, 763–782.
- Pinkham, A.E., Gloege, A.T., Flanagan, S. & Penn, D.L. (2004). Group cognitive-behavioral therapy for auditory hallucinations: A pilot study. *Cognitive and Behavioral Practice*, 11, 93-98.
- Royal Australian and New Zealand College of Psychiatrists (RANZCP) (2005). Clinical practice guidelines for the treatment of schizophrenia and related disorders. *Australian and New Zealand Journal of Psychiatry*, 39, 1 – 30.
- Ruane, D. & Daddi, I. (2011). Pilot study of group cognitive behaviour therapy for heterogeneous acute psychiatric inpatients: Treatment in a sole-standalone session allowing patients to choose the therapeutic target. *Behavioural and Cognitive Psychotherapy*, 39, 359–365.
- Saksa, J.R., Cohen, S.J., Srihari, V., H. & Woods, S.W. (2009). Cognitive behavior therapy for early psychosis: A comprehensive review of individual vs group treatment studies. *International journal of group psychotherapy*, 59, 357-383.
- Sarin, .F, Wallin,L. & Widerlöv, B. (2011). Cognitive behavior therapy for schizophrenia: A metaanalytical review of randomized controlled trials. *Nordic Journal of Psychiatry*, 65, 162–174.
- Tandon, R., Keshavan, M.S. & Nasrallah, H.A. (2008). Schizophrenia, "just the facts" what we know in 2008. 2. Epidemiology and etiology. *Schizophrenia Research*, 102,1-18.
- Tani, H., Uchida, H., Suzuki, T., Fujii, Y. & Mimura, M. (2013). Interventions to reduce antipsychotic polypharmacy: A systematic review. *Schizophrenia Research*, 143, 215-220.
- Thompson, A., Shaw, M., Harrison, G., Ho, D., Gunnell, D. & Verne, J. (2004). Patterns of hospital admission for adult psychiatric illness in England: analysis of Hospital Episode Statistics data. *The British Journal of Psychiatry*, 185, 334-341.

Turkington, D., Dudley, R., Warman, D.M. & Beck, A.T. (2004). Cognitive behavioural therapy for schizophrenia: a review. *Journal of Psychiatric Practice*, 10, 5-16.

van Os, J. & Kapur, S. (2009). Schizophrenia. Lancet, 374, 635-45.

- Veltro, F., Falloon, I., Vendittelli, N., Oricchio, I., Scinto, A., Gigantesco, A. et al. (2006).
  Effectiveness of cognitive-behavioural group therapy for inpatients. *Clinical Practice and Epidemiology in Mental Health*, 2, 16-21.
- Veltro, F., Vendittelli, N., Oricchio, I., Addona, F., Avino, C., Figliolia, G. et al. (2008). Effectiveness and efficiency of cognitive-behavioural therapy for inpatients: A 4-year follow-up study. *Journal of Psychiatric Practice*, 14, 281-288.
- World Health Organisation (2013). Sixty sixth World Health Assembly: Comprehensive mental health action plan 2013-2020. Retrieved June 13, 2013, from: http://apps.who.int/gb/ebwha/pdf\_files/WHA66/A66\_R8-en.pdf
- Wykes, T., Steel, C., Everitt, B. & Tarrier, N. (2008). Cognitive behaviour therapy for schizophrenia: effect sizes, clinical models and methodological rigor. *Schizophrenia Bulletin*, 34, 523–537.
- Zigmond, A.S. & Snaith, R.P. (1983). The hospital anxiety and depression scale. *Acta Psychiatrica Scandinavica*, 67, 361–370.
- Zimmerman, G., Favrod, J., Trieu, V. & Pomini, V. (2005). The effect of cognitive behavioral treatment on the positive symptoms of schizophrenia spectrum disorders: a meta-analysis. *Schizophrenia Research*, 77, 1–9.

# **Chapter Three: Empirical paper**

# Journal

Behaviour Research and Therapy<sup>2</sup>

# Title

Group CBT for psychosis: a longitudinal, controlled trial with inpatients

# Authors

Mary Forsey <sup>a</sup>\*, William Sellwood <sup>a</sup> and May Sarsam <sup>b</sup>

<sup>a</sup> University of Liverpool, UK

<sup>b</sup>NHS Trust, Liverpool, UK

# **Corresponding author address**

\* Department of Clinical Psychology, School of Health and Wellbeing, Institute of Psychology,

Health and Society, University of Liverpool, Whelan Building, Brownlow Hill, Liverpool, L69 3GB,

UK. Tel: +44 151 794 5525; Fax: +44 151 794 5537; Email: mforsey@liv.ac.uk

<sup>&</sup>lt;sup>2</sup> Journal requirements – Abstract (200 words), Highlights (85 characters including spaces), Original articles (no length limitations).

# Abstract

#### Introduction

Individual cognitive behaviour therapy for psychosis (CBTp) is a recommended treatment in the acute phase and beyond. However, less is known about the effectiveness of group CBTp in acute care. This mixed methods study explored the implementation and effectiveness of brief group CBTp with inpatients.

#### Methods

This prospective trial compared inpatients who received either a four week group CBTp program or treatment as usual (TAU). Participants (n=113 at baseline) completed self-report measures of distress, confidence and symptoms of psychosis at baseline, post-intervention and one month follow up. CBTp group participants also completed a brief open-ended satisfaction questionnaire.

#### Results

Participants who received CBTp showed significantly reduced distress at follow up compared to TAU and significantly increased confidence across the study and follow up period. Qualitative analysis of the satisfaction data revealed positive feedback with a number of specific themes.

#### Conclusion

The study demonstrates that brief group CBTp with inpatients can improve confidence and reduce distress in the longer term. Participants report that the groups are acceptable and helpful.

# Highlights

- This controlled trial compared brief group CBTp with TAU in an acute care service.
- Group CBTp had a significant effect in reducing levels of distress at follow up.
- Group CBTp had a significant effect on increasing levels of self-efficacy over time.

# Keywords

Group cognitive behaviour therapy (CBT), psychosis, acute, inpatients, mindfulness.

## **1** Introduction

Cognitive behaviour therapy for psychosis (CBTp) has been widely researched over the last 20 years and there is considerable evidence that it is an effective intervention (Wykes, Steel, Everitt & Tarrier, 2008). Guidelines for professionals recommend individual CBTp in the treatment of schizophrenia (American Psychiatric Association, 2004; Canadian Psychiatric Association, 2005) and some recommend that this should start in the acute phase (Royal Australian and New Zealand College of Psychiatrists, 2005; National Institute for Health and Clinical Excellence (NICE), 2010). Mental health service providers must consider how best to offer treatment within the financial constraints of the current economic climate (World Health Organisation, 2013).

Group therapy is a practical way of streamlining therapy and several randomised controlled trials (RCTs) have been conducted comparing group CBTp with treatment as usual (Wykes, et al., 2005; Barrowclough, et al., 2006), group psycho-education (Bechdolf, et al., 2004 & 2010), social skills training (Lecomte, et al., 2008) or enhanced supportive therapy incorporating emotional support and non-symptom related counselling (Penn, et al., 2009) with mixed findings. There is some evidence that long term group CBTp can be more effective than individual CBTp if used as an early intervention (Saska, Cohen, Srihari & Woods, 2009) or for those with less severe symptoms (Lockwood, Page & Conroy-Hiller, 2004). While a review of the literature on CBTp found no differences in effect sizes between group and individual therapy, it suggested that clustering effects in group therapy may improve treatment efficacy (Wykes, et al. 2008).

Unfortunately, there is considerable heterogeneity amongst the type and length of therapy interventions used in these studies (e.g. ranging from 8-18 sessions, and based on different CBTp manuals) and the type of measures used to assess change (e.g. positive and negative symptom scale (PANSS; Kay, Fiszbein, & Opler, 1987), psychotic symptoms rating scales (PSYRATS; Haddock, McCarron, Tarrier, & Faragher, 1999), Beliefs about voices questionnaire (BAVQ; Chadwick, Lee & Birchwood, 2000), brief psychiatric rating scale (BPRS; Ventura, Green, & Shaner, 1993) and many more) making direct comparisons difficult. Moreover, the majority of this research has only studied outpatient populations. Group therapy in inpatient settings is challenging in a number of ways. First, the timing of intervention, because service users are currently experiencing crisis, there is considerable uncertainty regarding length of stay in hospital, and a common increase or change in medication at the time of admission. A recent systematic review concluded that there are positive signs that group CBTp in inpatient settings may be effective, but more robust evidence is needed (Forsey, Speight, Sarsam & Sellwood, 2013). There are similar difficulties in the outpatient literature regarding heterogeneity in type and length of therapy, and the plethora of assessment measures used to assess change. In addition, inpatient research has often used small sample sizes (Haddock, Tarrier, et al., 1999) or lacked treatment as usual (TAU) control groups (Pinkham, Gloege, Flanagan & Penn, 2004; Dannahy, et al., 2011). But research has shown positive findings in terms of service users' experiences of participating in groups (Bickerdike & Matias, 2010) and general wellbeing (Drinnen, 2004). Several studies have started to move away from pure CBTp manuals and include elements of person based therapy (Dannahy, et al. 2011), acceptance and commitment therapy (Gaudiano & Herbert, 2006) or mindfulness (Drinnen, 2004; Chadwick, Taylor & Abba, 2005). There is also some encouraging evidence that incorporating CBTp groups into routine practice in acute inpatient care can reduce readmission rates (Svennsson, Hansson & Nyman, 2000; Veltro, et al., 2006).

In line with this evidence and calls from service users for more choice of treatment in hospital (James, 2001), UK government initiatives for best practice on inpatient wards include the provision of talking therapy groups (Bright, 2006; Department of Health (DoH, 2007). One example of this in clinical practice comes from Clarke and colleagues who designed an inpatient therapy group adopting a recovery approach based on CBTp and mindfulness, encouraging normalisation of symptoms and education on emotional coping skills, arousal management and problem solving (Hill, Clarke & Wilson, 2009). They ran the group in four weekly sessions and measured participants' levels of distress, perception of control over their mental health, their goals regarding their mental health and their experiences of the group (Phillips, Clarke & Wilson, unpublished). Due to the small sample size no statistically significant changes were found but the feedback from service users about their experiences of the group were positive, particularly regarding increased wellbeing and decreased

isolation. Unfortunately, this study did not have a control group so it is not possible to determine whether the findings were due to the group intervention or some other variable. Further research with a larger sample size and a control group is necessary in order to provide more robust evidence for the positive effects of such a group.

The movement towards a recovery approach in psychosis research (May, 2004) draws attention to the limited usefulness of aiming to reduce 'symptoms' of psychosis in favour of focussing interventions on functional gains such as confidence, understanding and quality of life (Bentall, 2009). This is particularly relevant in inpatient settings where service users' abilities to cope with their symptoms effectively are a more important measure of readiness for discharge than reduction in symptomatology. There is a need for further research in inpatient settings, evaluating the effects of CBTp, which moves away from merely attempting to reduce symptoms of psychosis and instead encourages service users to gain more control and understanding over their experiences. In order to address this gap in the literature this study was designed to formally assess the approach developed by Clarke and colleagues using a robust experimental design; so that any positive effects observed could be confidently attributed to the group intervention. The study had three main hypotheses:

- 1. Participants who receive group CBTp will show greater reductions in distress than those receiving treatment as usual (TAU).
- 2. Participants who receive group CBTp will show greater improvements in confidence about their own mental health than those receiving TAU.
- 3. As a consequence of attending the groups participants may experience a greater reduction in positive symptoms of psychosis than those who receive TAU.

An additional aim of the study was to explore the feasibility of running a brief CBTp group on an acute inpatient ward and the accessibility and acceptability of such a group to service users.

## 2 Methods

## 2.1 Design

This mixed methods study used a prospective, quasi-experimental design to compare two groups of participants from four inpatient wards in an acute psychiatric service in North-West England. Participants were allocated to either receive a four week group CBTp intervention or TAU. Data were collected at three time points; baseline, post-intervention and follow-up one month later, and at equivalent times in the control group. It was not possible to randomly assign participants to groups because allocation depended on which ward (A, B, C or D) participants were admitted to and whether or not that ward was running the intervention group at the time. There were no differences between participants admitted to each ward, except for gender, (two wards were single sex and two were mixed), admissions were allocated according to available bed space. It was also not possible to blind the assessors as the researcher who collected the data (MF) also ran the intervention groups. Therefore, a non-equivalent groups design was adopted in order to minimise bias within the practical constraints of the acute inpatient setting.

#### 2.2 Participants

Service users admitted to one of the participating wards during the study period (May 2012- May 2013) were eligible to participate. Inclusion criteria were based on presence of psychotic symptoms. Service users who identified themselves as hearing voices or seeing visions (hallucinations), experiencing strongly held beliefs (delusions), or persecutory fears (paranoia), were eligible. In order to reflect the diversity of acute inpatient settings no restrictions were placed on participants experiencing first episode or long-term symptoms. The only exclusion criteria were participants who could not understand or read English or those considered too acutely distressed to consent or participate by the acute care team.

## 2.3 Intervention

The group intervention was based on the 'What is real and what is not' group programme by Clarke & Pragnell (2008). Designed specifically for inpatients this CBTp based group has four sessions each

with a different topic for discussion, handouts and homework. Session one sets the group rules, establishes group aims, discusses different experiences, focuses on normalising and introduces monitoring. Session two, focuses on understanding experiences, introduces the idea of a continuum between 'shared' and 'personal' experiences, and examines triggers. Session three explores different coping styles, and the difference between distraction and focussing, it introduces mindfulness and practices breathing techniques and mindfulness in session. Session four focuses on how people make sense of their experiences and discusses the stress-vulnerability model and other ways of understanding psychosis (Hill, Clarke & Wilson, 2009). The manual was adapted slightly in order to; simplify the language used and increase readability, incorporate our outcome measures, and make it specific to our service (see Appendix 3 for revised manual).

#### 2.4 Measures

Four self-report questionnaires were administered to all participants at each time point. One additional evaluation questionnaire was given to those participants who completed the intervention groups. All measures can be found in the group manual (see Appendix 3 -pp.128-132)

- The Clinical Outcomes in Routine Evaluation (CORE- 10; Connell & Barkham, 2007) is a short form of the CORE-OM measuring pathology in mental health. It has good internal reliability (.90) and high correlation (.94) with the extended version in clinical samples (Barkham, et al., 2013). It has been used to assess and review symptoms in groups for people with psychosis (Chadwick, Taylor & Abba, 2005; Durrant, Clarke, Tolland & Wilson, 2007).
- The Mental Health Confidence Scale (MHCS; Carpinello, Knight, Markowitz & Pease, 2000) is a reliable (.94) measure of self-efficacy relating to mental health, with good internal consistency and test-retest reliability (Kaczinski, Resnick & Rosenheck, 2009), recommended for people experiencing psychosis (Castelein, van der Gaag, Bruggeman, van Brusschbach & Wiesma, 2008).
- The Psychotic Symptoms Rating Scale (PSYRATS; Haddock, McCarron, et al., 1999), which has shown good internal consistency and high inter-rater reliability (0.9) in samples with chronic (Haddock, McCarron, et al., 1999) and first episode symptoms (Drake, Haddock, Tarrier, Bentall)

& Lewis, 2007). We simplified the hallucinations and delusions subscales to make them suitable for use as self-report measures (renamed separately as the Voices and Beliefs questionnaires). Participants only completed these scales if they were currently experiencing the relevant symptoms.

4. Satisfaction questionnaire (Phillips, et al., unpublished). Eight open questions examining which aspects of the group participants found useful and had the greatest impact on reducing stigma.

#### 2.5 Procedure

Following ethical approval eligible (see Appendix 4) participants were identified through discussion with multidisciplinary teams and given verbal and written information about the study (see Appendix 5). Willing participants signed a consent form and completed the baseline measures at the start of the first group session or individually for TAU participants (Time 1). Groups consisted of four 1.5 hour sessions, which took place over four consecutive weeks. Groups were co-facilitated by a trainee clinical psychologist (MF), a service user with personal experience of psychosis and recovery, and a member of the ward staff. All group facilitators received training and regular group supervision from a qualified clinical psychologist (MS). Initially only two wards planned to participate in the study so groups were run consecutively on ward A for six months, collecting TAU data from ward D, before switching to running groups on ward D and using ward A as the TAU ward. Two additional wards (B and C) were included once the study started but C only took part in the intervention condition. Groups were closed and limited to eight participants. Participants who were discharged were invited back to attend as outpatients.

At the end of the last session (or after 4 weeks for TAU participants) the main outcome measures were repeated and CBTp participants also completed the satisfaction questionnaire (Time 2). Participants who had been discharged during the study period were sent the measures with postage paid envelopes. All participants were followed up again after another month and asked to repeat the main outcome measures (Time 3). All participants who completed the outcome measures at Time 2 received a £5 voucher as an incentive; if they completed the measures again at Time 3 they received another £5 voucher.

#### 2.6 Analysis

#### 2.6.1 Quantitative

Given that the study used two independent groups and repeated measures design we used a mixed between-within subjects analysis of variance (ANOVA) to test for differences between the two groups on all of the outcome measures (Field, 2012). In order to use this analysis the data must meet the necessary assumptions for parametricity including; interval scaling data, random sampling, independence of observations, normality of distribution and homogeneity of variance (Pallant, 2007). In our study although CBTp participants took part in groups they completed the outcome measures independently and the selection of participants was consecutive so assumed to meet these assumptions. In order to test for normality of distribution we examined histograms with distribution curves and assessed the skewness, kurtosis & Shapiro-Wilk values and to test for homogeneity of variance we used Levene's statistic (see Appendix 6).

These explorations showed that across both groups, none of the demographic variables met the assumptions for parametricity, except age. With regard to the outcome measures, across all three time points (pre, post and follow up); the CORE and MHCS measures did meet the assumptions for parametricity but the Voices and Beliefs measures did not. In addition, Maunchley's test was used to check for sphericity in the differences between variances in the outcomes measures and found to be non-significant (CORE: MW=0.90, p>0.05; MHCS: MW=0.91, p>0.05).

#### 2.6.2 **Qualitative**

The free text responses to the satisfaction questionnaire were transcribed as written (see Appendix 7). As most responses were brief the data from all questions was pooled in order to complete a qualitative content analysis (Bryman, 2008). This involved reading the data several times and breaking down sections of text into single words or phrases relating to participants' experiences of the groups, and then systematically searching all other responses for the same words or phrases. These words or phrases were collected into descriptive categories also known as codes. These codes were then clustered together with others that described similar content to produce super-ordinate themes.

# **3** Results

# 3.1 Sample demographics

A total of 113 participants were recruited. There were 80 men and 33 women, age ranged between 19 and 66 years (M=40.8, SD=12.2). The majority were White British (n=98; 86.7%) and from socially deprived areas; with 67.6% of the sample (n=74) residing within the 10% most deprived areas of England (Community & Local Government, 2011) see Table 1. The sample showed considerable heterogeneity on a range of factors. The most common primary diagnosis was schizophrenia (n=38, 34%) although there was a considerable range of diagnoses. Therefore, in keeping with dimensional approaches towards diagnosis, symptoms on admission were also recorded to ensure only those with relevant experiences were included in the study, most common were delusions and paranoia (n=27, 23%) see Table 2. The average length of admission was 89 days (SD=101.5; range 5-660), and the average length of admission before participating in the study was 38 days (SD=69.2, range 0-505). The majority of our sample were admitted voluntarily (n=66, 58.4%). To assess chronicity we recorded the number of previous inpatient admissions which ranged from 0 to17 (M=4.27, SD=3.97).

