DO CLINICAL PSYCHOLOGISTS WORKING IN EARLY PSYCHOSIS CONNECT CLIENTS' EXPERIENCES OF TRAUMA WITH CURRENT PRESENTATION AND DOES THIS INFORM THERAPY PROCESSES?

Thomas Peter Mountjoy

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School of Medicine

Academic Unit of Psychiatry and Behavioural Sciences

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The candidate confirms that the work submitted is his own and that appropriate credit has been given where reference has been made to the work of others.

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ABSTRACT

Introduction: Trauma and adversity are recognised as important risk factors for the development of psychosis. Clinicians should assess clients' trauma histories and address this appropriately, as recommended in recent National Institute for Health and Care Excellence (NICE) guidelines for psychosis. However, it is unclear how commonly clinical psychologists working in early psychosis assess trauma-related factors, how they make sense of potential links with clients' experiences, and how this impacts on therapy processes.

Method: Eleven qualified clinical psychologists were recruited from seven National Health Service (NHS) Early Intervention Psychosis (EIP) services. The study adopted an individual vignette-semi-structured telephone interview approach to elicit relevant aspects of participants' understanding and approaches. Interviews were transcribed and analysed using content analysis and thematic analysis techniques. Responses explicitly relating to 'severe adversity, abuse, and trauma' were coded using the abbreviation 'AAT'. Analysis led to the formation of a conceptual map, displaying relationships between important codes and themes.

Results: Assessment procedures were both collaborative and client-led. Participants commonly acknowledged AAT-related factors; however, multiple factors not explicitly related to AAT were also highlighted. Participants commonly worked with wider issues of distress, beyond 'psychosis'. Indirect roles of AAT were commonly identified, particularly in making sense of schematic development and later impacts on distressing experiences. Mechanisms underlying AAT-psychosis links were largely unclear. Cognitive Behavioural Therapy (CBT) models were the most commonly cited theoretical and intervention-based approach; links between AAT and psychosis, and wider distress, were commonly addressed through collaborative sense-making processes of joint formulation. However, participants discussed the need for appropriate timing, client willingness, and the role of clinical judgement. There was some limited evidence of direct AAT-processing based interventions. Overall, however, the data were suggestive of heterogeneous conceptualisations of psychosis and wider distress, and varied approaches to clinical intervention.

Discussion: Findings were examined in relation to existing research literature. While AAT was one key factor, among others, links with psychosis were clearly complex in practice. Participants appeared to operate within a more heterogeneous world than researchers may sometimes be willing to promote. Following exploration of study limitations, the theoretical and clinical implications are outlined, and finally topics for future research.

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ABBREVIATIONS

AAT: Severe Adversity, Abuse, or Trauma

BPS: British Psychological Society

CAT: Cognitive Analytic Therapy

CBT: Cognitive Behavioural Therapy

CDP: Continuing Professional Development

CFT: Compassion Focussed Therapy

CPA: Care Programme Approach

DSM*:* Diagnostic and Statistical Manual of Mental Disorders

EE: Expressed Emotion

EIP: Early Intervention Psychosis

EMDR: Eye Movement Desensitisation and Reprocessing

HPA: Hypothalamic–Pituitary–Adrenal

IPA: Interpretative Phenomenological Analysis

MDT: Multidisciplinary Team

NHS: National Health Service

NICE: National Institute for Health and Care Excellence

PTSD: Post-traumatic stress disorder

RCT: Randomised Control Trial

R&D: Research and Development

THQ: Trauma History Questionnaire

The Current Study

The current study examined clinical psychologists' practice with respect to the inclusion of trauma in formulating clients' experiences of early psychosis. More specifically the study aimed to explore the degree to which a sample of clinical psychologists working in Early Intervention Psychosis (EIP) services routinely investigated trauma and adversity with their clients, whether theoretical models informed their clinical formulations, and how incorporation of these factors impacted on therapeutic processes. It is currently unclear from existing research whether elucidating trauma-psychosis links leads to a greater degree of trauma-focussed formulation and therapy processes in real-life practice; the current study aimed to explore this. An individual vignette-semi-structured telephone interview approach was used to focus on relevant aspects of clinicians' practice and decision making processes. To avoid limiting conceptualisations of these phenomena, for example by solely considering trauma as a contributory or aetiological factor in psychosis, the study was designed to allow wider exploration of relationships and other key factors. The research findings have implications for conceptualisation of relationships between trauma and psychosis in practice, and for clinical intervention in this field.

Due to the breadth of the trauma-psychosis field, the literature review required a narrower focus. The following areas are covered: following preliminary literature searches, a brief overview of relevant policy, models of psychosis, and research exploring links between trauma and psychosis is first provided. Drawing upon systematic principles, a more thorough literature review more relevant to the study aims is then outlined. This section first covers how links between trauma and psychosis may be conceptualised in practice, focussing on theoretical models and research findings which may inform clinical formulation. The second section addresses clinical approaches which take into consideration trauma-psychosis links, including assessment and therapy processes. The literature review does not include detailed discussion of epidemiological findings or the debate regarding aetiological mechanisms potentially involved in trauma-psychosis links. The objective was to critique literature which may elucidate how clinicians understand trauma-psychosis links, and with a focus on how this informs clinical practice.

Definitions

Psychosis is often considered a severe mental condition. Whilst the term is broad, the condition is commonly described as a distressing mental state typified by a loss of contact with reality. Common symptoms may include disturbance of perception (hallucinations), disturbance of belief (delusions), and disorganised patterns of speech (thought disorder) (Bendall *et al*., 2011). There is an emerging literature that highlights traumatic and adverse experiences as a significant risk factor for a number of mental health problems, including psychosis, and this finding is robust at all life-course stages and across cultures (Kessler *et al.,* 2010; MacMillan *et al.,* 2001). Precise definitions for the terms 'trauma' and 'abuse' are difficult to ascertain and, from the outset, this important limitation is likely to impact upon the interpretation of strong associations with psychosis in the research literature.

Although the term trauma is ubiquitous, there is no consensus on a single definition amongst behavioural scientists. Childhood trauma may include negative life experiences including physical violence, sexual and emotional abuse, and physical and emotional neglect (Larkin & Read, 2008). Psychological trauma has been conceptualised as the result of experiencing overwhelming uncontrollable events perceived to threaten an individual's sense of integrity or survival (Herman, 1997; Mueser, 2002; van der Kolk, 1987). Briere & Scott (2006, p.4) suggest that an event may be considered traumatic, in a phenomenological sense, if it 'is extremely upsetting and at least temporarily overwhelms the individual's internal resources'. According to another common clinical conceptualisation, psychological trauma occurs when an individual is exposed to an overwhelming event that renders them helpless in the face of intolerable danger, anxiety, or instinctual arousal (Eth & Pynoos, 1985).

Whether an event has to satisfy conditions for a *Diagnostic and Statistical Manual of Mental Disorders* (DSM) diagnosis to be considered 'traumatic' is subject to contentious debate (American Psychiatric Association, 2000; American Psychiatric Association, 2013). Much research has relied upon DSM-IV conceptualisations of post-traumatic stress disorder (PTSD) (American Psychiatric Association, 2000). However, defining trauma specifically in terms of threats to physical integrity, as per criterion A, may be restrictive and could exclude more psychologically-based or interpersonal traumas such as childhood abuse (Jackson *et al.,* 2004). Interestingly, language stipulating an individual's response to the event, involving helplessness, horror, or intense fear, is not present in the new DSM-5, due to apparent limited utility in predicting onset of PTSD (American

Psychiatric Association, 2013). This new version contains four diagnostic clusters instead of three, with the addition of negative alterations in cognitions and mood. PTSD symptoms must cause clinically significant distress or impairment in the individual's social interactions, capacity to work, or other important areas of functioning. Whilst there remains much contention surrounding the validity of psychiatric diagnoses, they may have utility as working concepts for clinicians (Kendell & Jablensky, 2003).

Clearly there are varied ways of conceptualising these phenomena. For the purposes of the current study, wider 'severe adversity' was included as well as notions of 'abuse' or 'trauma', as used by Varese *et al.* (2012), thus going beyond conceptualisations of PTSD outlined above. Corstens & Longden (2013) also used broader conceptualisations, considering childhood adversity, familial conflict, bullying, physical/sexual/emotional maltreatment, and neglect, in examining links between broader life history and voice hearing experiences. Importantly, as outlined by Fowler *et al.* (2006), themes of threat or helplessness may result from an upbringing in difficult but not abusive family circumstances; these events may be personally significant without necessarily being unusual or traumatic. Adopting an inclusive approach to conceptualising the phenomena involved, for the purposes of this study, events and experiences explicitly related to 'severe adversity, abuse, or trauma' were classified using the abbreviation 'AAT'. Whilst there is some degree of subjectivity in deciding whether events were 'severely adverse', 'traumatic', or 'abusive', this approach was deemed appropriate due to the exploratory nature of the study; the researcher attempted to be guided by participants' interpretations.

Search strategy

Drawing upon systematic principles, two separate literature reviews were completed. The first related to conceptualisations of trauma and psychosis, and the second focussed on how these may impact upon clinical practice (see appendix 1 for search strategy). Due to the paucity of research literature, both empirical and non-empirical/theoretical peer-reviewed articles were included. Articles from the 1960s onwards were included as researchers have studied the impact of life events in relation to psychosis from this period (Jeffries, 1977). Articles excluded from search results included single case-studies, conference abstracts, non-peer reviewed papers, articles clearly not relevant to the research aims, e.g. psychosis following physical trauma, and papers clearly more focussed on epidemiology or

correlations rather than clinically-relevant conceptualisations or mechanisms. Keywords cited in these articles were scrutinised to highlight potential search terms. Additionally, hand searching of key papers identified a number of relevant papers which were also included.

To the best of the researcher's knowledge, there was a paucity of literature directly relating to the core issue of how clinical psychologists conceptualise links between trauma and psychosis in real life practice, and how this impacts upon therapy processes. However a number of relevant papers focussed on theoretical links between trauma and psychosis, potential mediating factors likely to be relevant to clinical psychologists, clinicians' experiences, and wider recommendations and clinical implications. As the next best source of information this literature will be reviewed. It is important to note that not all individuals exposed to AAT develop psychosis, and not all individuals experiencing psychosis report AAT histories. However, in light of the developing evidence base, the current thesis focuses specifically on AAT-psychosis links.

Background Information

National policy and the emerging literature

The importance of inquiry into violence and abuse has existed in the Department of Health policy agenda for a number of years and is applicable to all services that mental health provider trusts deliver (Department of Health, 2003). A recent briefing policy stressed the importance of working alongside survivors of violence and abuse, particularly childhood sexual abuse, in delivering effective mental health services (NHS Confederation, 2008). According to the policy, all service users should be asked about abuse in assessments, and then receive appropriate care. Indeed changes have been made to Care Programme Approach (CPA) national guidance, including explicit inclusion of the 'abuse question' in CPA documentation; a key building block was routine inquiry and inclusion of the 'abuse question' into assessment documentation, specifically 'have you experienced physical, sexual or emotional abuse at any time in your life?' (Department of Health, 2008, p.24-25). However, the manner in which relevant training and abuse-related information is recorded, and in what circumstances, is ultimately down to local determination (see appendix 2 for extra background information). In light of the emerging literature linking trauma and

psychosis, such policies may have important implications for clinicians working with this client group. What clinicians in early psychosis do with this information, or how it specifically informs therapy processes, remains largely unknown.

Models of psychosis

Psychosis is a complex phenomenon and cannot be explained by a single factor. The dominant model underlying psychiatric understanding of schizophrenia and psychosis has been the dopamine hypothesis (Carlsson & Lindqvist, 1963). These conditions are associated with atypical dopaminergic signal transduction and dopamine overabundance, and particularly D2 receptor overactivation; antipsychotic medications that inhibit dopamine are a mainline intervention in managing symptoms (NICE, 2014; Reynolds, 2004). However, this hypothesis is not a complete explanation for psychosis. Recent research has highlighted the importance of considering psychosocial factors as well as genetic risk for psychosis, e.g. urbanicity, trauma, and cognitive mediation. There is a strong case for an integrated biopsychosocial understanding (Bebbington *et al.,* 2004; Krabbendam & van Os, 2005; Read *et al.,* 2009).

Biogenetic models

There exists a credible body of research supporting a genetic contribution to the risk of developing many psychiatric conditions. Recent years have seen advances in genetic research in the field of psychosis; the main topics of investigation have included the influence of genetics suggested by twin, adoption and family studies (with newer studies being based on large national population registers), phenotypic factors, the chromosomal location of DNA risk variants, and the potential for new biological treatments (Cardno, 2014; DeRosse *et al.,* 2012). Replicated data supports the notion that genetic variation in multiple different loci may influence susceptibility to psychosis, and there is evidence of overlaps with other conditions such as bipolar disorder (International Schizophrenia Consortium, 2009).

There is substantial evidence for family influences on development of psychosis, with heightened risk in siblings (8-10%) compared to the general population (0.8-1%)

(Cardno & Owen, 2014). Twin studies are also supportive of genetic influences and concordance rates are significantly higher in monozygotic (MZ) pairs compared to dizygotic (DZ) pairs (Cardno *et al.,* 2002). However, evidence suggests that non-inherited risk factors are also significant, as more than half of MZ co-twins do not develop psychosis despite genetic similarities.

On the basis of such general evidence for genetic influences, studies aiming to localise DNA risk variants have recently been largely in the form of chromosomal structural variation studies and genome-wide association studies (GWAS) (Sullivan et al., 2012). Chromosomal structural variants, particularly large copy number variants (CNVs), are uncommon but tend to be associated with a relatively high risk for development of psychosis, while GWAS aim to detect common genetic variants that each have a small effect on risk (Cardno, 2014; O'Donovan *et al.*, 2009).

Commenting on the findings of a large multi-stage GWAS, the Schizophrenia Working Group of the Psychiatric Genomics Consortium (2014) suggest that high levels of heritability (60-80%) indicate an important role of genetic variants in the aetiology of schizophrenia. This group suggest that half to a third of genetic risk is indexed by common alleles, as highlighted by GWAS arrays, despite differing frequencies of risk variants. Genes involved in dopamine (DRD2 gene) and glutamate transmission are amongst those implicated, and these findings support existing physiological hypotheses. It is likely that CNV and GWAS approaches, along with emerging high-throughput genetic sequencing studies, will form an important part of future research into the genetic and biological aspects of psychosis.

Trauma and psychosis

The literature commonly refers to three main ways in which trauma and psychosis may relate clinically. Firstly, psychosis can be itself traumatic, perhaps leading to PTSD *(e.g.* McGorry *et al*., 1991). Secondly, both PTSD and psychosis may be separate but intertwined disorders that worsen the course of emotional distress; both conditions may lie on a continuum of responses to trauma (e.g. Mueser *et al.*, 2002). Lastly, adverse life events may play a causal role in the aetiology of psychosis. This latter relationship has received most attention in recent years and, although complicated by mutually reinforcing feedback loops

of stress and symptoms, research agendas are now seeking to establish directions of influence (Conus *et al.*, 2009; Larkin & Morrison, 2006a; Norman & Malla, 1993). In the past 10 years large scale studies have highlighted potential links between adversity, particularly childhood trauma, and psychobiological changes which may increase vulnerability to psychosis (Arseneault *et al.*, 2011; Elklit & Shevlin, 2010; Read, 1997; Read & Bentall, 2012; Read *et al*., 2005; Romme & Escher, 2011; Schreier *et al*., 2009).

Empirical evidence linking trauma and psychosis

Links between trauma and psychosis are recognised in recent NICE guidance (NICE, 2014). Trauma is recognised as an important risk factor for later development of psychosis. Whilst far from conclusive, there is some evidence of a 'dose-response' (Shelvin *et al.*, 2008). The most comprehensive meta-analysis included 18 case-control studies (n=2,048 psychotic patients, 1856 non-psychiatric controls), eight cross-sectional population-based studies (n=35,546) and 10 prospective and quasi-prospective studies (n=41,803). Significant associations were identified between adversity and psychosis across all designs with an overall effect of OR = 2.78 (95% CI = 2.34–3.31) (Varese *et al.*, 2012). Further supporting evidence comes from studies connecting traumatic experiences and content of unusual experiences (e.g. Ensink, 1992). Hallucinations related significantly to childhood sexual and physical abuse in a large sample (n=200), most strongly for command hallucinations and commenting voices (Hardy *et al*., 2005; Read *et al*., 2003).

Trauma-psychosis links are complex and remain poorly understood; systematic reviews reveal inconsistent findings (Morgan & Fisher, 2007; Read *et al*., 2005; van Os *et al*., 2009). Most studies rely on cross-sectional correlational designs using inpatient samples with chronic psychosis, which may overestimate the aetiological role of trauma (Goodman *et al*., 2001). Similarly, first admission study samples tend to exclude individuals with less severe presentations managed in the community, leading to similar potential problems (Varma *et al.*, 1997). Bendall *et al*. (2008) identified six high quality studies tentatively suggesting trauma-psychosis aetiological relationships; however, they cited lack of statistical power, poor attention to moderating and mediating variables, and key differences in measurement of trauma as recurrent problematic factors within the literature. Indeed over-reliance on observational data and relatively crude retrospective assessments of developmental trauma makes comment on causality difficult. Whilst reliability of self-report

and use of clinical notes is limiting, acknowledging that retrospective perceptions of trauma may be influenced by current beliefs and circumstances, few ethical alternatives are available (Morrison *et al*., 2003).

Early adversity does not necessitate the development of psychosis, just as not all people recovering from psychosis go on to develop PTSD. Similarly, not all individuals who experience psychosis will have suffered trauma (Kilcommons & Morrison, 2005). However, it seems timely to move beyond associations between trauma and psychosis and consider potential psychological and biological mechanisms underlying the relationship (Krabbendam, 2008).

Psychological models

The literature does not contain developed conceptual models for understanding connections between adverse life experiences, PTSD, and psychosis (Mueser *et al*., 2002). However, triangulating data from multiple sources, including interactions between neurophysiological, cognitive, affective, behavioural, and genetic contributions, may form potential working models that may inform future research and practice (Bebbington, 2009).

The commonly cited cognitive framework proposed by Garety *et al.* (2001) outlines two routes to the development of positive psychotic symptoms, starting with a triggering event. In the 'combined cognitive and affective route', triggering events result in the disruption of both cognitive processes and emotional changes in predisposed individuals. The disruption in cognitive processes leads to anomalous experiences, the content of which is influenced by the emotional changes; furthermore, these anomalous experiences trigger a search for explanation. Biased conscious appraisals can lead to an external explanation, likely worsened by a negative emotional state. It is the externalising appraisal that makes an anomalous experience psychotic. The second route is the 'affective route' whereby stressful events trigger disturbed affect which directly activates biased appraisal processes and maladaptive self/other schemas, leading to an externalising appraisal (Baker & Morrison, 1998; Bentall *et al.*, 2001; Myin-Germeys & van Os, 2007).

Voice hearing specifically may be conceptualised as a dissociative phenomenon (Longden *et al*., 2012; Moskowitz & Corstens, 2007). Allen *et al.* (1997) propose that

trauma-induced dissociative detachment may lead to experiences of psychosis by affecting grounding in the external world, hampering reality testing and forcing attention inwards. Whilst the current literature is limited to studies of small sample sizes and cross-sectional designs, conceptualisation of trauma as 'disconnection' at different levels of functioning may be useful in clinical intervention (Straker *et al.* 2002). Identifying the mechanisms by which unusual experiences are generated may allow the possibility of improving psychological approaches to treatment (Lasalvia & Tansella, 2009).

How links between trauma and psychosis are conceptualised

Despite recent research interest in the subject area, theoretical explanations for links between trauma and psychosis remain sparse. Few studies have examined the mechanisms by which trauma may increase individual vulnerability to psychosis (Morrison *et al.*, 2005). Perhaps the most relevant work addressing links in the context of therapy is by authors Larkin and Morrison (2006b) in *Trauma and Psychosis: New Directions for Theory and Therapy* and, whilst not peer-reviewed, part III of the text specifically addresses trauma and psychosis 'from theory to therapy'.

The traumagenic neurodevelopmental model

This integrative biopsychosocial model acknowledges the role of early trauma in creating neurodevelopmental abnormalities which heighten vulnerability to stress and susceptibility to psychosis (Read *et al.*, 2001). Cognitively-mediated vulnerability may not originate entirely from biological factors, but via interaction with adverse social environments (Bentall *et al*., 2001). Recognising that epigenetic processes turn gene transcription on and off through mechanisms highly influenced by environmental experience, Read *et al.* (2009) highlight similarities between the brains of people diagnosed 'schizophrenic' and those chronically exposed to early traumatic life events. Indeed there is increasing evidence supporting the notion of long-term trauma-induced neuronal damage (Nemeroff, 2004). It has been proposed that changes in brain structures, including cerebral atrophy, ventricular enlargement, and hippocampal damage, may underlie dopaminergic changes associated with psychosis (Heim *et al.*, 2000; Janssen *et al.*, 2004). The effects of adversity on the brain are important in relation to stress regulation mechanisms in the hypothalamic–pituitary–adrenal

(HPA) axis; preferential amygdalic processing during chronic and stressful life events may also lead to disruption and bypassing of the hippocampus (Read *et al.*, 2005). This may affect individuals' abilities to accurately encode experiences in context, and strength of ability to integrate contextual information may be affected by severity of trauma history (Steel *et al.*, 2005). These neurobiological changes could be associated with vulnerability to intrusion of poorly integrated affective states into one another, perhaps a partial explanatory basis for dissociative experiences.