Characteristic		СВТ	Гр Group			TA	U Group	p Significance T			
	n	Mean	SD	Range	n	Mean	SD	Range	Stat	р	
Age (years)	71	42.15	12.43	19-66	42	38.60	11.65	20-66	t=1.51 (df=111)	0.14	
Deprivation	69	4783.12*	6238.93	12- 24073	39	2623.13	4286.49	6- 19642	U=1032, (z=-2.01)	0.05* *	
Length of admission (days)	71	98.41	113.80	7-660	42	73.71	73.76	5-414	U=1346.50 (z=-0.86)	0.39	
Length at participation (days)	71	37.77	75.62	0-521	42	38.69	57.76	1-316	U=1610.50 (z=0.71)	0.48	
No. of admissions	71	4.25	3.94	1-18	42	4.31	4.06	1-16	U=1.510 (z=0.16)	0.91	

Table 1. Participant characteristics for scaled variables by group with mean comparison

\* Higher scores indicate lower deprivation

\*\*Significant at the 0.05 level (2 tailed)

Characteristi	c		CBTp Group		TAU roup	Significance Test	
		n	%	n	%	$\chi^2(df)$	р
Gender	Male	42	59.2	38	90.5	12.52	0.00*
	Female	29	40.8	4	9.5	(1)	
Ethnicity	White British	64	90.1	34	81	5.83 - (6)	0.43
	Any other ethnicity	7	9.9	8	19	= (0)	
Type of	Informal	39	59.9	27	64.3	3.19	0.53
admission	Section 2	9	12.7	4	9.5	(4)	
	Section 3	12	16.9	8	19	_	
	Informal to Section 3	7	9.9	1	2.4	_	
	Section 2 to Section 3	4	5.6	2	4.8	_	
Diagnosis	Mental & behavioural disorder due to alcohol, drug misuse or neurocognitive disorder	5	7	3	7.1	6.20 (20)	0.10
	Schizophrenia, delusional, acute & transient, psychotic & schizoaffective disorders	35	49.3	20	47.6	_	
	Mood disorder, depression, recurrent depression & BPAD	22	31	11	26.2	_	
	Anxiety, OCD, adjustment disorder, PTSD & Aspergers	5	7	1	2.4	-	
	Personality disorders	4	5.6	7	16.7	_	
Symptoms	Hallucinations	11	15.5	7	16.7	9.80	0.20
on admission	Delusions	3	4.2	4	9.5	- (7)	
	Paranoia	4	5.6	4	9.5	-	
	Severe intrusive thoughts (often suicidal)	7	9.9	0	0	_	
	Hallucinations & delusions	6	8.5	3	7.1	-	
	Hallucinations & paranoia	11	15.5	7	16.7	_	
	Delusions & paranoia	19	26.8	8	19	-	
	Hallucinations, delusions & paranoia	10	14.1	9	21.4	-	

#### Table 2. Participant characteristics for categorical variables by group with mean comparison

\*Significant at the 0.05 level (2 tailed)

Statistical analyses<sup>3</sup> confirmed that there were no significant differences between the intervention and control groups with regards to; age, ethnicity, diagnosis, symptoms on admission, length of admission, number of admissions or type of admission (i.e. voluntary or involuntary). However, there were some significant differences between the two groups due to unavoidable difficulties in the data

<sup>&</sup>lt;sup>3</sup> Scaled variables which met the assumptions for parametricity were tested using t-test and those which did not were tested using Mann-Whitney. Ordinal data were tested using Chi-Squared or loglinear analysis if they had more than two categories per variable.

collection procedure. The intervention group was bigger (n=71) than the control group (n=42), and the number of participants recruited from the different wards were not equally distributed ( $\chi^2$ (3)=23.89, p<0.001) as shown in Table 3. As a result there were also significant differences between the two groups regarding gender ( $\chi^2$ (1)=12.52, p<0.001), with fewer women in the control group.

There were also significantly more people in the control group who were from more deprived backgrounds (Mean Rank = 46.46, n=39) than those in the intervention group (Mean Rank =59.04, n=69). However, there were no significant differences between the two groups on any of the baseline measures, although there was a trend towards higher levels of symptoms in the intervention group (see Table 4).

Ward	Total participants	Intervention group	Control group	Percentage of sample
Α	51	24	27	45.1
В	16	10	6	14.2
С	20	20	0	17.7
D	26	17	9	23.0
Total	113	71	42	100.0

Table 3. Number of participants recruited on each ward by group.

### 3.2 Exploring drop out

As expected in any study based in acute inpatient settings the attrition rate was high. Forty six participants (41%) were discharged during the study period of four weeks, although there were no significant differences between groups on this factor ( $\chi^2(1)=1.33$ , p=0.25). A total of 69 people (61%) had been discharged by the follow up period, and there was a significant difference between groups as more people in the control group had been discharged in the follow up period ( $\chi^2(1)=4.57$ , p=0.03). Overall, 56 people (49.5%) dropped out<sup>4</sup> during the study period (Time 1 to Time 2) and a further 15 dropped out in the follow up period (26.3%) (Time 2 to Time 3) giving an overall drop out rate (Time 1 to Time 3) of 62.8%. There were no significant differences between dropout rates in the intervention and control groups ( $x^2(1)=1.20$ , p=0.27). As would be expected, dropout during the study

<sup>&</sup>lt;sup>4</sup> Based on the number of people who completed the CORE-10 as this was the most frequently completed measure.

period (Time 1 to Time 2) was found to be significantly correlated with discharge from hospital (S=-0.44, n=113, p<0.01).

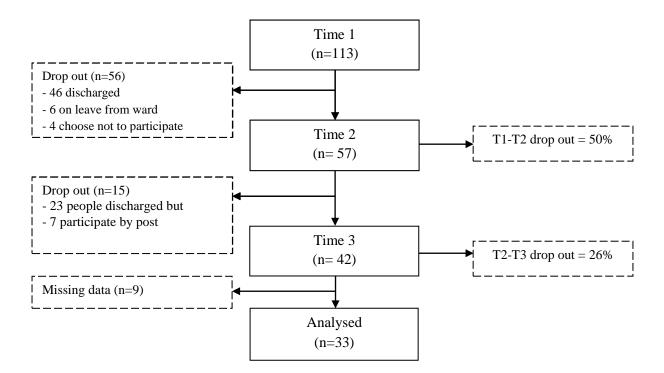


Figure 1. Flow diagram showing drop over the study period.

#### 3.3 Comparing differences between groups

As there were no significant differences in drop out between the intervention and control groups the data were analysed using complete case analysis in order to simplify the analysis and reduce bias (Myers, 2000). This led to a reduction in the sample size as only cases which had complete data sets on the CORE or MHCS at all time points were included, resulting in 33 participants (20 CBTp and 11 TAU). A mixed between-within subjects ANOVA was used to assess the impact of the group intervention on participants' distress and confidence scores, comparing pre-intervention, post-intervention and follow up. Overall, combining changes across both the control and intervention group, there was no significant main effect of group using Pillai's Trace (p=0.80). But there was a significant main effect of time (V=0.38, F(4,26)=4.04, p=0.01) with a medium (0.38) effect size (Cohen, 1988), and a significant interaction between group and time (V=0.33, F(4,26)=3.19, p=0.03), also with a medium effect size (0.33). This suggests that participants in the control and intervention groups experienced different patterns of change during the study across both outcome measures.

Within groups there was a significant effect of time on CORE scores, between baseline and follow up (F(1, 29)=13.94, p=0.01) with a medium effect size (0.33), but not between post-intervention and follow up (p=0.39). The equivalent effect of time on MHCS scores was not significant at either baseline to follow up (p=0.14) or post-intervention to follow up (p=0.95). See Table 4.

The interaction between time and group significantly affected distress between post-intervention and follow up (F(1,29)=4.54, p=0.04) with a small effect size (0.14) but not between baseline and follow up (p=0.35). The interaction between time and group had significant effects on confidence at both time points; baseline to follow up (F(1,29)=4.50, p=0.03) and post-intervention to follow up (F(1, 29)=8.92, p=0.01), both had small effect sizes (0.16 and 0.24 respectively) (see Figures 2 & 3). These effects remained significant after controlling for the identified differences between the two groups (i.e. ward, gender and deprivation).

Measure		Intervention Group (n=20)		Control Group (n=11)		Significance		
	Mean	SD	Mean	SD	Time	F	р	Partial eta squared
CORE Time 1	23.05	9.38	21.18	6.94	T1-T3	13.94	0.01*	0.33
CORE Time 2	18.30	9.18	13.27	8.03	T2-T3	0.76	0.39	0.03
CORE Time 3	13.30	9.31	15.36	9.56				
MHCS Time 1	46.85	22.75	57.00	18.67	T1-T3	2.31	0.14	0.07
MHCS Time 2	52.80	22.59	62.82	12.73	T2-T3	0.00	0.95	0.00
MHCS Time 3	61.35	19.71	53.91	17.47				

Table 4. Comparing distress and confidence scores between groups.

The Voices and Beliefs measures were analysed separately because they were completed by fewer participants than the CORE and MHCS (see Table 5 for comparisons) and because they did not meet the assumptions for parametricity. Attempts to transform the data or to use last observation carried forward (LOCF) methods did not improve the normality of distribution so it was not possible to complete a mixed between-within subjects ANOVA for these outcome measures.

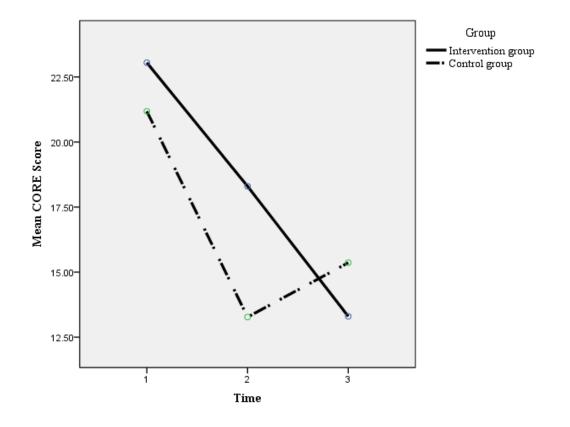


Figure 2. Compares mean CORE scores over time in the control and intervention groups.

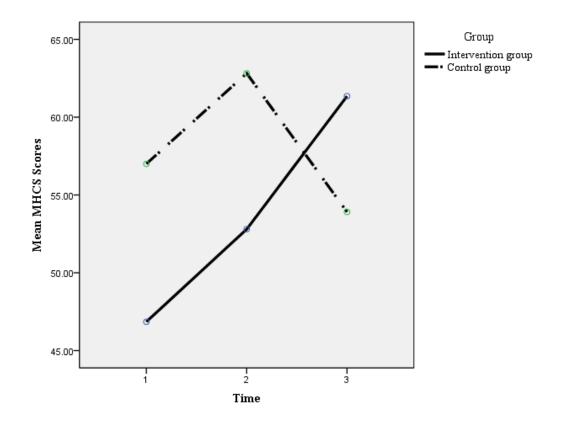
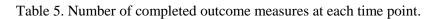


Figure 3. Compares mean MHCS scores over time in the control and intervention groups.

Unfortunately, there is no non-parametric equivalent to a mixed between-within subjects ANOVA (Field, 2012). Instead independent samples Mann Whitney U tests were used to separately compare scores on the Voices and Beliefs measures at each time point. All of these comparisons revealed non-significant differences (p>0.05). In addition, related samples Friedman's ANOVAs revealed no significant differences between scores on either measure at each of the time points (p>0.05) within the same group. However, mean scores on these measures did show trends in the right direction, showing that symptoms decreased over time, which appear more consistent in the intervention group (see Figures 4 & 5).

Measure	Time 1 (n)		Time	<b>2</b> (n)	Time 3 (n)		
	Completed	Missing	Completed	Missing	Completed	Missing	
CORE	113 (100%)	0 (0%)	57 (50.4%)	56 (49.6%)	39 (34.5%)	74 (65.5%)	
MHCS	106 (93.8%)	7 (6.2%)	56 (49.6%)	57 (50.4%)	38 (33.6%)	75 (66.4%)	
VOICES	52 (46%)	61 (54%)	26 (23%)	87 (77%)	23 (20.4%)	90 (79.6%)	
BELIEFS	54 (47.8%)	59 (52.2%)	54 (47.8%)	59 (52.2%)	30 (26.5%)	83 (73.5%)	



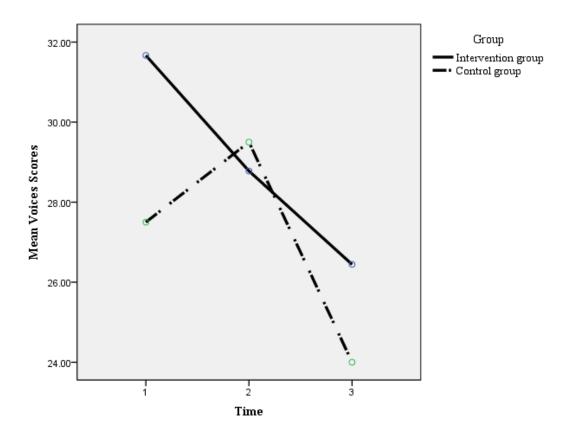


Figure 4. Compares mean scores on the Voices questionnaire by group over time.

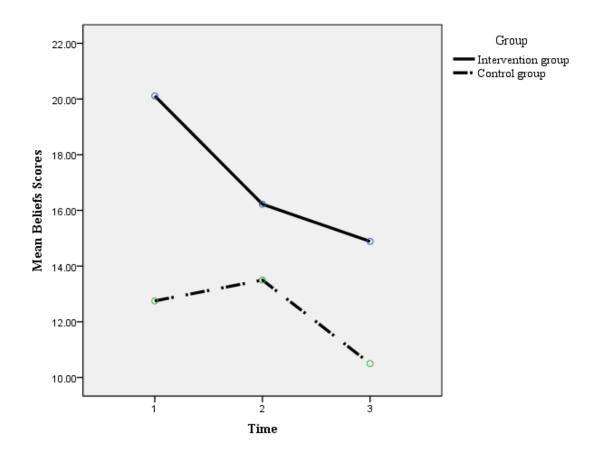


Figure 5. Compares mean scores on the Beliefs questionnaire by group over time.

## 4 Qualitative analysis

Twenty six participants who finished the group intervention (46%) completed satisfaction questionnaires. Initially the content analysis produced 30 descriptive codes which were collapsed into four super-ordinate themes (see Appendix 8). Overall, 13 participants gave purely positive comments, which contained no negative critique or ambivalence. Seven participants made overwhelmingly positive comments but gave some critique in response to question two 'what was least helpful about the group'. Two participants' responses were ambivalent, containing equal numbers of positive and negative statements, and two more were not possible to interpret in this way, as they did not comment on how they felt. The analysis is described below under the headings of the super-ordinate themes. Comments made by only one person are given in quotation marks; if the same comment was made by others the number of people the data relates to is given in brackets.

#### 1. Changes in emotional states

The majority of participants described feeling more "positive" (6), "confident" (7) or feeling "better" (2) as a result of the group. Other individuals described feeling "happier", "more settled" or "cool, calm and collected". One person said they felt "less frightened" of their feelings and others referred to less fear of "prejudice". The majority of participants also mentioned how much they valued "talking" to others (8), or "listening to other people" (6), and that this helped them feel "less isolated" and "alone" (7), reminding them they were "not the only one". Two people also described a sense of comfort in being with others, one said "all of us close together, going through our experiences". Only three participants described negative feelings in response to question two. One said "my negativity" was unhelpful and we can interpret that another participant felt frustrated when they said "not being able to express myself" was least helpful. One participant also described how "confronting my thoughts and fears made me anxious and tense".

#### 2. Learning coping techniques

Many participants made reference to having learnt strategies to help them "cope" or "deal with" (10) their experiences. Participants mentioned different techniques or "tools" that they had found useful, including: "relaxation" or "breathing" techniques (7); learning to "control", "challenge" or "confront" their voices or beliefs (3); "mindfulness" (2); "breaking things down", and the visual aid of "the recovery steps". Others felt that "talking" or "sharing" (5) and "asking for help" were coping strategies in themselves. One participant mentioned that they "did not always feel the benefit" of the coping strategies offered in session.

#### 3. Changes in understanding, attitudes and thinking

Encouragingly, numerous participants made comments which indicated some positive change in attitude or thinking, describing feeling more "hopeful" about the future (3), or the possibility of change (2). Several made statements which demonstrated that they had learnt to understand their experiences in a different way, such as "I am not my thoughts", "the voices and thoughts weren't real" or "they are just voices and just thoughts". Whilst others specifically mentioned that their

"understanding" or "insight" (3) had improved. Two people also commented that they were less selfcritical and had learnt it was "not my fault" and "don't blame myself". In contrast, six people said they had not experienced any change in their thinking or how they view themselves (questions 3-5) and one person said the group had "made me realise I am not as better as I thought I was", although this does reflect an improvement in insight. However, all of these six participants also described at least one positive aspect of the group including: feeling "more hopeful", "more confident", appreciating the "chance to talk", "the advice", or hearing about "other people's experiences" and "not being the only one".

#### 4. Effects on participation in the group sessions

The satisfaction questionnaire asked for specific feedback about the least helpful aspects of the group. Four people did not give any response and four indicated that it was all helpful. Some of the criticisms related to other group participants including; "people rambling" or "walking in and out", needing more "patient participation" or comments about specific individuals. Other criticisms generally related to individual factors, such as; "my negativity", "not being able to express myself" or that thinking "made me anxious and tense". Two people also commented that "hearing voices" was the least helpful thing about the group. There were also comments about the "time constraints" (3) of the group overall (too short) and the sessions (too long). One person commented the medication made them "sleepy" and another that they struggled following ECT which had "resulted in some memory loss". However, many people made positive comments about what factors encouraged them to participate in the groups. As described above, most commonly people valued "talking to" and "hearing from" others. But in addition participants made positive comments about: the service user co-facilitators (2), the "tutors", that the groups were "friendly", "nice" "pleasant", "good" or "worthwhile" (6), "helpful", "useful" or "interesting" (6), or that they had enjoyed attending (4).

81

## **5** Discussion

The quantitative findings show encouraging effects regarding the interaction between time and group attendance and are discussed in relation to the original hypotheses:

- Participants who received group CBTp showed greater reduction in distress at follow up than those receiving TAU, although the difference between the groups was not significant overall. Therefore, the findings partially support our first hypothesis and indicate a potential continuation effect of CBTp in reducing distress.
- Participants who received group CBTp showed significantly improved confidence over time from baseline to post-intervention, and at follow up, compared to those receiving TAU. This change could not be attributed to time alone and therefore supports our second hypothesis.
- 3. Our findings are inconclusive with regards to changes in positive symptoms of psychosis, as insufficient data were collected to allow for a fair comparison between groups. However, the findings suggest a trend for decreasing symptoms over time, and suggest a more consistent reduction in symptoms in the intervention group.

Our qualitative findings add weight to the quantitative conclusions and show support particularly for hypothesis two. Many participants who attended the groups reported improvements, including feeling more positive, confident and hopeful about the future. Participants described learning coping strategies which may help them, and showed some change in ways of understanding their experiences, which we could interpret as contributing to feelings of improved confidence.

Overall, our findings appear consistent with recovery models of psychosis, as the groups more clearly increased confidence than reduced symptoms. This suggests that group participants were learning to cope with, and accept, difficult and frightening experiences, rather than attempting to reduce their occurrence. Our finding of a maintenance effect of the groups in reducing distress over time suggests there could be an interaction between improving confidence and providing psychoeducation or therapeutic group factors (such as universality, catharsis, etc) on reducing distress. It is likely that the

group, through its approach of normalisation, support and skills teaching, allows participants to gain confidence and a 'recovery framework' that TAU participants are less able to access.

Our findings are in keeping with similar studies which have found reductions in distress and general psychopathology across both intervention and comparison groups (Bechdolf, et al., 2004; Pinkham, et al. 2004; Bechdolf, Knost, Pukrop & Klosterkotter, 2005). It is interesting to note that in our sample there was a significant correlation between distress and type of admission to hospital. Those participants admitted informally who were later changed to involuntary detention (Section 3) showed the highest levels of distress which fits evidence that for some admission to hospital can be a traumatic experience in itself (Berry, Ford, Jellicoe-Jones & Haddock, 2013). Our findings of medium effect sizes (Cohen, 1988) regarding reducing distress over time are comparable to reviews of studies of CBTp in the community (Wykes, et al., 2008). Although, given the crisis nature of hospital admission it is expected that distress will decrease over time anyway, our findings suggest that a group intervention during the crisis period can help people to maintain improvements in distress after the crisis has eased, and potentially during discharge from hospital. We can hypothesise that attending the group gave service users the skills on discharge to continue to manage anomalous experiences, which often return when service users are exposed to stressful living or family environments.

Our findings regarding improved confidence or self-efficacy as a result of the group intervention replicate the tentative positive findings reported by Clarke and colleagues (Durrant, et al., 2007), and are supported by studies which have shown improvements in self- esteem (Aho-Mustonen, Miettinen, Kovivisto, Timonnen, 2008; Aho-Mustonen, et al., 2011) and improved quality of life (Bechdolf, 2010). Our qualitative findings are also consistent with other research which reports generally positive findings from satisfaction questions (Ruane & Daddi, 2011) and informal feedback (McInnis, Sellwood & Jones, 2006) that participants value groups and feel they benefit from them (Chadwick, Sambrooke, Rasch & Davies, 2000). In particular, the feeling of "I'm not alone" reported by participants in our study is congruent with the previous study (Durrant, et al., 2007) and the wider literature regarding groups outside of inpatient care; that universality is one of the most helpful and supportive aspects of group interventions (Chadwick, et al., 2000).

#### 5.1 Limitations and feasibility

To the best of our knowledge this is the largest controlled study with inpatients comparing brief group CBTp with treatment as usual. However, the study has a number of limitations including the small sample size, particularly with regards to the control group, which limits the power of the statistically significant findings. We anticipated that dropout would be high due to the chaotic nature of the inpatient ward setting that is not designed to provide long term care. Despite the use of incentives to encourage continued participation in the study our dropout rate was higher than that reported by other similar studies (Bechdolf, et al., 2010). Although, other studies have often been carried out in secure settings (Aho-Mustonen, et al., 2011) in which people are less quickly discharged, or have employed methods to encourage participation, such as follow up phone calls (Hagen, Nordahl & Grawe, 2005) which we were not able to utilise. However, our dropout rate is comparable to that of studies in acute inpatient settings in other countries (Eichler, et al., 2008). It was not possible to randomize participants due to pragmatic issues because the therapy groups were run on the wards and participants could only be included in the control arm on wards which were not running the group. It was not possible to have equal numbers of wards providing control and intervention groups within the data collection period due to the cumulative effect of the study gradually being adopted by more wards over time. Generally ward staff were keen to be involved in the intervention groups rather than the control arm of the study. These factors limit the generalisability of findings but also reflect the reality of conducting research in inpatient settings. Resource limitations also meant that it was not possible to blind the researcher collecting the outcome measures or provide a longer follow up period which would be helpful in assessing the longevity of change.