In a cross-sectional study using an experience sampling method, Lardinois *et al.* (2011) found a significant interaction between childhood trauma and daily life-stress on symptom intensity and negative affect in people with psychosis (n=50). Increased stress reactivity could be associated with a sensitisation process following childhood trauma. In accordance with the traumagenic neurodevelopmental model, adversity may increase sensitivity to stress via a primarily behavioural rather than genetic route. Importantly vulnerability to stress can be acquired by adverse life events and psychosocial events are not relegated to the 'stress' side of the equation in understanding psychosis (Read *et al.*, 2008; Zubin & Spring, 1977). Read and colleagues call for a truly integrated return to the stress-vulnerability model. In light of the above, adopting a top-down cognitive approach, individuals may impose explanations of aberrant salience in a bid to make sense of their experiences (Fowler *et al.*, 2006; Kapur, 2003; Phillips *et al.*, 2002; Read *et al.*, 2001).

Cognitive and behavioural consequences of trauma and vulnerability to psychosis

In a key review of the subject area, Morrison *et al.* (2003) attempt to integrate evidence suggesting that trauma can have an aetiological role in psychosis, that psychosis can itself lead to the development of PTSD, and consider whether both phenomena could be conceptualised as part of a spectrum response to adverse life events. In terms of key mechanisms, the authors underscore the role of appraisal and top down cognitive processes, drawing upon the works of Garety *et al.* (2001) and Morrison (2001) on psychosis, Ehlers and Clark (2000) on PTSD, and Wells and Matthews (1994) on generic psychological dysfunction. However, how clinicians make sense of clients' experiences in practice remains largely unknown.

Negative beliefs, schemas, and appraisals

It is generally accepted that psychosis is associated with negative beliefs about the self, world, and others (Bentall *et al*., 2001; Garety *et al*., 2001; Morrison, 2001). There is evidence that trauma may predispose development of maladaptive cognitive schema. In a cross-sectional online study Gracie *et al.* (2007) explored mechanisms by which trauma may affect predisposition to hallucinations and paranoia in a non-clinical sample (n=228). Participants completed measures of schematic beliefs, past traumatic life events, PTSD, perceptual anomalies, and predisposition to hallucinations and paranoia. Controlling for gender and number of traumatic events, multiple regression analyses examined significant associations between positive symptoms and types of trauma. Results suggested negative schemas, reexperiencing of PTSD, and interactions between them, may be implicated in mediating relationships between past trauma and psychotic symptoms. Limitations include the fact this was a cross-sectional study, requiring retrospective judgements of trauma. Also, less stringent definitions of trauma, for example not including DSM criterion A's 'threat to physical integrity' in identifying PTSD, may have led to higher PTSD prevalence compared to other studies.

Kilcommons and Morrison (2005) investigated whether negative appraisals, stemming from traumatic experiences and responses to trauma such as dissociation, may be implicated in the development of psychosis. A convenience sample of people with a range of 'schizophrenia spectrum disorders' (n=32) completed a number of standardised tools measuring trauma, post-traumatic cognitions, and PTSD/psychosis symptom measures. Severity of trauma correlated positively with severity of positive symptoms and PTSD. Negative appraisals, including cognitions about self, correlated with positive symptoms, including hallucinations. Dissociation predicted hallucinations even after controlling for cumulative effects of trauma. Indeed dissociation, which may serve functionally as a coping strategy, could increase likelihood of hallucinations. This is consistent with the notion that the sequelae of trauma may lead to negative beliefs, which increase likelihood of distressing interpretations of daily ambiguity and vulnerability to psychosis. Similar to Morrison *et al.* (2003), the authors tentatively conclude that findings are consistent with the notion that psychosis and PTSD are both implicated as reactions to traumatic events, and that these reactions may lay upon a spectrum. However, they highlight that a third variable may indeed increase susceptibility to both conditions, e.g. social factor or biological component;

correlational analyses increase likelihood of making type I errors. Limitations of this study included a small sample size and retrospective self reporting of trauma severity, which potentially undermines the findings. A control group of individuals with psychosis but no trauma history would have been useful.

Jackson *et al.* (2004) investigated a clinical sample (n=35) approximately 18 months after their first episode of psychosis and found that intrusions and avoidance were associated with appraisals of ward stress and personal coping style. Although the retrospective nature of the study is a limitation, 'sealers' reported increased levels of avoidance. Drawing upon understanding from Ehlers and Clark (2000), this suggests that appraisals and coping styles may mediate the effects of trauma following first episodes of psychosis. Also regarding coping, a study by Bak *et al.* (2005) offers further support for the role of appraisal style, shaped by traumatic experiences, in determining psychosis-related distress. In a longitudinal general population study (n=4045), individuals with childhood trauma experienced less subjective control over anomalous psychotic-like experiences, along with increased reports of distress (overall effect of OR=10.0 (95% CI = 1.04, 96.3; P = 0.046). Early trauma may cause vulnerability to negative schematic models, leading to less effective coping resources when faced with clinical symptoms, plus lower perceived ability to cope. Importantly, controlling for severity of psychosis did not affect these associations.

Considering the role of posttraumatic intrusions in mediating relationships between childhood trauma and hallucinations and delusions in first episode psychosis, Bendall, Hulbert, *et al.* (2013) conducted a study involving 28 individuals meeting clinical criteria and 21 nonclinical control participants. Those in the clinical group with a history of trauma showed selective attention for trauma-related stimuli in a Stroop test and had more severe symptoms of psychosis compared to those without a history of trauma. The authors suggested that results were consistent with the post-traumatic intrusions account of hallucinations and delusions in individuals presenting with psychosis and a history of trauma.

Finally, Lovatt *et al.* (2010) investigated the role of maladaptive appraisals in clinical (n=27) and non-clinical (n=27) groups of individuals reporting psychotic-like experiences. Greater interpersonal trauma was associated with more personalising appraisals of their experiences in the clinical group compared to non-clinical group (OR=21.25, 95%

CI = 4.1-109, P < 0.001), and fewer normalising/psychological appraisals (OR=0.073, 95% CI = 0.02-0.28, P < 0.001). All participants reported a history of general trauma (according to the Trauma History Questionnaire), suggesting this may play a developmental role in formation of anomalous experience rather than psychosis. However, only interpersonal trauma was associated with development of malign appraisals, suggesting this may influence negative schema formation, consistent with existing cognitive models of psychosis. In a sample of individuals labelled ultra-high risk (n=37), a RCT found that cognitive therapy reduced the likelihood of progression to psychosis over 12 months compared to treatment as usual (n=23) (Morrison, French, *et al.,* 2004). Whilst methodological issues make interpretations difficult, such as the fact CBT was matched idiosyncratically to individuals' self-identified problems, it is possible that addressing dysfunctional schemas may have delayed onset of psychosis. These studies are relevant to the current thesis as they highlight factors of potential importance in considering the ways clinicians may make sense of AAT-psychosis in practice.

Are PTSD and psychosis responses on a spectrum?

Morrison *et al.* (2003) suggest that developmental and maintenance factors for PTSD and psychosis may occur along a spectrum, with intrusion and avoidance as core processes. Building upon their work, Klewchuk *et al.* (2007) conducted an experimental study investigating cognitive biases for trauma-related stimuli in people with schizophrenia (n=53). The researchers investigated whether this population had an 'active cognitive architecture' related to historical traumas. Participants were split into groups according to trauma history (sexual, physical, and neutral) and completed Stroop and incidental memory tasks; standardised measures of trauma, PTSD and psychosis were administered. Results suggested that participants with sexual trauma histories had active trauma-related cognitive schema, showing slower response times on colour naming Stroop tasks for sexual stimuli, plus a bias on free recall tasks. Those with traumatic sexual histories may utilise more cognitive resources processing trauma-related information than their counterparts with no such histories.

This study provides support for Morrison *et al.'s* (2003) assertion that psychosis and PTSD may occur upon a spectrum in response to traumatic events, with biased memory processes, selective attention, and safety behaviours likely to be maintenance factors in both

conditions. Again, findings are to be interpreted with caution as not all individuals with a history of trauma develop psychosis, and not all individuals experiencing psychosis report experiences of AAT. Other limitations include the fact that participants had experienced psychosis for a number of years, and findings may not be generalised to early psychosis. Also, researchers did not discriminate between childhood and adult traumas, or potential differences in cognitive biases that may have resulted.

Appraisal of intrusions and their acceptability

Morrison (2001) outlines a theoretical approach to interpreting intrusions into awareness. The model suggests that transparency of linkages between traumatic events and positive symptom content may determine how professionals conceptualise the experience, which may be of relevance in the current study (Figure 1). Indeed many positive symptoms of psychosis can be conceived as intrusions into awareness, perhaps causing distress because they are 'culturally unacceptable'. The degree to which they are unacceptable may be central in determining whether a person's intrusions are considered 'psychotic' or 'traumatic'. Interpretations of intrusions are affected by a range of cognitive factors including maladaptive self/social knowledge, probably maintained by mood, physiology, and selective attention, safety behaviours, and attempts to control thoughts.

A core concept is interpretation of experiences and key comparisons are made with cognitive models of PTSD (e.g. Ehlers & Clark's, 2000) and anxiety (e.g. Wells & Matthew, 1994). Ehlers and Clark (2000) suggest negative appraisals of traumatic events lead to a psychological sense of severe and imminent threat. Intrusions, and the strong emotional reactions that result, may maintain notions of threat which can be internal (e.g. one's ability to lead a fulfilling existence), or external (e.g. others are to be feared). In addition, other experiences may increase likelihood of ambiguous experiences, such as drug use and sleep deprivation, and provide potential for further misinterpretation and maintenance via cognitive behavioural factors.

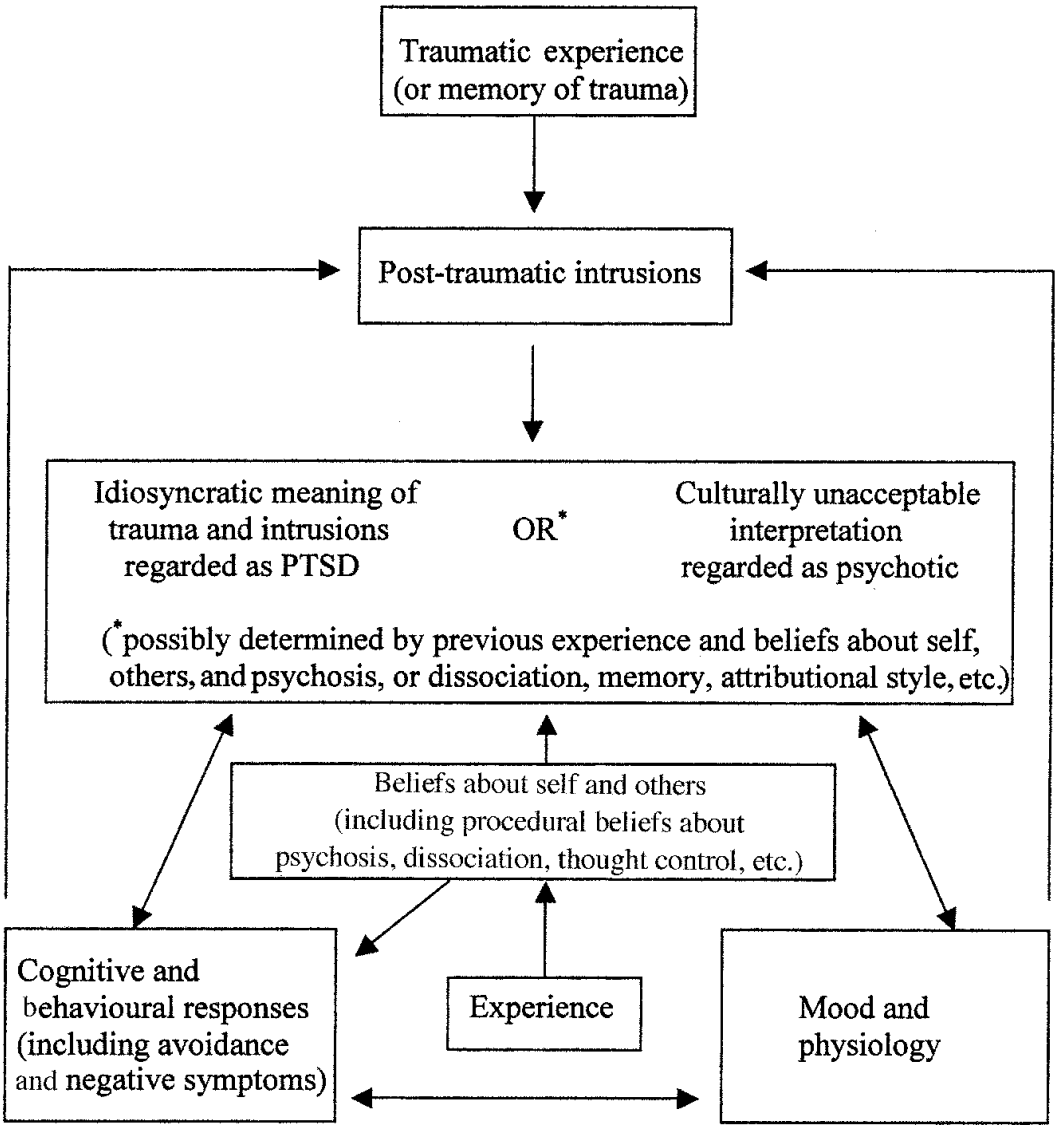

Figure 1: Integrative model explaining trauma and psychosis where links are indicated (source: Morrison *et al.*, 2003: p343).

Indirect role of trauma on cognitive vulnerability

Fowler *et al.*'s (2006) catastrophic interaction hypothesis supposes a more indirect role of trauma upon psychosis. Information processing abnormalities associated with psychosis may interfere with normal emotional responses to stressful life events which commonly occur prior to the onset of psychosis; the former processes may themselves be exacerbated in a 'catastrophic interaction' (Fowler *et al.*, 2006). An individual's resilience following development of psychosis may be compromised by lasting changes acquired through processes of social learning and representation of knowledge in self/other schemata (Bebbington *et al.*, 1996; Birchwood, 2003). In a maintenance cycle, profound negative evaluations and anxiety may worsen positive symptoms, such as persecutory thinking and delusions. This approach is different to that of Bentall *et al*. (2001) who conceptualise paranoia as an esteem-protecting defensive mechanism. Bentall *et al.* (2001) draw upon evidence for an integrative explanatory model of persecutory delusions. Again the role of early adversity is central in the development of vulnerability to a paranoid cognitive style whereby negative events are attributed to external sources. A core process is the attribution-self-representation cycle in which biased causal attributions impact representations of self, which then affect future attributions. Fowler *et al.* (2006) suggest that few studies provide reliable indication of how commonly therapists link direct or indirect connections between themes observed in psychosis and past trauma within the client population.

There is a paucity of existing research investigating how clinicians make sense of AAT-psychosis links in practice. Clearly research must move beyond simple 'trauma-causes-psychosis' models and should instead focus more on cognitive mediation mechanisms and clinical implications. Any causal links between trauma and psychosis appear unlikely to be simple. Clinical implications will be discussed in light of the literature outlined above.

How Do Trauma-Psychosis Links Impact Upon Therapy Processes?

Clinical intervention for psychosis

Recent years have seen a dramatic increase in the evidence base for psychosocial treatments for psychosis; CBT and family therapy form a major part of the NICE guidance for psychosis (Bird *et al*., 2010; NICE, 2014; Pilling *et al*, 2002; Rector & Beck, 2001). Whilst there is strong evidence supporting psychological approaches for psychosis, there is little clinical research focussing specifically on those with a clear involvement of childhood trauma. Similarly, there are few empirically evaluated interventions for people who develop PTSD following psychosis (Morrison *et al.*, 2003).

Intervention in the context of trauma

Addressing the effects of trauma may be crucial in the early stages of psychosis. Early intervention is critical in minimising the negative psychosocial effects of psychosis with individuals in the ultra-high risk or first episode phases of psychosis (Bendall, Alvarezez-Jimenez, *et al.*, 2013). Focussing on underlying trauma can allow the potential for important treatment gains, which may reduce likelihood of transition to psychosis and therefore decrease chances of post-psychotic PTSD. More general recovery approaches from the trauma literature have been used with people with psychosis (French *et al*., 2010). Herman's (1997) three stage 'recovery from trauma' model is commonly cited and includes first establishing a good therapeutic alliance based upon trust and safety, reconstructing the trauma story, and then restoring a more satisfying connection between an individual and their community. While key recommendations include integrating existing trauma models with bona fide psychological therapies for psychosis, including cognitive and family therapy approaches, few studies have investigated clinicians' actual practice.

Inquiring about trauma

One of the most obvious pragmatic implications is that clinicians ought to 'move beyond ideologically-based presuppositions' and routinely ask individuals experiencing psychosis about their trauma history (Read *et al*., 2005, p.344). This is the most commonly occurring

recommendation for clinical practice made in the literature, and many authors stress its importance (Bak *et al*., 2005; Bendall, Alvarez-Jimenez, *et al.*, 2013; Kilcommons & Morrison, 2005; Lardinois *et al.,* 2011; Lovatt *et al.,* 2010; Morrison, 2001; Morrison *et al.,* 2003; Morrison *et al.,* 2005; Read *et al.,* 2001; Read & Bentall, 2012; Schäfer & Fisher, 2011; Steel *et al.,* 2005). This has recently been included within NICE guidance for psychosis (NICE, 2014). Morrison (2009) suggests that routine inquiry into abuse history should be introduced into all mental health services, and this has been partly realised in the United Kingdom as outlined elsewhere in the current chapter. In practice, studies suggest that clients are rarely asked about traumatic life events, and some studies suggest as few as 2% of clients with psychosis receive a diagnosis of PTSD (Read, 2006; Schäfer & Fisher, 2011). Training for staff is vital and guidelines for why, when, and how to ask, have been published (Larkin & Read, 2008; Read, 2006; Read *et al.* 2007). Importantly the evidence suggests that without training, these guidelines are often ineffective (Read *et al*., 2005).

Responses to disclosures of trauma and abuse

There is a small research literature regarding mental health staffs' responses to disclosures of trauma and abuse. Evidence suggests that a large proportion of clients with abuse histories are never asked about their experiences by mental health staff in services; indeed it is uncommon that survivors of childhood sexual abuse make spontaneous disclosures of their experiences (Elliott, 1997; Read *et al.,* 2006; Read *et al.,* 2007). However, in one inpatient study, it was found that rates of abuse disclosure increased when clients were directly asked about trauma on admission (Read & Fraser, 1998a). Although routine assessment of abuse history is a common recommendation in the literature, there remains important questions surrounding the manner in which clinicians make these inquiries, how commonly this is completed in practice, and whether this differs with different clinical populations.

There is a small research literature investigating professionals' responses to disclosure, and this is of relevance to the current study. Eilenberg *et al.* (1996) found that eliciting trauma history did not necessarily lead to incorporation of this information in documentation of posttraumatic symptoms, or inclusion in formulation or treatment planning. Similarly, after examining the records of 100 consecutive admissions, Read & Fraser (1998b) reported on psychiatric staffs' responses to knowledge of clients' abuse

histories. According to these records none of the 32 clients who disclosed abuse received counselling while in hospital, and only three were referred for ongoing support; there was no evidence of information being shared with the appropriate authorities. Agar & Read (2002) studied the records of 200 community mental health service users for details relating to disclosure responses. A total of 46% of files contained documentation of historical sexual or physical abuse. However, only 33% of treatment plans highlighted the abuse for this group, and only 36% of formulations made reference to these experiences; records suggested that 22% of these clients received therapy with an abuse-focus. It would seem that identification of historical abuse does not necessarily predict future input from mental health services in relation to this. Interestingly, Agar & Read (2002) suggested that other factors can influence client response rates. For example, lower rates of disclosure were observed for male clients, those with a schizophrenia spectrum diagnosis, and where the clinician was male.

In recognition of the fact that clinicians do not routinely inquire about clients' abuse histories, Young *et al.* (2001) conducted a questionnaire-based study investigating potential barriers to asking with a sample of 63 psychologists and 51 psychiatrists. Their findings suggested that the main barriers to assessment included the concern that other needs were more pressing, and also clinicians' anxieties about further distressing clients. Read *et al.* (2007) suggest that whilst the first may be sensible in some situations, the second point may be a valid reason to engage in learning about how to inquire and respond both sensitively and appropriately; there is little evidence suggesting that asking about abuse causes serious harm or lasting damage. Other key findings from Young *et al.'s* (2001) study were that clinicians who believed that childhood sexual abuse disclosures were commonly false were less likely to inquire about abuse, and that a client diagnoses of schizophrenia was also related to reluctance to ask about abuse.

Disclosures of abuse by clients with psychosis are reliable, however, according to existing evidence. Using a standardised instrument, Meyer *et al.* (1996) found that childhood histories of physical and sexual abuse were reliably and validly assessed in a sample of women (n=70) with severe and persistent mental health problems. Similarly Goodman *et al.* (1999) found that reports of traumatic events were reliably reported by a sample of male and female clients (n=50) with diagnoses including schizophrenia and bipolar disorder. In a study investigating the reliability and comparability of first-episode psychosis service users or clients' reports of childhood abuse, Fisher *et al.* (2011) found

support for the use of retrospective reporting methods. Finally, a study by Darves-Bornoz *et al.* (1995) suggested that clinical features in women diagnosed with psychosis were similar to those described for other groups of victims of sexual abuse; importantly clients with this diagnosis were no more likely to make false allegations than the general population.