However, what this study has shown is that it is feasible to introduce and evaluate brief group therapy on inpatients wards, specifically for people experiencing psychosis, regardless of diagnosis. Whilst closed groups were challenging to manage at times on the busy inpatient ward, they were not impossible, and added to a sense of group cohesiveness which many participants valued highly. Group members particularly valued input from the service user facilitators who provided a hopeful and real message about the possibility of change. If these groups were only available to outpatients then at times of crisis service users experiencing psychosis would miss the opportunity to receive normalising, optimistic approaches towards recovery when arguably they might need it most. Hill and colleagues (2009) discuss the wider impact that providing CBT groups on inpatient wards can have on institutions, by encouraging co-working, staff development, the visibility of cognitive therapy and increasing awareness of normalising, recovery focussed approaches. In addition, groups provide ward staff, who commonly see service users who have relapsed and been readmitted, with optimism and increased understanding of recovery from service user facilitators. Whilst none of the above factors are specific to CBTp groups, the tendency is often for people experiencing psychosis not to be referred for therapy due to a lack of awareness of the potential change; but specific groups for this population demonstrate a different approach.

#### 5.2 Clinical implications

There is a call for more therapeutic opportunities to be available for people admitted to hospital from service user initiatives (James, 2001) and government guidelines (Bright, 2006). This study has shown that brief CBTp for inpatients can significantly improve confidence and reduce distress over time, is feasible, acceptable and valued by service users and ward staff. Groups offer a way to honour peoples' experiences, facilitate engagement in therapy, and provide a normalising, optimistic and hopeful message at a time of crisis; focused on promoting recovery, emphasising hope, optimism, personal meaning and potential (Roberts & Wolfson, 2004). Brief CBTp groups run by novice therapists, recovered service users and ward staff (with regular supervision from experienced therapists) offer a realistic, economical way of providing basic therapeutic input to people in hospital who might otherwise not access support that specifically addresses their experience of psychosis. It also has the potential to increase engagement with services in the community if service users have had a positive experience of group therapy while in hospital and could even be tailored as a possible referral pathway to facilitate ongoing engagement. There is also the potential for using brief group therapy as a way of determining suitability for further therapeutic interventions which could include engaging with families and wider support networks.

85

## 5.3 Acknowledgements

We wish thank all the group facilitators and ward staff who assisted with the study, particularly the service user volunteers. And we are especially grateful to all of the service users who took the time to participate in the study. We also wish to acknowledge Professor Peter Kinderman who provided advice regarding the study design and Dr David Powell provided additional clinical supervision for MF and the group facilitators. We would also like to thank the volunteer assistant psychologists who assisted with the data collection.

The project was jointly funded by the University of Liverpool and XXXX NHS Trust as part of MF's doctoral training.

Word count: 6,451.

## **6** References

- Aho-Mustonen, K., Miettinen, R., Koivisto, H., Timonen, T. & Raty, H. (2008). Group psychoeducation for forensic and dangerous non-forensic long-term patients with schizophrenia. A pilot study. *European Journal of Psychiatry*, 22, 84-92.
- Aho-Mustonen, K., Tilonen, J., Repo-Tiihonen, E., Ryynanen, O.P., Miettinen, R. & Raty, H. (2011). Group psychoeducation for long-term offender patients with schizophrenia: An exploratory randomised controlled trial. *Criminal Behaviour and Mental Health*, 21, 163-176.
- American Psychological Association (2004). *Practice Guideline for the Treatment of Patients With Schizophrenia* (2<sup>nd</sup> ed.) APA. Retrieved June 15, 2013, from http://psychiatryonline.org/pdfaccess.ashx?ResourceID=243185&PDFSource=6
- Barkham, M., Bewick, B., Mullin, T., Gilbody, S., Connell, J., Cahill, J. et al. (2013). The CORE-10:
   A short measure of psychological distress for routine use in the psychological therapies,
   *Counselling and Psychotherapy Research*, 13, 3-13.
- Barrowclough, C., Haddock, G., Lobban, F., Jones, S., Siddle, R., Roberts, C. & Gregg, L. (2006).
  Group cognitive-behavioural therapy for schizophrenia. *British Journal of Psychiatry*, 189, 527-532.
- Bechdolf, A., Knost, B., Kuntermann, C., Schiller, S., Klosterkotter, J., Hambrecht M. et al. (2004). A randomised comparison of group cognitive-behavioural theraoy and group psychoeducation in patients with schizophrenia. *Acta Psychiatrica Scandinavica*, 110, 21-28.
- Bechdolf, A., Kohn, D., Knost, B., Pukrop, R. & Klosterkotter, J. (2005). A randomized comparison of group cognitive-behavioural therapy and group psychoeducation in acute patients with schizophrenia: outcome at 24 months. *Acta Psychiatrica Scandinavica*, 112, 173-179.
- Bechdolf, A., Knost, B., Nelson, B., Schneider, N., Veith, V, Yung, A.R. & Pukrop, R. (2010).Randomized comparison of group cognitive behaviour therapy and group psychoeducation in

acute patients with schizophrenia: effects on subjective quality of life. *The Royal Australian* and New Zealand College of Psychiatrists, 44, 144-150.

Bentall, R. (2009). Doctoring the Mind: Why psychiatric treatments fail. London: Penguin Books.

- Berry, K., Ford, S., Jellicoe-Jones, L. & Haddock, G. (2013). PTSD symptoms associated with the experiences of psychosis and hospitalisation: A review of the literature. *Clinical Psychology Review*, 33, 526-538.
- Bickerdike, A. & Matias, L. (2010). Thinking about thinking: developing a meta-cognitive approach to group-based cognitive behavioural therapy for psychosis in a medium secure setting. *Clinical Psychology Forum*, 214, 31-35.
- Bright (2006). Star Wards: practical ideas for improving the daily experiences and treatment outcomes of acute metal health inpatients. London: Bright

Bryman, A. (2008). Social Research Methods (3<sup>rd</sup> ed.). Oxford: Oxford University Press.

- Canadian Psychiatric Association (2005). Clinical Practice Guidelines: Treatment of Schizophrenia. *The Canadian Journal of Psychiatry*, 50, Supplement 1.
- Carpinello, S.E., Knight, E.L., Markowitz, F.E. & Pease, E.A. (2000). The development of the mental health confidence scale: A measure of self-efficacy in individuals diagnosed with mental disorders. *Psychiatric Rehabilitation Journal*, 23, 236-243.
- Castelein, S., van der Gaag, M., Bruggeman, R., van Busschbach, J.T. & Wiersma, D. (2008). Measuring empowerment among people with psychotic disorders: A comparison of three instruments. *Psychiatric Services*, 59, 1338-1342.
- Chadwick, P., Lee, S., & Birchwood, M. (2000). The Revised Beliefs About Voices Questionnaire (BAVQ-R). *British Journal of Psychiatry*, 177, 229–232.

- Chadwick, P., Sambrooke, S., Rasch, S. & Davies, E. (2000). Challenging the omnipotence of Voices: group cognitive behaviour therapy for Voices. *Behaviour Research and Therapy*, 38, 993-1003.
- Chadwick, P., Taylor, K.N. & Abba, N. (2005). Mindfulness groups for people with psychosis. Behavioural and Cognitive Psychotherapy, 33, 351-359.
- Clarke, I. & Pragnell, K. (2008). The Woodhaven 'What is real and what is not?' Group Programme: A psychosis group in four sessions for an inpatient unit. Retrieved 20 February, 2011 from http://www.isabelclarke.org/psychology/index.htm#CBT
- Cohen, J. (1988) Statistical power analysis for the behavioural sciences (2nd Ed.). Hove and London: Lawrence Earlbaum Associates, Publishers.
- Communities & Local Government (2011). *The English Indices of Deprivation 2010*. London: Department for Communities and Local Government.
- Connell, J., Barkham, M. (2007). *CORE-10 User Manual, Version 1.1*. CORE System Trust & CORE Information Management Systems Ltd.
- Dannahy, L., Hayward, M., Strauss, C., Turton, W., Harding, E. & Chadwick, P. (2011). Group person-based cognitive therapy for distressing Voices: Pilot data from nine groups. *Journal of Behavior Therapy and Experimental Psychiatry*, 42, 111-116.
- Department of Health (2007). *New ways of working for everyone: A best practice implementation guide*. London: Department of Health.
- Drake, R., Haddock, G., Tarrier, N., Bentall, R. & Lewis, S. (2007). The Psychotic Symptom Rating Scales (PSYRATS): Their usefulness and properties in first episode psychosis. *Schizophrenia Research*, 89, 119–122.
- Drinnen, A. (2004). A secure base? A group for voice hearers on an inpatient ward. *Clinical Psychology*, 36, 19-23.

- Durrant, C., Clarke, I., Tolland, A. & Wilson, H. (2007). Designing a CBT service for an acute inpatient setting: A pilot evaluation study. *Clinical Psychology and Psychotherapy*, 14, 117-125.
- Eichler, T., Schützwohl, M., Priebe, S., Wright, D., Adamowski, T., Rymaszewska, J., et al. (2008).
  Loss to follow up in longitudinal psychiatric research. *Epidemiologia e Psichiatria Sociale*, 17, 138-147.
- Field, A. (2012). Discovering Statistics using IBM SPSS Statistics (4<sup>th</sup> ed). London: Sage Publications
- Forsey, M., Speight, T., Sarsam, M. & Sellwood, B. (2013). *Group cognitive behaviour therapy for psychosis in acute care: A review of outcome studies.* Manuscript submitted for publication.
- Gaudiano, B.A. & Herbert, J.D. (2006). Acute treatment of inpatients with psychotic symptoms using acceptance and commitment therapy: Pilot results. *Behaviour Research and Therapy*, 44, 415-437.
- Haddock, G., Mc Carron, J., Tarrier, N. & Faragher, E.B. (1999). Scales to measure dimensions of hallucinations and delusions: the psychotic symptom rating scales (PSYRATS). *Psychological Medicine*, 29, 879-889.
- Haddock, G., Tarrier, N., Morrison, A.P., Hopkins, R., Drake, R. & Lewis, S. (1999). A pilot study evaluating the effectiveness of individual inpatient cognitive-behavioural therapy in early psychosis. *Social Psychiatry and Psychiatric Epidemiology*, 34, 254-258.
- Hagen, R., Nordahl, H.M. & Grawe, R.W. (2005). Cognitive-behavioural group treatment of depression in patients with psychotic disorders. *Clinical Psychology and Psychotherapy*, 12, 465-474.
- Hill, G., Clarke, I. & Wilson, H. (2009). The 'Making Friends with Yourself' and the 'What Is Real and What Is Not' groups. In I. Clarke & H. Wilson (eds.), *Cognitive Behaviour Therapy for*

Acute Inpatient Mental Health Units: Working with Clients, Staff and the Mileu, (pp. 161-173). London & New York: Routledge, Taylor & Francis Group.

- James, A. (2001). *Raising our Voices: An Account of the Hearing Voices Movement*. Gloucester: Handsell Publishing.
- Kaczinski, R., Resnick, S.G. & Rosenheck, R.A. (2009). A psychometric study of empowerment and confidence among veterans with psychiatric disabilities. *Journal of Rehabilitation*, 75, 15-22.
- Kay, S., Fiszbein, A., & Opler, L. (1987). The positive and negative symptoms scale (PANSS) for schizophrenia. *Schizophrenia Bulletin*, 13, 261–276.
- Lecomte, T., Leclerc, C., Corbiere, M., Wykes, T., Wallace, C. & Spidel, A. (2008). Group cognitive behavior therapy or social skills training for individuals with a recent onset of psychosis?
  Results of a randomized controlled trial. *Journal of Nervous and Mental Disease*, 196, 866–875.
- Lockwood, C., Page, T. & Conroy-Hiller, T. (2004). Effectiveness of individual therapy and group therapy in the treatment of schizophrenia. *Joanna Briggs Institute Reports*, 2, 309-338.
- May, R. (2004) Understanding psychotic experience and working towards recovery. In P. McGorry &
   J. Gleeson (Eds.). *Psychological Interventions in Early Psychosis (pp. 245-261)*. Chichester: Wiley.
- McInnis, E., Sellwood, W. & Jones, C. (2006). A cognitive behavioural group-based educational programme for psychotic symptoms in a low secure setting: a pilot evaluation. *The British Journal of Forensic Practice*, 8, 36-46.
- Myers, W.R. (2000). Handling missing data in clinical trials: an overview. *Drug Information Journal*, 34, 525-533.
- National Institute for Health & Clinical Excellence (2010). Schizophrenia: Core Interventions in the Treatment and Management of Schizophrenia in Adults in Primary and Secondary Care

*(Updated Edition).* Leicester & London: The British Psychological Society and the Royal College of Psychiatrists.

Pallant, J. (2007). SPSS Survival Manual (3<sup>rd</sup> ed.). Berkshire: Open University Press.

- Penn, D., Meyer, P.S., Evans, E., Wirth, R.J., Cai, K. & Burchinal, M. (2009). A randomised controlled trial of group cognitive-behavioral therapy vs. enhanced supportive therapy for auditory halluncinations. *Schizophrenia Research*, 109, 52-59
- Phillips, R., Clarke, I. & Wilson, H. (unpublished). Evaluation of an inpatient group CBT for psychosis group program designed to increase effective coping and address the stigma of diagnosis.
- Pinkham, A.E., Gloege, A.T., Flanagan, S. & Penn, D.L. (2004). Group cognitive-behavioral therapy for auditory hallucinations: A pilot study. *Cognitive and Behavioral Practice*, 11, 93-98.
- Roberts, G. & Wolfson, P. (2004). The rediscovery of recovery: open to all. *Advances in Psychiatric Treatment*, 10, 37-48.
- Royal Australian and New Zealand College of Psychiatrists (RANZCP) (2005). Clinical practice guidelines for the treatment of schizophrenia and related disorders. *Australian and New Zealand Journal of Psychiatry*, 39, 1 – 30.
- Ruane, D. & Daddi, I. (2011). Pilot study of group cognitive behaviour therapy for heterogeneous acute psychiatric inpatients: Treatment in a sole-standalone session allowing patients to choose the therapeutic target. *Behavioural and Cognitive Psychotherapy*, 39, 359–365.
- Saska, J.R., Cohen, S.J., Srihari, V.H. & Woods, S.W. (2009). Cognitive behavior therapy for early psychosis: A comprehensive review of individual vs. group treatment studies. *International Journal of Group Psychotherapy*, 59, 357-383.

- Svensson, B., Hansson, L., Nyman, K. (2000). Stability in a comprehensive, cognitive therapy based treatment program for long-term mentally ill patients. A 2-year follow-up study. *Journal of Mental Health*, 9, 51-61.
- Veltro, F., Falloon, I., Vendittelli, N., Oricchio, I., Scinto, A., Gigantesco, A. et al., (2006).
  Effectiveness of cognitive-behavioural group therapy for inpatients. *Clinical Practice and Epidemiology in Mental Health*, 2, 16-21.
- Ventura, J., Green, M., & Shaner, A. (1993). Training and quality assurance with the Brief Psychiatric Rating Scale. *International Journal of Methods in Psychiatric Research*, 3, 221–244.
- World Health Organisation (2013). Sixty sixth World Health Assembly: Comprehensive mental health action plan 2013-2020. Retrieved June 13, 2013, from: http://apps.who.int/gb/ebwha/pdf\_files/WHA66/A66\_R8-en.pdf
- Wykes, T., Hayward, P., Thomas, N., Green, N., Surguladze, S., Fannon, D. & Landau, S. (2005).What are the effects of group cognitive behaviour therapy for Voices? A randomised controlled trial. *Schizophrenia Research*, 77, 201-210.
- Wykes, T., Steel, C., Everitt, B. & Tarrier, N. (2008). Cognitive behavior therapy for schizophrenia: Effect sizes, clinical models, and methodological rigor. *Schizophrenia Bulletin*, 34, 523-537.

# **Chapter Four: Conclusions**

# 1 Discussion overview

This study suggests that it is possible to have a positive impact on the mental health of people in hospital by providing targeted group therapy. At a basic level, the groups offered people opportunities to talk about their experiences, share with and hear from others, potentially build relationships and ultimately feel less alone. These are recognisable therapeutic factors of catharsis, acceptance, altruism and universality (Yalom & Leszcz, 2005), non-specific to any particular type of therapy but important aspects of any group, and most consistently significant in short-term groups (Brabender, 2002). On the other hand: education about psychosis; helping participants to link their thoughts, feelings and behaviours associated with psychotic experiences; teaching monitoring and coping skills, such as mindfulness and breathing techniques; and introducing new ways of understanding experiences, are all specific to the therapist-directed content of therapy. Although in their feedback participants talked less about the therapist led factors, they did demonstrate increased understanding and described feeling less frightened of their experiences, which we can hypothesise may be as a result of the specific therapeutic action rather than generic therapeutic factors. In addition, learning practical coping skills appears to have been highly valued by participants and arguably may influence self efficacy because people feel like they have more 'tools in their toolkit', and therefore a greater sense of control and mastery (Berry & West, 1993). In line with the aims of cognitive therapy our groups showed improvement in confidence more clearly than reduced symptoms (Morrison, 2013), which may have contributed to the reductions in distress in group participants at follow up. The inclusion of recovered service users as group facilitators appears to have been particularly influential in the creation of hope in participants who commonly asked questions and sought guidance from these individuals, which demonstrates another generic therapeutic factor 'the instillation of hope' (Yalom & Leszcz, 2005).

94

#### 1.1 How the groups fit with current services

Our group is based on models of care which promote a normalising, transdiagnostic approach to distress, seeing psychotic experience as on a continuum with healthy functioning (van Os, Hanssen, Bijl & Ravelli, 2000; Nelson, Fusar-Poli & Yung, 2012). Groups such as these are consistent with wider recovery movement which encourages empowerment, sees service users as capable of helping themselves (Dillon, Bullimore & Lampshire, 2013), and demonstrates a shift in thinking away from traditional biomedical models of care which still dominate acute care settings (Clarke, 2009). In line with approaches adopted in service user led groups, such as the Hearing Voices Network (HVN), our groups encouraged the use of non-stigmatising language and tried to avoid medical jargon and labeling, although understandably some participants used this language to talk about their own experiences (Chamberlain, 2013). We tried to validate participants' experiences by accepting that they were a real part of their experience, and consider everyone in the group as equals regardless of whether their expertise was from personal or professional experience (HVN, 2013). These elements of service user led groups are highly respected by group participants who value safety and social relationships as well as learning coping strategies (Newton, Larkin, Melhuish & Wykes, 2007) and see the development of trust as the foundation from which other experiences in the group can grow (Morland, 2004).

Volunteer service users who had personal experience of psychosis were essential members of the facilitation team, on occasions when the service user co-facilitator could not attend a session, participants were disappointed, demonstrating how highly they were valued by the group. This model of joint working demonstrates another way in which our groups fit with the current service ideals which call for collaboration between professionals and those with personal experience of services at every level of service development, organisation and delivery (Department of Health (DoH), 2012a; DoH, 2012b).

Acute care services, which are under constant pressure to encourage short hospital stays and discharge people as soon as the crisis has abated (Clarke, 2009), have to focus on the most economical methods of streamlining therapy. Brief therapy groups such as ours provide an opportunity to maximise

resources and engage people who might not be appropriate for individual therapy (Davidson, Hammond, & Maguire, 2009). Our findings are also encouraging because despite the fact that facilitators were novice therapists, which has previously been associated with poorer outcomes (Ruddle, Mason & Wykes, 2011), a positive impact was observed. Regular supervision for all the group co-facilitators from experienced therapists was essential to enable reflection, sharing of problems and ideas, and ensuring that everyone had a shared understanding of the group approach.

#### **1.2** Reflecting on my role within the research

Research does not take place in a vacuum but is affected by the social, cultural, political and intellectual context in which it takes place (Kingdon, 2005). As a researcher positioning yourself within any piece of work is essential in order for others to interpret what you have done and how you have influenced the knowledge produced at every stage of the research process, from design to dissemination, whether it is a clinical trial or ethnography (Davidoff, et al. 2001). From a social constructionist perspective there is no such thing as an 'absolute truth' (Lincoln & Guba, 2000). Instead we offer an understanding from our unique subjective perspective and are reflective in considering how our values and interests and are likely to have shaped our thinking (Atkinson & Hammersely, 1995).

My personal interest in working with people experiencing psychosis was inspired after attending a talk by Jacqui Dillon, an advocate and campaigner, who has personal and professional experience of hearing voices and mental health services (Dillon, 2009). Working in an 80 bedded inpatient unit at the time, which only had one clinical psychologist (my supervisor May Sarsam) who had been in post for about a year, meant that there was an opportunity to develop the psychology input to the wards and offer a group specifically for people with psychosis. Later I was able to attend hearing voices group facilitation training run by Jacqui which helped me to develop ideas about my role in organising and managing the inpatient groups, with the intention of facilitating a collaborative group, rather than purely therapist led group, but with a focus on CBT and coping strategies.