According to the available evidence, and assuming that staff receive appropriate training, there is a good rationale for inquiring about abuse with clients experiencing psychosis. However, the processes surrounding inquiry, and the decision making which may inform assessment and therapy planning, remain largely unknown.

Clinicians' experiences of inquiring about trauma and abuse

In a study recruiting psychological therapists (n=7) in early intervention services, Toner *et al.* (2013) explored clinicians' general experiences of asking about abuse. The results suggested that the issue of 'why ask' was more pertinent than 'how to ask'. The main categories related to the therapists' personal models of psychosis, commitment, the service culture, and the process of asking. This group of clinicians appeared to be formulation-driven in their approach to assessing for abuse; limitations of this study, however, included a small sample size and potential biases introduced as a result of the use of grounded theory methodology. Indeed the available literature is not clear with regards to the most appropriate time to investigate trauma history. The optimum time may be once rapport has been established, rather than inquiring at initial assessment (Bendall, Alvarez-Jimenez, *et al.*, 2013). Either way, failure to assess for trauma may impede consideration of appropriate treatment strategies and could unnecessarily prolong individuals' distress (Morrison *et al.*, 2005). As suggested by Whitfield *et al.*, (2005), finding trauma-symptom associations may be important in making diagnoses, treatment plans, or onward referral, and may play a key part in helping alleviate clients' distress.

Larkin and Morrison's (2006b) recommendations on structuring therapy are relevant and congruent with the above literature, though empirical and peer-reviewed support on effectiveness is lacking. Recognising that clinicians are likely to assess clients according to their therapeutic approach, the following information may be considered relevant in assessing the role of trauma in this client group: life experiences of abuse/trauma, developmental factors, dysfunctional schema and beliefs relating to self/others,

metacognitive factors relating to beliefs and meanings attributed to intrusions, strategies used to control thoughts, safety behaviours, plus emotional and physiological reactions.

Therapy processes addressing trauma-psychosis links

Another common recommendation is made in line with Ehlers and Clark's (2000) cognitive model of PTSD. This approach seeks to reduce distress by using CBT strategies to address negative appraisals of trauma and/or its sequelae, autobiographical memory disturbances in the context of impoverished elaboration and contextualisation, perceptual priming, and associative memories. This may be particularly useful where clear links between an individual's traumatic events and experiences of psychosis are identified (Larkin & Morrison, 2006a). Early stages of therapy may involve safe retelling of traumatic experiences, with minimal details of specific traumatic events and increased focus on the lasting effects. A key clinical task is to monitor symptoms of PTSD where necessary, and assess underlying beliefs relating to self, others, and the world.

Morrison *et al*. (2005) suggest that helping clients formulate links between their traumatic experiences and current unusual experiences may act as a normalising process, maximise perceived control, and reduce distress. This is a common recommendation in the literature, though empirical evaluation supporting the efficacy of this therapy process is lacking. Where appropriate it may be important for clinicians to help clients determine whether positive symptoms may reflect traumatic memories, the clinical goal being to help the client move from a position of externalising to internalising the cause of their experience (Morrison *et al.*, 2003). Tactfully sharing formulations which appropriately link trauma and psychosis may facilitate incorporation of intrusive experiences within a narrated autobiographical account, and decrease likelihood that the source of an experience is externalised (Steel *et al.*, 2005). Raune *et al.* (2006) suggest that exploring content of psychotic experiences and event attributes at the first episode, rather than relapse which may merely highlight theme maintenance factors, may give useful information regarding event–theme relationships.

Other strategies in addressing trauma-psychosis links include: re-examining meaning attributed to trauma, using verbal reattribution to generate alternative explanations, and behavioural reattribution to reduce avoidance (Larkin & Morrison, 2006a). However

inducing excessive stress is a real concern when addressing traumatic memories, and care must be taken not to trigger relapse; case studies have outlined decisions not to proceed as a result of this (Callcott & Turkington, 2006). Based on case examples and clinical experience, Longden *et al*. (2011) suggest that using positive examples of other voice hearers is useful in helping motivate clients to discuss their own experiences.
Callcott and Turkington (2006) offer practical clinical advice drawing on case examples. Distinguishing between stressful life events and type I (single incidents) and II (multiple incidents) trauma in the context of psychosis may be clinically useful, i.e. difference between simpler PTSD and the effects of more complex or cumulative or developmental trauma. Specifically assessing coping style may be important in therapy and, according to Jackson *et al.*'s (2004) study, 'sealers' should not be pressured to take an 'integrating' style where there is risk of further traumatisation.

There are clinical implications of Morrison's (2001) work on interpretation of intrusions. CBT formulations can identify alternative explanations for clients' experiences, and acknowledge the role of life events in guiding interpretations. Importantly therapy could focus directly on clients' interpretations and the cognitive behavioural reactions that follow, for example by addressing thought control strategies; more indirectly, clinicians could consider schematic beliefs relating to self/social knowledge and the context in which these were formed. Drawing upon cognitive models of anxiety, such as Wells (1997), effective therapy interventions may target metacognitive processes and the procedural beliefs directing attention, as well as the attentional biases themselves. Finally, a mindfulness approach may be a useful therapy intervention, and use of grounding techniques with dissociative experiences (Morrison, 2001; Morrison, 2009).

A formulation-based approach to working with people with psychosis is becoming regarded as good practice. Stainsby *et al*. (2010) found that interventions which helped clients develop a coherent sense of their difficulties, by exploration of the personal meaning of their experiences of psychosis, were associated with improved quality of life. Indeed formulations may help provide an integrating framework for merging unassimilated experiences and memories into an individual's existing representational structures (Longden *et al.*, 2012).

Models of formulation

Formulation is commonly accepted as the dominant model in clinical psychology, and can be defined as a summation and integration of information gathered from assessment (Division of Clinical Psychology, 2010; Division of Clinical Psychology, 2011). A framework is provided for describing salient factors in the development and maintenance of clients' difficulties and how these may relate. This may include information inferred by the therapist as well as descriptive accounts of client difficulties. Central to the notion of formulation is collaborative empiricism and 'sense-making', though a formulation should indicate a particular intervention plan (Bieling & Kuyken, 2003; Johnstone & Dallos, 2006; Kuyken *et al.*, 2005). There is evidence that low 'sense-making', judged by lack of curiosity and minimisation of the impact, may lead to poorer outcomes for people with psychosis (Startup *et al*., 2006). Similarly, an avoidant coping style, or 'sealing over', has been associated with low personal resilience to psychosis (McGlashan *et al.*, 1975). A study involving clients with a sealing over coping style (n=50) found them to have more insecure adult attachment styles, a greater number of negative childhood experiences, and more negative self-evaluative beliefs (Tait *et al*., 2004).

A trauma inclusive approach

Whilst the following method does not yet have empirical support regarding its efficacy, Longden *et al*. (2011) describe an approach to formulating relationships between life adversity and the content and characteristics of voice hearing. Drawing upon Romme and Escher's (2000) Maastricht Approach, the 'construct' is a systematic assessment schedule which focuses on the interplay between interpersonal stress, predisposition for emotional crises, and the cluster of personally salient triggering events prior to onset; this allows creation of an individualised intervention plan. In some contexts voice hearing may be formulated as a defensive strategy, where conflicted events emerge as voices in an adaptive response. Indeed some voices contain personal themes rooted in significant events from the client's life history; these can be 'mastered' if associations are made and safely processed. Longden *et al*. (2011) suggest that the clinician writes a formulation letter outlining the core 'construct', i.e. who (perhaps literal, metaphorical, including aspects of self) and what (situations exceeding internal resources) the voices represent. This process may be used to

guide therapy planning processes for individuals who hear voices, perhaps following a staged model of recovery.

Efficacy of trauma-focused interventions in psychosis

Research evidence supporting specialised intervention protocols for traumatised clients with psychosis is limited. The following studies have evaluated interventions for PTSD in individuals with psychosis, though the main focus was on reducing psychosis-related trauma rather than childhood trauma. The first two studies selected for individuals with psychosis but not PTSD, and did not specifically target trauma with evidence-based techniques.

Jackson *et al.* (2009) conducted a single-blind RCT investigating a cognitive recovery intervention (form of CBT, 26 sessions maximum) in reducing trauma, depression, and low self-esteem following first episode psychosis (6-16 months prior). A total of 66 subjects were assigned to either an intervention or treatment as usual group. The intervention primarily involved formulation, trauma processing, and appraisal of psychosis. Participants in the intervention condition showed reduced trauma symptoms at 12 month follow-up which exceeded reductions in depression and self esteem. Results suggest that not intervening with CBT may put people at risk of PTSD-related distress following first episode of psychosis. However, important limitations may cast doubt on these findings as the study was statistically underpowered, and sample sizes were not adequate to detect moderate effect sizes. Similarly common factors of psychotherapy may be confounding variables in affecting therapeutic change.

A study by Bernard *et al.* (2006) investigated whether written emotional disclosure reduced PTSD symptoms in first episode psychosis (n=23). Participants in the emotional exposure condition (n=12) wrote daily about the most stressful aspects of their experiences whilst those in the control condition (n=11) wrote about non-emotional activities. Writing about psychosis-related stress was associated with an overall reduction in avoidance and symptom severity and, although the sample size was small, statistically significant effects were found on the primary dependent measure (Impact of Events Scale-Revised). However, these effects may only apply to those with an 'integrating' coping style, as sealing over levels were low at baseline.

Frueh *et al.* (2009) conducted a pilot study evaluating exposure-based CBT interventions for adults with 'schizophrenia-spectrum disorders' and PTSD (n=20). The intervention consisted of 22 sessions including education, anxiety management, safety planning to minimise future revictimisation, social skills training (to increase control over disclosure and environmental cues), and exposure therapy. Over eight individual sessions imaginal exposure narratives were created and taped, then used for homework assignments between sessions. Completers showed significant reduction across three PTSD symptom clusters and 10/13 participants no longer met criteria for PTSD. These findings have important implications as PTSD is higher in this group than the general population. However, small sample and low power increased likelihood of type I errors; a larger replication with a control group is needed.

Focussing primarily on exposure, Van den Berg and Van der Gaag (2012) performed a pilot study in which adults with psychosis underwent a maximum of six Eye Movement Desensitisation and Reprocessing (EMDR) sessions (n=27). Interestingly treatment protocols were not adapted and did not involve a stabilisation period, nor did they avoid direct exposure to trauma-related stimuli. This intervention demonstrated a reduction in auditory hallucinations and delusions, and improvement in mood and PTSD symptoms. However, the study is in need of replication with a larger sample, using a control group and follow-up, plus more robust criteria for diagnosis, i.e. not reliant on chart records.

Drawing on case examples, Van den Berg *et al.* (2013) recently provided guidelines on the conceptualisation and treatment of comorbid PTSD in clients with psychosis and a history of childhood trauma. The authors suggest that distressing early life events can play a key role in emergence and maintenance of psychosis, both directly and indirectly. They outline a Two Method Approach and suggest that EMDR can be used to address symptoms of psychosis directly linked to specific life events, i.e. onset coincides with traumatic experience, but also where experiences indirectly affect psychosis, i.e. core beliefs, assumptions about self/others/the world. This approach may also be used to specifically address psychosis-related imagery, e.g. intrusions. First a hypothesis ought to be formed, establishing links between complaints and the target memories. The 'first method' involves meaningfully identifying potential aetiological events on a timeline. The 'second method' involves targeting memories which underlie clients' problematic core beliefs or assumptions. The authors outline a 'third method' which involves targeting unrealistic

expectations or negative imagery related to psychosis symptoms themselves, i.e. ongoing traumatisation. Obstacles to using this approach are addressed, including low concentration, difficulty with eye movements, and effects of antipsychotic medication. They provide adaptive strategies to help account for these, for example mental arithmetic instead of eye movements as a means of taxation of working memory, or use of grounding techniques to reduce dissociation. The authors conclude that, drawing on clinical judgement, standard EMDR procedures may be used in combination with existing comprehensive psychological intervention approaches, such as Morrison, Renton *et al.'s* (2004b) extensive CBT-based protocol.

Despite widespread use of empirically-supported CBT interventions for PTSD there are current gaps in psychosis service provision for traumatised clients. Historically people with psychosis have been excluded from studies into the efficacy of PTSD treatments (Spinazzola *et al*. 2005). Clearly assumptions that exposure should not be used with people with psychosis must be challenged. Where trauma is present, not treating PTSD in people with serious mental health conditions may indeed affect prognosis, with increased potential for negative impact on wellbeing (Howgego *et al*., 2005; Lysaker & LaRocco, 2008). However, poorly developed treatment protocols could impact upon client participation and their ultimate recovery (Bendall *et al.,* 2011; Bendall, Alvarez-Jimenez, *et al.*, 2013). Whilst well-controlled RCTs are lacking, there are trials in the development stages (Bendall *et al.,* 2011). The wider context of this research is the way clinicians make theory-practice links and how this impacts upon clinical decisions.

Clinical decision making

In advancing the current literature, it will be useful to learn more about how clinical psychologists make decisions with regards to formulating trauma-psychosis links, and impacts on clinical practice. Clinical decision making and clinical judgement are part of the wider field of clinical reasoning. However, terminology is not clearly defined and clinical decision-making is often used interchangeably with problem-solving, decision-making, and clinical judgement. Commonly a 'clinical decision' essentially means 'a diagnosis', though processes by which clinicians manage their patients' conditions are far less clearly understood (Norman, 2005). The term clinical judgement here will be diagnosis-related, whereas clinical decision-making will refer to intervention and management choices.

In terms of expert decision-making, the hypothetico-deductive and pattern recognition approaches are key models. Central to the hypothetico-deductive approach is staged and sequential data collection, leading to interpretation, generation of a hypothesis, and hypothesis-directed selection of the next data to be collected (Elstein & Schwarz, 2002). New data are used to reformulate the active hypotheses and make differential diagnoses. This process continues until a certainty threshold is achieved, or uncertainty at a satisfactory level, at which point a therapeutic or management decision can be made. However, research suggests that the hypothetico-deductive approach is more common in routine practice amongst novices than experts, and experts are more likely to use 'strong methods' rooted in structured and elaborate knowledge bases. Compared to hypothetico-deductive reasoning, pattern recognition and scheme-inductive reasoning have been shown to improve accuracy of diagnosis (Coderre *et al.*, 2003).

Furthermore, experts' clinical judgement does not often involve explicit testing of hypotheses in familiar situations. Commonly physicians make accurate diagnoses more quickly and effectively by using a recognition strategy to match presentations to diagnoses via a categorisation process (Groen & Patel, 1985). This is more of an inductive rather than deductive or hypothesis-testing approach. Indeed experts' speed, efficiency, and accuracy suggests they may not use the same reasoning processes as novices (Schmidt *et al*., 1990). The manner in which new cases are categorised may depend upon category assignment, based on matching the case to a specific instance (or 'exemplar based recognition') or to a more abstract prototype. In the former, a new case is categorised by its resemblance to memories of instances previously seen. The prototype model suggests that clinical experience facilitates the construction of mental models or abstractions, i.e. conception of a hypothetical client who best exemplifies a particular disorder (Evans *et al*., 2002; Garb, 2005).

Schmidt *et al.* (1990) proposed a theory of expertise development based on clinicians' illness scripts that contain features of prototype clients, even real-life cases, in a 'compiled' form. Increased availability of knowledge representation may emerge from extended education and practice. Experts' scripts are not thought to be rooted in deeper knowledge of pathophysiology, nor associated with more advanced reasoning skills, but related to more comprehensive formulation of vast clinical information relating to the

context of disease. This leads to quicker recognition of critical aspects of a client's presentation. More experienced clinicians may better identify the findings needed to complete a clinical picture and relate the findings to an overall concept. Whilst straight forward cases can be solved by pattern recognition, more complex ones require systematic generation and the testing of hypotheses.

However, these two approaches may be brought together considering that practitioners may use hypothetico-deductive approaches to problem solving in novel situations and when confronted with complex and challenging presentations as experts (Elstein & Schwartz, 2002). Drawing upon the above theories, and incorporating general reasoning theory with expert reasoning theory, Croskerry (2009) presents a universal approach toward clinical decision making. The 'system 1' approaches are intuitive and involve pattern recognition, use of intuition and heuristics; 'system 2' approaches are more time-consuming but less prone to error; they are analytical and involve more conscious reasoning processes, i.e. hypothetico-deductive modes. If a patient's presentation is not recognised by system 1 processes, then system 2 processing is activated. The individual or mixed outputs from both systems determines the 'calibration of the response and the eventual veracity of the diagnosis' (Croskerry, 2009, p.1025). This model offers a basic framework for clinical decision making within sound theoretical structure. However, an important limitation is that it does not explain how practitioners make clinical management decisions relating to a service users' care or intervention planning, as the literature is primarily related to diagnostic clinical judgments.

Study aims

There is currently very little research addressing the ways clinicians make sense of trauma-psychosis links, and how this impacts on therapeutic decisions and processes in real-life practice. Whilst isolating factors involved in clinician decision making can be extremely difficult, there is evidence that mental health professionals may attempt to make 'diagnoses' by forming causal theories (Wakefield *et al.*, 1999). Indeed clinical psychologists' theory-based representations of mental disorders have been shown to predict their diagnostic reasoning (Kim & Ahn, 2002). The current research may help clarify processes by which

clinical psychologists make sense of complex client presentations in psychosis, and make decisions accordingly. This process is complicated by the fact that cognitive processing frequently occurs outside of awareness (e.g., Kihlstrom, 1999). However, certain research techniques such as 'thinking aloud' may allow the researcher to access information not usually articulated (Gilhooly & Green, 1996). Taking this into consideration, the methodology supporting the current study is outlined in the method chapter. In light of the existing research, and in order to provide insight into important gaps in the literature, the following research questions were developed.

The current study aimed to explore:

- The extent to which a sample of clinical psychologists working in the early phases of psychosis routinely investigate AAT with their clients.
- The role of AAT in the sample's sense making of psychosis, and whether theoretical models inform clinical formulations.
- How inclusion of these factors may impact on therapeutic processes in practice.

Method

Reflective paragraph

I became interested in trauma-psychosis links during an Assistant Psychologist post in an acute inpatient service, and through attendance at a Continuing Professional Development (CDP) special interest group in 2011. The clinical inpatient environment appeared to assume quite a medicalised, and at times paternalistic, approach to working with people experiencing psychosis. The team's main aims seemed to involve 'minimising symptoms' using medication and then 'discharge'. Personally, I found this approach, used in isolation, very uncomfortable and on many levels somewhat unethical. There was very little focus on helping clients understand their situation or better equip them to cope with obvious personal difficulties, and this seemed to be doing them a disservice. As a result of my clinical experiences, and new learning from the CPD group, I was inspired by the recovery model and traumagenic understanding of psychosis. Starting out on clinical training, I pursued a doctoral research project in this field, as it was something I had become passionate about. Starting out on the current study, I suspected that AAT-related details would be attributed an important role in explaining psychosis and, as a result, supposed that participants may naturally suggest more comprehensive formulations associated with AAT-focussed intentions for therapy. Encouraged to read the literature from a more academic and critical perspective, however, I came to see that empirical evidence supporting a direct causal role of trauma in psychosis remained unclear. There appeared to be important social processes confusing the picture somewhat, perhaps stemming from promotion of a (very worthwhile) recovery approach to mental health. In reality it seemed that the role of potential mediating and moderating factors involved in trauma-psychosis links were likely very complex; as a budding researcher, it has felt quite daunting conducting a study in such a complicated field. However, the current study felt important because of limited research investigating how clinicians formulate links between trauma, adversity and psychosis, and how this might influence real-life practice.

Design

The current study adopted a vignette approach in combination with a semi-structured telephone interview. The interview procedure involved a case reflection (part A), responses to a hypothetical case vignette sent in advance (part B), and responses to AAT-specific questions (part C); reasoning behind this approach will be expanded upon later in the chapter. The following sections outline how the study was designed to optimise detailed and considered responses from participants in relation to the study aims.

Methodological considerations

Vignette methodology. Vignettes have been described as 'short stories about hypothetical characters in specified circumstances, to whose situation the interviewee is invited to respond' (Finch, 1987, p.105). They attempt to create a plausible reality for participants but are purposefully constructed to span 'grey areas' of phenomena under study. Indeed open ended vignettes bear some similarity to projective techniques, whereby participants themselves define meaning (Finch, 1987). Participants are then asked to respond from points of view relevant to the research aims (Hughes & Huby, 2004; Kirmayer *et al.,* 1997; McKeganey *et al.,*1995; Scott & Rosenberg, 1998). Responses to hypothetical situations are valuable as relevant perceptions, opinions, and beliefs may be elicited and influential variables elucidated (Alexander & Becker, 1978; Barter & Renold, 1999). Participants' responses can be recorded and later analysed using qualitative methods of data analysis (Thompson *et al*., 2003). Studies investigating clinicians' decisions often utilise vignette methodology and are popular in research literature (Bachmann *et al.,* 2008; Veloski *et al.*, 2005). Vignettes have also been used successfully with data collection methods, including semi-structured interviews, which can help broaden the focus from personal experiences to more abstract issues (Barter & Renold, 2000; Cawson, 2005; Finch, 1987; Hughes, 1998; Rahman, 1996). However, there must be a rationale for using this technique over others. Veloski *et al.* (2005) suggested that vignette-based surveys were better measures of care quality, when compared to medical record reviews used to measure differential diagnosis and test selection. Compared to reviewing case notes, or simply using a semi-structured interview alone, this method may offer better opportunities for isolating clinical conceptualisation and decision-making.

For the current study, other vignette-based designs were also considered (Bradbury-Jones *et al.* 2012; Paddam *et al.,* 2010). An experimental vignette approach including a series of short anchoring vignettes and varying levels of AAT-related information could have been used to investigate how this affected clinicians' formulations and therapy intentions. However, the exploratory single vignette approach was deemed most appropriate for investigating theory-practice links, considering the paucity of research in this area. Whilst vignettes have the potential to highlight participants' real-life responses to situations, it is important to address issues of validity (Gould, 1996; Hughes & Huby, 2004; Kalafat & Galiano, 1996).

Validity in vignette research . The extent to which vignette methodology can accurately highlight real-life processes remains contentious (Gliner *et al.,* 1999; Hughes & Huby, 2004; Parkinson & Manstead, 1993). Whilst internal validity is generally considered high, external validity is more difficult to achieve. Peabody *et al*. (2000) completed a comprehensive study comparing the ability of vignettes to measure quality of care provision compared to standardised clients and chart abstraction. Vignettes were a valid and comprehensive method that directly focused on the process of care provided in clinical practice. Importantly vignettes appeared to reflect actual physician practice, resulting in higher criterion validity, and consistently measured practice more accurately compared to chart abstraction, demonstrating better content validity. Indeed one way of ensuring comparative analyses is to help control, at least partly, for case-mix variation and the impact of structural effects.

There is limited research investigating the interpretation of vignettes and little is known about the role of participants' assumptions. Use of grey areas in vignettes, for example by alluding to potential involvement of factors without making them overt, can elicit various elements of reality in participants' responses, and therefore highlight important processes (Hughes & Huby, 2004). However, a criticism is that limited vignette information may lead to inadequate responses, and an inability to capture elements of reality under study (Hughes & Huby, 2004; Parkinson & Manstead, 1993). Researchers acknowledge that vignettes are seldom used as a means of simulating total reality; rather they partly simulate 'elements of the topics under study' (Hughes & Huby, 2004, p.46). Despite this limitation, the researcher's ability to select material retains the potential to facilitate participants' responses and clarification of the phenomena under investigation. Finch (1987) suggests that

because individuals may agree in principle to norms under some circumstances, which become irrelevant in other circumstances, excessive concern about differences between belief and action may be inappropriate. The tone of the vignette ought to be in keeping with information outlined to participants, to prevent cueing certain responses, and should relate to the broader research questions (Wason *et al.*, 2002). Caution should be exercised when a vignette might foreclose areas for exploration by channelling responses. In the current study, care was taken in ensuring that content remained broad, including multiple possible avenues of interest, whilst remaining interesting and life-like.

In the interest of maximising validity in the current study, as suggested by Paddam *et al.* (2010), participants were initially asked for their impressions of the vignette, rather than drawing on prior experience. Asking participants to read vignettes themselves can also reduce likelihood of experimenter bias (Paddam *et al.*, 2010). In a study by Yager *et al*. (1986) physician participants were instructed to imagine the vignette character had been referred to them, and were later asked questions such as 'describe below any treatment plan which you would initiate at this point'. A similar method was adopted in the current study, as outlined below, and the vignette was presented in the form of a referral letter to maximise believability. Another way of bolstering external validity is to devote considerable effort into ensuring the clinical authenticity of vignette content.

Methodological issues: groundwork. With novice researchers, there is an especially important role for self-reflexivity and acknowledgement of assumptions and prejudices (Hand, 2003; Whiting, 2008). There are ways of bolstering self-reflexivity, and there should be recognition of social differences between the researcher and participants, as social roles often shape interview processes (DiCicco-Bloom & Crabtree, 2006; Spencer *et al.*, 2003). In the current project, the supervision team and qualitative support group helped the researcher develop understanding of how biases emerge, and personal reflections in the current thesis made some of this explicit.

It has been suggested that prior engagement with the research literature can help sensitise the researcher to less obvious aspects of the data (Tuckett, 2005). In the current project this was completed by developing knowledge of the research literature and current practice through background reading, and attendance at a two day workshop entitled 'Abuse, Trauma and Dissociation: Understanding and Working Towards Recovery' on 26-27

November 2012 (delivered by the Chair of the Hearing Voices Network in England and a PhD researcher from the University of Leeds).

It can be important to enhance interviewing skills before gathering data (Whiting, 2008). DiCicco-Bloom and Crabtree (2006) suggest that between five or ten relatively specific interview questions should be identified to ensure a topic is explored in sufficient detail. Because this type of research is iterative, more effective questions were determined through a piloting process and incorporated into the researcher's interview repertoire. In the current study, eight 30 minute pilot interviews were conducted with fellow trainee clinical psychologists in the early stages of the study's development. Willing trainees were asked to reflect upon some clinical work with an anonymised complex client (similar to part A of procedure, as outlined below), think aloud their formulation, and consider how this had impacted upon therapy. This helped give indication of prompts and potential questions for the interview schedule and develop the researcher's interviewing skills.

Telephone interviews. Where study participants are distributed nationally it is not always possible to organise face to face interviews. Due to time and practical constraints, telephone interviews were considered the most efficient and appropriate method in the current study. Telephone interviews have become a popular data collection method in qualitative research and are particularly appropriate in projects with clear aims, where participants are already informed of the agenda (Smith, 2005).

There is a paucity of empirical investigation into differences in the processes and outcomes of telephone versus face-to-face interviews in qualitative research (Irvine *et al.*, 2012). Whilst recent years have seen increased interest in the use of electronic qualitative interviews, Novick (2008) suggests there may be bias against their usage in qualitative research. Telephone interviews are often regarded as a less attractive alternative to face-to-face interviewing, with reduced capacity for contextual and nonverbal data. Critics argue that telephone interactions restrict the occurrence of a natural encounter, and that this method may compromise rapport, probing, and interpretation of responses. In a systematic review, Ryan *et al.* (2001) suggests that because of potentially shorter responses, telephone interviews may threaten validity and reliability.

In response, Novick (2008) suggests there is a lack of evidence suggesting telephone interviews produce lower quality data. Studies directly comparing telephone and face-to-face interviewing have concluded that resulting data are comparable; telephone interviews may actually help participants feel more comfortable and disclose sensitive information (Carr & Worth, 2001). Telephone methods can be more flexible, efficient in terms of time and travel costs, and may allow a larger sample size by recruiting participants from geographically dispersed areas (Wilson *et al.,* 1998). Compared with face-to face methods, Irvine *et al*. (2012) found that interviewee requests for clarification, and checks of the adequacy of their responses were more common in telephone interviews. Researchers' vocalised acknowledgements were less common in telephone interviews, and they were shorter overall, potentially making them more attractive to potential participants. Smith (2005) suggests that telephone interviews may also have increased response rates, for example, compared to postal surveys. The advantages of using telephone interviews were deemed to exceed the disadvantages in the current study.

Recruitment strategy

Sampling. The early phase of psychosis is a critical period, providing a clear rationale for specialist and intensive psychological input (NHS Confederation, 2011; Division of Clinical Psychology, 2006; NICE, 2014). The heterogeneity of the broader clinical group (psychosis) and varied roles of clinical psychologists within services, meant a narrowing of scope was necessary in the current study. For this reason only qualified NHS clinical psychologists working in early psychosis were approached. This ensured that findings would be relevant to a specific group. An alternative would have been including other professionals working in early psychosis, or approaching clinical psychologists working with people after the early phase. However, because practice is likely to vary greatly between different professionals, and as the phases of psychosis differ in presentation, this narrowing was necessary in order to maximise representativeness (McGorry *et al.*, 2008). A three-pronged sampling strategy was developed in order to maximise the chances of recruiting a representative sample of clinical psychologists working in early psychosis.

Three-pronged sampling strategy. A three-pronged sampling strategy (strategy 1, 2, and 3) was devised to aid recruitment and help account for the possibility of low response rates. Strategy 1 was to recruit a sample of clinical psychologists working in different

national NHS EIP services, i.e. working with clients aged 14-35 years who have experienced a first episode of psychosis within the last three years. There are reported associations between urbanicity and the risk of future development of psychosis. In the interest of maximising sample representativeness, NHS trusts were selected systematically by geographical location and urban population. The largest eight major English cities were highlighted and their EIP services, or those in close proximity, were identified. Additionally, due to the relatively small number of psychologists working in early psychosis, services in more populated areas were targeted to maximise the chances of recruiting a sufficient number of participants. Strategy 2 included widening inclusion criteria to potentially recruit clinical psychologists, in the same NHS trusts as above, who worked in wider mental health services with clients experiencing early psychosis. This was to be implemented in the event of low response rates from strategy 1. Strategy 3 was to recruit clinical psychologists who were members of the BPS's Psychosis and Complex Mental Health Faculty, as agreed by the Chair. Members of this group had in essence identified themselves as having a special interest in psychosis and, because of this, representativeness would be difficult to ascertain; therefore this strategy was to be implemented last.

All three strategies were outlined in the University ethics application and approved by the ethics panel (approval letter issued on 30 May 2013; reference HSLTLM/12/066, appendix 3). However, at the time of establishing sponsor approval, the representative suggested that approval should be sought initially for strategies 1 and 2 only, as indemnity arrangements would be more straightforward. Neither NHS nor University of Leeds Indemnity would have applied for non-NHS sites which may have been involved with strategy 3. In fact strategy 3 was not implemented; other indemnity arrangements were not necessary.

Recruitment. Local collaborators were identified in all selected NHS trusts and agreed to send the study advert, and supporting documents, to potential participants via email; this included the study advert (appendix 4), participant information sheet (appendix 5), consent form (appendix 6), and opt-in form (appendix 7). The study advert was also displayed on department notice boards. It was important that participants were not primed to the study's focus on AAT-psychosis links in order to best meet the research aims. To maximise validity, care was taken to avoid priming responses to life events in general. For this reason the participant information sheet outlined that the study was investigating how

clinicians formulated 'different factors' in understanding clients' experiences of psychosis, and how these informed therapy processes, i.e. purposefully broad. The advert invited qualified clinical psychologists working in early psychosis to take part in a single 45 minute research interview. It informed potential participants that the study aimed to investigate how clinical psychologists formulate peoples' experiences of psychosis and make decisions about therapy processes. The participant information form indicated that participants would be asked to talk for 5-10 minutes about a client they were working with, and their perceptions of the salient factors contributing to their experiences of psychosis. They were informed that another part of the interview would involve thinking aloud their responses to a hypothetical clinical vignette which would be sent in advance. The participant information sheet also outlined the possibility of more specific questions regarding aspects of their approach and working practice.

Willing participants contacted the researcher to ask any questions, return consent and opt-in forms, and arrange a suitable time for the telephone interview. Simple demographics were collected using the opt-in sheet, e.g. number of years of experience working with psychosis, banding level (see appendix 7). An example Research and Development (R&D)/NHS approval letter is included in appendix 8; due to the small number of clinical psychologists working in EIP, this is anonymised to ensure confidentiality (original letters available by request).

A number of incentives were outlined in the study advert and participant information sheet. Engaging in the study offered participants the opportunity to reflect on their practice, whilst at the same time supporting development of the research literature and potentially clinical psychology training; it was stressed that findings could be clinically useful for wider mental health services. Additionally participants were given the option of receiving individualised feedback on how their responses fitted within the wider findings.

Consent

Consent was obtained via electronic signature on the consent form, as approved by the University ethics committee. Consent was again obtained verbally after each interview debrief, which was recorded, as the participant information sheet omitted the study's AAT-psychosis focus. This method of obtaining verbal consent to telephone interviews is

documented in the literature (Carr, 1999; Kamal-bahl & Watson, 2009; Marks *et al.* 2007; Paulsen *et al.*, 1988; Zailinawati & Nik-Sherina, 2006). All participants gave consent on both occasions.

Sample numbers

There are no clear guidelines for determining nonprobabilistic sample sizes. Marshall (1996) suggests that an appropriate sample size for a qualitative study is that which allows the research question to be adequately addressed. Whilst purposive samples often rely on the concept of 'saturation', this gives no indication of suitable sample size prior to data collection. Using evidence-based recommendations, Guest *et al.* (2006) suggest that saturation, once they had operationalised the term, occurred after 12 interviews using thematic analysis. Smith *et al.* (2009) suggest that samples of approximately 10 participants are appropriate for professional doctorates and, although relating to interpretative phenomenological analysis (IPA), Smith and Osborn (2008) suggest a limit of 12. Considering organisational constraints, paired with pragmatic advantages of the telephone interview method, the researcher aimed to recruit a minimum of 10 participants and maximum of 20 in the current study.

Materials

A number of processes contributed to the construction of a realistic vignette and development of a high quality interview schedule in the current study.

Constructing the vignette. Drawing upon existing research, Paddam *et al.* (2010) and Bradbury-Jones *et al.* (2012) give helpful information regarding vignette construction and administration. Bradbury-Jones *et al.* (2012) highlight seven important 'considerations' relating to construction and the source of information (real life vs. research findings), format (single vs. multiple), capturing reality (real vs. hypothetical), and congruence of the vignette (e.g. clarity vs. ambiguity). Regarding administration, researchers need to consider presentation (open vs. closed questions) and response perspective (self vs. character).

The aim of using vignettes was to bring participants' ontological assumptions to the surface. Clinically inauthentic content may have challenged ontological assumptions, which

may have produced unwanted emotional and hostile reactions (Jenkins *et al.*, 2010). Ideas for vignette content, and particularly the vignette character, were generated from personal clinical experience and the advice of an expert supervision panel, consisting of a Senior Lecturer in Emotion and Cognition, Senior Lecturer in Psychiatry with an interest in psychosis, and Consultant Clinical Psychologist working in psychosis. The panel helped establish important factors which affect decision making, in light of existing literature (Flaskerud, 1979; Paddam *et al.,* 2010; Wilson & While, 1998; Yager *et al*., 1986). As recommended, the content was relatively 'mundane', not including unusual characters or events; however it provided enough contextual information for respondents to clearly understand the situation, and enough ambiguous information to ensure that multiple 'solutions' existed.

A first draft was reviewed by the field supervisor, an experienced Consultant Clinical Psychologist in psychosis, for comment and advice. Following editing and adjustment this was then circulated to the rest of the supervisory team, which ensured a broad perspective in developing an authentic vignette. This process provided reassurance regarding the vignette's suitability and allowed opportunity for removing ambiguous elements (Holmes *et al.,* 1989; Paddam *et al.,* 2010). A final draft was then sent to four Trainee Clinical Psychologist colleagues to check for basic accessibility, readability, and believability. Appreciating limits to their clinical experience, three trainees rated the vignette as 'very believable' and one as 'extremely believable' according to a seven point likert (as used in study debrief, see appendix 9). The final vignette, focussing on the character Sara and her situation, was 432 words in length (see appendix 10, accompanying covering letter).

The challenge with this type of vignette was to convince participants to answer in a manner that corresponds as closely as possible to actual behaviour, not what they thought were 'correct' answers (Grant *et al.,* 2009). For many researchers the unclear relationship between beliefs and real-life actions makes this technique's usage less desirable in isolation. One way of addressing this is to utilise different forms of responses, in combination with text-based vignettes, allowing more detailed insight into the issues being researched (Hughes & Huby, 2004; Rahman, 1996). A semi-structured interview approach, using open-ended questioning, in combination with a vignette has proved useful in health research (Sheppard & Ryan, 2003; Hughes, 1998; Hughes & Huby, 2004). Adopting this approach in

the current study, questions and prompts were developed in relation to a three-part procedure; part A (case reflection), part B (vignette), and part C (AAT-specific questions). This will be outlined in detail in the next section.

Semi-structured interview. Semi-structured interviews are often used in health research for the exploration of complex issues (DiCicco-Bloom & Crabtree, 2006). They are personal encounters in which direct and open questions may provide detailed narratives relevant to research questions. Interviews usually last between 30 minutes to an hour or more. Semi-structured interviews are well suited to the exploration of attitudes, values, beliefs and motives, and allow probing for information and clarification of answers (Barriball & While, 1994). The researcher has a framework of themes to be explored, according to predetermined questions as part of an interview schedule. Rather than using standardised questions, there is a flexible and fluid structure, and further questions may emerge from dialogue; this allows greater inclusion of participants' understanding (Britten, 1995). This can be helpful in obtaining data relating to participants' specific knowledge bases and interests, which may otherwise be overlooked (DiCicco-Bloom & Crabtree, 2006). Semi-structured interview approaches can also facilitate a degree of comparability by ensuring that all questions are answered by each participant. Indeed whilst this provides some degree of standardisation, as the interview is replicated with other participants, which does improve reliability, there is less scope for control compared with a structured interview. Freedom to probe unclear responses is essential as it enables exploration of inconsistencies. Also, probing maximises the potential for interactive opportunities between the respondent and interviewer, helping establish rapport and reduce the risk of socially desirable answers (Patton, 1990). One advantage of this approach is the potential for rich and detailed data collection not easily attained using other methods. However, disadvantages include the occasional spontaneity of questioning, which poses difficulties in analysis and comparison of data. Additionally, interviewing and transcription can be costly both financially and in terms of time.

The literature review and wider reading helped delineate areas of interest and relevance to be covered, which informed the process of building an interview schedule. The first draft was assessed by the supervision team for constructive criticism, consideration of ambiguities, and leading questions in order to minimise researcher bias. A full pilot interview with the field supervisor confirmed that questions were answerable; it was deemed

that the interview schedule would elicit differences in perceptions, attitudes and views. A final draft was then judged for its content validity to assess the appropriateness and completeness in relation to its purpose (see appendix 9, interview schedule). The piloting stages confirmed that a three-part procedure was deemed more suitable than an 'all in one' detailed semi-structured interview approach, which would have been an alternative design. The chosen approach allowed for the application of two separate data analysis techniques, as outlined later in the chapter; content analysis was particularly useful in helping gauge the frequency of certain factors within the data. However, as this approach was not necessary for all data, the three-part procedure meant that distinctions could be made, allowing a more simple thematic analysis to be used for certain data from the procedure. This would have been very difficult with an 'all in one' approach.

The research interview was comprised of the following three- part procedure (parts A, B, and C), which was designed to provide rich qualitative data relevant to the research aims. Importantly both parts A and B of the procedure were 'broad' in approach; this was important in ensuring that comparative analyses were possible, allowing for variation in case-mix and the impact of structural effects. In order to minimise potential for ordering effects, parts A and B of the procedure were counterbalanced, i.e. alternated for each interview. Part C was always implemented last in this sequence. The covering letter reminded participants that the research interview was not an examination of knowledge.

Part A- Case Reflection

Participants were asked to reflect upon a complex client in their service who they were confident had experienced a first episode of psychosis, and had engaged in therapy for at least three months. Following discussion with the field supervisor, this period was deemed sufficient in ensuring the client would have engaged in therapy, and that assessment would largely be complete. They were asked to prepare to talk for approximately 5-10 minutes about perceptions of the salient factors contributing to this client's experiences of psychosis, and how their formulation had informed clinical work. This provided data, rooted in participants' perceptions of real-life practice, including valuable information on the 'therapy phase', as well as assessment and sense-making processes.

Part B- Vignette

Participants were asked to 'think aloud' their initial responses to the hypothetical clinical vignette sent in advance. Participants were given instruction, in the participant information sheet and covering letter, to consider the potential salient factors which may contribute to the fictitious client's experiences of psychosis, information necessary to best make sense of their experiences, and ideas regarding possible options for therapy. This part of the procedure was designed to primarily explore the 'assessment phase', providing more of a standardised approach between participants, while still allowing the opportunity for discussion of therapy processes.

Part C- AAT-Specific Questions

Participants meeting at least one criterion from a devised checklist, geared towards the mention of AAT, were asked further AAT-specific questions. These criteria contained a range of common AAT-related experiences, as deemed relevant by the researcher and supervisory team; for example trauma (e.g. specific incident or ongoing), adversity (e.g. poverty or ongoing stressors), and adverse life experiences including familial strife and bullying (see interview schedule, appendix 9). The researcher judged whether the participant met the criteria during each interview, and this mechanism was included to prevent the interview from feeling too jarring, in the event that AAT-related information was not raised during parts A and B. The specific AAT-related questions related to information gathering processes, specific conceptualisations of AAT, AAT-psychosis links, how AAT-information informed therapy processes. In fact, all participants met the criteria, and part C was administered to the entire sample. Part C was administered last to minimise threats to interval validity, and prevent setting a tone which may have biased later responses.

The combination of personal experience from case reflection, a grounded approach from the vignette, and more specific AAT-related questions, allowed collection of relevant and rich data in relation to the research aims.

Procedure

Participants were asked to engage in a single telephone research interview lasting approximately 45 minutes, with 15 minutes for each part of the procedure. Recruited

participants were sent a standardised covering letter and case vignette via email, a week in advance of the research interview, outlining the format (see appendix 10). The full interview schedule, including probe questions for each part of the procedure, is included in appendix 9.

To provide a degree of standardisation, Rose (1994) gives guidance on interview preparation stages. The following points were reiterated prior to each interview; clarification of study topic, the format and approximate interview length, anonymity, and recording arrangements. The initial stage of interviews can cause apprehension, and care was taken in creating clear yet relevant questioning for these stages, to help facilitate a relaxed atmosphere (Britten, 1995; DiCicco-Bloom & Crabtree 2006). A number of different probing techniques were used; these included remaining silent and allowing the participant to further consider their responses, echoing the participant's answer to encourage development, use of agreement such as 'yes' or 'ok', asking for expansion, and use of longer questioning to encourage lengthier responses (Russell Bernard, 2000). Unclear responses were checked to ensure that participants' meanings were clarified, rather than relying on the researcher's assumptions (Britten, 1995).