96

Developing a research project in an area of clinical interest was important to me and extremely motivating. However it also presented a number of challenges in balancing the dual role of being a clinician and researcher, a common dilemma for clinical psychologists (Thompson & Russo, 2012). This was difficult at times, for example, when as a clinician I would have liked to follow up with participants individually after groups or when speaking to control group participants and could see much potential for intervention. However, whenever these issues arose I was able to utilise the staff co-facilitator, or a member of the ward staff, to follow up on these issues. At other times, it was frustrating to lose some people who wanted to take part in the groups but were put off by being asked to complete the study questionnaires. Although this was essential in order to be able to measure change, if I were to repeat the study I would change the way this information was collected (this is discussed further in the next section).

One particular challenge which highlights this dilemma was the inclusion of additional wards in the project over time. Once we started running the intervention groups on one ward, several managers from other wards wished to offer the same groups on their wards, without particularly wanting to take part in the research project. As a clinician this news was encouraging, demonstrating that the groups were valued by the care team. But from a researcher perspective it was problematic to have some wards only offering one arm of the trial. However, due to limited time and resources we allowed the additional wards to participate only in the intervention arm of the trial in order to maximize our data collection. As a result we have ended up with quite unequal numbers of participants in each group which affects our ability to draw firm conclusions from the data.

One of the greatest strengths, and biggest challenges, in running this group was that it offered participants a different message to the one that they were often (but not always) given by the medical or wider care team. Offering a group with a different perspective on mental health and 'illness' within a hospital setting required a careful balance in seeking to promote a new approach, without undermining the modality of care being provided by medical and nursing staff. This was extremely important because the relationships service users built with the care team, and their confidence in the team's approach and abilities, were essential for recovery. It was important that service users did not lose confidence by interpreting the group's introduction of a different message as direct conflict within the care team. Generally participants welcomed this different, more hopeful, message that they could do something to help themselves, and only occasionally did group discussion about the different messages appear to increase participants' sense of frustration; usually (understandably) when people were detained involuntarily. In these situations, acknowledging the individual's distress at their current circumstances in the group discussion was often something which brought empathy and altruism from other group members and I believe encouraged group cohesiveness. In addition, the majority of ward staff were overwhelmingly positive and encouraging about the group and accepted that it presented a different, additional perspective rather than a conflicting one.

While I have attempted to account for my own assumptions and expectations in this research it is inevitable that these will have influenced the data collection and analysis. I was responsible for collecting data, running groups and conducting the analysis so it is possible that I have unconsciously interpreted some participants' responses as more favourable towards the group than those in the control group. This is an unfortunate consequence of inadequate resources to conduct blinded procedures. It is also possible that participants will have felt more inclined to give socially desirable responses in the intervention group. However, this was not always the case and some people were very clear in saying what aspects of the group they did not find helpful. Having built up relationships with people who attended the groups it is also likely that they might not want to give unfavourable responses on the satisfaction questionnaire, even when we directly asked what was least helpful. However, whilst we need to understand the context in which the findings have been produced, and bear this in mind when generalising and making interpretations, it does not mean that the findings are invalid or lack authenticity (Lincoln & Guba, 2000).

#### **1.3 Reflections from group facilitators**

In the same way I cannot separate my assumptions and influence from the research findings, it would be impossible to try and isolate the contribution of the service user co-facilitators to the group sessions. Throughout the project we had many enlightening discussions, both in and out of group sessions, which have inevitably influenced my thinking, attitudes and running of the group. I think at times the dual role of the group as a therapy intervention and a research project was also frustrating for the service user co-facilitators, who like me, would have preferred more opportunity at times to be flexible about the group content, the completion of measures and admission of new people to the group each week. However, they too recognised that measuring outcomes was a necessity for evidenced based practice, and important for the development of groups such as this within the hospital setting.

At the end of the study I invited two of the service user co-facilitators who finished the groups with me if they would like to write a short piece to contribute to our feedback about the group. Both have given me permission to include their feedback here. Identifiable material has been removed to maintain anonymity; alterations are shown in square brackets.

#### To Mary,

My name is [xxxx] and I have been a service user with [the NHS trust] for nearly 2 and a half years and I have been co-facilitating The What's Real and What's Not group for the last 12 months at [site] and on several occasions at [other site]. I started on ward [B] with a [xxxx] and [xxxx] and we had a few teething problems to begin with and as with anything new there was a lot of scepticism from the service users and on occasions staff as to whether this was somebody's study or if this was going to be beneficial to the care of service users. Quite readily we gained the trust from the service users and even though it was a study it was also a really well thought 4 week care programme which involved sharing personal experiences of psychosis, delusions, hearing voices and unusual beliefs, learning coping strategies, relaxation and breathing exercises to mindfulness and a understanding of how mental health illness surfaces and how we are all susceptible to getting ill.

The negatives we had was unfortunately a) closed groups - because it was a study we were unable to accept any new service users once the first session had already started and with it being a 4 week group service users would be giving leave or let out and even though they were told they could come back as an out-patient none would and quite frankly who would after being in hospital for long periods. b) the paperwork - because it was a study it was essential to show that the group worked and there needed to be evidence to support this and again there was suspicion from service users who where quite reluctant to sign their name to paper and some just didn't have the concentration or focus to read the agreement and had to have it read to them so they understood what the group was about and why the paperwork was important. c) Staff - unfortunately not having the full support of the staff on specific wards and not publicising the group throughout the week so that once we got on the ward we had service users when we went on the ward we where met with no knowledge of the group from service users and it ended up being trying to explain what the group was and getting them to sign up to the group on the spot which didn't help.

I then started the group on another ward and to say it was like chalk and cheese is an understatement, you would swear it was a different hospital and not 20 yards away. It was readily publicised on the ward and it was met with a lot of enthusiasm from the staff which showed in the service users. Once the groups started and people started sharing there own experiences which they didn't think anyone could relate to we started to see service users making friendships and supporting each other away from the groups and even when the groups had finished some asked if they could still sit in and to recap what the group had already gone over. In my opinion there isn't a group which focuses on the topics which this group does and it is very much needed not just on the wards but also in the community. Having myself had schizophrenia for nearly 12 years medication is not enough it's only half the battle the other half is talking therapies and it's proven that it works and myself as a service user having somewhere you can open up in a safe environment and not having that fear that if you do speak up as being a voice hearer you have the confidence it's not going to be repeated to your psychiatrist and resulting in a longer admission in hospital which is a recurring fear. For me being involved in the group has been very therapeutic and I have come away with a few more tools in my recovery and I do the breathing exercises and am looking more into mindfulness and I am very grateful for being part of this group. I hope this group will continue in some shape of form on the wards and maybe progress to in the community and I wanted to write this piece for Mary to show others a little insight and to humanise how successful the group was and give a little feedback which sadly the paperwork for the study won't show.

Hi Mary and to all concerned,

This is just a brief feedback on my roll as a group facilitator in a short time at [site] and a longer time in [other site] as part of the "what is real group"..!!

To be honest I've felt we could provide a lot more practical support in and alongside the group work we have done, i.e. to be able to have a resource of organisations and support groups to help in the follow on of patients, and for us as ex-service users to maybe be able to stay in touch to offer pastoral support or something similar for a short time.

These group sessions have shown me that this type of intervention has been really helpful in grounding patients if they're in distressing circumstances. As a whole I've felt it is beneficial to them, yet feel a slightly more simplistic sort of practical day to day, here and now, group work would help more, so we have at times been flexible and tried that in the groups with some success!!

*I've really enjoyed doing this and would look forward to any possibility of continuing to be of help...thanx* 

xxxx, service user carer rep... "what is real group"

## 2 What we learnt from our experience of running the groups

Introducing new groups onto the ward was not easy, and there were a number of specific challenges highlighted by the facilitators above, and described in similar accounts of running groups on inpatient wards (Hill, Clarke & Wilson, 2009; Jefford, Grandison & Pharwaha, 2010). In our study running the groups across a number of wards gave us the opportunity to compare the difficulties we encountered on each ward.

The success or failure of the group session each week was largely dependent upon the attitudes of the ward as a whole and the understanding and enthusiasm of the individual staff working on the ward that day. As described above by the service user volunteers, we encountered major differences between the mind-set of different wards even within the same hospital. Although each ward allocated a member of nursing staff to co-facilitate the groups (and this person received training and supervision about the groups) on some wards this person was not regularly available (i.e. not working that day or having been allocated other duties, such as ward round). This person was key in preparations before the group sessions, such as waking people up and reminding them about the group; making sure they

had received morning medication; being encouraging and positive about the group if people said they "couldn't be bothered", but not forcing people to come if they did not want to; helping to make refreshments and not being frightened to join in with the group discussion. They were also able to follow up with people after the sessions if necessary and act as a resource for patients on the ward who wanted more information in between the sessions. Therefore, we learnt that the role of the ward manager in championing and overseeing the attitudes and responsibilities of ward staff was essential.

On wards which regularly ran other types of groups, such as generic recovery groups or morning meetings, this system worked relatively well, and other members of staff were usually happy to step in and fulfil these duties if the allocated person was not available. However, wards which had fewer structured groups and activities were usually those where the allocated member of staff was less available. Therefore, we frequently had to ask another member of staff to help out (often a nursing assistant or trainee nurse), who had not received any training about the group, did not know how to approach people about the group and was often uncomfortable joining the sessions. On occasion, these 'substitute' co-facilitators made unhelpful comments in the group which went against the group philosophy, although this is understandable, as they may never have been exposed to alternative ways of thinking about mental health before, it did not help group cohesiveness when the facilitators had obviously different approaches. However, it was encouraging to observe that often 'substitute' co-facilitators, who had not spoken in the group, would ask questions afterwards and say they had enjoyed the session and would like to back again.

In order to facilitate the running of groups on inpatient wards it is essential that support for staff cofacilitators also comes from a managerial level, meaning that ward managers, matrons and service directors must also value groups and see the potential benefit to inpatients, staff and the therapeutic ward environment; and actively champion these concepts to allow change at the frontline of inpatient care. The staff co-facilitators needed the support of managers not only to attend the group sessions for 1.5 hours a week; but to attend training and monthly group supervision sessions, to have time to spend encouraging participants, and to deal with any incidents if people became distressed in the groups. Whilst this sounds like a big ask, those members of the nursing team who did regularly facilitate the groups said that they learnt a lot themselves, especially from hearing the stories of recovered service users. They also felt the groups helped them get to know participants better, understand their difficulties more, and improve their interactions with participants outside of the sessions. We also received positive feedback from a manager on one ward who thought that the groups had a calming effect on the ward as a whole because the group of service users who experienced psychosis were often some of the most challenging.

## 3 What could be next?

In reflecting on what worked well and what did not, many other interesting ideas for adaptations to the groups or further research were suggested by group participants and the research team. One of the strongest views was the need for improved coordination between inpatient groups and follow on groups in the community. Service users reflected that discharge from hospital was often a time when they felt more anxious and less supported, and thought being able to access groups or peer support from familiar faces would be beneficial at this time. Although everyone who was discharged during the study was invited to come back to attend the groups as outpatients only one person did, which as described above, is understandable. Unfortunately at the time of the project there were no community based hearing voices groups in the local area, but I believe that some are currently being developed. Another suggestion was that family members or carers could benefit from attending groups with service users or at least accessing better (i.e. more hopeful, less stigmatising, more normalising) information, in order to help them understand what the service user might be experiencing and know how they might be able to help. Many group participants described how difficult it was for their families and friends to support them when they too were frightened and anxious about what was happening. In addition, more practical forms of support were highly valued by service users, such as being supported to attend activities which provide opportunities to socialise or learn new skills, or being able to access one-to-one peer support, as described above. Although these ideas move away from the role of an inpatient therapy group, the idea of linking people with organisations that can provide these sorts of support, or at least help people find out what is available while they are in hospital, was a common theme of discussion both in and out of the group sessions.

103

It was also suggested that simplifying the group content might be beneficial, and I think this highlights an important point, but on a heterogeneous inpatient ward it is difficult to pitch information to the right level for everyone. Many people found it hard to concentrate in the groups for lots of reasons, including the side effects of medication, and we tried to take breaks, use refreshments and change activities in the sessions as much as possible in order to maintain people's attention. For some it was too difficult to read the information sheets or draw on the flipchart but most people contributed to the discussion with encouragement from the group facilitators. A possible way of exploring this in future research would be to compare the effectiveness of groups based on the current 'What is real' group manual, with similar groups offering simpler, supportive listening rather than CBTp, in order to see whether the content of the therapy or generic therapeutic group factors are responsible for any change in outcomes.

Finally, another idea which emerged from jointly conducting this project with such committed and inspiring service user co-facilitators, would be to compare the effect of delivering CBTp groups with and without a service user co-facilitator. To the best of my knowledge none of the other studies identified in our systematic review used this method of co-facilitation to deliver inpatient therapy groups. I would hypothesise that groups with service user co-facilitators would be more highly valued by group participants and have more of a positive effect on the attitudes and atmosphere on the ward in general than those only run by professional staff alone.

This discussion has reflected on some of the challenges and opportunities that arose as part of this project. You live and learn when conducting research of any kind, but particularly research in naturalistic settings, such as that of a busy inpatient ward. Inevitably there are some things that I would do differently that I think would enhance the validity and generalisability of this study findings. These are discussed in the final chapter of this thesis, titled 'future research proposal'.

# 4 Lay Summary

The following information is to be printed double sided in order to produce a folded leaflet (please see back cover of this volume). This leaflet will be sent to all participants who took part in the study and wished to be notified of the study findings.

Word count (including leaflet) -3,727

# Volunteer feedback

People who helped to run the groups thought they had been useful for people in hospital.

"These group sessions have shown me that this type of intervention has been really helpful in grounding patients if they're in distressing circumstances"

The group helpers noticed how people started to support each other.

"Once the groups started and people started sharing their own experiences which they didn't think anyone could relate to, we started to see service users making friendships and supporting each other away from the groups"

All of the helpers said they would like to keep running the groups.

"I've really enjoyed doing this and would look forward to any possibility of continuing to be of help".

Some people also thought it had helped their own recovery.

"For me being involved in the group has been very therapeutic and I have come away with a few more tools in my recovery... and I am very grateful for being part of this group"

# Thank you

Thank you for helping to support the project. We hope that it will lead to better services, and more choice of treatment, for people in hospital.

We would also like to thank all those who helped to make the groups happen, especially the service user volunteers, psychology volunteers and all the ward staff who helped us.

# Contact details

If you have any questions about the study please contact: Dr Mary Forsey <u>mary.forsey@.nhs.uk</u>, Dr May Sarsam <u>may.sarsam@.nhs.uk</u> Or Dr Bill Sellwood at the University of Liverpool <u>sellwood@liv.ac.uk</u>





# "What is Real" Group Research Project

Researchers: Mary Forsey, Bill Sellwood & May Sarsam



A joint project between the University of Liverpool & XXXX NHS Trust (2013).

# The project

Hearing voices, seeing things or having unusual thoughts or beliefs can be very frightening. While many people cope well, others can get so distressed that they need hospital care. We wanted to find out if a group, called the "what is real" group, could help people in hospital. To see if the groups were helpful we compared people who came to the groups with people who did not. The groups had four weekly sessions and took place on four hospital wards over one year. The groups involved:

"Sharing personal experiences, learning coping strategies, relaxation, breathing and mindfulness, and understanding how mental health problems can surface".

We asked people who took part in the project to fill in some question sheets about distress and self confidence. We also asked some people to answer extra questions if they heard voices or had unusual beliefs. Everyone filled in the question sheets three times:

- Time 1 at the start of the study,
- Time 2 four weeks later (or after four group sessions),
- Time 3 another month later.

# Results

113 people started the study (80 men and 33 women). But many people dropped out when they were discharged. 57 completed time two and 39 completed time three.

We found that levels of distress went down whether or not people came to the group. This shows that most people felt less worried over time. But people who came to the groups had less distress at time three than those who did not. This shows that the group may help people feel less distressed in the long term.

- Distress went down in both groups.
- Distress stayed lower in people who came to the group.

We also found that self confidence improved over time for people who came to the group, but did not change for people who did not. This shows that the group can help improve people's self confidence while they are in hospital, and this improvement carries on after they go home.

- Self confidence increased over time if people attended the group.
- Self confidence did not change if people did not come to the group.

Not enough people filled in the question sheets about voices and unusual beliefs for us

to find out whether the groups helped to reduce these symptoms. Although we can not say for sure, voices and unusual beliefs seemed to reduce over time for both groups.

• Hearing voices or having unusual beliefs, seemed to reduce over time.

# Group feedback

We asked people who came to the group what they thought of it. Most people said the group helped them feel *"more confident"*, more *"positive"*, *"less alone"* or *"less frightened"*. People said *"talking to others"*, *"sharing"* and *"listening to others"* helped.

#### "I'm not the only one who hears voices"

People said that they learnt how to "cope" or "deal with" their experiences more. They found different ways of coping helpful such as "relaxation" and "breathing" exercises.

"Things can be changed by breaking things down"

Some people learnt to "control" or "challenge" their voices. Others said they learnt to see things in a new way,

#### "I am not my thoughts".

Many people said they felt *"more hopeful"* about the future and the chance *"of change"*.

## **5** References

- Atkinson, P. & Hammersley, M. (1995). *Ethnography*, *Principles in Practice* (2<sup>nd</sup> ed.). London: Routledge.
- Berry, J.M. & West, R.L. (1993). Cognitive self-efficacy in relation to personal mastery and goal setting across the life span. *International Journal of Behavioral Development*, 16, 351-379.

Brabender, V. (2002). Introduction to Group Therapy. New York: John Wiley & Sons.

- Clarke, I. (2009). Introduction. In I. Clarke & H. Wilson (Eds.). *Cognitive Behaviour Therapy for acute Inpatient Mental Health Units: Working with Clients, Staff and the Milieu (pp.1-7).* East Sussex: Routledge.
- Chamberlain, J. (2013). The work of experience based experts. In J. Read & J. Dillon (Eds.). *Models* of Madness (2<sup>nd</sup> ed.), pp 305-318. East Sussex: Routledge.
- Davidoff, F., DeAngelis, C. D., Drazen, J. M., Hoey, J., Hojgaard, L., Horton, R., et al. (2001). Sponsorship, authorship, and accountability. *New England Journal of Medicine*, 345(11), 825-827.
- Davidson, L., Hammond, V., & Maguire, T. (2009). The implementation of a 'Living with Voices' group in a psychiatric intensive care unit: A pilot study. *Journal of Psychiatric Intensive Care*, 5, 289–294.
- Department of Health (2012a). *No Decision About Us Without Us*. Retrieved 12 June, 2013, from: http://www.nsun.org.uk/modules/downloadable\_files/assets/no\_decision\_about\_us\_without\_u s.pdf

Department of Health (2012b). *No Health Without Mental Health: Implementation framework*. Retrieved 12 June, 2013, from: https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/156084/No-Health-Without-Mental-Health-Implementation-Framework-Report-accessibleversion.pdf.pdf

- Dillon, J. (2009). Jacqui Dillon. In M. Romme, S.Escher, J. Dillon, D. Cortstens & M. Morris. *Living with Voice: 50 Stories of Recovery, (pp. 188-194)*. Ross-On-Wye: PCCS Books.
- Dillon, J., Bullimore, P. & Lampshire, D. (2013). The work of experience based experts. In J. Read & J. Dillon (Eds.). *Models of Madness (2<sup>nd</sup> ed.), pp 305-318.* East Sussex: Routledge.
- Hearing Voices Network: For people who hear voices, see visions or have other unusual perceptions (2013). Retrieved 12 June, 2013 from: http://www.hearing-voices.org/
- Hill, G., Clarke, I. & Wilson, H. (2009). The 'Making Friends with Yourself' and the 'What Is Real and What Is Not' groups. In I. Clarke & H. Wilson (eds.), *Cognitive Behaviour Therapy for Acute Inpatient Mental Health Units: Working with Clients, Staff and the Mileu,* (pp. 161-173). London & New York: Routledge, Taylor & Francis Group.
- Jefford, A., Grandison, A. & Pharwaha, B. (2010). The communication group: Reflections on the setting up, sunning and supervision of an inpatient group. In J. Radcliffe, K. Hajek, J. Carson & O. Manor. *Psychological Groupwork with Acute Psychiatric Inpatients (pp.175-191)*. London: Whiting & Birch.
- Kingdon, C. (2005). Reflexivity: Not just a qualitative methodological research tool. *British Journal of Midwifery*, *13*(10), 622-627.
- Lincoln,Y.S., & Guba, E.G. (2000). Paradigmatic controversies, contradictions, and emerging confluences. In N.K. Denzin, & Y.S. Lincoln (Eds.), *Handbook of Qualitative Research* (2<sup>nd</sup> ed. pp.163-189). London: Sage Publications.
- Morland, R. (2004). How do people experience being part of a hearing voices group? *Schizophrenia Research*, 70, 125–126.
- Morrison, A. (2013). Cognitive therapy for people with psychosis. In J. Read & J. Dillon (Eds.). *Models of Madness (2<sup>nd</sup> ed.), pp 319-336.* East Sussex: Routledge.
- Nelson, B., Fusar-Poli, P & Yung, A.R. (2012). Can We Detect Psychotic-like Experiences in the General Population? *Current Pharmaceutical Design*, 18, 376-385.