DiCicco-Bloom and Crabtree (2006) talk about the 'participation stage' in which maximum rapport is achieved, whereby the participant guides and teaches the researcher; whilst not always achieved, this is what the researcher aims for. Following this, at what Whiting (2008) calls the cooperative phase, neither party fears offending the other, and more sensitive questions can be asked; this coincided, most commonly, with part C of the interview schedule. The researcher's thoughts, feelings and insights were written in a reflective journal following each interview. This helped capture initial impressions, strengths and weaknesses of the interview, and later helped with immersion during analysis (Chesney, 2000; Ribbens, 1989).

Interview procedure. This section outlines the interview procedure used in the current study. Burke and Miller (2001) give practical recommendations and 'lessons learned' regarding telephone data collection. Interviews were scheduled in advance at a time convenient to the participant. Participants were given numerical codes prior to each interview allowing anonymity. Steps were taken to ensure that potential difficulties were minimised, including attempts to arrange interviews early in the day, not completing

multiple interviews per day, and asking whether participants were feeling comfortable before starting interviews to ensure good flow (Irvine, 2010; Stolte, 1994). Participants were reminded of the interview length when they received the vignette and covering letter, a week before the interview, ensuring enough time was allowed. Land lines were used, where possible, to ensure the best audio quality for communication and later transcription.

Other ways of attempting to elicit optimal responses in the current study included listening for prosodic cues during interviews, such as long pauses or sighs, and perhaps asking a different question entirely if seemingly vague responses were being given (Krosnick, 1991). By sending the vignette a week in advance, participants had the opportunity to thoroughly consider their response; this helped protect against the likelihood of participants simply giving their first response without reference to relevant attitudes, beliefs, or interests.

Recording and transcription. A Sony ICD-PX312M digital voice recorder with Olympus TP-8 telephone pick up microphone was used to record telephone interviews. This helped create a relaxed atmosphere, minimise researcher distraction, and allowed later production of verbatim transcription (Rubin & Rubin, 2005; Whiting, 2008). Interviews were transcribed anonymously by an experienced paid transcriber within the School of Medicine. This person signed the Academic Unit of Psychiatry and Behavioural Sciences' 'Confidentiality Statement for Transcribers', in line with BPS guidelines. To familiarise himself with the process, the researcher transcribed one interview.

Ethical approval

The study was approved by the Health Sciences/LIGHT/LIMM Faculty Research Ethics Committee's University Ethical Review, under the Faculty of Medicine and Health (see appendix 3). Having liaised with the Leeds Central NHS ethics coordinator, it was apparent that NHS ethical approval was not required as the study was recruiting NHS staff only. However, R&D approval/NHS Permission from each prospective services' R&D department was required on a Trust by Trust basis. R&D approval/NHS Permission was gained from 12 mental health NHS Trusts using the IRAS system (see appendix 8).

Recruitment Strategy Operation

Strategy 1 was implemented in September 2013 and a total of 11 participants were recruited from seven of the 12 approved Trusts. In an attempt to recruit further participants, strategy 2 was implemented in November 2013 using a stratification sampling technique; due to pragmatic constraints, six of the approved Trusts from varying geographical locations were targeted. Despite initial interest, and due to participants dropping out or not meeting inclusion criteria, no further participants were recruited. All efforts were made to maximise the number of participants; however, due to the time constraints of the project, and to allow adequate time for data analysis, no further attempts at recruitment were made after January 2014. All interviews were conducted between September 2013 and January 2014.

Further discussion of the sample's representativeness is warranted. The entire sample was recruited via strategy 1 and therefore all participants were qualified clinical psychologists working in EIP services with clients in the early stages of psychosis. There are limits to the representativeness of the sample and their responses compared, for instance, to clinical psychologists working in other settings. The specific roles of psychologists in EIP services, and the scope of input with clients experiencing early psychosis, could mean the sample were primed to certain issues or literature relevant to this clinical population. One cannot, therefore, assume that findings will be directly relevant or applicable to clinical psychologists working in other mental health settings, for example community teams or adult psychological therapies services. Findings and recommendations may not necessarily be extended to clinicians working beyond the early phases of psychosis. Finally, other mental health professionals, for example psychiatrists and psychological therapists, may conceptualise links between trauma and psychosis in other ways, and may have responded differently to the study tasks.

Data Analysis

Content analysis was used to analyse data from parts A and B of the procedure. One of the main benefits of content analysis is that qualitative data can be managed quantitatively to some extent (Bryman, 2001; Cavanagh, 1997; Dixon-woods *et al*., 2004). This method allowed some degree of quantification with regards to the extent AAT-related meaning units appeared within the data, which was particularly relevant to the first research question.

However, content analysis was not appropriate for part C data, as questions were AAT-specific and there was no benefit to be gained from measuring 'the extent to which' certain factors appeared. Therefore thematic analysis was used to examine part C data. Issues of methodology and justification for using these approaches are described.

Content Analysis

Content analysis is often used in health research, specifically with vignette methodology and data collected from telephone interviews (Carr, 1999; Evans & Fitzgerald, 2002; Lapatin *et al*., 2012; Ryan & Bernard, 2003; Urquhart & Crane, 1994). This method attempts to take a systematic and objective approach to not only describe phenomena but also quantify aspects where necessary. It is concerned with meaning as much as frequency counting, however, though the aim is to produce a condensed and broad description of phenomena (Cavanagh, 1997; Downe-Wamboldt, 1992). Central to this methodology is the distillation of words into fewer content-related categories through analysis. Whilst there is no universal way of conducting content analysis, important stages include selecting units of analysis, and defining categories, pretesting these and the rules upon which they are based, assessing reliability and validity, and repeating stages as necessary (Cavanagh, 1997; Downe-Wamboldt, 1992). It is assumed that words and phrases, when classified in the same categories, share the same meaning (Cavanagh, 1997). At the end of the process, the phenomena are described in terms of categories or concepts, and this overall process may lead to the production of a conceptual map. Identified themes may later inform potential working models (Ryan & Bernard, 2003).

Content analysis can be performed inductively or deductively, and both approaches are used within health research. Inductive approaches move from specific instances of phenomena and attempt to integrate these with more general statements (e.g. Europe & Tyni-Lenne, 2004; Kyngas, 2004). Deductive approaches may help establish the extent to which formed theories appear within data (e.g. Latvala *et al.*, 2000). However, inductive, or data-driven, approaches are more appropriate in the context of limited existing research or fragmented knowledge (Elo & Kynga, 2008). As the literature on trauma and psychosis fits this description, an inductive approach was adopted in the current study. Models produced from inductive methods may be tested and developed further using deductive techniques in a separate research process.

Stages of content analysis

The content analysis progressed according to three main stages: preparation, organising, and reporting (Elo & Kynga, 2008). The first stage was an attempt to get a sense of the data as a whole through immersion. Recordings were listened to during the week following each interview, and each interview was again listened to when transcripts were received, and queries were corrected as necessary. Indeed transcripts were read a number of times before commencement of the organising stage. Participants were not contacted again, as is sometimes recommended to check transcript accuracy; participants were busy NHS clinicians and asking more involvement may have acted as a barrier to recruitment.

Preparation involved highlighting units of analysis in order to later extract critical elements in the text (Cavanagh, 1997; McCain, 1988). It was important in the early stages of coding to clarify the recording units during the analysis process (Lederman, 1991). Selecting units of analysis involved deciding upon an appropriate level of detail, i.e. issues of breadth. It made sense to mostly code at the level of full sentences which reflected relevant or meaningful themes in relation to the research questions. As an example from the current study, meaning units in the following extracts were identified in square brackets:

> *"I'm really interested in you know the the [thematic links between you know earlier life experience and beliefs and the content of psychosis]" (P6, lines 225-226)*

However, sometimes word level coding was used, for example coding of the word 'trauma' or 'abuse'. For example:

> *"I mean sort of things like [abuse] I guess would always be kind of erm an idea going round in my head" (P5, lines 25-27)*

This combination was used to avoid fragmentation; indeed if the analysis units are too small, then data are not sufficiently reduced, and the abstraction process may be compromised (Graneheim & Lundman, 2004). It was important to consider whether to simply include manifest content or also include latent content (Elo & Kynga, 2008; Miller *et al.,* 1989). Whilst the former is simply a description of participants' literal responses, the latter is the

researcher's attempt to code meaning of responses or underlying motives. In the current study the researcher attempted to code manifest content, as best as possible, for analysis of data from parts A and B of the procedure, as necessary in addressing the research aims. For example, the following extract was coded as 'explicitly refers to CBT approach' (code 1L.2):

> *"So it's a mixture really from the psychosis literature and the general adult mental health literature [very focussed on CBT]" (P4, lines 244-245).*

Some latent content was included too where more abstract categories were of interest; however, latent content at the level of prosody was not included. For example 'supporting recovery/strengths focus' (code 2F) was used to code participant's reported actions in the following extract, and this required some level of interpretation:

> *"That kind of work's about [building on that positive schema formulation of him and his qualities and wishes], and all that kind of stuff" (P12, lines 254-256)*

The organisation stage next involved 'open coding, creating categories, and abstraction' (Elo & Kynga, 2008, p.109). Creating a description of the research topic through category production is the process of 'abstraction'. Headings were written in the margins to describe content, which were then extracted and assimilated onto coding sheets (Cole, 1988; Downe-Wamboldt, 1992). Putting categories under higher order headings, and in the process collapsing those which were similar or overlapping, left distinct headings and codes which adequately described the phenomena in the text (Cavanagh, 1997; McCain, 1988). This process succeeded in generating knowledge through increasing understanding of the subjects in question (Elo & Kynga, 2008).

A coding framework was produced using the stages outlined above. This was used to initially analyse parts A and B of the first two interview transcripts. Coding training from the supervision team was important, as suggested by Miller *et al.* (1989). The team also checked early drafts, which involved examining for duplicate themes, and providing comment on appropriate depth, adding an element of credibility checking. Indeed it was important to define the appropriate level of granularity early in this process. The revised categories and coding framework were pre-tested to the point where ambiguity over the

code assignment process was appropriately resolved, as suggested by Cavanagh (1997). Four successive drafts of the coding framework were created before the analysis of the remaining transcripts commenced. The coding framework, as a tool, was updated as necessary throughout this process. There was some level of interpretation regarding what was included in the AAT-related categories; coding framework rules are included in appendix 11 to aid transparency of the process.

Reliability and validity

It is important to be able to make defensible inferences based on the collection of valid and reliable data. Issues of trustworthiness were attended to by clearly outlining the process, and assessing the strengths and limitations of the analysis. Categories need to have an empirical basis, as issues of validity and reliability must be addressed, and for this reason multiple examples were included in the results section to demonstrate how codes were specifically linked to the data. Validity, in this context, is the extent to which a tool measures what it claims to. Lederman (1991) outlines issues of correspondence (agreement between two measurement procedures for a concept or construct) and generalisability (the level to which concepts or constructs are consistent with existing theory). A valid category implies a relationship between the concept being studied and emergence of the category from data. Different types of validity are important here, the first being content validity (Cavanagh, 1997). One method of assessing the appropriateness of categories and coding is use of an expert panel (Elo & Kynga, 2008; Graneheim & Lundman, 2004; Lederman, 1991). Studies such as Battenfield's (1984) use this method of checking content validity, and this was used in the current study. However, a limitation of this approach is that it focuses on a single variable at a time.

Another method of establishing validity is proposed by Weber (1995) and Lederman (1991), who propose that if resulting constructs are in line with theoretical arguments in the existing literature, it is suggestive of hypothesis validity. However, a non-match does not necessarily imply poor validity, which is a limitation. Semantic validity is the extent to which experts in a subject agree on the meanings or connotations reported (Lederman, 1991). This was completed through revision of the coding framework in supervision,

through asking a fellow trainee psychologist to check the tool for coherence, and through regular discussion at a qualitative support group.

Kovach (1991) used the 'auditability' approach to establish some degree of validity in content analysis research. In essence this involved thorough description of data collection procedures, the abstraction and categorisation processes, and how themes were formed. Making the decision trail auditable increases reliability, so that the process could be followed by another researcher (e.g. Miller *et al.,* 1989). A similar attempt has been made in the current study, through inclusion of decision making and coding rules and by uploading of detailed supervision minutes to the researcher's Postgraduate Development Record. Earlier drafts of the coding framework are also included (appendix 15). Of course, sampling issues are central in addressing external validity, and much effort went into gaining as representative a sample as possible, as demonstrated earlier in the chapter (Krippendorff, 1980). The rationale for recruitment processes and data collection methods, as outlined elsewhere, go towards clarifying the limits surrounding transferability of findings (Elo & Kynga, 2008).

Regarding reliability, the concepts of 'stability over time' and 'reproducibility' are key (Weber, 1995). Resolving ambiguity of word meanings was an important issue, thus increasing reliability or consistency in the coding process. More specifically, Lederman (1991) comments on three important types of reliability in content analysis. The best form of reliability, according to Lederman (1991), is accuracy, or the extent to which classification conforms to a set standard. Another is stability, or 'the extent content classification is invariant over time' (Lederman, 1991, p.199). Stability over time can be demonstrated when the researcher adheres to strict rules of coding across transcripts, i.e. the same meaning units are coded similarly across transcripts, adhering to coding rules. Reflective paragraphs were written throughout the analysis process, in addition to supervision discussions, which allowed the researcher to maintain a critical stance towards the data, by being explicit about tendencies and biases.

Reproducibility is ascertained by the level to which a second coder provides the same results using content classification for the same text, via establishing the level of inter-rater reliability (Cavanagh, 1997). A high degree of reproducibility signifies a high level of shared understanding of the data. Inter-rater reliability was established by engaging two

fellow trainee psychologists in a reliability checking exercise in the current study. Raters were sent three extracts from three separate anonymised transcripts; comprising 172 lines in total, with meaning units pre-identified using square brackets. Extracts were selected by the lead researcher on the basis of their understandability and coherence when isolated from their corresponding transcript. Raters were also sent an adapted version of the final coding framework; this included the 37 codes assigned to the same text by the lead researcher, across 9 different categories, and an additional 38 codes as distracters to help reduce the risk of chance 'hits' in code assignment. Instructions, including coding rules, were sent to the raters in advance of training provided by the lead researcher; raters then coded the extracts independently. The percentage of agreement was calculated for each rater using the following criteria; an agreement, or 'hit', was classified as a code assigned from the same category as the lead researcher's assigned codes. These wider agreement criteria were warranted due to the inherent complexity of the coding framework. The agreement rate (A) was the overall observed agreement (O) divided by the possible agreement (P), thus A = O/P (Grayson & Rust, 2001).

The overall agreement rate for both raters was 69%. This was considered sufficiently close to the '70% agreement or above' guideline which is evident in the literature (Stemler, 2004). The coding framework was deemed to be reliable and therefore fit for purpose in the current study. With stricter agreement criteria, using exact code matches, the figures dropped to 49% and 58% for both raters respectively.

There are limits to using percentage of agreement as a basis for determining reliability and, used alone, this is generally considered a crude form of measuring reproducibility (Banerjee *et al.*, 1999; Goodman & Kruskal, 1954). Indeed this approach does not account for the reality that a certain level of agreement may be observed on the basis of chance alone. Indeed Cohen (1960) introduced Kappa as a measure of agreement, corrected for chance. This considered observed marginal distributions of responses, and the assumption that rater reports are statistically independent (Banerjee *et al.*, 1999). However, this becomes complex with multiple codes and utterances. As the number of overall codes increases, the potential for agreement by chance naturally falls; however, the exact level of fall is hard to predict due to varying levels of relatedness between codes, which makes them unequal. Whilst percentage agreement measures were satisfactory, there were reasons that further statistical analyses were deemed inappropriate in the current study. Certain factors

increase likelihood of chance hits; for example, rater training cannot rule out the introduction of researcher bias. Similarly, raters were given a coding framework that was already highly categorised, making it very difficult to determine the level of chance involved, especially paired with the fact that codes and categories differed significantly.

Following completion of the reliability exercise, the lead researcher aimed to resolve differences in coding through discussion with the raters. There appeared to be clear explanations for application of different codes to the extracts. Raters commented upon the initial difficulty of using a novel coding framework; having to remember codes, cognitively manipulate information, and then apply codes. Importantly, they reported that this became easier with task familiarity. Whilst most decisions were similar conceptually, there were some simple instances of differing interpretation, for example within categories. Similarly there were times when the raters broke the coding rules, for example failing to assign multiple codes to a meaning unit when warranted. The inherent complexity of the framework, paired with the raters' relative unfamiliarity with the tool, may have prevented higher percentages of agreement from being observed. One way of bolstering reliability of the coding framework would have been to engage further raters in a more extensive reliability checking exercise, utilising an increased number of codes from the final coding framework; however, pragmatic constraints meant this was not possible in the current study.

In a content analysis study investigating life adjustments post infarction, Miller *et. al.* (1989) observed a high level of coder agreement and also chose not to conduct further recoding or statistical analysis using the Kappa statistic, considering practical issues relating to time efficiency. In Smith *et al.'s* (1983) study investigating parent adaptation to the impact of childhood cancers, inter-rater reliability was reported in terms of percentage of agreement for each of the, albeit predetermined, categories. The interrelatedness of different categories needs to be taken into account in the interpretation, not simply relying on frequencies; importantly there will always be some sources of random error (Cavanagh, 1997). The final version of the coding framework is in appendix 12.

Process of analysis

The main process of analysis took place after part A and B data had been coded, and reliability and validity had been considered. A systematic approach to comparing data can facilitate increased understanding of it. Reporting content analysis data numerically, using frequency counts, is evident in the literature (Cavanagh, 1997; Kovach, 1991; Miller *et al.,* 1989; Smith *et al.*, 1983). For example Miller *et al.* (1989) present frequency of different themes by bracketing numerically in prose (e.g. f=12). The next stages in the current study involved tabulation of code frequencies from across all part A and B transcripts, and identification of codes and code clusters relevant to the research questions, as outlined in the results chapter (see appendix 16). The final stage in reporting the results involved production of a conceptual map and description of categories and their meaning (Elo & Kynga, 2008). The conceptual map in the current study also included relevant findings from the thematic analysis, as outlined in the latter part of this chapter.

Limitations of content analysis

There are limitations to the content analysis method of analysis. A major issue is that due to its breadth, there is no standardised way of using it. Difficulties may arise because 'narrative material is generally not linear', and multiple categories often rise from the same paragraphs, making for a difficult process (Elo & Kynga, 2008, p.113). The abstraction stage was challenging and required balancing the tendency to use too many individual categories. Creating categories which were too inclusive or broad would have failed to appropriately categorise the data.

Content analysis has been charged with being neither sufficiently quantitative nor qualitative, and lacking in its potential for facilitating interpretation (Billig, 1988). Morgan (1993) argues it is distinctively qualitative in both the coding and interpretation of patterns or frequencies; indeed frequency counts can be considered the end of the descriptive aspects of analysis, and start of interpretation. A theory that explains patterns in the data can then be formed. The fact that numbers are needed for statistical analyses does not preclude the use of code frequencies for descriptive purposes in qualitative research. In the current study, commenting on explicitly AAT-related patterns was particularly useful in addressing research question one, though interpretation beyond this was also necessary. The above

demonstrates how content analysis was used to analyse part A and B data. Thematic analysis was used to analyse part C data and this is outlined in the next section.

Thematic analysis

Thematic analysis was deemed appropriate for analysing part C data in the current study. As the AAT-focus had been disclosed at this point in the procedure, there was no need for measuring the frequency of specific factors. Including part C data alongside part A and B data in the content analysis would have contaminated results, due to AAT-specific questioning in this part of the interview schedule. A focus on the critical elements within part C data was needed and thematic analysis was deemed appropriate for this. Thematic analysis allows researchers to identify, analyse and report patterns or themes within data, and enables organisation and description of data in a rich manner (Braun & Clarke, 2006).

In their seminal paper, Braun and Clarke (2006) offer a six phase guide to performing thematic analysis, and clarify similarities and differences with other qualitative approaches. They argue that thematic analysis is a separate bona fide method, rather than a tool used within other formalised approaches. Thematic analysis can be split into two main categories; firstly, some thematic analyses associate with methods underpinned by clear epistemological positions, such as IPA, and tend to be less varied. However, other approaches, such as grounded theory or narrative approaches, allow 'different manifestations of the method, from within the broad theoretical approach' (Braun & Clarke, 2006, p.78). Secondly some thematic methods appear to be theory independent, not underpinned by clear epistemology. The authors argue that thematic analysis, fitting within this second category, is 'compatible with essentialist and constructionist paradigms within psychology' (Braun & Clarke, 2006, p.78). Indeed Braun and Clarke (2006) suggest that much analysis in the field is in fact thematic, despite being named as something else, as has been argued for content analysis (Meehan *et al.*, 2000); often the specific form of qualitative analysis is not mentioned whatsoever.

Much thematic analysis is not bound by strict theory, unlike many other methods. For example IPA focuses on experience and is attached to a phenomenological epistemology (Smith *et al.* 1999). Similarly grounded theory has a focus on theory development rooted in

the data. Braun and Clarke (2006) suggest thematic analysis is accessible for those new to qualitative research, as limited theoretical knowledge of the approach is required. However, the theoretical position must be made explicit, by outlining assumptions. Driven by a realist epistemology, and assuming sampling is appropriate, one can draw straightforward conclusions about motivations, meaning and experience, and the reality for participants. The relationship between meaning and experience, and language, which allows articulation of the former, is assumed to be mainly unidirectional (Potter & Wetherell, 1987). A constructionist approach, however, considers experience and meaning to exist within the social domain, and therefore does not focus on individualised motivations, but instead seeks to highlight the social and structural conditions which allow individual accounts; indeed latent thematic analyses tend to be more constructionist. Usually approaches considering meanings across the entire data set are more realist and prioritise semantic themes, as in the current study. However, as participants were answering questions designed by the researcher in this study, there is a specific constructed context which has to be taken into consideration here.

A 'theme' contains something relevant to the research question, and represents some degree of patterned response within the data set (Braun & Clarke, 2006). There should be some attempt to acknowledge the 'size' of a theme, though prevalence does not imply importance necessarily. A theme containing something key to the research question is the main issue of importance and there is no correct way of determining prevalence, as long as it is done consistently. Being explicit about whether reporting or describing the entire data set (as useful in poorly understood areas), or particular parts which are relevant to the research question, is also needed, e.g. a latent theme across the whole data set. The current study focussed mainly on particular aspects, rather than the entire data set. In keeping with the approach outlined in the content analysis section, the current study adopted an inductive approach to analysis. Themes are closely linked to the data, and in this way it is reminiscent of grounded theory (Patton, 1990). In inductive research, the themes are less likely to be driven by interests of the researcher, i.e. not attempting to fit within an existing framework (Frith & Gleeson, 2004). Braun and Clarke (2006) are quick to highlight that data cannot be coded in an epistemological vacuum, and that all researchers carry epistemological and theoretical ties. Epistemological issues are specifically addressed in the discussion chapter.

As with the content analysis, data were coded at the semantic/manifest and latent/interpretative level in the current study. Even with the former, the researcher can still go beyond merely describing the data, and interpret semantic content according to 'significance of the patterns and their broader meanings and implications', especially in response to relevant literature (Braun & Clarke, 2006, p.84; Frith & Gleeson, 2004). Alternatively, latent analysis involves consideration of ideas, assumptions, and ideologies which inform the manifest content, which clearly involves more interpretation. Whilst the overall aim is the presentation of themes embodying the 'content and meaning of patterns in the data' (Braun & Clarke, 2006, p86), the process of analysis involves recursive motions, back and forth across the entire data set and the written output of the analysis.

Step-by-step

The following six phases were followed in completing the thematic analysis for part C data, as outlined by Braun and Clarke (2006). The process started with the researcher looking for patterns of meaning and interest through a process of familiarisation, involving thorough re-reading of the interviews transcripts. Making field notes immediately after each interview also ensured active engagement with the data and a search for meaning from an early stage. The second phase involved generating initial codes. These codes represented the simplest elements of the data that could be assessed meaningfully. In the current study, extracts were coded by simply writing in the margins of transcribed texts. One must be sure to code themes which go against the narrative of the analysis of the data set, and include this when presenting findings, as it is common for data sets to contain contradictions.

Once all part C data had been coded, the next phase involved searching for themes. This required manual code sorting, considering how they combined into potential themes. Using visual aids was helpful at this stage, using post-it notes in working towards development of themes and a conceptual map. Codes were included under main themes and some sub-themes; some codes were miscellaneous and others were lost altogether. The next phase involved reviewing themes, which meant collapsing or breaking themes into smaller ones where appropriate. Reviewing required two separate processes, firstly considering whether all coded extracts for a theme appeared to form a pattern upon rereading. If the candidate theme did not fit, the theme was deemed questionable and was adjusted, split, or reassigned with data extracts elsewhere. These issues were resolved independently by the

researcher. The second part involved assessing the 'validity of individual themes in relation to the rest of the data set', checking whether the candidate theme fitted with the whole (Braun & Clarke, 2006, p.91). Clearly endless re-coding was not an option, and the researcher stopped this process when refinements stopped adding substance.

The next phase involved defining and naming themes, describing the essence of each theme and the interesting aspects they captured. It was important to outline, after description, how each theme fitted with the broader narrative and research questions, and this is demonstrated in the results section. In the current study, the main findings from the thematic analysis were revised and incorporated within a conceptual map, alongside key findings from the content analysis. This integration of the findings not only makes it easier for the reader to make sense of the data, but helps demonstrate the overall 'story' of the current thesis.

Reliability and validity

Poor analyses fail to consider alternative readings of the data or make claims that are too bold. Data extracts were included in the results section to support the presence of themes, and help convince the reader of the validity of the analysis. Going beyond a mere description of the data, this helped further develop the analytical story. External credibility checks were not deemed necessary for the thematic analysis. Indeed this is not always necessary in qualitative research, as the researcher's own interpretation is central. At the most basic level, Guba and Lincoln (1981) suggest that qualitative data can be deemed credible when others are able to recognise experiences after simply reading about them. However, attempts were made to maximise credibility in the current study. As suggested in the wider methodology literature, the researcher aimed to demonstrate credibility of the thematic analysis by being clear about personal perspectives through use of reflective paragraphs, grounding the findings in extensive examples, leaving a clear audit trail, being open about assumptions and limitations, and by use of a conceptual map to help integrate findings (Elliott, 1999; Eliott & Timulak, 2005). Data were coded and themes were generated by the researcher, with input from supervisors, which added a degree of consistency to the data.

Limitations of thematic analysis

Braun and Clarke (2006) outline advantages and disadvantages of using thematic analysis. One of the benefits of thematic analysis is its flexibility, and the fact it can be used across differing epistemologies and diverse research questions. One of the main limitations is that thematic analysis can often fail to go beyond description, if not rooted in existing theory which ground the claims made. Indeed many studies may not pass the 'so what?' question, as outcomes may be of little relevance or significance to the wider literature. The results chapter outlines the findings from the content analysis and thematic analysis, as relevant to the research questions.

Results and Analysis

The primary analyses are presented in separate sections, as relevant to the three research questions. Within each of these sections, the most relevant and commonly occurring codes/themes are presented, as identified from the content analysis of A and B data followed by part C data from the thematic analysis. All coded transcripts from parts A and B, and part C, are included on a disk in appendix 17. The secondary analysis is then presented, accompanying a conceptual map displaying relationships between the main codes/code clusters and themes in the data.

Part A and B data –case discussion and vignette

Content analysis was performed on parts A and B data. As means of reducing large amounts of data, the most frequent codes were considered in the next stages of analysis, as relevant to the research questions. An extraction tool was used, drawing relevant categories (and the codes they contained) from the final coding framework; code frequencies were recorded and then tabulated. This included examining a total of 13 categories of interest from a maximum of 16 categories as follows; AAT-related information in any form, seeking further information, reason for information seeking, approach to information gathering, research/theory, attribution of factors relevant in explaining psychological distress, attribution of factors relevant in explaining psychosis, multifactorial understanding of psychosis, direct therapeutic processes, abstract therapeutic concepts, therapy stages, evidence of therapy success, and service level factors.

The next stage involved a systematic approach of highlighting codes which appeared in at least three participant transcripts; though somewhat arbitrary, this was deemed appropriate as it meant codes were present across at least 25% of the sample, and helped focus the analysis. These data are presented, though occasionally codes which were observed across less than three participants are included, if of special interest. The codes selected from A and B data are included in raw code and frequency tally format in appendix 16. This systematic method was necessary in highlighting the main findings.

Throughout the results section, the proportion of participants who reported specific codes is given, to provide insight into prevalence and assumed importance throughout the

data. For example ‘8/11 participants’ means the specific code appeared in eight of the 11 transcripts. The overall code frequencies across the data are provided in some instances for the same reason; for example ‘f=16’ signifies a total of 16 code utterances across all transcripts. In the text, relevant codes/themes are outlined with the use of supporting extracts to demonstrate links with the data. While the example responses are only linked to single codes below, they may have been assigned multiple relevant codes in the coding process (as outlined in coding rules); the corresponding meaning units are identified in square brackets.

Part C data - AAT-specific questions

A more interpretative thematic analysis was conducted on part C data. This part of the analysis did not seek to separate AAT from non-AAT-related meaning units to the same extent as with data from parts A and B. Indeed most responses clearly related to AAT, and were coded as such. As means of reducing large amounts of data, again, the same approach of extracting themes which appeared in at least three participant transcripts was used. The proportion of participants that reported specific themes is provided, allowing insight into prevalence and ‘importance’ within the data set, e.g. 4/11 participants. The raw data containing tallies of themes across all participant transcripts is included on disk in appendix 18. Relevant themes are described, drawing upon supporting extracts to demonstrate links with the data in the text.

Participants

Eleven participants were interviewed about their conceptualisations of psychosis and clinical work (see table 1 for participant information). All participants were practising clinical psychologists working in EIP services, and were recruited from across seven trusts nationally. Similar numbers of male and female participants were recruited, and their experience of working specifically in the field of psychosis ranged from less than a year to thirteen years; participants were employed between bands 7 and 8c, indicating a range of experience. The sample identified a range of preferred therapy approaches; however, five participants identified CBT as their preferred model. (N.B. Participant 11 dropped out of the study after participant 12 had taken part, hence the number gap). Interviews lasted between 41 and 54 minutes.

Table 1: Participant information

Participant	Gender	Banding	No. years working in psychosis	Preferred approach ('+' = main)
1	M	8c	13	CBT/CFT+
2	F	8a	3	Schema therapy
3	M	8a	7	Integrative/Systemic+
4	M	8b	10	CBT
5	M	8a	<1	Systemic/Critical
6	F	8b	6	CBT
7	F	8a	3	CBT+/CAT
8	F	7	3	CBT
9	M	8a	1	CBT
10	F	7	2	Integrative
12	F	8b	5.5	CBT

Primary Analysis

To what extent does a sample of clinical psychologists working in early psychosis routinely investigate AAT with their clients?

It is necessary to first elaborate on terminology within this research question. Firstly, 'to what extent' relates to the issue of quantification. The emergent frequencies of relevant codes and themes, across participant transcripts, allowed insight into the proportion of the sample that raised particular meaning-units. Though relatively crude, this method provided means of quantification, taking into account prevalence across the data set; for example, 'the majority of the sample raised [salient issue]'. There were multiple ways of interpreting this aspect of the research question, for example, the 'extent to which' could have related more to the depth to which participants explored AAT issues. The word 'routinely' was taken to mean clinicians' broad reflections on their normal practice, rather than adherence to unvarying procedures, thus capturing something of the 'process'. The term 'investigated' related primarily to assessment and information gathering processes. Finally, throughout the study, the researcher accepted participants' conceptions of what constituted as 'psychosis', without detailed elaboration.

Findings- summary

According to the terms of the study, the majority of participants routinely 'considered' AAT and its sequelae in their clinical approaches. Data from parts A and B, and part C supported this, and provided information relating to salient details which were sought and processes surrounding the gathering of such information. However, there was very little evidence that participants routinely assessed AAT, in a systematic fashion, with all clients. Whilst AAT-related factors were often explicitly considered, the data were suggestive of necessary structures and context. Assessment procedures were both collaborative and client-led in the context of a psychologically safe environment. Importantly the data highlighted a range of factors which were not explicitly AAT-related but also commonly investigated in routine practice; for example the context prior to onset of symptoms, general life experiences, cognitive/schematic and/or emotional factors, interpersonal factors, and sense-making of experiences. Findings highlighted explicit investigation of broadly defined AAT-related issues within heterogeneous approaches to working with psychosis.

Parts A and B

Overall AAT prevalence

Meaning units explicitly relating to AAT-specific information were prevalent throughout the data. The 'simple' code (16A) was assigned where the participant simply mentioned AAT, for example 'he was abused'. The 'complex' code (16B) was given if the participant elaborated on the experience/phenomenon in some way, for example 'she was abused for years by her uncle', offering some quantification of severity (see coding rules, appendix 11). Across all transcripts these simple and complex codes each occurred with a frequency of 50 (f=50). As the AAT-focus was at this stage unknown to participants, this information was in essence spontaneously shared, suggesting that AAT-related factors were highly prominent in participants' approach to the task and wider clinical practice. Examples of the simple (code 16A) and more complex (code 16B) AAT codes, respectively, are included below:

> *"I mean sort of [things like abuse] I guess would always be kind of erm an idea going round in my head" (P5, lines 25-27)*

> *"We eventually discovered that she erm she [had been abused err and err the sexual abuse had err gone on for some time erm err by her father]" (P1, line 276-278)*

A number of codes related directly to assessment processes, as explored in the next section.

Assessment factors

Seeking AAT-related information

Participants' responses suggested that explicit AAT-related information was commonly sought during assessment stages. Four out of 11 participants sought this in the context

proximal to psychosis onset, and 5/11 sought this in relation to distal life events or the early developmental context. More than half of the sample sought AAT-related information relating to life events or clients' generic histories without specifying life stages (6/11 participants). Examples of seeking AAT-related information proximal to symptom onset (code 5B) and more generically (code 5F) are included below:

> ***"****I'd try and work with her I suppose on working out [whether there's any persecutory beliefs, what is reality, was she actually bullied at work]? " (P4, lines 429-431)*

> *"I'd be err interested in err [looking at would be ongoing conflict so whether err and I guess, for ongoing unprocessed err potentially traumatic experiences] which could drive stress and fuel the err unusual experiences" (P1, line 83-87)*

A limited number of codes related to processes surrounding the manner in which AAT-related information was sought. Three participants discussed the research base as a reason for further assessment, for example (code 6C):

> *"Specifically sexual abuse is very high with erm voice hearers and and other err and other presentations of psychosis. The, so, so, [good evidence base in order to check it out]" (P1, lines 80-82)*

Codes not explicitly linked to AAT-related life events and experiences appeared frequently, which also warranted inclusion.

Seeking information, not explicitly AAT-related

These findings suggested that a wide range of factors were commonly considered by participants during assessment processes, beyond those explicitly related to AAT. Indeed general life events played a central role in the sample's conceptualisations of clients' difficulties, as seen within EIP services. Five participants explicitly sought information

linking past non-AAT-explicit events and experiences to clients' current experiences. For example (code 5R):

> *"I'm really interested in you know the the [thematic links between you know earlier life experience and beliefs and the content of psychosis]" (P6, lines 225-226)*

Nine participants sought information about the context prior to onset of unusual experiences, and the entire sample sought information on distal life events and life experiences more generally. However, a key limitation was the difficulty in ascertaining whether participants were referring to events which may have met AAT-criteria, but did not vocalise this; however, these utterances were always coded as 'not-AAT-explicit'. Despite this, the findings still suggested that life events played an important role in the sample's conceptualisations of clients' difficulties.

One of the highly prevalent codes was information sought explicitly regarding clients' sense-making or appraisal of their experiences (10/11 participants). For example (code 5L):

> *"I guess it depends [what that actually meant to her] in terms of her self-image" (P7, lines 37-39)*

Information relating to 'cognitive/schematic and/or emotional factors' was common throughout the data. Throughout the entire coding process, these terms were broadly defined by the researcher to conceptualise heterogeneous forms of mental representation, where explicit in participants' responses. The researcher used 'cognitive/schematic factors' to code utterances relating to specific aspects of experience which arrange incoming information, generating meaningful perceptual, cognitive, emotional, and behavioural experience. Information relating to emotion, or the role of affect, was also included as these factors were common but difficult to differentiate from cognitive/schematic factors in participants' responses. Information concerning cognitive/schematic factors and/or emotional responses, not explicitly related to AAT, was commonly sought (9/11 participants, f=23). For example (code 5K):

> *"I'd want to know what [her beliefs are about psychosis]" (P4, line 433)*

Information relating to relevant interpersonal factors and relationships (i.e. immediately involving other individuals) was very commonly sought (9/11 participants). Semantically different, more than half of the sample sought information relating to wider 'social' issues including systemic/cultural factors (6/11 participants). The majority of participants commonly sought information relating to clients' coping styles (8/11 participants) and details relating to clients' strengths/values (8/11 participants). Less frequently, five participants sought information on coping effectiveness and the same number sought information on biological or medical factors (including drugs and sleep deprivation); a minority also sought risk-related information (4/11 participants). A limited number of codes related to the procedures surrounding assessment, as outlined next.

Further assessment factors

In terms of assessment processes, there were mixed responses regarding the notion of systematic assessment procedures. Four participants explicitly talked about 'no routine', and three referred to some form of routine in normal practice. This suggested that participants had different or client-dependent approaches to gathering information, or that they were not consciously elaborating on these processes.

There were common reasons for seeking information not explicitly AAT-related. Four participants suggested it allowed them to formulate clients' problems, supporting the notion of goal-direction facilitation. Some stressed the importance of 'assessing certain key factors' (4/11 participants). Furthermore, clinical judgement was important in guiding information seeking processes not explicitly AAT-related (5/11 participants). For example (code 7B.2):

> *"They are sort of mentioning these things because they've had vague ideas that the things might link up but it doesn't actually link up very well […] so err [I'm asking the questions when, when these window appear]" (P9, lines 272-276)*

Four participants suggested that engagement and trust were necessary before asking more specific questions, and this was not necessarily in the context of AAT. For example (code 7I):

"You can sense that you can make links between, well this information would have to come, you know I know, I know, [you don't want to be saying that I know your dad left you straight away]" (P9, lines 258-261)

These findings were suggestive of sensitive information seeking processes, even when unrelated to AAT, clearly drawing upon clinical judgement, rather than 'asking away'. Data from part C supported some of these findings, and added detail in other aspects.

Part C

Definitions and conceptualisations

Though it was clearly difficult for participants to provide complex responses considering the time restraints, this data allowed exploration into issues of defining 'trauma' and other phenomena included within the AAT construct. Data suggested that trauma may have been broadly defined, distinctly negative, and resulted from a developmental break which impacted on cognitive/schematic and/or emotional development.

Broadly defined

Participants commonly defined trauma in a broad manner (7/11 participants); the overarching message here was one of heterogeneity. Participants commented upon the difficulty in providing a 'catch all' definition, and queried whether this was possible due to the individual nature of each client's experiences. There was the sense that defining psychological trauma in a 'total' fashion may not be particularly useful clinically either. Examples include:

"I think it's really broad… what is trauma for one person isn't necessarily a trauma the same degree of trauma for another. So for some it might, might be being sexually abused for 10 years, for other people it might be erm having a sibling that was being, that they perceived their parents preferred… or it might be a one off trauma that, that's triggered things like an accident […] I think it's really variable" (P10, lines 682-693)

"I suppose the kind of simple answer is whatever anybody thinks is traumatic erm […] if that's not a bit of a cop out" (P3, lines 730-731)

The data suggested no simple way of conceptualising AAT. However, less common themes communicated some interesting points.

Developmental 'break'

Four participants discussed notions of 'trauma' as resulting from a break in the expected developmental trajectory of a person's life, often in the context of significant life events. Importantly this contained the notion of a lasting impact upon cognitive/schematic and/or emotional development. For example:

"I guess my sense of it would be that it's a kind of an occurrence of a, err of an external event which would be so outside a person's erm experiences that I, I'm going to quote somebody else here but err, but perhaps a shattered assumptions idea is a very nice one […] where a person experiences something which is so powerful so overwhelming that it erm shatters errr a sense of err themselves […], shatters their expectations" (P1, lines 458-467)

"I suppose any event that disrupts the normal pattern of emotional, social and personal development, erm, that would lead to significant stress or disruption to functioning" (P7, line 879)

Distinctly negative

Finally, three participants alluded to trauma being linked distinctly to negative experiences. For example:

"Most importantly I think shatters their sense of this is a safe world" (P1, lines 458-468)

"I guess, you'd never use the word trauma for something that wasn't very negative" (P12, line 678)

Participants gave rich responses in relation to AAT-related assessment processes which will be explored below:

Assessment related themes

Many of the emerging themes below confirmed points highlighted from part A and B data, suggesting that AAT-related information was frequently sought, and played a role in participants' conceptualisations of psychosis. However, there was variation in the manner in which this information was sought and subsequently acted upon. Information seeking processes seemed to be conducted in a sensitive manner, very much dependent on client-specific factors. In essence, emergent themes related to collaborative and suitably timed inquiries into AAT issues, determined somewhat by clients' individual needs and clinical judgement.

Inquiry warranted

The majority of participants suggested that assessment of AAT-related issues was warranted (9/11 participants). They commented upon the central importance of assessing adversity, likely assuming a broad definition of AAT. Examples include:

"I think a good therapy erm would, would always have a good feel for somebody's trauma history" (P12, lines 665-666)

"I don't do it [assess AAT] as a matter of course but I suppose it's always in my mind" (P3, lines 672-673)

Specific information sought

Most participants elaborated on the type of information they sought in the AAT context (7/11 participants); significant life events and the subsequent impact on development, were themes within this data. For example:

> *"If […] you give them a brief core schema for psychosis questionnaire or EDS or something, and they're coming up with I am bad, I am a failure, I am worthless, and this type of thing is well, but why is that, and if it's related to how it, you know what happened to you as a child" (P4, lines 611-616)*

> *"I guess the obvious things is going to be conflict within the family erm or strangely the, the, the absolute lack of conflict that everything is lovely and wonderful" (P1, lines 533-536)*

Much of the sample discussed the manner in which AAT-related information was gathered; assuming a collaborative approach to inquiry, considering appropriateness, the client-dependent nature of this, and the role of wider team involvement.