- Newton, E., Larkin, M., Melhuish, R., & Wykes, T. (2007). More than just a place to talk: Young people's experiences of group psychological therapy as an early intervention for auditory hallucinations. *Psychology and Psychotherapy: Theory, Research and Practice*, 80, 127–149.
- Ruddle, A., Mason, O. & Til Wykes. (2011). A Review of hearing voices groups: Evidence and mechanisms of change. *Clinical Psychology Review*, 31, 757–766
- Thompson, A.R. & Russo, K. (2012). Ethical dilemmas for clinical psychologists in conducting qualitative research. *Qualitative Research in Psychology*, 9, 32-46.
- van Os, J., Hanssen, M., Bijl, R.V. & Ravelli, A. (2000). Straus (1969) revisited: A psychosis continuum in the general population? *Schizophrenia Research*, 45, 11-20.
- Yalom, I. D., & Leszcz, M. (2005). *The theory and practice of group psychotherapy (5<sup>th</sup> Ed)*. New York: Basic Books.

# Chapter Five: Future research proposal

## 1 Background

The findings from the present study suggest that a brief CBTp group delivered by novice therapists, recovered service users and ward staff can significantly improve confidence in participants over time, compared to participants receiving treatment as usual. It also suggests that attending the CBTp group may have a maintenance effect in reducing distress, because although distress decreased in both groups in the first month, participants who attended the CBTp group were significantly less distressed at two month follow up than controls. No significant differences were found between the two groups on the psychosis measures; although there were trends towards reduced symptoms in both groups over time, and potentially more consistent reductions in symptoms in the CBTp group. In order to address the limitations of the present study there are a number of improvements that would help to validate the findings.

### 1. Increasing the sample size

There are a number of ways this could be achieved. First, the study could be expanded to incorporate other acute hospitals in the region or beyond if possible. Within the same Trust there are two other inpatient units which could join the study and help increase the potential pool of participants. Second, a longer data collection period would help to ensure that enough people would continue to participate (assuming drop out rates would remain high) to make the findings more reliable and less skewed and potentially eligible for parametric analysis. Third, if financial resources were available it might be advantageous to increase the incentives people receive for participating in the study. Although payment of vulnerable research participants is still an area of debate, there is no clear evidence that paying research participants leads them to ignore risk and participate against their better judgement (Dunn, Candilis, & Roberts, 2006). There is also no evidence that participants who misuse substances use their financial reward to precipitate new drug or alcohol use, even when provided with high cash incentives (Festinger, et al., 2005). Instead evidence suggests that participants use their research payments in a responsible and safe manner and that higher incentives can lead to increased

111

participation (Festinger & Dugosh, 2012). In the present study no negative consequences of participation were anticipated or observed.

#### 2. Longer follow up period

A follow up period of longer than eight weeks would allow us to assess whether any changes made as a result of the group continued to be maintained over a longer time period. Other similar comparison studies have followed up over several years which would be a significant advantage (Bechdolf, et al. 2005; Mortan, Tekinsav, Sutcu & German Kose, 2011). This might also allow observation of potential between group differences in outcomes and treatment engagement.

#### 3. Balancing control and intervention groups

Similar numbers of participants in the intervention and control groups would be an advantage when analysing the data. One way to achieve a greater balance would be to ensure that all wards that participated in the study took part in both the intervention and control arms of the study for the same period of time. Given the nature of the acute care setting a waiting list control would not be feasible as all patients admitted to a ward currently running the groups would be able to participate in the groups.

### 4. Matched controls

Matching participants in each group on a number of factors such as age, gender, level of education, deprivation, social status (e.g. married, single, living with partner) would be helpful in terms of reducing extraneous variables that may account for any variation in outcomes. The differences between our groups in terms of gender and deprivation had the potential to confound the outcomes but did not have any significant effects when included as covariates in the statistical analysis. Achieving matched participants in an inpatient setting might be difficult without a significantly increased sample size. If it were also possible to match participants responses at baseline (on distress, confidence, voices and beliefs) this would avoid one of the pitfalls seen in the present study, that control participants showed a trend towards lower levels of pathology at baseline and were more likely to be discharged sooner. Matching participants at baseline would eliminate the chance that one group were more 'unwell' than another.

112

#### 5. Blinding the data collection procedure

In the present study participants were generally happy to attend groups and discuss their difficulties but were often reluctant to fill in questionnaires at the start of the first group session, particularly those relating to symptoms, such as hearing voices or unusual beliefs. From my observation, and feedback from service user co-facilitators, people were often worried that this information would be passed on to the medical team and may have negative consequences for them, such as increased medication or longer stays in hospital, despite our reassurance that this would not happen. Instead this information could be collected separately before the first group by a blind assessor who could spend more time individually explaining the measures and reassuring participants of their intended use. In order for this person to be blind to the treatment condition they would have to be from a different hospital site or university-based, otherwise they would know which wards were and were not running the groups at that time. The post-intervention and follow up measures could also be collected in this way. This might also help prevent bias in the satisfaction questionnaire data, as participants are likely to have given more positive responses as a result of the group facilitators being present.

#### 6. Consistency of group co-facilitators

The groups were closed and new participants were not admitted after session one. However, the nurse or nursing assistant who co-facilitated the group on each ward was not consistent throughout each run of the group. Ensuring that all group members were the same throughout the four week cycle could potentially improve group cohesiveness and ensure equity between members, whether they were staff or patients. This would also mean that staff could receive adequate training before the groups, although this was provided in the present study not all staff co-facilitators attended. This process would also help with staff development and encourage staff to become more involved in the group rather than simply 'observing' which understandably tended to make patients feel paranoid.

### 7. Exploration of drop out

Sample size limitations did not allow for exploration of drop out in the present study. However, a larger sample size would allow us to predict who is most at risk of dropping out. This might help us to

customise interventions to meet the needs of those most likely to drop out, or allow us to better understand what other help they might benefit from. In addition more detailed feedback from participants might help us to establish what aspects of the groups people find least appealing or off putting. Addressing these aspects and incorporating service users in the design and development of future work could help to minimise drop out and help ensure the groups are designed around the needs of service users rather than the requirements of the service.

### 2 Proposed research design

### 2.1 Aims and objectives

The aims are to evaluate the effectiveness of the brief group CBTp intervention with inpatients in a larger more robust trial. Effectiveness will be measured by assessing participants' level of distress, perception of their control over their mental health, and level of psychotic symptoms. An additional aim is to explore participants' experiences of recovery following an inpatient admission and what factors facilitate and hinder this process. The hypotheses are that people who attend the CBTp group:

- Will show greater reductions in distress than people who receive TAU, which are maintained over time.
- Will show greater improvement in confidence than people who receive TAU, which are maintained over time.
- May show greater reductions in level of psychotic symptoms (hearing voices or experiencing unusual beliefs) than people who receive TAU, which are maintained over time.

An additional aim will be to compare the accounts of participants' who attend the groups with those who receive TAU, in order to explore their perspectives on what aspects of their treatment in hospital help or hinder recovery.

### 3 Methods

### 3.1 Design

The study uses a mixed methods quasi-experimental design with matched controls, as it is not possible to randomise participants. Data will be collected pre and post intervention, and at two follow up points, six months and one year later.

### 3.2 Participants

The study will take place across all three inpatient units in the participating NHS Trust (a total of 147 beds). Participants are patients admitted to any of the eight participating wards during the study period. Inclusion criteria are; anyone who identifies themselves as having psychotic symptoms such as, hearing voices or seeing visions (hallucinations), strongly held unusual beliefs (delusions) or fears (paranoia). Exclusion criteria are; patients who the multidisciplinary team assess as too distressed to participate, or those who cannot understand or read English.

### 3.3 Measures

In order to add weight to the present study findings it would be advantageous to use the same study measures. However, these could be completed more easily, individually with the researcher.

- 1. Clinical Outcomes in Routine Evaluation (CORE- 10; Connell & Barkham, 2007),
- 2. The Mental Health Confidence Scale (MHCS; Carpinello, Knight, Markowitz & Pease, 2000)
- The Psychotic Symptom Rating Scales (PSYRATS) hallucinations and delusions subscales, (Haddock, McCarron, Tarrier & Faragher, 1999)
- 4. Satisfaction questionnaire (Phillips, Wilson & Clarke, unpublished).

In addition a subsample of people from each group, stratified across the different wards, would be invited to take part in semi-structured interviews after the data collection period. Additional information would also be collected at follow up from hospital records including readmission rates, length of hospital stay, engagement with services and adherence to treatment (i.e. with medication and/or the care plan).

### 3.4 Ethics

Ethical approval will be sought from NHS Research Ethics Committee and NHS Research and Development.

### 3.5 Procedure

### 3.5.1 **Phase One**

Eligible participants will receive verbal and written information about the study from a trained member of ward staff. Interested participants then meet individually with a researcher (blind to the ward condition) who will explain more about the study, answer any questions, take informed consent and complete the baseline measures with the participant.

Participants in the intervention group attend four weekly sessions of manualised CBTp (adapted from Clarke & Pragnell, 2008), each session lasting approximately 1.5 hours with a break. The groups are co-facilitated by a trainee clinical psychologist, a service user volunteer and a member of the ward staff. All group facilitators will receive training and monthly group supervision from the supervising clinical psychologist.

After five weeks participants again meet with the blind researcher to complete the post-intervention measures. Participants who attend the groups will also complete the additional satisfaction questionnaire. Participants who have been discharged during the study period will be posted the questionnaires with a paid return envelope but also offered the opportunity to meet with the researcher to complete the questionnaires together if they prefer.

After 6 months all participants will be invited to complete the questionnaires again (minus the satisfaction questionnaire) either in person if they are still on the ward or via post. In addition participants will also be asked if they have received any other psychological or recovery orientated intervention (group or individual) in the intervening period. This process will be repeated again at one year. At each time point post-intervention participants who successfully complete the study questionnaires will receive a £10 Argos voucher.

#### 3.5.2 **Phase Two**

A random subset of participants, sampled separately from the control and intervention groups, and stratified by ward, will be invited to take part in a short interview at least one year after their participation in the study. Participants who have been discharged will be approached by post and invited to return a slip containing telephone contact details if they are interested. If participants are still inpatients they will be approached in person. All participants will receive an information sheet explaining what the interview will be about and the sort of questions they might be asked. This information will also stress that the researcher is not part of their medical team and their participation does not affect their care in any way. Participants who take part will receive a £10 Argos voucher to thank them for their time. The interviews will be semi-structured and use an interview prompt guide to explore the person's understanding of recovery, what helped and what hindered them in their recovery and what help they feel they would benefit from in the future. The interviews will be audio-recorded.

### 3.5.3 Sample size

We found effect sizes of 0.3, similar to those reported in reviews (Wykes, Steele, Everitt & Tarrier, 2008). Power calculations using GPower (Erdfelder, Faul & Buchner, 1996) with two groups at 80% power (Cohen, 1988) for this effect size range suggest a sample size between 128 and 52 participants. From our previous study (collecting data from 4 wards over 1 year) we retained 39 participants at Time 3. Therefore, we estimate that across 8 wards over 2 years a sample size of 156 is realistic. This sample will be stratified in order to conduct qualitative interview with 12 participants from each group, in line with approximations of theoretical saturation (Guest, Bunce & Johnston, 2006; Bryman, 2008).

#### 3.5.4 Analysis

The quantitative data will be analysed using mixed within-between Analysis of Variance (ANOVA) in SPSS (Field, 2012). Logistic regression will be used to explore what factors may predict drop out. The qualitative data will be transcribed verbatim and analysed using thematic analysis, in order to

ensure that the analysis is inductive and themes or categories are not preconceived (Stiles, 1993). The process of analysis will draw on constant comparative methods (Glaser & Strauss, 1968) in order to compare and contrast the data as a way of generating theory. This comparison would take place at two levels; the participants (CBTp or TAU) and the different wards, in order explore similarity and divergences between the groups and the different ward environments. Participants who have received psychological therapy in the follow up period will be considered a sub-group (within the control or intervention condition) in order to control for the potentially confounding effects of additional therapy.

### 3.5.5 Clinical Implications

No other inpatient study has been so comprehensive and if the findings support our conclusions that self-confidence can be improved and distress reduced in the long term with a brief intervention it will have considerable implications for clinical practice. The qualitative findings will provide a new insight into what aspects of therapeutic interventions in hospital are valued and preferred by service users when they have the opportunity to reflect on their experiences. My service user colleagues and I feel strongly that these groups are valuable and that inpatients should be routinely offered a real choice of treatment in hospital.

#### Word count: 2,478

### **4** References

Bechdolf, A., Kohn, D., Knost, B., Pukrop, R. & Klosterkotter, J. (2005). A randomized comparison of group cognitive-behavioural therapy and group psychoeducation in acute patients with schizophrenia: outcome at 24 months. *Acta Psychiatrica Scandinavica*, 112, 173-179.

Bryman, A. (2008). Social Research Methods (3<sup>rd</sup> Ed). New York: Oxford University Press.

- Carpinello, S.E., Knight, E.L., Markowitz, F.E. & Pease, E.A. (2000). The development of the mental health confidence scale: A measure of self-efficacy in individuals diagnosed with mental disorders. *Psychiatric Rehabilitation Journal*, 23, 236-243.
- Cohen, J. (1988). *Statistical power analysis for the behavioural sciences (2nd Ed.)*. Hove and London: Lawrence Earlbaum Associates, Publishers.
- Connell, J., Barkham, M. (2007). *CORE-10 User Manual, Version 1.1*. CORE System Trust & CORE Information Management Systems Ltd.
- Dunn, L.B., Candilis, P.J. & Roberts, L.W. (2006). Emerging empirical evidence on the ethics of schizophrenia research. *Schizophrenia Bulletin*, 32, 47-68.
- Erdfelder, E., Faul, F., & Buchner, A. (1996). GPOWER: A general power analysis program. Behavior Research Methods, Instruments, & Computers, 28, 1-11
- Festinger, P.S. & Dugosh, K.L. (2012). Paying substance abusers in research studies: Where does the money go? *The American Journal of Drug & Alcohol Abuse*, 38, 43-48.
- Festinger, P.S., Marlowe, D.B., Croft, J.R., Dugosh, K.L., Mastro, N.K., Lee, P.A., et al. (2005). Do research payments precipitate drug use or coerce participation? *Drug and Alcohol Dependence*, 78, 275-281.

Field, A. (2012). Discovering Statistics using IBM SPSS Statistics (4<sup>th</sup> ed). London: Sage Publications

Glaser, B.G. & Strauss, A. L. (1968). The Discovery of Grounded Theory: Strategies for Qualitative Research. London: Weidenfeld & Nicolson.

- Guest, G., Bunce, A. & Johnston, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods*, *18*, *59-82*.
- Haddock, G., Mc Carron, J., Tarrier, N. & Faragher, E.B. (1999). Scales to measure dimensions of hallucinations and delusions: the psychotic symptom rating scales (PSYRATS). *Psychological Medicine*, 29, 879-889.
- Mortan, O., Tekinsav Sutcu, S. & German Kose, G. (2011). A pilot study on the effectiveness of a group-based cognitive-behavioral therapy program for coping with auditory hallucinations. *Turkish Journal of Psychiatry*, 22, 1-8.
- Phillips, R., Clarke, I. & Wilson, H. (unpublished). Evaluation of an inpatient group CBT for psychosis group program designed to increase effective coping and address the stigma of diagnosis.
- Stiles, W. B. (1993). Quality control in qualitative research. *Clinical Psychology Review*, *13*(6), 593-618.
- Wykes, T., Steel, C., Everitt, B. & Tarrier, N. (2008). Cognitive behavior therapy for schizophrenia: Effect sizes, clinical models, and methodological rigor. *Schizophrenia Bulletin*, 34, 523-537.

### 5 Word count evidence

Word counts are given for the body text of each chapter including tables, footnotes and

acknowledgments but excluding abstracts, highlights, keywords, references and appendices.

### Chapter 1: Introduction – 5,121

Word Count	? ×						
Statistics:							
Pages	16						
Words	5,121						
Characters (no spaces)	29,643						
Characters (with spaces)	34,753						
Paragraphs	57						
Lines	394						
☑ Include textboxes, <u>f</u> ootnotes and endnotes							
	Close						

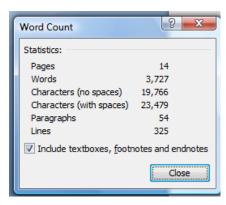
Chapter 2: Systematic review - 6,403

Word Count	? x
Statistics:	
Pages	20
Words	6,403
Characters (no spaces)	35,661
Characters (with spaces)	41,831
Paragraphs	305
Lines	1,136
Include textboxes, <u>f</u> ootn	otes and endnotes
	Close

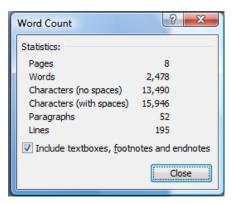
### Chapter 3: Empirical paper - 6,451

Word Count	? ×
Statistics:	
Pages	23
Words	6,451
Characters (no spaces)	35,780
Characters (with spaces)	41,904
Paragraphs	420
Lines	907
Include textboxes, <u>f</u> ootr	notes and endnotes
	Close

Chapter 4: Conclusion (incl. leaflet) - 3,727



Chapter 5: Future research proposal – 2,478



Therefore total word count = 24,180

## Appendices

- 1. Database coverage
- 2. Quality review of studies in systematic review
- 3. Group Manual
- 4. Ethical approval
- 5. Participant information sheets and consent form
- 6. Distribution of outcome measures
- 7. Responses to satisfaction questionnaire
- 8. Example of qualitative coding structure

### Appendix 1. Database coverage

Scopus is the largest abstract and citation database containing both peer-reviewed research literature and quality web sources. With nearly 20,500 titles from more than 5,000 international publishers in scientific, technical, medical (including 100% coverage of Medline titles), social sciences, including arts and humanities. It contains 49 million records; 28 million of which go back to 1996 and include full article references lists, and 21 million pre-1996 records which go back as far as 1823. It integrates web searches with links to full-text articles from the Liverpool University holdings and other university libraries from around the world making it easy to get hold of full text articles.

EBSCO is a leading database and eBook provider for libraries and other institutions — more than 375 full-text and secondary research databases and more than 300,000 eBooks and audiobooks available via the EBSCO*host* platform. EBSCO covers all subject areas including magazine and journal articles available via EBSCO*host* and H.W. Wilson, eBooks and audiobooks, Digital Archives as well as print books from Salem Press. Covered databases include AMAD, CINAHL, Medline Plus, PsychInfo & PsychArticles.

Web of Science provides access to the world's leading citation databases and contains over 46 million records. Authoritative, multidisciplinary coverage includes current and retrospective journal and proceedings data in the sciences, social sciences, arts, and humanities, with backfiles to 1900. It includes Conference Proceedings Citation Index from 1990 to present, Science Citation Index Expanded, Social Sciences Citation Index, Arts & Humanities Citation Index, Index Chemicus and Medline Full text.

## Appendix 2. Quality review of included studies

No.	Aims & research question	Design of study	Ethical review	Control group	Validated manualised intervention	Validated outcome measures	Follow up	Independent data collection/ analysis	Sample size & drop out	Inferential statistics	Conclusions	Overall quality score
1	Clearly stated (3)*	Pre/post (2)	Yes (3)	Yes - matched TAUs (2)	Yes - then adapted by authors (2)	Yes & one developed by authors (2)	None (0)	Yes - blind (3)	Small (n=11) drop out (n=4, 36%) (1)	Non parametric Man Whitney U & Wilcoxen Signed rank (1)	Reasonable quality for pilot study - limited by small sample size and lack of follow up	19/30
2	Adequately stated (2)	RCT (3)	Yes (3)	Yes - blind random TAUs (3)	Yes - then adapted by authors (2)	Yes – but not all validated in Finland (2)	Yes – 3 months (2)	Yes – blind (3)	Okay (n=35) drop out (n=4, 8%) (2)	Parametric (intention to treat analysis) t-test & Cohen's d (2)	Good quality for small scale RCT – limited by short follow up	24/30
3	Adequately stated (2)	RCT (3)	Missing (0)	Yes – blind random PE group but not TAU (2)	Yes – then adapted by authors (2)	Yes & several developed by authors (2)	Yes – 6 months (2)	Yes – blind (3)	Good (n=71) drop out (n=17, 24%) (2)	Parametric (intention to treat) ANCOVA (3)	Good quality RCT – limited by no description of ethics or TAU control group	21/30
4	Adequately stated (2)	RCT (3)	Yes (3)	Yes - blind random PE group but no TAU (2)	As above (2)	As above (2)	Yes – 6 months (2)	Yes – blind (3)	Good (n=64) drop out (n=7, 10%) (2)	Parametric (intention to treat) ANCOVA (3)	Good quality RCT - limited by no description of ethics or TAU control group	24/30
5	Adequately stated (2)	RCT (3)	Missing (0)	Yes – but no longer representat ive & not TAU (1)	As above (2)	As above (2)	Yes - 24 months (3)	Yes – blind (3)	Small (n=40) drop out (n=31, 44%) (1)	Parametric & non parametric – t tests, Man Whitney U & ANCOVA (2)	Follow up to earlier study - limited by high drop out rates & unrepresentative sample as a result of drop out	20/30
6	Only gives aims of the group not	Pre/post (2)	Missing (0)	None (0)	No – based on MCT designed by	Yes (3)	None (0)	No (0)	Small (n=5) drop out (n=1, 20%)	None (0)	Poor quality pilot study – limited by sample size & significant lack	8/30

Mary Forsey

	the study (1)				authors (1)				(1)		of detail in the paper including any numerical results. So assumed lack of control, non blind assessment & lack of follow up.	
7	Only gives aims of the group not the study (1)	Pre/post (2)	Yes (3)	None (0)	No – designed by authors (1)	Yes & one developed by authors (2)	Yes – 1 month (2)	Yes – one independent assessment (2)	Small (n=22) drop out (n=4, 18%) (2)	Non-parametric Friedman's & Wilkinson pair wise analysis (1)	Reasonable small scale study – limited by lack of control group & small sample size	16/30
8	Clearly stated (3)	Pre/post (2)	Yes (3)	None (0)	Yes – then adapted by authors (2)	Yes (3)	Yes - 6 months (3)	No (0)	Small (n=15) drop out (n=4, 27%) (2)	Parametric – (per-protocol analysis) ANOVAs & ANCOVA (3)	Reasonable quality small scale study – limited by small sample size and lack of control group & blind assessment.	21/30
9	Only gives aims of the group not the study (1)	Pre/post (2)	Missing (0)	None (0)	No – developed by authors (1)	Yes & one developed by authors (2)	Yes – 6 months (file review) (2)	No (0)	Small (n=9) No drop out (1)	Non parametric - Wilcoxen Signed Ranks tests (1)	Poor quality pilot study – limited by small sample size, lack of control, non blind assessment & only file review follow up.	10/30
10	Adequately stated (2)	Pre/post (2)	Missing (0)	Yes - TAU (but not random) (2)	No – designed by authors but independentl y reviewed (2)	Yes (3)	Yes – 1 year (phone interview only) (2)	No (0)	Small (n=12) drop out (n=3, 25%) (1)	Non parametric – Wilcoxen Signed Ranks test & Mann Whitney U (1)	Reasonable quality pilot study – limited by small sample size, non blind allocation & assessment & drop out at follow up.	15/30
11	Clearly stated (3)	Pre/post (2)	Missing (0)	None (0)	Yes – Wykes et al. (1999) & (2004) (3)	Yes (3)	None (0)	No (0)	Small (n=10) drop out (n=1, 9%) (1)	Non parametric – MANOVA, t tests (on combined data) (1)	Poor quality pilot study – limited by small sample size, lack of control, lack of random allocation & blind	13/30

Mary Forsey

											assessment, lack of follow up.	
12	Adequately stated (2)	Cohort study (1)	Missing (0)	None (0)	Yes - group CBT manual (Bieling et al. 2006) (3)	No (0)	None (0)	No (0)	Large (n=137) missing data (n=74 (out of 200) 37%) (2)	Parametric – Pearson's chi squared & fishers exact test (2)	Large pilot study (not specific to psychosis) – limited by lack of control group, non validated non blind assessment measures, no distress measure & high rates of missing data & no ethical review	10/30
13	Clearly stated (3)	Cohort study (1)	Missing (0)	Historical controls - compariso n with data from previous year (1)	No – but manual collaborative ly developed with another research group (2)	No (0)	Yes – 2 years (2)	No (0)	Large (90% inpatients) – no info about drop out (2)	Parametric – ANOVAs & non parametric – chi squared (2)	Large naturalistic study (not specific to psychosis) – limited by lack of randomisation, contemporary control group, specific distress blinded measures, ethical review	13/30
14	Adequately stated (2)	Pre/post (2)	Missing (0)	Historical controls (1)	Yes – as above (2)	No (0)	Yes – 4 years (3)	No (0)	Large (90% inpatients) - no info about drop out (2)	Parametric – ANOVAs & non parametric – chi squared (2)	Large follow up study – limited by lack of data on drop out and same problems as study 13.	14/30

\*Scoring system:

0= Missing – may have been addressed but not described at all in the paper.

1= Poor – addressed in the paper in passing, poorly described or least rigorous design utilised.

2= Adequate – competently addressed, but somewhat limited in description or design.

3= Excellent – very clearly addressed, most rigorous design utilised.

## Appendix 3. What is Real Group Manual





## The XXXX

## 'What is real & what is not?'

## **Group Programme**

## A psychosis group in four sessions for an inpatient unit

Mary Forsey

Adapted from Group Manual by Isobel Clarke & Kirstyn Pragnell (2008)

### Contents

### SESSION PLANS

- Session 1 Introduction Openess to unusual experiences
- Session 2 Different states of mind different sorts of reality
- Session 3 Coping Strategies
- Session 4 What is real and what is not?

### HANDOUTS

Session 1 – How open are you to unusual experiences? Session 2 – Different states of mind – different sorts of reality Session 3 – Coping Strategies Session 4 – So what is real and what is not? Basic Grounding Mindfulness Relaxation Breathing

### MEASURES

Measuring what you would like to get out of the group CORE-10 Mental Health Confidence Scale Voices Questionnaire Beliefs Questionnaire Satisfaction Questionnaire

## **Session Plans**

## Session 1- Introduction

### Introduce the group

Introduce the group members and facilitators and explain the aims of group:

- To share experiences within confidential environment can be helpful
- To share ways of coping with hearing voices, having experiences/ideas others don't share, or having thoughts you can't get out of your head and explore new techniques for coping with these experiences
- To discuss in an open manner different ways of making sense of these experiences, to understand them, make them less distressing and help manage them in everyday life (and get out of hospital).
- To be able to be more in control of your experiences, and spot in good time if they are returning and do something about it.

### Consent

if people are happy to take part then ask them to sign the consent form. If they do not want to sign (or take part) then ask them to leave but encourage them to think about coming to the next group in 4 weeks.

### \*\* SIGN CONSENT FORMS \*\*

### Measures

Explain that the group is new at XXXX and although it has been shown to be helpful in other hospitals we want to find out if people here find it helpful.

So we would like to ask people to fill in some very short questionnaires before and after the group.

### \*\* GIVE OUT - CORE-10, MHCS, VOICES & BELIEFS QS\*\*

### DISCUSSION (Ground rules): Try to get the group to generate the rules

- Confidentiality,
- Commitment i.e. regular attendance. Encourage people to come back to the group if discharged before the end.
- Control People choose what they talk about no need to disclose things you do not want to.
- Respect for each other, supportive of each other.

### 1. Normalising unusual experiences

What do we mean by unusual experiences?

- Hearing or seeing things that other people don't (e.g. voices or visions)
- Having beliefs or ways of looking at things that are different from other people (sometimes called delusions)
- Feeling frightened or threatened by people when other people around you don't think you should be worried (often called paranoia)

ANYONE can have these sorts of strange experiences.

### EXPLANATION

### Romme and Escher's work with Voice Hearers

This type of group started as a result of the work of two researchers in Holland. Romme & Escher wanted to study voice hearing. They used a TV and radio phone in first, and then conferences to locate people who heard voices, but who were not in touch with the psychiatric services.

They found that a lot more people heard voices than ever went to the doctor. A lot of people did not find their voices a problem. At their conferences, people who coped well with voices were able to give tips to those who did not.

Romme & Escher's work led to a 'Hearing Voices Network' which runs self help groups all over the place.

Famous voice hearers – Ghandi, Charles Dickens, Beethoven, Mozart etc

**Extending the approach to other unusual experiences -** We use the same approach with other strange experiences or symptoms e.g.

- Having beliefs and ways of looking at things that are different from other people
- Feeling frightened or threatened by people when they are not actually out to get you (often called paranoia)

These are also experiences that are much more common than you would think – and there are ways of understanding and coping with them that help – hence the group.

### \*\* DISCUSSION - go round the group & write answers up on FLIPCHART\*\*

- How does this fit with your experience?
- If prepared to talk about it- what sort of unusual/unique experiences have brought you here?



### 2. Openness to unusual experiences

### EXPLANATION

Everyone can have these sorts of strange experiences. Some people are very open to them – and that applies to all of you. For other people it takes more for them to be able to access this sort of experience – or to have it just happen to them.

### \*\* DISCUSSION - write up on FLIPCHART\*\*

What sorts of things or circumstances might make people more open to strange experiences?

- Lack of food or sleep
- Fever or very high temperature (through illness)
- Extreme stress
- Trauma e.g. abuse, assault, solitary confinement
- Taking drugs
- Spiritual practices

Other people are naturally very open to unusual experiences. Whether you are more open or not depends on physical differences in the brain. It is also something very important about who you are as a person.

**EXPLANATION** - There has been research into the spectrum of openness to these sorts of experiences. We are all somewhere along this line....

### \*\* Draw on FLIPCHART \*\*

←-----→

## Not very open to experiences

Very open to unusual unusual experiences

### \*\* DISCUSSION – add onto flipchart diagram \*\*

- What sort of people would you expect to find at each end of the spectrum?
- What would people at the low end be like?
- What might people at the high end be like?
- Do we know any famous people who might be at the high end?

e.g. Not very open to experiences

Very open to unusual unusual experiences

←------→

Common ideas and beliefs Feet on the ground Realistic/ rational Bit boring Less vulnerable to psychosis Unique ideas and beliefs Sensitive Creative/ spiritual Imaginative More vulnerable to psychosis

e.g. Tim Henman, John Major

e.g. Van Gogh, Stephen Fry

**EXAMPLE:** David Bowie - used his high openness for a successful career as a musician. His half brother had a diagnosis of schizophrenia.

### DAVID BOWIE

In order to use his openness to strange experiences successfully in his career, David Bowie had to be able to balance his common and unique ideas. What would have happened if he had 100% believed that he was an alien from out space?

To manage a successful career, he had to have his feet on the ground as well as giving free reign to his imagination.

The theme of this group is to look at how you can have the best of both worlds – use your sensitivity to enhance life, but be able to bring yourself back into common reality when you threaten to float off into the stratosphere.

That way life will work better for you and you are less likely to end up back in hospital.

### \*\* DISCUSSION\*\*

- Any thoughts about David Bowie?
- Anyone else we can think of? E.g. Lady Gaga very unique and creative but also good business woman

If you are open to unusual experiences you might benefit from:

- Learning to manage your unusual experiences so that:
  - They don't get in the way of you getting on with your life, and
  - You do not end up in hospital
- This is what the group is about!

Now that you know a bit more about what the group is about let's think about what you would like to get from the group. What your own personal goals are:

### **\*\*GIVE OUT – GOALS FORM\*\***

Help people fill in the 'Measuring what you would like to get out of the group' form with:

- Their own goal for the group
- How they far away they are from achieving their goal now
- In the last session we will rate it again and see if they are any closer

### Recognizing unusual experiences

In order to manage your unusual experiences better, you need to be clear about whether you are experiencing/seeing/hearing things the same way as everyone else (common) or in an unusual way.

For some people it is hard to face that they are experiencing "personal reality", but for others it is a big relief! Noticing the sorts of unusual experiences that you have and noting them down is the way to start being aware of this.

### **KEEPING NOTES**

To get the most out of the group, we'd like you to note down any voices/ strange experiences/ unusual thoughts you have in between each group session.



- Please fill in the Keeping Notes chart!
- If you fill this out regularly, it will give you a better idea of when you are most likely to get these experiences. This is very useful for doing something about them!
- This chart is useful even if all you do is tick the boxes at times when they occur or are bad. There is space to add a bit more that is even more helpful!

\*\* GIVE OUT - Keeping Notes sheet \*\*

Give example to demonstrate filling in the Keeping Notes chart and encourage people to bring it with to the next group!

### **Questions and comments?**

## Session 2: Different states of mind – Different sorts of reality

### **Review Keeping Notes charts:**

- When are voices, unusual experiences more likely to happen? Or get stronger?
- What were you doing? Who with? Where? How did you feel?
- Any patterns emerging?

### \*\* DISCUSSION - when are your triggers?\*\*

• What are the times when you notice you are more likely to get these sorts of experiences?

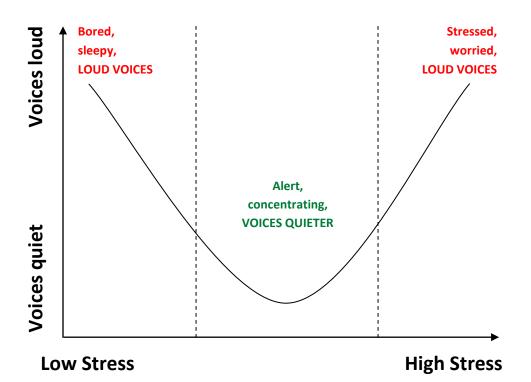
### **Different states of mind**

## People who are sensitive to unusual experiences have found that there are 2 main times when they are MORE likely to happen:

- When they are under lots of stress or pressure
- When they are bored, not really concentrating on anything or trying to go to sleep

There are also 2 main times when people say they are LESS likely to happen:

- When they are alert or concentrating on something (but not overly stressed)
- When they are chatting with other people or busy doing something.



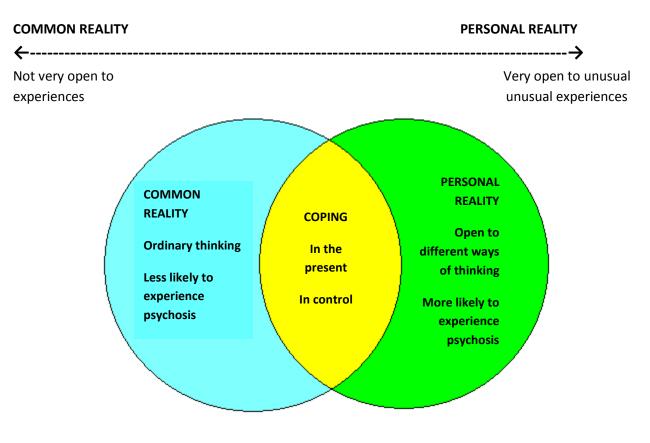
### \*\*Flipchart – draw diagram and explain\*\*

## **Different sorts of reality**

There are 2 different types of experiences:

- **Common reality** (normal, usual, run-of-the-mill type experiences that are shared by others) and
- Personal reality (unusual, strange, out-of-the-ordinary type experiences that are unique to you).

EVERYBODY can have these 2 types of experiences, when we are in different states of mind.



### \*\*Flipchart – draw diagram and explain\*\*

#### **Common and personal reality**

- People vary in how open they are to personal reality.
- Being open to this way of experiencing makes you more vulnerable to psychosis
- It is also associated with high creativity, spirituality etc.
- If you can learn to cope with personal reality, and find the middle ground you can have the best of both worlds!

### \*\* DISCUSSION\*\*

- What are the characteristics of personal reality?
- Important to be able to spot the difference between common and personal reality in order to be able to manage both.
- COURAGE is sometimes needed to accept that your reality is different to other people!

### \*\*FLIPCHART \*\*

COMMON REALITY	PERSONAL REALITY
Rational thinking	Thinking outside the box
More moderate – easier to hear both sides of	Strong conviction in one side of the argument
the argument	
Things feel ordinary	Things are super-important – supernatural
Less meaningful	Lots of things appear very meaningful
Realistic about the self	Confusion about the self – can lead to a sense
	of importance
Boring	Exciting

### \*\* DISCUSSION - PROS and CONS \*\*

- What is the upside of personal reality?
- What is the downside?

**COPING:** Now that you are in hospital, coping is the first priority. People cope differently in different situations:



- High stress situations Crowds/ shopping/ relatives
- Low stress situations In bed/ mind drifting/ unoccupied/ staring at TV/ bored



What do you find most helpful? How do you cope in these different situations?

### \*\* DISCUSS - techniques currently used to cope with experiences - FLIPCHART \*\*

- The different states of mind diagram gives clues about how to make yourself less vulnerable to personal reality.
- If stress brings it on ways of reducing stress (breathing, relaxation ) will help you cope.
- If not enough concentration brings it on concentrating on something and staying alert will help you cope.
- Medication should help you cope.

### \*\* DISCUSSION - The role of alcohol and street drugs\*\*

- How effective/adaptive are these?
- What problems do they bring?
- Cost-benefit analysis
- Recognize that alcohol and cannabis can be used as ways to access personal reality when the person misses it because common reality is boring or has little to offer them.

### **COPING TECHNIQUES**

What techniques might people be able to try this week to help them cope while they are in hospital?





- Distraction reading, music, talking, TV, elastic band around wrist, hot bath
- Relaxation breathing techniques, progressive muscle relaxation
- Anxiety management, exercise, healthy lifestyle,
- Time for self, time management, Social support,
- Education (understand voices and what might mean, others experiences etc)

### **KEEPING NOTES**

Continue to keep note of voices/experiences/thoughts/ideas, when, where, etc and include techniques employed to cope and rate how successful on scale 1-10.



\*\* GIVE OUT - more Keeping Notes Sheets if needed \*\*

**Questions and Comments?** 

## **Session 3 - Coping Strategies**

### **Review Keeping Notes charts:**

Were they able to use coping strategies? Successful/ unsuccessful? Any others discovered?

### **Cognitive Coping Strategies**

**1. DISTRACTION** – getting away from the experience by concentrating on something else. We all use different distractions, whatever we enjoy or find helpful.

Distraction could be:



- Listening to music or talking radio programmes or • watching TV
- Mental tasks reading, writing, doing maths or puzzles
- Physical activity cleaning, running, gardening, playing tennis etc
- Talking to others



2. FOCUSING - paying attention to the experience (you have already begun to do this with the homework).

Focusing is:

•

- Noticing the experience
- Not trying to push it away
- Not getting drawn into it
- Noticing what it is like instead of just what it is about (e.g. with voices notice what the voice is like – is it male/female, it's tone of voice? - instead of what it is saying to you)
- Letting go of the experience and absorbing yourself in an activity ٠

### Focusing versus distraction - Which is better?

Evidence suggests focusing is an effective coping strategy and can improve self-esteem.

- Research has compared people taught to use distraction for voices and those taught focusing.
- What do you think the result would be?
- Answer: the same, but those who used focusing had improved self esteem. •

Why does focusing help self-esteem?

- It is the opposite of avoidance and puts you more in control.
- It takes courage to focus on something that is frightening but this can help to overcome it! •

### How to do focusing:

1. First use breathing to reduce your anxiety.

2. Then notice the content of the thought, or the characteristics of the voice, and notice what they are like.

### \*\* PRACTICE - Lead relaxation breathing exercise \*\*

### MINDFULNESS

Mindfulness is a way of focusing on your experience. Research has shown that mindfulness is helpful for dealing with voices and unusual experiences:

- Mindfulness helps you to face things that are difficult;
- Mindfulness helps you to be in control while doing this;
- Mindfulness helps you to let them go.

### How to do mindfulness:

### \*\* PRACTICE - Lead brief grounding mindfulness exercise\*\*

\*\* DISCUSSION - Pros and cons of attending to the experience in a mindful way\*\*

- What can get in the way of really noticing the experiences; attending to the voices?
- These experiences can be frightening/disturbing/wish it wasn't happening. Natural to want to block out or push away if it is like that.
- Who finds their thoughts, voices distressing so tries to block them, or otherwise not think about them? This is normal but does it always work?
- Did anyone not do the homework because they thought it might make things worse?

Mindfulness means paying attention to your experiences, but this can be difficult and you may find you try to avoid doing so. There are different reasons why some people find this hard:

### 1. FEAR



- Fear of voices, thoughts or unusual experiences is natural.
- Fear leads people to try and avoid them or block them out.
- This means they are never faced or dealt with.
- Focusing on them and facing them means that you are in control.
- You can then let them go.

### 2. MEANS FACING THAT THEY ARE PERSONAL & NOT COMMON EXPERIENCES

- Some people do not want to look at their experiences mindfully because it might mean facing that they are not real to others;
- Admitting that what you thought is not common to others is very difficult for all human beings but it is the first step to getting back to normal life and getting out of hospital.

### **3. PERSONAL REALITY IS NICER**

- Other people have nice unusual experiences or ways of understanding things
- They might prefer this to common reality
- Mindfulness means facing common reality (but can make it possible to be in touch with both common and personal reality safely), if you can manage both you can have the best of both worlds.



Perfectly possible for someone to have all 3 reasons for finding this difficult!



### **KEEPING NOTES**

Mindfulness takes practice. Encourage people to try it using the relaxation breathing and grounding mindfulness sheet.

Try it out this week and record in the Keeping Notes Chart how you get on. Note any resistance or difficulty you have with it – this is normal.

\*Give out - Mindfulness and Breathing handouts\*

**Questions and Comments?** 

## Session 4: So what is real and what is not?

### **Review Keeping Notes charts:**

- Have people made use of focusing/mindfulness or distraction strategies?
- Get examples (might not be formal practice might simply be that they are getting better at noticing what state they are in).