Collaborative inquiry

Similar to findings from parts A and B, a common theme communicated the collaborative nature of AAT-related assessment, following the client's lead as appropriate, in a joint process (7/11 participants). For example:

> *"I guess that would come up if you're like looking at significant factors and anything that's been difficult for you […] if it was on their case notes […] if it's difficult to illicit information I often use a timeline so I say right we're here like above the line let's identify all the things that have happened to you in the last I don't know 20 years and then underneath all the things that have been more difficult that's happened to you" (P8, lines 808-817)*

Context dependent

A number of participants discussed the notion of a necessary context for more in-depth AAT assessment (5/11 participants). It was sometimes deemed inappropriate if the client did not wish for exploratory work, or if risks were too high. For example:

> *"I feel a full erm exploration of any kind of trauma that's, that, that they've had in their lives is essential […] if that's not what the person wants to do, if the person wants to work on something else then, then I wouldn't be doing that […] it's not necessary for those people who aren't, aren't interested in that kind of work so I wouldn't, I don't do it as a matter of course but I suppose it's always in my mind (P3, lines 663-673)*

Appropriate timing

The need for appropriate timing was raised by 5/11 participants. Some participants were wary about conducting thorough inquiry into AAT too early in the assessment process. Engagement was necessary, as exploration of these issues was a timely process. For example:

> *"Usually it's something that comes over time and that people aren't ready to talk about that at the beginning of therapy" (P10, lines 566-568)*

Client-dependent processes

Four participants discussed the client-dependent nature of assessing for AAT. For example:

> *"I mean I probably do have a structure in my head, somewhere, but I don't think there's sort of a particular, particular way, […] I don't, don't do it very, particularly systematically" (P6, lines 496-500)*

Clinical judgement

Related to this, 3/11 participants discussed the role of clinical judgement in assessing AAT, including MDT discussion where necessary. For example:

> *"Each case is unique and you've got to make a judgement call in combination with discussing this with the MDT" (P4, lines 600-601)*
> *"If I kind of get a sense of yeah there's something more, then you know, I would you know vocalise that, you know, something about how I'm feeling and, you know, what, whether there's something more" (P5, lines 837-840)*

In summary, the above data goes some way in addressing the first research question, suggesting that the majority of participants routinely considered, and sought, AAT-related information in their normal practice. However, there were clearly important processes surrounding the manner in which this was performed; there was very little evidence of systematic assessment of AAT with all clients, in a routine manner. Issues of client willingness, appropriate timing, and the role of clinical judgement in assessing clients' readiness were of key importance. A range of factors not explicitly related to AAT were also considered, suggestive of heterogeneous approaches to working with psychosis. The next section will examine data in relation to the second research question and more specifically, the role of AAT in formulating psychosis and the theoretical models used by participants.

What is the role of AAT in the sample's sense making of psychosis, and do theoretical models inform clinical formulations?

The terminology in this research question is first outlined. The 'role of AAT' related primarily to its attributed function, as highlighted through participants' responses. 'Sense making' referred to the ways participants explained psychosis in light of these factors. The 'theoretical models' related to meaning units directly linked to the ways participants conceptualised psychosis.

Findings- summary

According to the above terms, participants commonly referred to AAT-related factors in explaining clients' experiences of psychosis. The sample most commonly conceptualised indirect roles of AAT in terms of its impact on clients' schematic development, particularly how development of particular beliefs or assumptions affected distressing experiences at a later stage in the process, e.g. relational procedures and styles of coping. However, factors not explicitly AAT-related also played a key role, and these were included due to high frequencies within the data; for example the role of cognitive/schematic and/or emotional factors, and stress. Additionally it became clear that participants worked broadly with psychological distress, beyond conceptualisations of psychosis. The coding framework accommodated for this by coding utterances relevant to wider conceptualisations of distress separately from those specifically made in relation to psychosis. This data warranted inclusion as AAT-related responses were also evident within this wider category. Finally, there were also common themes not explicitly related to AAT within this wider category of distress. The latter part of this section outlines the theoretical models which informed participants' approaches to the task and their clinical work. Overall, these data were suggestive of heterogeneous conceptualisations of psychosis and wider distress, and participants drew upon varied theoretical approaches.

PARTS A and B

Conceptualisations of psychosis

Within AAT context

There was clear evidence suggesting that AAT-related factors played an important role in the ways participants made sense of psychosis. Most participants made explicit links between clients' AAT histories and current experiences of psychosis in some capacity (9/11 participants). For example (code 11A):

"[The other link I think was with all these sort of ideas about reality and life and death and existentialism, and I think you know I think there were a number of reasons about why he fell into those thoughts and those ways of thinking. But I think his sister's death was, part played a role in that]" (P3, line 620-625)

More specifically, a number of participants conceptualised the content of psychosis symptoms as direct or indirect reflections of AAT-related life events (7/11 participants). For example (code 11B):

"I saw it as [a reflection of the horror that she'd witnessed in her childhood] but other people were denying were there" (P2, lines 77-80).

The most frequently occurring codes within this category related to cognitive/schematic and/or emotional factors in the context of AAT. These factors played a key role in the ways participants explained clients' experiences of psychosis in the AAT context (8/11 participants). For example (code 11FF):

"I feel it [recent humiliating experience] all [activated all of this earlier stuff about sort of being rejected and other people are untrustworthy and I guess the er yeah the sort of build up of loss] and it, the the themes are sort of very prominent in his sort of psychotic symptoms if that makes sense" (P6, lines 116-120).

Cognitive/schematic and/or emotional factors appeared with almost twice the frequency (f=22) of those relating to 'content a reflection of AAT' outlined above (f=14), giving some indication of their significance. Related to this, four participants talked specifically about experiences of psychosis being a reflection of clients' own internal models of relating or schema. For example (code 11CC):

"He'd [internalised his father to some extent and, and so the way that he responded to some of his erm psychotic experiences was in a kind of harsh and self critical way] which […] was a kind of maintaining factor" (P3, lines 409-414).
"If you look at this young lady's erm like probably some [core beliefs, negative automatic thoughts and assumptions they're mirrored in what this voice is saying to her]" (P8, lines 364-367).

Mentioned less frequently in explaining psychosis was the role of disrupted processing, e.g. result of unprocessed trauma (3/11 participants). The role of interpersonal factors, in the context of AAT, were also evident (3/11 participants). Finally, three participants suggested social factors were important in explaining psychosis in the context of AAT. For example (code 11EE):

> *"When people have had you know difficult traumatic life events err you know that is a, a significant context but then you know [if the wider systems social supports aren't able to contain that so, so, so very much, you know, I don't necessarily see this as an individual problem, I see it as something very much embedded within you know err her relationships]" (P5, lines 618-624)*

Not explicitly within AAT context

Many codes reflected ways participants made sense of psychosis outside of the explicit context of AAT. This communicated, again, that participants acknowledged heterogeneity in working with psychosis, beyond factors directly related to AAT.

Cognitive/schematic and/or emotional factors, again, played a central role in how the sample made sense of clients' experiences of psychosis (10/11 participants, overall f=44). These factors were related to general life events/experiences in many instances. For example (code 11L):

> ***"****The idea that under stress of a relationship she starts to experience strange things and look for some sort of [meaning and and and a meaning that fits for her just based on her past experience I suppose that people were always going to for her at some point are always going to try and sabotage her life]" (P9, lines 162-166)*

More specifically, the vast majority of the sample suggested some experiences of psychosis were a reflection of clients' own schemas/internal models of relating (9/11 participants). For example (code 11G):

> ***"****Not seeing her father for all those years could you know, could have erm contributed to her erm [disrupted attachment and herm her trust in other people being somewhat undermined so that she's made more, later more vulnerable to reference and persecutory delusions or interpersonal delusions of any sort]" (P4, lines 437-442)*

Participants also commonly referred to the role of clients' coping styles in helping explain psychosis (6/10 participants). Other common explanatory factors related to wider social factors (6/11 participants), and more specifically, four participants discussed the role of social isolation in explaining psychosis. Similarly, interpersonal factors were mentioned by five participants, for example (code 11T):

> *"She acts in a way that's consistent with those beliefs, so she doesn't assert herself at all [she looks after other people, she, other people take advantage of her]" (P8, lines 421-427)*

The roles of biological factors (including sleep, genes, neurotransmitters) were reported by three participants, and sleep disruption, specifically, was also reported by three participants. Similarly the role of stress, or accumulated stresses, was prominent in this data (7/11 participants). For example (code 11M):

> *"I wouldn't ascribe to you know underlying genetic disorder more a sense of a [unique combination of psychosocial stresses err and a unique presentation in that time of erm err perhaps her resources getting stretched and stretched to the point of breaking at which point] unusual experiences would have begun" (P1, lines 67-72)*

In keeping with a complex understanding of psychosis, 5/11 participants acknowledged a multifactorial understanding of psychosis and 4/11 participants talked directly about differentiating between causal and maintenance factors, and the interaction of relevant factors. Four participants suggested that known contributing factors may be an insufficient explanation; much remains unknown. For example (code 11Q):

> ***"****[multiple factors] would contribute to a psychosis onset which may be erm contributory, not necessarily sufficient of themselves" (P4, lines 109-113)*

Finally, 3/11 participants advocated an integrated/biopsychosocial understanding of psychosis. Importantly, many utterances related to distress wider than that conceptualised in terms of psychosis; these findings are outlined in the next section.

Conceptualisations of wider psychological distress

The sample reported working broadly with psychological distress, beyond conceptualisations of psychosis. Factors explicitly related to AAT, in addition to those not explicitly related to AAT, were frequently highlighted within this category.

Within AAT context

The data clearly suggested that explicit AAT-related factors played an important role in how participants made sense of more general psychological distress. Eight participants explicitly made links between AAT history and clients' current experiences of distress (f=21). For example (code 10A):

> *"I think the [sexual abuse that she experienced was a very large factor in triggering her psychological distress]" (P2, lines 46-48)*

Specifically, again, there was a central role of cognitive/schematic and/or emotional factors in explaining distress, conceptualised in the same way as outlined above (8/11 participants). For example (code 10B):

> *"So that was a secret that was between her and her father. The erm holding that linking into [massive conflict so err a huge I guess we're talking traumatic err memories erm, and which were unprocessed, so the […] emotional intensity, the emotional stresses associated with those memories erm not being processed]" (P1, lines 334-340)*

Interpersonal factors, relevant to AAT, were evident in some participants' explanations of clients' wider distress (4/11 participants). Social factors were also cited, less frequently, as relevant explanatory factors (3/11 participants). For example (code 10KK):

> *"So I suppose it's the sort of the stress and the [environment at home and some of it is parents ideas about the world being an unsafe place which is based on this trauma they had years ago]" (P10, lines 371- 374)*

The roles of clients' coping efforts in maintaining distress were discussed by 4/11 participants. Importantly there were other common utterances relating to wider distress, outside of the AAT context, which were worthy of inclusion.

Outside explicit AAT context

Codes not explicitly AAT-related were commonly highlighted in participants' broad explanations of psychological distress. Again cognitive/schematic and/or emotional factors, outside of the context of AAT, were commonly attributed in explaining psychological distress (9/11 participants, f=34). For example (code 10L):

> *"There was a lot of [shame there and a lot of denial of her experiences. Erm I think that was a big factor]" (P2, lines 44-48)*

Similarly 3/11 participants referred explicitly to the retriggering of maladaptive schema in explaining clients' distress. Interestingly the role of general interpersonal factors were very frequently attributed to clients' distress (9/11 participants, f=29). For example (code 10K):

> *"I wonder if that had been kind of a [conflict relationship for quite some time that had potentially been leading to the difficulties]" (P2, lines 317-319)*

The role of social factors (including social inequality, work environment, family attitudes) were discussed by 5/11 participants, and specifically, social isolation was highlighted by 5/11 participants. Less than half of the sample discussed the role of clients' coping

styles/attempts as important in explaining issues of general distress (5/11 participant). For example (code 10R):

> *"Erm we thought about how her [self harm is a function of coping with the voices]" (P7, lines 560-561)*

The role of biological/medical factors (including drugs, birth complications, diagnosis) were discussed by 5/11 participants. A related theme was the role of stress in understanding wider distress (5/11 participants). Finally, again suggestive of complex interactions of factors in conceptualisations of distress, 4/11 participants differentiated between causal and maintenance factors, and interactive effects. For example (code 10Q):

> *"She had a boyfriend, […] he was very jealous and she saw he would become angry and self blaming and depressed and I think she felt quite a responsibility […] and so trying to strike out in the world and make your own friends, and at the same time sort of feeding the guilt of your boyfriend struggling with that […] that sort of led to the onset of the voices and the onset of the voices led to the onset of self harm]" (P7, lines 369-380)*

Responses from part C data helped further shed light on the conceptualisation of AAT and psychosis, and wider distress.

Part C

Participants elaborated on some important ways they conceptualised links between AAT and psychosis in part C data.

Trauma-psychosis links

In keeping with data from parts A and B, the most common links between AAT and psychosis were those considering earlier impact on cognitive/schematic and/or emotional development, often prior to onset of psychosis. It is important to note that it was not always possible to differentiate between factors involved in problematic schema formation

(including disrupted cognitive and emotional processes) and the impact of these 'maladaptive' schemas (i.e. effect of this learning) in participants' responses. However, three key subthemes related to this higher theme.

Links related to cognitive/schematic and/or emotional factors:

Developmental impact. The majority of participants talked about ways in which AAT events affected cognitive/schematic and/or emotional development, and how this made clients more susceptible to related problems later in life (8/11 participants). For example:

> *"Some people may have experienced […] severe sexual abuse, and I think it's more about understanding somebody's experience of their childhood and the way that they felt, rather than necessarily the facts of what happened, but I think yeah understanding people's difficulties from childhood […] how it's left them feeling about themselves, how it's left them feeling about other people" (P2, lines 586-595)*

Content similarities. A similar theme related to the notion of clients' experiences of psychosis reflecting actual AAT-related life events or experiences. It was inferred that such events, acquired through social learning and then represented in schematic knowledge, played a functional role in the links between AAT and psychosis. Similarity in content between these phenomena were commonly occurring (7/11 participants). For example:

> *"Often people, the voices that they hear and the things they tell me that they say, not necessarily who they think the voice is, but the things they say I think it's off, often crystal clear where it comes from, 'cos it's things that probably were said to them when they were younger or that if they were sexually abused that they feel dirty or contaminated in some way they are often things that the voices might say to them" (P10, lines 708-714)*

> *"It doesn't seem like she's experiencing flashbacks like would be described in the PTSD Ellers and Clark model […] but it has given her understandably some very clear ideas about other people are dangerous, and also that other people won't help her, because her brother was killed in quite a big group of people but nobody*

intervened, so she's very paranoid and feels very persecuted by other people" (P8, lines 774-781)

Increased vulnerability. A less frequent theme linked to schema formation related, more indirectly, to the notion of AAT increasing vulnerability, both to content-related interpretations and other risk factors for psychosis (4/11 participants). For example:

"The abuse might make them more emotional and more likely to take, take, take drugs in order to cope, which would lower their biological threshold, so what we're looking at is a complex aetiological picture of multiple factors. The childhood abuse would have a, like a pinball in a pinball machine bang, bang, bang, bang, in all sorts of different directions (P4, lines 550-555)

Acute responses

A minority of participants discussed the acute impact of AAT-related events, conceptualised here in a similar way to Ehlers and Clark's (2000) cognitive model of PTSD (3/11 participants). These utterances bore resemblance to the distress associated with traumatic memories, for example acute emotional responses and situationally activated memories, which were qualitatively distinct from the broader, lasting impact upon relational patterns in the former schema categories. For example:

"If they've got a strong emotion attached to them, they become more erm met, what's the word, reinforced in your mind, erm, so I suppose if people have got emotion regulation difficulties, erm, then I don't know, certain ideas or situations might be more salient to them or anxiety provoking" (P10, lines 536-543)

Disrupted processes

Three participants discussed the contributing impact of AAT on disrupted processing in the context of psychosis at biological, neurodevelopmental, and emotional levels. This

mechanism was here conceptualised as having more of a direct causative role in psychosis, similar but qualitatively different to the notion of increased vulnerability. For example:

> *"Depending on the early environment people's ability to process emotions and erm tolerate emotions might be reduced erm and also […] I don't know the science behind it but the, sort of, the effect that trauma might have on your brain in a more sort of biological way… in terms of the brain structure and neurochemistry" (P10, lines 519-526)*

> *"I'd go back to that sense of, erm, the emotional intensity, err, associated with trauma memories which are unprocessed erm, which can cause significant destabilisation of normal processes" (P1, lines 474-477)*

The finding that schematic factors were so commonly cited in explaining clients' experiences corroborated findings from parts A and B, and this was a significant finding. However, there were other important ways in which the sample linked AAT to psychosis.

Other 'linking' themes

Significance of links

Some participants simply commented on the significance of links between AAT and psychosis, and familiarity with this in clinical work (3/11 participants). For example:

> *"It's very common once I start working with people if we, if we go into this kind of exploratory work, often what comes out is that people have had difficult experiences and traumatic experiences in their childhood erm, including loss and all sorts of other things erm and and then in their adulthood have had another experience or maybe several experiences of trauma or loss immediately prior to their psychosis if you like […] I've noticed that that's a particularly common pattern" (P3, lines 638-648)*

Multifactorial complexity

Finally, some participants commented on the complex array of factors involved in potential links between AAT and psychosis (4/11 participants). This also included some wariness about making strong claims linking these phenomena. For example:

> *"You've got to move away I think from a simplistic childhood abuse causes this erm, so much more erm complicated multiple routes, both direct and indirect through cognition emotions psychot, erm, thoughts and biological factors" (P4, lines 558-562)*

In summary, the ways participants made sense of links between AAT and psychosis was far from clear. However, participants' responses allowed further insight into the roles of AAT-related factors, both in terms of clinical processes and theoretical underpinning. In particular the data highlighted the importance of cognitive/schematic and/or emotional variables within more heterogeneous understandings of the subject matter. Findings relating to the theoretical models raised by participants will be explored in the next section, some of which considered AAT directly, while others did not.

Theoretical models and influences

Part A and B

Participants drew upon a range of theoretical models and influences in making sense of psychosis and distress, suggestive again of a heterogeneous understanding of the phenomena involved. Whilst AAT-related theory played a part, there were generally low frequencies for these codes within the data. While overlaps between clinical and explanatory models were often difficult to distinguish, five participants referred to the influence of generic CBT models for psychosis in guiding their conceptualisations. These codes were assigned where participants were not discussing models or techniques used explicitly in clinical intervention, but approaches which informed their understanding. For example (code 4C.5):

> *"I've undoubtedly been influenced by sort of erm [CBT type ideas around sort of power relationships of voices]" (P7, 521-522)*

Another common code related to the stress-vulnerability model (4/11 participants), for example (code 4C.1):

> *"I'd be wanting to sort of be try to normalise it more, about what had happened, in terms of sort of [stress vulnerability type model]" (P6, lines 349-351)*

Similarly 4/11 participants referred to generic attachment or developmental theory in the context of psychosis, for example (code 4C.4):

> *"A reflection of that, that really deep and fundamental conflict […] you know this is, this is attachment systems which are which are just so powerful you know" (P1, lines 352-354)*

Of relevance to the second research question, findings notably highlighted the centrality of a developmental stance. In addition to these data, there were numerous meaning units relating to research and theory less frequently, representing varied influences on participants' understanding (see table 2, appendix 13). Theoretically relevant themes were raised in the sample's responses to part C of the procedure, as outlined below.

PART C

Models

The sample highlighted a range of therapeutic models in discussing conceptual understanding of psychosis and potential links with AAT.

CBT approaches. The CBT model was most commonly highlighted by the sample, though this category was wide ranging. Four participants talked about using CBT in their clinical work in the context of AAT; including approaches such as Garety's cognitive model, Beck's CBT model, and more generic PTSD models. For example:

"[The] CBT formulation model, like longitudinal, longitudinal Beck model […] erm some people that have experienced lots of bullying, like trauma PTSD models […] like the Ellers and Clark model about flashbacks, I've got a couple of cases on my case load who've had quite horrific traumas" (P8, lines 755-766)

The next section explores parts of the data relevant to the third research question, specifically how relevant factors may impact on therapeutic processes in practice.

How does inclusion of these factors impact on therapeutic processes in practice?

This question examined how participants linked or discussed AAT-related factors in their clinical work, and specifically means of instigating clinical change in light of these.

Findings- summary

CBT was the most commonly cited clinical intervention model. Links between AAT and psychosis, and wider distress, were most commonly addressed through collaborative sense-making processes of joint formulation. There was some limited evidence of direct AAT-processing based intervention beyond this. The sample discussed the need for appropriate timing, client willingness, and the role of clinical judgement. Importantly, the sample commonly considered factors not explicitly AAT-related during assessment and therapy, for example interpersonal and wider social factors. The overarching message regarding therapy and intervention processes was one of diversity and complexity; again, the data was suggestive of heterogeneous approaches to clinical intervention and there was little evidence of prioritisation of any single factor. Clearly AAT was one important factor amongst many. However, the general process of therapy appeared to be based on principles of sensitivity, collaboration, and a strong therapeutic alliance, with much importance placed on clients' personal wishes and therapy goals. As the focus of analysis was 'what clinicians do in practice', the researcher made fewer distinctions between psychosis and wider conceptualisations of distress in relation to therapeutic processes, as this was beyond the scope of the current study.