## **Reality Testing**

There are different ways of testing what is real (common reality) and what is not (personal reality).

**1.** Focusing and mindfulness - give you the chance to consider what is real and what is not, and this can be the key to you having more control.

You can be in the driving seat - not your experiences or symptoms. Mindfulness helps to see

that...

### \*\*Flipchart - write the following\*\*

• A thought as just a thought – (not something you can be blamed for having; not something you have to follow);



- A voice is just a voice (you do not have to obey it, or believe it).
- A feeling is just a feeling (you can choose whether it is useful or not).

### \*\* DISCUSSION\*\*

- Can people see it like that? Anything that gets in the way?
- It takes a lot of COURAGE especially if you have believed for a long time that thoughts, voices or feelings have a lot of power and control over you.
- Realising this gives you control back!

**2.** By asking others - can be a useful way of checking whether to take a thought or voice seriously. Do they see it the way you do?

• It can be hard to admit that others do not see things the same way – especially when the person has held those beliefs for a long time.



**Warning** – sometimes this can be taken too far. It is important to build your own confidence about what is real rather than to repeatedly seek reassurance from others.

**3. By looking at the evidence** – challenge the thoughts or voices, can they provide evidence for what they say. For example:



If you think everyone is looking at you in the shop, deliberately look up and note what they are really looking at.

- Is there any evidence that they are all looking at you?
- What do you think they might actually be looking at?

If the voices tell you every night that you will die when you go to sleep, what does it mean when you continue to wake up every morning?

- What evidence is there that what the voices say is true?
- Is this evidence fact (could it be used in a court of law?) or is just it just their opinion (not strong evidence?)
- What evidence is there that what the voices say is not always true?

### \*\* DISCUSSION- can we look at the evidence for each other?\*\*

How could you challenge your own thoughts or voices? How could we challenge those of the person sitting next to us? What evidence do we have to believe the voices or thoughts? What evidence to we have against believing them?

## How do people make sense of their experiences?

### \*\* DISCUSSION\*\*

- Go round the group and ask the individuals for their thoughts on what is going on when they experience symptoms or personal reality.
- Introduce the idea from Romme and Escher that people have lots of different explanations for voices same for other strange experiences.
- Discuss advantages and disadvantages of different explanations

### 1. Stress



You can get clues about what unusual experiences mean by thinking about what was happening in your life when the thoughts or voices started. Often this is when people go through:

- Stressful times
- Life changes
- Losses

## 2. Life events

Difficult experiences or things that happen when we are very stressed can keep 'popping up' again and again in the form of:

- Voices
- Thoughts
- Beliefs



For example, if you have experienced abuse in childhood it is not unusual to hear voices saying abusive things to you.

This can mean you end up having a personal reality which is quite different from what other people think - e.g. you might end up believing you are a bad person because the voices say you are.

So this is a good reason for checking out what others think. Having a balance between your own reality and everyone elses' is helpful and healthy.

## 3. Openness to unusual experiences

Some people are more open to unusual experiences than others, and so more likely to have unusual experiences. You need to recognise your own level of openness to the unusual and manage your life accordingly.

## • What helps you cope?

• Any strategies? Medication? Being careful with drugs and alcohol?

## 4. Problem solving

When life gets really difficult, staying in personal reality can be easier or more comforting than facing common reality. This can lead to creative solutions to the problem. The danger is of becoming stuck in personal reality, which has problems of it's own.

e.g sometimes voices or beliefs can be positive and comforting, they can provide company if you are lonely. But if you only spent time listening to the thoughts or voices you will never meet any new people, which might also help you to be less lonely.

## \*\* DISCUSSION\*\*

Any examples of this from the group? Any times when they think their experiences have helped them to get through something very difficult?



What might the problems be if they stayed in personal reality all the time and could not also see common reality?

## \*\* PRACTICE - Lead Brief Mindfulness Exercise\*\*

Questions and Comments?

## \*\* IMPORTANT - GIVE OUT END OF GROUP MEASURES \*\*

### 1. GOALS VISUAL ANALOGUE SCALE

Present this again for people to mark how far they have got with their own goal for the group.

How do they feel about this? Is there any progress? If not do they feel they can continue working towards this goal?

2. **REPEAT QUESTIONNAIRES** – explain we want to know if the group is helpful and whether it has made any differences to them!

Ask people to fill in the same questionnaires as before the group

1. CORE-10

- 2. Mental Health Confidence Scale
- 3. Voices & beliefs questionnaires (if relevant)
- 3. SATISFACTION QUESTIONNAIRE how can we make the group better in the future?

## \*\* Remind people about FOLLOW UP \*\*

Explain we will ask them again in 1 month to see if there have been changes after finish the group.

Stress that is very helpful for them to return these questionnaires – very few studies have done a follow up in this area of research – therefore **VERY** helpful for designing future groups!

# Handouts

## How open are you to unusual experiences?

## Session 1 Handout

What do we mean by unusual experiences?

- Hearing or seeing things that other people don't (e.g. voices or visions)
- Having beliefs or ways of looking at things that are different from other people
- Feeling frightened or threatened by people when other people around you don't think you should be worried (often called paranoia)

ANYONE can have these sorts of strange experiences.

Some people will only become 'open' to these sorts of experiences if, for instance:

- They are deprived of sleep or food (or choose to go without sleep or food)
- Have a very high body temperature (a fever) through illness
- They are under extreme stress, or bad things happen to them (e.g. being abused, attacked or very overworked)
- They take street drugs



Other people are naturally very open to unusual experiences. Whether you are more open or not depends on physical differences in the brain. It is also something very important about who you are as a person.

-----→

We are ALL somewhere along this line...

## Not very open to experiences

←-----

Very open to unusual unusual experiences

### People who are very open to unusual experiences

- Tend to be highly creative or spiritual
- Have a tendency to be think outside the box or differently to others
- Are also more vulnerable to experiencing **psychosis** (when voices, beliefs or feeling paranoid is getting in the way of your everyday life)



### People who are not very open to unusual experiences

- Are less likely to suffer problems with psychosis.
- Have a tendency to be more conventional thinkers.

If you are open to unusual experiences (and people who have been chosen to attend this group probably are) you might benefit from:

- Learning to manage your unusual experiences so that:
  - They don't get in the way of you getting on with your life, and
  - You do not end up in hospital

#### This is what the group is about!

In order to manage your unusual experiences better, you need to be clear about whether you are experiencing/seeing/hearing things the same way as everyone else (common reality) or in an unusual way (personal reality).

For some people it is hard to face that they are experiencing "personal reality", but for others it is a big relief! Noticing the sorts of unusual experiences that you have and noting them down is the way to start being aware of this.

#### **KEEPING NOTES**

To get the most out of the group, we'd like you to note down any voices/ strange experiences/ unusual thoughts you have in between each group session.

- Please fill in the Keeping Notes chart!
- If you fill this out regularly, it will give you a better idea of when you are most likely to get these experiences. This is very useful for doing something about them!
- This chart is useful even if all you do is tick the boxes at times when they occur or are bad. There is space to add a bit more that is even more helpful!

## Fill in the Keeping Notes chart and bring it with you to the next group!



## **Keeping Notes Chart**

Day & Time	What were you doing?	What was the thought / voice or experience?	How did you feel?	What did you do & did it help?	How did you feel after?
Monday					
Tuesday					
Wednesday					
Thursday					
Friday					
Saturday					
Sunday					

## Different states of mind – Different sorts of reality Session 2 Handout

## **Different states of mind**



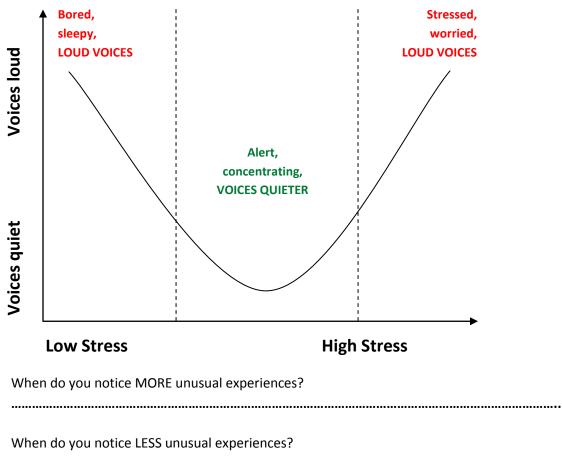
People who are sensitive to unusual experiences have found that there are 2 main times when they are MORE likely to have them:

- When they are under **lots** of stress or pressure
- When they are bored, not really concentrating on anything or trying to go to sleep



There are also 2 main times when people say they are LESS likely to experience unusual things:

- When they are alert or concentrating on something (but not overly stressed)
- When they are chatting with other people or busy doing something.

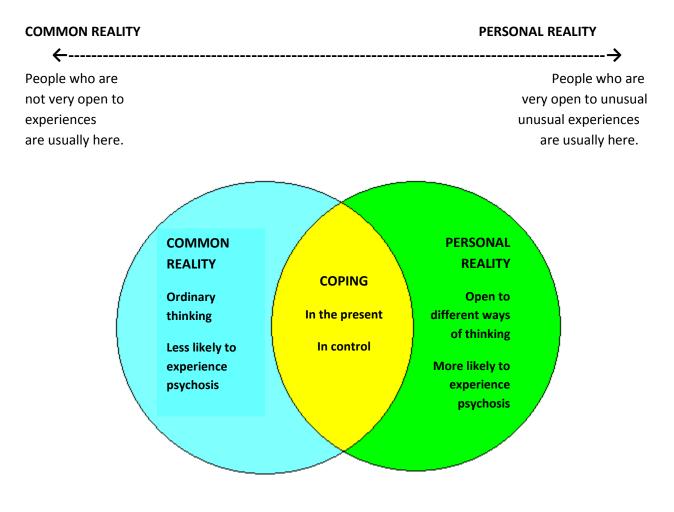


## **Different sorts of reality**

There are 2 different types of experiences:

- Common reality (normal, usual, run-of-the-mill type experiences that are shared by others) and
- Personal reality (unusual, strange, out-of-the-ordinary type experiences that are unique to you).

EVERYBODY can have these 2 types of experiences, when we are in different states of mind.



#### **Common and Personal Reality**

- As we discussed last session, different people can be more open or less open to unusual experiences or PERSONAL REALITY.
- Being open to this way of experiencing can be good it can mean you are highly creative, or spiritual, or a lateral thinker (someone who thinks outside the box).
- BUT it can also be a problem sometimes, if your reality is so unusual or unique that it starts to get in the way of your everyday life.
- If you can learn to **recognise** and **cope with** personal reality, it means you can have the best of both worlds!

**COPING** - Now that you are in hospital, coping is the first priority.

- If stress brings it on find ways of reducing stress (breathing, relaxation etc.)
- If not having enough to do brings it on concentrating on something and staying alert will help you cope.
- Medication can help 'turn down the volume' on some of the unusual experiences. This should also help you cope.

## **COPING TECHNIQUES**



- Distraction reading, music, talking, TV, elastic band around wrist, hot bath
- Relaxation breathing techniques, progressive muscle relaxation
- Anxiety management, exercise, healthy lifestyle,
- Time for self, time management, Social support,
- Education (understand voices and what might mean, others experiences etc)

## What do you find most helpful?

## **Record it in your Keeping Notes chart!**

People use different strategies to cope with unusual experiences.

These often fall into 2 categories:

**1. DISTRACTION** – getting away from the experience by concentrating on something else. We all use different distractions, whatever we enjoy or find helpful.

Distraction could be:



- Listening to music or talking radio programmes or watching TV
  - Mental tasks reading, writing, doing maths or puzzles
- Physical activity cleaning, running, gardening, playing tennis etc
- Talking to others

**2. FOCUSING** – paying attention to the experience (you have already begun to do this with the homework).

Focusing is:

- Noticing the experience
- Not trying to push it away
- Not getting drawn into it
- Noticing what it is like instead of just what it is about (e.g. with voices notice what the voice is like it's gender/ tone of voice etc instead of what it is saying to you)
- Letting go of the experience and absorbing yourself in an activity

### Focusing versus distraction

Which is better? Evidence suggests focusing is an effective coping strategy and can improve self-esteem.

- Research has compared people taught to use distraction for voices and those taught focusing.
- What do you think the result would be?
- Answer: the same, but those who used focusing had improved self esteem.

## Why does focusing help self-esteem?

- It is the opposite of avoidance and puts you more in control.
- It takes courage to focus on something that is frightening but this can help to overcome it!



### How to do focusing:

1. First use breathing to reduce your anxiety.

2. Then notice the content of the thought, or the characteristics of the voice, and notice what they are like

### MINDFULNESS

Mindfulness is a way of focusing on your experience. Research has shown that mindfulness is helpful for dealing with voices and unusual experiences:

- Mindfulness helps you to face things that are difficult;
- Mindfulness helps you to be in control while doing this;
- Mindfulness helps you to let them go.



Mindfulness means paying attention to your experiences, but this can be difficult and you may find you try to avoid doing so. There are different reasons why some people find this hard:

### 1. FEAR



- Fear of voices, thoughts or unusual experiences is natural.
- Fear leads people to try and avoid them or block them out.
- This means they are never faced or dealt with.
- Focusing on them and facing them means that you are in control.
- You can then let them go.

### 2. MEANS FACING THAT THEY ARE PERSONAL & NOT COMMON EXPERIENCES

- Some people do not want to look at their experiences mindfully because it might mean facing that they are not real to others;
- Admitting that what you thought is not common to others is very difficult for all human beings but it is the first step to getting back to normal life and getting out of hospital etc.

### **3. PERSONAL REALITY IS NICER**

- Other people have nice unusual experiences or ways of understanding things
- They might prefer this to common reality
- Mindfulness means facing common reality (but can make it possible to be in touch with both common and personal reality safely, if you can manage both and achieve "wise mind").

## • Mindfulness takes practice – use the handouts!

## TRY it this week and note how you get on in the Keeping Notes Chart

## **So what is real and what is not?** Session 4 Handout

There are different ways of testing whether you are experiencing common reality (what is real for everyone) or personal reality (what is only real for you).

**1. Focusing and mindfulness** - give you the chance to consider what is real and what is not, and this can be the key to you having more control.

You can be in the driving seat – not your experiences or symptoms. Mindfulness helps to see that:

- A thought as just a thought not something you can be blamed for having; not something you have to follow;
- A voice is just a voice. You do not have to obey it, or believe it.
- A feeling is just a feeling. You can choose whether it is useful or not.

**2.** By asking others - can be a useful way of checking whether to take a thought or voice seriously. Do others see it the way you do?



**Warning** – sometimes this can be taken too far. It is important to build your own confidence about what is real rather than to repeatedly seek reassurance from others.

**3.** By looking at the evidence – challenge the thoughts or voices, can they provide evidence for what they say? For example:

If you think everyone is looking at you in the shop, deliberately look up and notice what people are really looking at.



- Is there any evidence that they are all looking at you?
- What do you think they might actually be looking at?

If the voices tell you every night that you will die when you go to sleep, what does it mean when you continue to wake up every morning?

- What evidence is there that what the voices say is true?
- Is this evidence fact (could it be used in a court of law?) or is just it just their opinion (not good enough evidence?)
- What evidence is there that what the voices say is not always true?

## How could you challenge your own thoughts or voices? What is the evidence for and against what they say?

### DIFFERENT WAYS OF UNDERSTANDING UNUSUAL EXPERIENCES

## 1. STRESS



You can get clues about what unusual experiences mean by thinking about what was happening in your life when the thoughts or voices started. Often this is when people go through:

- Stressful times
- Life changes
- Losses

### 2. LIFE EVENTS

Difficult experiences or things that happen when we are very stressed can keep 'popping up' again and again in the form of:

- Voices
- Thoughts
- Beliefs

For example, if you have experienced abuse in childhood it is not unusual to hear voices saying abusive things to you. This can mean you end up having a personal reality which is quite different from what other people think - e.g. you might end up believing you are a bad person because the voices say you are.

So this is a good reason for checking out what others think. Having a balance between your own reality and everyone elses' is helpful and healthy.

## **3. OPENESS TO UNUSUAL EXPERIENCES**

Some people are more open to unusual experiences than others, and so more likely to have unusual experiences. You need to recognise your own level of openness to the unusual and manage your life accordingly.

- What helps you cope?
  - Any strategies? Medication? Being careful with drugs and alcohol?

### **4. PROBLEM SOLVING**

When life gets really difficult, staying in personal reality can be easier or more

comforting than facing common reality. This can lead to creative solutions to the problem. The danger is of becoming stuck in personal reality, which has problems of it's own. For example, sometimes voices or beliefs can be positive and comforting, they can provide company if you are lonely. But if you only spent time listening to the thoughts or voices you will never meet any new people, which might also help you feel less lonely.



## **Basic Grounding Mindfulness**

Aim: To bring yourself 100% into the present, where you are in control.

**Exercise**: Take your attention away from your thoughts, away from your head and into your body.

### Awareness of body

- Notice what it feels like to be a body sitting in a chair
- Notice your weight on the chair
- Notice how your back feels against the chair
- Notice all the things you can feel, in your arms and legs, fingers and toes
- Notice things that normally your mind ignores because they are not 'interesting'

### Awareness of breath

- Notice your breathing
- Going in and out keeping you alive
- Connecting you with the world

### Awareness of sounds

- Notice what your senses tell you about the world around you
- Notice what you can hear
- Notice any judgments the mind automatically judges
- Just note them and let them go
- Come back to just hearing

### Awareness of sights

- Notice what you can see
- Again note and let go of judgments
- Can you see anything in here that you never noticed before?

## Awareness of thoughts and letting these go

- If we are quiet for a minute, you will notice thoughts coming into your head
- Perhaps taking you away into the past or the future
- Away from the present. That is what thoughts do.
- Note them and let them go
- Come back to the breath and to the present moment.

### Awareness of emotions

- Notice any emotions
- Note where you feel them in the body
- Note that they are just an event in the body
- No need to follow them.

## **Relaxation Breathing**

Using breathing to reduce stress, panic and anger.

High stress means that your body is getting ready for action. When stressed, you breathe in more than you breathe out.

This gives you a simple way to calm down:

Breathe IN – 1 OUT - 1 and 2

## Breathe out more than you breathe in!

And – you do not need to breathe in straight after you have breathed out – you can have a little rest:

Breathe IN – 1 OUT - 1 and 2 AND R--E--S--T

A bonus is that, as you breathe in you naturally tense your chest muscles, so you naturally relax them when you breathe out.

So - it is very easy to ....

Relax your muscles on the out-breath!

Breathe IN OUT – AND R---E---L---A---X

Keep practicing this so that it is easy to do when under stress.

BREATHING WILL BRING DOWN ANXIETY IF YOU CATCH IT EARLY. NOTICE WHAT YOUR BODY IS TELLING YOU. PICK UP YOUR FIRST SIGNS OF ANXIETY, AND LENGTHEN YOUR BREATHING. THEN THIS BREATHING SHOULD HELP YOU TO THINK MORE CLEARLY.

# Measures

Name: .....Date.....Date.

## Measuring what you would like to get out of the group

Now you know what is going to be covered in the group, and how this might apply to you. Think what you would like to be different by the end of the group - something that the group help with.

Write that down in the first space (C) – describe how it could be.

C. What you would like to see different by the end of the group?

.....

Then fill in the other lines, comparing this with how it is now, and thinking about how you would know that some change had taken place in the right direction.

A. Where are you with this now?

.....

.....

B. What would the half way position be?

.....

.....

Important! A, B & C need to be easily identifiable things you do (or don't do).

## This bit to be filled in during the last group session

Make a mark on this line to represent how you have managed this week in relation to your goal.

	Α	В	С
(worse than before)	(where you started)	(halfway to goal)	(your goal)

Name.....Date.....

## CORE-10

This text box is where the unabridged thesis included the following third party copyrighted material:

Connell, J., Barkham, M. (2007). *CORE-10 User Manual, Version 1.1*. CORE System Trust & CORE Information Management Systems Ltd

Name.....Date.....

## Mental Health Confidence Scale

This text box is where the unabridged thesis included the following third party copyrighted material:

Carpinello, S.E., Knight, E.L., Markowitz, F.E. & Pease, E.A. (2000). The development of the mental health confidence scale: A measure of self-efficacy in individuals diagnosed with mental disorders. *Psychiatric Rehabilitation Journal*, 23, 236-243.

## **Voices Questionnaire**

This text box is where the unabridged thesis included the following third party copyrighted material:

Haddock, G., Mc Carron, J., Tarrier, N. & Faragher, E.B. (1999). Scales to measure dimensions of hallucinations and delusions: the psychotic symptom rating scales (PSYRATS). *Psychological Medicine*, 29, 879-889.

## **Beliefs Questionnaire**

This text box is where the unabridged thesis included the following third party copyrighted material:

Haddock, G., Mc Carron, J., Tarrier, N. & Faragher, E.B. (1999). Scales to measure dimensions of hallucinations and delusions: the psychotic symptom rating scales (PSYRATS). *Psychological Medicine*, 29, 879-889.

## Satisfaction Questionnaire

1	What was most helpful about the group?
2	What was least helpful about the group?
3	Has it made you think differently about anything?
4	Please tell us what, if anything, has changed in the way you think about your mental health since attending the group?
5	Please tell us what, if anything, has changed in the way you view yourself since you attended the group?
6	What kind of things did you learn in the group?
7	Do you have any other comments?

## Appendix 4. Ethical Approval

This text box is where the unabridged thesis included the confidential ethical approval documentation.

## Appendix 5. Participant information sheets and consent form

## Participant Information Sheet 1- Group participants

## Brief group therapy for psychosis in acute care

We would like to invite you to take part in our research study. Before you decide we would like you to understand why the research is being done and what it would involve for you. One of our team will go through the information sheet with you and answer any questions you have. Please ask us if there is anything that is not clear.



## What is the purpose of the study?

This study aims to find out if group therapy is helpful for people in hospital who hear voices, see visions or experience unusual beliefs. We want to know if the group can help reduce distress, increase confidence and help recovery while people are in hospital.

As part of the study we will run weekly group sessions for 4 weeks and ask participants to fill in short questionnaires at the beginning and end of the sessions to help us evaluate the group. We are also interested in finding out what participants think of the group.

The study is being conducted by Dr Mary Forsey, a trainee clinical psychologist at the University of Liverpool and Dr May Sarsam a clinical psychologist at the XXXX unit.

## Why have I been invited?

You have been invited because you are currently experiencing symptoms that the group is designed to help with, such as hearing voices, seeing visions or having unusual beliefs.



## Do I have to take part?

No – it is your decision entirely. If you decide to take part, you will be asked to sign a consent form and you are free to withdraw at any time, without giving a reason. This would not affect your care in any way.

## What will happen to me if I take part and what will I have to do?

You will be asked to attend 4 group sessions which will be held once a week on the ward. The sessions will last about 1.5 hours each with a break in the middle. At the start of the first session you will be asked to sign a consent form to say you are happy to take part in the study and then fill in a short questionnaire.

The groups are run by a psychologist or occupational therapist, a service user who has recovered from similar symptoms and a member of the ward staff. There will be no more than 8 participants in each group. The sessions will be a mixture of talking and listening. We will provide some information and encourage people to talk about their own experiences in

order to help understand them better. You do not have share anything in the group that you do not wish to.



At the end of the fourth session we will ask you to fill in another short questionnaire and ask for your written feedback about taking part in the group. If you come to all 4 group sessions and fill in the questionnaires you will receive a £5 Argos voucher. One month after the last group session we will send the short questionnaire again to look for changes over time, if you

fill it in again you will receive another £5 Argos voucher.

## What are the possible risks of taking part?

- There is little risk involved in taking part in the study.
- Some people may find it difficult to talk about their experiences but you do not have to share anything in the group that you do not want to.



• If you experience any problems you can spend time individually with the group facilitators and receive additional support from the ward staff.

## What are the possible benefits of taking part?

- Although we cannot promise the study will help you the information we get collect will help improve treatment in the future.
- Taking part in the group may help reduce distress, increase confidence and help you move towards your own personal goals for recovery.



- Talking to other people who have shared similar experiences may help you feel less different or alone.
- The group may help you develop a better understanding about your experiences and learn more about yourself.

• You will receive £10 in Argos vouchers if you take part in all the group sessions and complete the questionnaires 3 times.

## What happens when the research study stops?

When you have attended all 4 group sessions and filled in the study measures, you will not be asked to take any further part in the study.

When the whole study has been completed we will write a report of the findings for NHS managers who decide what services are offered to people in hospital. We also hope to publish papers in academic journals and present the findings at conferences. The findings will also be written up as part of Mary Forsey's thesis which will be part of her doctoral training as a clinical psychologist. No confidential information will be used in these reports.



## What will happen if I don't want to carry on with the study?

No problem – you are fee to withdraw from the study at any time and this will not affect your care in any way.

## What if there is a problem?

If you have a concern about any aspect of this study, you should speak to the researchers who will do their best to answer your questions (see contact details below). If you remain unhappy and wish to complain formally, you can do this through the NHS Complaints Procedure. Details can be obtained from the hospital.

This study is covered for harm due to negligence by the University of Liverpool. In the event that something does go wrong and you are harmed during the research study due to someone's negligence then you may have grounds for legal action against the University of Liverpool, but you may have to pay your legal costs. There are no special compensation arrangements for non-negligent harm, though the normal National Health Service complaints mechanisms will still be available to you.



## What about confidentiality?

No information will be passed onto the ward staff or any other person without your permission, unless there is a direct risk of harm to you or another person, in which case we have a duty to disclose this to the relevant authority,

however, this will always be discussed with you first.

All information collected about you during the study will be kept strictly confidential, and any information about you which leaves the hospital will have your name and address removed so that you cannot be recognised. You will not be named or identified in any reports of the study. We may include brief quotations from some questionnaires in our reports, but we will always change details such as names and places so nobody can be identified.

All data collected from the study will be kept safely and securely on computer. Dr Bill Sellwood will be the custodian of all study data. With your permission, the data will be archived and stored at the University of Liverpool for up to 8 years after the end of this study for possible use in future studies. Access to



these by researchers not involved in the current study will be subject to further ethical review. We will send you a summary of the results at the end of the study if you would like one.

## Who is organising and funding the study?

The University of Liverpool and XXX NHS Trust have provided the funds to carry out this study and the University of Liverpool is the study sponsor. The University of Liverpool is organising the study in collaboration with XXX NHS Trust and the XXXX Unit.



## Who has reviewed the study?

This study was given a favourable ethical opinion by the NRES Committee North West.

## Who can I contact for further information?



If you have any questions at all, at any time please contact:

Dr Mary Forsey (0151 250 5061 / mforsey@liv.ac.uk/ mary.forsey@.nhs.uk), Dr May Sarsam (0151 250 5062/ may.sarsam@.nhs.uk) who are based at your hospital.

Alternatively, you may prefer to contact Dr Bill Sellwood (0151 794 5530/ sellwood@liv.ac.uk) who is based at the Division of Clinical Psychology, Whelan Building, University of Liverpool, Liverpool, L69 3GB.

Thank you very much for taking time to read this information sheet.

## Participant Information Sheet 2 - Control Group

## Brief group therapy for psychosis in acute care

We would like to invite you to take part in our research study. Before you decide we would like you to understand why the research is being done and what it would involve for you. One of our team will go through the information sheet with you and answer any questions you have. Please ask us if there is anything that is not clear.

## What is the purpose of the study?



This study aims to find out if group therapy is helpful for people in hospital who hear voices, see visions or experience unusual beliefs. We want to know if the group can help reduce distress, increase confidence and help recovery while people are in hospital.

We also want to compare this new group with current treatment in hospital so some people will be asked to fill in the short questionnaires but not attend the group because this is what normally happens in hospital. To make sure this is a fair process we will run the group for 4 months on one ward and then swap around and run the group for 4 months on a different ward.

The study is being conducted by Dr Mary Forsey, a trainee clinical psychologist at the University of Liverpool and Dr May Sarsam a clinical psychologist at the XXXX unit.

## Why have I been invited?

You have been invited because you are currently experiencing symptoms that the group is designed to help with, such as hearing voices, seeing visions or having unusual beliefs.



## Do I have to take part?

No – it is your decision entirely. If you decide to take part, you will be asked to sign a consent form and you are free to withdraw at any time, without giving a reason. This would not affect your care in any way.

## What will happen to me if I take part and what will I have to do?

You are on a ward which is not currently running the group sessions, therefore you will only be asked to fill the short questionnaire. We will ask you to fill in the questionnaire 3 times over a two month period in order to look for changes while you are receiving normal treatment in hospital. If you fill it in twice you will receive a £5 Argos voucher, if you fill it in a third time you will receive another £5 Argos voucher.

## What are the possible risks and benefits of taking part?

- There are no risks involved in taking part in the study.
- Although we cannot promise the study will help you the information collected will help improve treatment in hospital in the future.
- You will receive £10 in Argos vouchers if you choose to take part and complete the questionnaire 3 times.

## What happens when the research study stops?

When you have filled in the study measures you will not be asked to take any further part in the study.

When the whole study has been completed we will write a report of the findings for NHS managers who decide what services are offered to people in hospital. We also hope to publish papers in academic journals and present the findings at conferences. The findings will also be written up as part of Mary Forsey's thesis which will be part of her doctoral training as a clinical psychologist. No confidential information will be used in these reports.

## What will happen if I don't want to carry on with the study?

No problem – you are fee to withdraw from the study at any time and this will not affect your care in any way.



## What if there is a problem?

If you have a concern about any aspect of this study, you should speak to the researchers who will do their best to answer your questions (see contact details below). If you remain unhappy and wish to complain formally, you can do this through the NHS Complaints Procedure. Details can be obtained from the hospital.

This study is covered for harm due to negligence by the University of Liverpool. In the event that something does go wrong and you are harmed during the research study due to someone's negligence then you may have grounds for legal action against the University of Liverpool, but you may have to pay your legal costs. There are no special compensation arrangements for non-negligent harm, though the normal National Health Service complaints mechanisms will still be available to you.



## What about confidentiality?

No information will be passed onto the ward staff or any other person without your permission, unless there is a direct risk of harm to you or

another person, in which case we have a duty to disclose this to the relevant authority, however, this will always be discussed with you first.

All information which is collected about you during the study will be kept strictly confidential, and any information about you which leaves the hospital will have your name and address removed so that you cannot be recognised. You will not be named or identified in any

reports of the study. We may include brief quotations from some questionnaires in our reports, but we will always change details such as names and places so nobody can be identified.

All data collected from the study will be kept safely and securely on computer. Dr Bill Sellwood will be the custodian of all study data. With your permission, the data will be archived and stored at the University of Liverpool for up to 8 years after the end of this study for possible use in future studies. Access to these by researchers not involved in the current study will be subject to further ethical review. We will send you a summary of the results at the end of the study if you would like one.

## Who is organising and funding the study?

The University of Liverpool and XXX NHS Trust have provided the funds to carry out this study and the University of Liverpool is the study sponsor. The University of Liverpool is organising the study in collaboration with XXX NHS Trust and the XXXX Unit.



## Who has reviewed the study?

This study was given a favourable ethical opinion by the NRES Committee North West - Preston.

### Who can I contact for further information?



If you have any questions at all, at any time please contact:

Dr Mary Forsey (0151 250 5061 / mforsey@liv.ac.uk/ mary.forsey@.nhs.uk), Dr May Sarsam (0151 250 5062/ may.sarsam@.nhs.uk) who are based at your hospital.

Alternatively, you may prefer to contact Dr Bill Sellwood (0151 794 5530/ sellwood@liv.ac.uk) who is based at the Division of Clinical Psychology, Whelan Building, University of Liverpool, Liverpool, L69 3GB.

Thank you very much for taking time to read this information sheet.

Participant Identification Number:

## **CONSENT FORM**

Title of Project: Brief group therapy for psychosis in acute care

Name of Researcher:

		Please initial the
1	I confirm that I have read and understand the information sheet dated (version) for the above study. I have had the chance to think about the information, ask questions and have my questions answered.	box
2	I understand that taking part is voluntary and that I can change my mind at any time without giving any reason, without my medical care or legal rights being affected.	
3	I give permission for the researchers to have access to my address, date of birth and nationality.	
4	I agree to take part in the above study.	
5	I would like to receive a summary of the findings at the end of study.	

Name of participant	Date	Signature	
Name of person taking consent	Date	Signature	

When completed: 1 for participant; 1 for researcher site file; 1 (original) to be kept in medical notes

Variable	Group	Skewness	Kurtosis	Sha	piro-W	ʻilk	Levene's		
				Statistic	df	р	Statistic	df	р
CORE T1	Intervention	-0.18	-0.92	0.97	71	0.11	0.82	1,111	0.37
	Control	0.06	1.08	0.95	42	0.08			
CORE T2	Intervention	-0.29	-0.38	0.98	33	0.73	0.95	1,55	0.758
	Control	0.38	-0.31	0.96	24	0.40			
CORE T3	Intervention	0.18	-1.23	0.93	28	0.06	0.46	1,37	0.50
	Control	0.31	0.02	0.94	11	0.46			
MHCS T1	Intervention	0.19	-0.84	0.97	64	0.19	2.70	1,104	0.10
	Control	0.13	0.31	0.97	42	0.27			
MHCS T2	Intervention	0.26	-0.93	0.96	32	0.28	4.09	1,55	0.05*
	Control	0.28	-0.18	0.98	24	0.85			
MHCS T3	Intervention	0.08	-0.41	0.98	27	0.94	0.37	1,36	0.55
	Control	-0.13	-0.93	0.95	11	0.69			
VOICES	Intervention	-0.07	-0.04	0.91	26	0.32	5.02	1,50	0.03*
T1	Control	-0.16	-1.37	0.91	26	0.30			
VOICES	Intervention	0.87	0.07	0.92	13	0.24	0.13	1,23	0.72
T2	Control	-1.48	4.22	0.82	12	0.02*			
VOICES	Intervention	-0.85	0.31	0.94	16	0.37	0.23	1,21	0.64
T3	Control	-0.97	-0.24	0.82	7	0.06			
BELIEFS	Intervention	-0.75	-0.45	0.90	34	0.01**	0.47	1,52	0.50
T1	Control	-0.42	-0.71	0.93	20	0.16			
BELIEFS	Intervention	-0.24	-0.83	0.97	20	0.71	3.76	1,27	0.06*
T2	Control	0.77	1.02	0.95	9	0.65			
BELIEFS	Intervention	-0.11	-1.06	0.95	20	0.35	0.26	1,25	0.62
Т3	Control	0.77	-1.04	0.85	7	0.13			
	control	,	1.01	0.00	,	0.10			

## Appendix 6. Distribution of normality and variance in outcome measures

\* Significant at the p < 0.05 level (2 tailed)

\*\*Significant at the p < 0.01 level (2 tailed)

## Appendix 7. Responses to satisfaction questionnaire

	Q1 – What was most helpful about the group?	Q2 – What was least helpful about the group?	Q3 – Has it made you think differently about anything?	Q4 – What, if anything, has changed in the way you think about your mental health since attending the group?	Q5 – What, if anything, has changed in the way you view yourself since you attended the group?	Q6 – What 5kind of things did you learn in the group?	Q7 – Any other comments?
1	The discussion	Nothing	Yes, that they are just Voices and just thoughts	Nothing	Don't blame myself	That there's a lot of people dealing with the same problems.	The group was nice and the tutors made it easy for us.
2	Talking to people about how you feel	It was all helpful	Yes	I feel more confident	I feel a lot better	How to control my thoughts	The course is very helpful
3	Coping techniques	Patients walking in and out	Deal with intrusive thoughts	I'm not alone	More confident, no self- esteem issues	The whole world doesn't revolve around me	Very good
4	Discussing things	It being really up to you to make the change	Somewhat or in some ways more hopeful	A bit more rational and positive	Nothing really	I can't say	
5	A chance to talk openly to other people, without prejudice or fear.	More patient participation would be helpful, to get a lot of different experiences.	Learning to challenge thoughts more, rather than pushing them to the back of my mind. Still hard to do.	I cannot tell if there has been any change or not, sometimes my mind is in a whirl.	I do not think there has been any change at all. Which is not good at all.	I believe I have one foot in each reality. But can I survive with both feet in the middle.	Good to talk. I have to talk more. Some discussion groups would be good, but probably not well attended.
6	All groups were helpful	Hearing Voices	I have been thinking positive most of the time		I have enjoyed the changes	To smile all the time and think positive	Thank you!

Mary Forsey

7	Ability to understand that the Voices and thoughts weren't real. That I am not the only one who hears Voices		The way I am able to deal with Voices and thoughts	My thinking is more positive since attending the group	Feel less isolated and feel more positive in myself since attending the group	How to deal with thoughts and Voices	No
8	Relaxation	Did not always feel the benefit that was offered	Yes	I feel more confident	I view myself better	To feel less frightened of my feelings	I feel more hopeful about the future
9	Learning how to relax	The sessions are too long	Feeling a bit better, have a bit more understanding	No	Cool, calm collected	Good to speak to other patients	Good fruit, the sessions relax me
10	All of us close together going through our experiences and talking about them and ways of dealing with them	Nothing much as most ideas and subjects were helpful going forward	It has made me think more about feelings in a positive way	I have undergone 'ERT' treatment which has resulted in some memory loss	I feel more positive with my thoughts when faced with the future	Try not to be alone with your thoughts and meet new people	I think people in the group and myself learnt new ways to cope with stress and anxiety
11	The variety and scope of discussions/ topics		Yes	I'm not alone		About personal reality problems	It was worthwhile and friendly
12	Very well run, lovely treats.	I was sleepy from medication	Coping	Same, some extra tools	I am not my thoughts	Relaxation, mindfulness and coping strategies	No thank you, enjoyed course, fab homemade mince pies.
13	Talking out in a group bereavement. Breathing exercises	Voices experiences	Reality which was necessary for normal improvement in health	Happier	More settled about personal feelings	Normal approach to Voices in life	The group was pleasant and most helpful as I was upset.
14	I would like to think the group has given people more of an insight & able to recognise the symptoms of mental health		I think I would be aware of any mental health symptoms occurring, & able to stop the symptoms before the problem requires hospitalisation				Don't be afraid to ask for help

Mary Forsey

15	Group discussions, listening to/ talking about, sharing discussions	Time constraints	Breathing coping strategy	Using life cycles	See something new each time	Breathing techniques, life cycles	More OT times
16	Talking about relaxation/ Talking through problems	Talking/ Listening to others	Yes/ More positive	More confidence/ GP	Being able to cope with domestic violence of ex- partner/ Talking about the future	Much better/ More relaxation	Stress can give you worry/ Talking about how others feel
17	Advice on what to do and what not to because my head is a brick wall metaphorically.	Advice	No	Nothing	Nothing, just glad its not my fault	Take one step at a time, distract yourself if possible	No
18	The group helped me confront my fears and thoughts	Confronting my thoughts and fears made me anxious and tense	I think the session has made me realise I am not as better as I thought I was.	I think I am half way up the recovery steps, before I attended I didn't have the visual aid.			
19	Very helpful and informative		Have tried to be more positive in my outlook on life		How to deal with negative thoughts and feelings. To turn the other cheek and ignore people who may try to bully or be abusive towards me.	Very interesting, enjoyed listening to other people's experiences.	
20	Feeling comfortable in the small group	Not being able to express myself which was more to do with me than any slight on the group	Things can be changed by breaking things down		Feel more positive about making changes	Things can and do change for the better	Very useful
21	Being able to understand a bit more from hearing from other people reminds	The comment "its ok not to be ok".	I think its starting too, a bit too slowly for 4 weeks	That's its ok - a tiny bit	Slightly more confident at talking	Mindfulness	Really enjoyed it

	me a bit more about myself that I have forgotten						
22	XXXX because he's been there	My negativity and interruptions	No, but there may be help eventually	I've no confidence etc, I just pretend, I don't even believe I exist	XXXX has tried to help me see other people have been like this	Relaxation - possible help	Life is crap, anger and pretend - so feels impossible to stop doing
23	XXXX was most helpful	XXXX	No	Nothing has changed	More confidence	All sorts	Plenty chopper
24	Not being the only one who heard voice/Voices in my head	Can't think of anything that wasn't helpful	No still the same	Only thing that helps is the medication	Nothing has changed	Don't know	No
25	Other people's experiences	People rambling	No	No change	No	Other people experiences	I can see that it could be helpful for some people. Not me.
26	Openness	Self-expression	Yes		Average	To listen and not be too judgemental	

## Appendix 8. Example of qualitative coding structure

Superordinate theme	Codes	Evidence from text
Changes in emotional states	Increased confidence/ Increased positivity/ Feeling better/ Less fear/ Less prejudice/ Less judgement/ Decreased isolation	More confident, more positive, happier, feeling better, better about self, less frightened of my feelings, talk without prejudice or fear, not alone, not the only one, less isolated, talking to people, listening to others, openness
Learning coping strategies	Dealing with symptoms/ Coping techniques/ Extra tools/ Advice/ Relaxation/ Breathing/ Mindfulness	Helpful, talking to people, discussion, more control, able to stop symptoms, able to cope, breaking things down, talking, distract yourself, good to speak, asking for help, confronting thoughts and fears, challenging thoughts, advice on what to do, relaxation, breathing techniques, mindfulness
Changes in understanding, attitudes and thinking	Thinking about the future/ More hopeful/ Going forward/ Process of recovery/ Fears about change/ Lack of change/ Changes in thinking/ Less self-blame	Going forward, more hopeful recovery steps, one step at a time, no change, the whole world doesn't revolve around me, more understanding, insight, journey, thinking of the future, recognise symptoms, life cycles, normal approach, I am not my thoughts, the Voices and thoughts weren't real, they are just Voices and just thoughts, not my fault, don't blame myself
Effects on participation in group sessions	Cohesiveness of group/ Comfort from the group/ Effect of facilitators/ Timing/ Hearing from others/Disruption from others/ Self focused barriers	All of us close together, feel comfortable in the small group, enjoyed, well run, friendly, good, nice, pleasant, interesting, treats, made it easy for us, time constraints, too long, people rambling, self- expression, patient participation, hearing from others, walking in and out, interruptions, my negativity