Therapy processes

PARTS A and B

Within AAT context

A number of codes related to therapy processes which directly considered AAT. The most common response was the process of engaging clients in a sense-making or exploration process, formulating distress-related factors in the context of AAT (8/11 participants). This included general notions of processing AAT and also 'making links' between clients' AAT histories and experiences of psychosis. For example (code 1A, f=16):

> ***"****If we can [process the early memories and process the distress associated with those and erm work through the trauma associated with those then erm my hope is that would rob the power of the voice] err as erm if she can feel that actually she was not to blame" (P1, lines 428-432)*

Beyond this, there was relatively little elaboration on AAT-specific processes in therapy in these data. Some participants discussed the notion of formulating AAT factors personally, without sharing this with the client (3/11 participants). However, 3/11 participants did mention the use of AAT-focussed techniques, including experiential elements or exposure/rescripting. For example (code 1F):

> *"Another large aspect of it as well in [processing the trauma memories was the experiential aspect of the schema therapy which is erm some kind of giving some visual processing of trauma memories and being able to bring in a healthy adult into your trauma memory] to help manage that distress" (P2, lines 265-270)*

Finally 3/11 participants talked explicitly about exploring the relationship between the client and their experience of psychosis. For example (code 1JJ):

> *"Understanding of [how her traumatic experiences had made her feel and she could very much relate that that's the kind of experiences that she had with the voices and the visions that she saw]" (P2, 188-192)*

An array of wider relevant therapy and intervention processes were mentioned by less than three participants in the context of AAT (see table 3, appendix 13). Participants alluded at times to working with the effects of trauma, e.g. self-esteem, reconnecting with values-based living, rather than focussing on AAT directly. Despite the fact these codes did not appear frequently in the data, there was clear evidence of participants taking AAT into consideration in therapeutic work.

Indeed numerous processes were raised outside of the context of explicit AAT-focussed intervention. This, again, suggested that the sample acknowledged varied approaches to clinical work with psychosis, many of which were not explicitly related to AAT.

Not explicitly within AAT context

The most common responses within these data related, again, to the process of engaging clients in exploration or sense-making processes, formulating relevant factors. Importantly the entire sample referred to this, with an overall high frequency of related utterances (f=53). The majority of participants also referred to a personal formulation process, which was not shared with clients, again suggesting that relevant links were not always vocalised with clients (10/11 participants). Another common code related to 'here and now' or coping-related techniques (9/11 participants, overall f=22). For example (code 1K):

> *"If Sarah says look I don't want to talk about the past, [I just want you to help me with some coping strategies then obviously that's erm well not obviously but that, that's what I will focus on]" (P3, lines 216-219)*

Intervention approaches

The most common clinical intervention approach (as opposed to theoretical underpinning) highlighted in part A and B data was the CBT model. A total of 8/11 participants mentioned this in a general capacity (f=22), and 7/11 participants discussed specifically CBT techniques, e.g. thought challenging, positive risk taking (f=22). Five participants referred

explicitly to behavioural techniques, e.g. behavioural experiments, behavioural activation. The majority of participants discussed explicit techniques for validating client's experience, e.g. normalising conversations (6/11 participants). For example (code 1W):

> *"I see [the relationship is part of, as part of the treatment not that treatment's probably the right word but as part of the sort of the healing process erm and help it and being able the to use myself in a way for that person to understand themselves better]" (P10, lines 185- 189)*

A total of 5/11 participants referred to generic therapy techniques for increasing awareness/'making links', e.g. patterns, reflections (overall f=18). For example (code 1Y):

> *"Bringing some of the links quite early on with her, you know how it's understandable how she might be sort of mistrusting with people because of some of her earlier experiences, and sort of maybe bringing her attention some of the other big triggers" (P6, lines 322-326)*

In terms of other formalised therapy approaches, 3/11 participants discussed the process of conducting generic interpersonal work, e.g. boundaries/attachment, communication difficulties. Systemic approaches (including constructionist approaches, family therapy) were discussed by four participants, and three participants explicitly referred to the use of specific systemic techniques, e.g. absent others' views, partner, facilitating support network.

In terms of other therapy techniques, four participants referred to the use of metaphors with clients, e.g. fear as food, formulation as road map. A role for psychoeducation was also evident (4/11 participants). Generic intrapersonal work and issues of relating to self (e.g. self esteem, identity) were highlighted by 3/11 participants. Five participants discussed exploration of the relationship between clients and experiences of psychosis (e.g. voice/hearer). For example (code 1U):

> *"I guess moving into the [specific meaning for her in connection to the voice events erm, so the initial voice and the […] secondary err more attacking voice]" (P1, lines 192-195)*

In keeping with findings suggestive of broad-ranging interventions, a range of other clinical approaches were also highlighted less frequently (see table 4, appendix 13).

Wider aspects of clinical work

Many of the following points related to common factors in psychotherapy. The whole sample frequently referred to the use a collaborative approach, e.g. open dialogue, co-creating, mutual curiosity (f=31). Similarly all participants also explicitly referred to the role of preparatory work in their interventions, e.g. engagement, facilitate safeness, and generic information gathering (f=24). For example (code 1R):

> *"Well what I do in the [initial stage is always really with the therapeutic relationship erm but without collusion] and because there would be no point because they'd just disengage with therapy anyway" (P4, lines 413-416)*

Eight participants discussed the importance of identifying clients' hopes and aims for therapy or their primary difficulties (f=21). Related to this, four participants discussed the need to identify barriers to therapy, or goal completion, with clients. Finally 7/11 participants referred explicitly to integrative working, or the possibility of multiple intervention options. Clearly creating a safe therapeutic environment was of central importance, irrespective of the clinical model. Other responses related specifically to therapy stages.

Stages in therapy

Meaning units relating to different stages in therapy were of key importance in participants' discussion of therapy processes. Almost all the sample suggested that the process of therapy was guided by the client's wishes, or issues important to them, across both assessment and therapy stages (10/11 participants). For example (code 3A):

> *"What exactly I've got to explore and, and not will really be [driven by what we've agreed we're going to work on]" (P3, lines 214-216)*

Also suggestive of a sensitive approach to working, the majority of participants discussed the notion of not introducing something which would be met with resistance or overload the client (10/11 participants, f=18). A minority of participants talked about shifting the focus away from unusual experiences/psychosis to other salient problems (3/11 participants). For example (code 3F):

> *"Some of the [work on self esteem kind of stands on it's own as well. It's obviously linked but I guess this work isn't all about voices and all about psychotic experience]" (P7, lines 644-651)*

Related to this, participants discussed the process of shifting between a focus on issues in the present/here-and-now and historical origins of distress (3/11 participants). In terms of a routine approach to work, only 3/11 participants highlighted the use of some standardised practices. Four participants considered assessment/formulation/collaboration as a 'platform', being beneficial in itself, prior to formal intervention.

A number of codes related more generally to wider relevant concepts, which were more abstract compared to the therapy approaches outlined above. These are relevant to the research question, and therefore warranted inclusion.

Abstract therapeutic concepts

More than half of the sample stressed the importance of focussing on alliance building or the therapeutic relationship (6/11 participants). Four participants discussed the notion of a 'strengths focus' supporting 'recovery' or values-based living. For example (code 2F):

> *"That kind of work's about building on that [positive schema formulation of him and his qualities and wishes], and all that kind of stuff" (P12, lines 254-256)*

Related to this, three participants discussed the notion of providing a corrective or positive emotional experience and four participants mentioned adapting the therapy session setup or format to suit clients' needs. Similarly, in keeping with the wider roles of clinical

psychologists, 7/11 participants highlighted the role of MDT working or involvement, including psychological consultation. For example (code 2D):

> *"I would [recommend that she had increased social activity through our support worker who would take her out, build social activity, do the graded exposure work]" (P2, lines 486-488)*

Considering concepts more focussed on the individual, 3/11 participants talked about increasing the client's sense of control/power. Finally, three participants suggested that assessment and therapy can take time with this client group (3/11 participants). In addition to these points, a range of abstract therapeutic concepts were mentioned less frequently by participants (table 5, appendix 13).

In summary, AAT-related therapy processes were prominent within this part A and B data. In particular the sample discussed the notion of formulating links between past and current experiences, and there was some limited evidence of AAT-focussed intervention. However, other factors were also important, and there was little evidence of prioritisation of AAT-related factors over others. These data were suggestive of collaborative and client-led interventions, which were sensitive, flexible and multifactorial. Data from part C again offered further information into relevant therapy processes highlighted by participants.

PART C

Therapeutic processes- specific

Participants provided further detail regarding the range of therapeutic processes involved in clinical work, more specifically acknowledging AAT-psychosis links. Relevant themes emerging from this data are outlined below.

AAT-linking formulations

Similar to findings from parts A and B data, the most commonly occurring theme here related to the use of formulations which linked AAT and current experiences of psychosis, i.e. a sense-making process (6/11 participants). For example:

> *"Ideally I would want to create a formulation that was palatable and could be shared with the person that I was working with so we could see links between the thoughts that they were having and the voices they were experiencing and that experiences they had when they were bullying" (P8, lines 580-585)*

Lengthy and complex interventions

Another common theme related to the fact that work with this client group was not a simple or straightforward process, particularly where AAT was involved (6/11 participants). This corroborated a similar finding in A and B data. For example:

> *"If I was working in a psychology secondary care department I think that might be easier to say but […] the people we see are really quite chaotic and it's quite difficult sometimes to, to get the same flow" (P10, lines 729-731)*

Client-led process

In keeping with findings from A and B data, participants here suggested that therapy processes were largely client-led (5/11 participants). They discussed the notion of a collaborative process of establishing therapy aims with clients, though participants were at times explicit about their own agendas. Indeed there was some agreement that AAT-focussed intervention would be completed if the client suspected it might be relevant and useful, and consented to the work. For example:

> *"I'm usually trying to say what do you want to change, what do you want to work on, and it's often things like social anxiety or erm making sense of what's going on […] that's your kind of starting point often from, often from quite a neutral*

normalising point of view, […] hopefully the trust improves and we can have more discussions about their background" (P9, lines 858-868)

Clinical judgement

A similar theme related to the role of clinical judgement in guiding therapy processes (5/11 participants). For example:

"I guess there are no, there are no hard and fast err rules really, but you know with that roadmap that formulation that I kind of discussed before, at least that thing would be located and the decision and the dilemmas revised at various points" (P12, lines 716-720)

Other relevant themes relating to therapeutic processes within this data are discussed below.

Cognitive restructuring

Considering more direct therapeutic processes, a cognitive restructuring theme emerged from participants' responses, with two separate subthemes.

Challenge schematic assumptions. A limited number of participants talked about the process of testing out clients' schematic assumptions, in the context of AAT, e.g. beliefs relating to themselves, others, and the world (3/11 participants). For example:

"We did some work around the abuse that happened, and thinking about her vulnerability at that time and how that wasn't her fault […] if it were really true that people get herpes from breathing, wouldn't everybody in that particular area have it by now, because they'd have given it to somebody who'd have given it to somebody else" (P7, lines 803-809)

AAT processing. Another minor theme highlighted was that related to direct AAT processing with clients experiencing psychosis (3/11 participants). For example:

"To work on the childhood abuse can be relevant because if it's leading to beliefs in the present that generate emotional, well emotion can often erm initiate and accelerate a psychotic process, so that was that one factor out of the relapse or maintenance of psychosis […] with childhood abuse, make some of their thinking less extreme in the present which also may make them less vulnerable to extreme interpretations" (P4, lines 622-60)

'Here and now' work

Two separate subthemes related to present-focussed processes were apparent within these data, as opposed to those which were historical or exploratory in nature.

Preparatory work. Four participants referred to the role of preparatory work with clients experiencing psychosis. They communicated a clear need for safety and basic symptom management before addressing AAT-related issues. For example:

"I would have looked to try and reduce his drug and alcohol use err increase his self care erm, if possible we could have started with some CAT for the trauma, if he'd have been in a position or able to do that" (P7, lines 727-730)

"That symptom management stuff at the beginning, erm making sure that the therapeutic relationship is safe and contained, and then I guess moving into trauma processing in a variety of ways" (P2, lines 664-667)

Coping work. In a similar vein, a minority of participants talked more explicitly about the role of coping-based work (3/11 participants). For example:

"It might be about helping to redevelop the skills to manage all of that stuff of which would be more of a sort of standard erm therapy I suppose … using more like CBT or DBT type things" (P10, lines 627-631)

Validating processes

Three participants discussed a validating process in making links between AAT and psychosis in therapy. For example:

> *"When I've done work around sort of childhood abuse in other clients it has looked at the sort of talking about those early experiences, providing an opportunity to be heard" (P7, lines 744-747)*

Case-dependent approach

This final therapy process theme emerged from meaning units alluding to the case-dependent nature of how AAT was addressed in therapy (3/11 participants). For example:

> *"I'm also on a ward, because of that kind of fragile period of engagement, and make and kind of forging a therapeutic relationship, so I find that a kind of tricky question to answer, I haven't got one clear answer, because it's so case dependent" (P8, lines 677-681)*

> *"I don't have a set thing that I'm like, this is what I do with people who've got this problem, no it's […] very sort of individualised" (P10, lines 614-617)*

The sample raised some interesting and relevant points in response to situations whereby suspected unprocessed AAT may have been maintaining their client's experiences of psychosis.

Suspected unprocessed AAT

These responses allowed further insight into the processes involved with exploration and intervention in the context of AAT with clients experiencing psychosis. These themes centred on issues of timing, gathering more information, and tentatively making-links.

Appropriate intervention timing

The most common theme related to the need for appropriately timed intervention (raised by 9/11 participants). Willingness and readiness were deemed necessary before detailed AAT-focussed work was initiated, both in assessment and therapy stages. Again, the tone was collaborative and client-led. For example:

> *"It depends whether they are ready to do anything about that, […] sometimes you just have to choose the time and that isn't always at the point they're seeing you […] if they can't manage that, if that would actually make them worse rather than better, […] if they're not ready to hear that that's what, you know what you think might be sort of influencing problems then it might be about choosing another time to do that work" (P7, lines 858-868)*

Tentative link-making

This theme centred on the possibility of suggesting an AAT-focus to the work in the context of suspected links with current experiences (4/11 participants). For example:

> *"I'd be just using sort of I'd be making tentative links, something like, 'you know it's interesting that you know went through this and you told me this made you feel this way or that way about other people […] what you're stressed by now, there might be some similar sort of themes in all of that', what do you make of that" (P6, lines 516-522)*

Gather more information

This theme related to the process of gathering more information in the context of suspected links between AAT and psychosis, including issues of safeguarding (4/11 participants). For example:

> *"[At] other times I would be very directive about, that you know obviously I've got statutory duties to, you know, duty of care […] you know I suppose I wouldn't*

always ask direct questions erm, at least at the very beginning of kind of my work with people (P5, lines 851-857)

Participants' reported indicators of therapy success for clients with clear AAT-psychosis links are explored in the next section.

Success indicators

These themes related in particular to therapy success indicators, and included observable and reported changes through 'checking in' with clients, observing reductions in symptom frequency, increased engagement, and increased cognitive control. However, there was also the sense that change was difficult to gauge with clients with a history of AAT who experienced psychosis.

Observable changes

Participants commented upon observable progressions made by clients with AAT-related difficulties, for example, in relation to therapy goals (5/11 participants). For example:

"I would draw up a list of erm goals and what we're looking to do in therapy at the beginning of the therapy, so we've got something to refer back to, to keep referring to" (P8, lines 649-652)

Checking with clients

Related to this, four participants suggested that simply 'checking in' with clients, through conversation, was a common method of gauging change. For example:

"I do try try and do as much reviewing with the client at various points, what have they found useful, what have they found difficult, how do they find that things are going" (P2, lines 478-481)

Outcome measures

A minority of participants discussed the notion of using outcome measures to track change with clients (3/11 participants). For example:

> *"Because they report changes in mood erm, I haven't been as great as I should be in using outcome measures in the past I used to use CORE erm and I'm thinking of returning to that" (P7, lines 837-839)*

Positive engagement

The simple observation of continued engagement was mentioned as means of gauging success with clients (4/11 participants). For example:

> *"If people yeah, sort of keep coming and seem engaged, and keep talking about it, I feel it's worth continuing, and I feel they're getting something out of it" (P6, lines 465-468)*

Increased cognitive control

The observation of clients' increased cognitive control was another less common theme in the context of gauging progress in the context of AAT-psychosis links (3/11 participants). For example:

> *"Working through that trauma were they less avoidant of something for example […] do they have fewer flashbacks of something? Were they able to talk to a particular family member again, you know, I guess that you know all of those measures would be fairly idiosyncratic" (P12, lines 771-777)*

Difficult to gauge

Finally, 3/11 participants suggested that change was difficult to gauge with clients presenting with AAT-psychosis links. For example:

"It sounds wishy washy but you know you just kind of feel it sometimes, that you feel you've made an important link, there's just something, you can just sort of reflect" (P6, lines 473-476)

Finally, a number of relevant subthemes emerged from the data which fitted beneath a higher order theme relating to abstract ideas which were therapeutically significant.

Therapeutic significance

These more abstract themes allowed exploration of significant conceptual issues used in addressing AAT and psychosis. They alluded to complexity and multifactorial approaches, as well as service-related factors.

Critical of simplicity

A number of participants alluded to the complexity involved in this work, and warned against simplistic approaches to linking AAT and psychosis (4/11 participants). For example:

"We had some training recently from people […] the sort of service user and and active in the hearing voices movement and paranoia networks and, and you know kind of got this sense really of very much forcing you know people who have voices or paranoia have had traumas […] there's obviously a lot of research that suggests they kind of have had things that could be seen as traumatic […] but you know in my, my perspective is to open up conversations, and if you go in with an agenda like that then you tend to close down conversations" (P5, lines 696-707)

Multifactorial approach

Providing further evidence of a heterogeneous approach to work within the field, a number of participants highlighted the necessity of a multifactorial approach; this had clear implications for AAT-focussed work (3/11 participants). For example:

"Things never seem to be clear cut enough to do like a, a formal trauma patient manual" (P9, 744-745)

Life events not explicitly AAT-related

In keeping with findings from parts A and B data, some participants referred to the importance, more generally, of significant life events in making sense of psychosis, beyond those considered traumatic (3/11 participants). For example:

"We're talking specific environmental factors, not even necessarily stressful factors 'cos it could be you know being praised as a child might erm erm lead to later you know more grandiose erm beliefs or manic related beliefs" (P4, lines 511-514)

Onward referral

Interestingly 3/11 participants discussed the potential for referring clients on with AAT-related issues, where appropriate, suggesting this was not something they would necessarily or routinely work with. For example:

"But in terms of doing the reliving work, that's not something that I do, because I don't feel confident enough in it, so I refer on" (P8, lines 841-843)

Service wariness

Finally some participants discussed their colleagues' wariness and uncertainty around working with AAT-related problems (3/11 participants). For example:

"I think people are kind of a bit wary and a bit scared of working err or talking about you know the child sexual abuse or bereavement erm, neglect, you know all

the kind of common sources of trauma, and so people will often ask me as a psychologist, oh will you see that person" (P12, lines 734-739)

In summary, participants had formed ideas and approaches to working with AAT with clients experiencing psychosis. However, there was variation in the ways in which this occurred, and there was little evidence of a standardised approach. In keeping with some of the points raised throughout the entire data set, the sample stressed the importance of working sensitively and collaboratively with clients.

Secondary analysis

Conceptual map

A conceptual map was developed in order to visually represent interpretation of the relationships between the findings outlined below (see figure 2). Its purpose was to help communicate links between theoretical and clinical themes and provide some degree of quantification to key findings. The following method was used in establishing the prominence or 'importance' of codes/code clusters and themes.

Code frequencies from the content analysis and thematic analysis were organised into three levels, using cut offs determined using the following method, which allowed for representation of high, medium and low frequency categories. The upper limit of codes/code cluster (part A and B data) and theme (part C data) frequencies was calculated and then divided by three, to provide cut-offs. Codes/code clusters which appeared with a frequency <83 (part A and B) or were mentioned by less than or equal to 4/11 participants (part C) were indicative of low overall frequency and were represented using smaller text. Codes/code clusters with frequencies between 84-166 (part A and B) and/or highlighted by 5/11-8/11 participants (part C) were conceptualised as medium frequency concepts and represented with medium sized text; finally codes/code clusters appearing >167 times (part A and B) and/or mentioned by 9/11-11/11 participants (part C) were framed as high frequency concepts and represented using the largest text size on the conceptual map. See

appendix 14 for the theme/code clusters and combinations used in calculating code/code cluster and theme prominence, used as a measure of importance.

These different levels of prominence were used in helping interpret the 'importance' of particular codes and themes within the data, and their relationships. As formation of the conceptual map elements involved some degree of interpretation, and in order to draw themes together meaningfully, some text on the map was not included within boxes, and this related to important points of interest, not easily accounted for using the method outlined immediately above. Elements contained within the red shading related to assessment factors and processes, though conceptualisations of psychosis and distress were also represented within this space; therapeutic processes were contained within green shaded spaces on the map. The 'heterogeneous conceptualisation' element, contained within a white section, applied to both assessment and therapy processes. However, as signified by the symbol described in figure 2, the methods of analysis did not always permit meaningful distinction between phenomena involved; this is also communicated by use of a grey shaded area. The dotted line within the 'diverse interventions' box signifies the merging of key clinical approaches. The corner elements of the map represented concepts and 'pressures' which were conceptualised as guiding assessment and therapy processes, as interpreted from the data.

The meaningful groups of codes and themes, and relationships presented in the conceptual map, are explored in relation to research questions in the discussion. This chapter will consider the extent to which the above findings are supported by relevant theory and research within the field of trauma and psychosis.

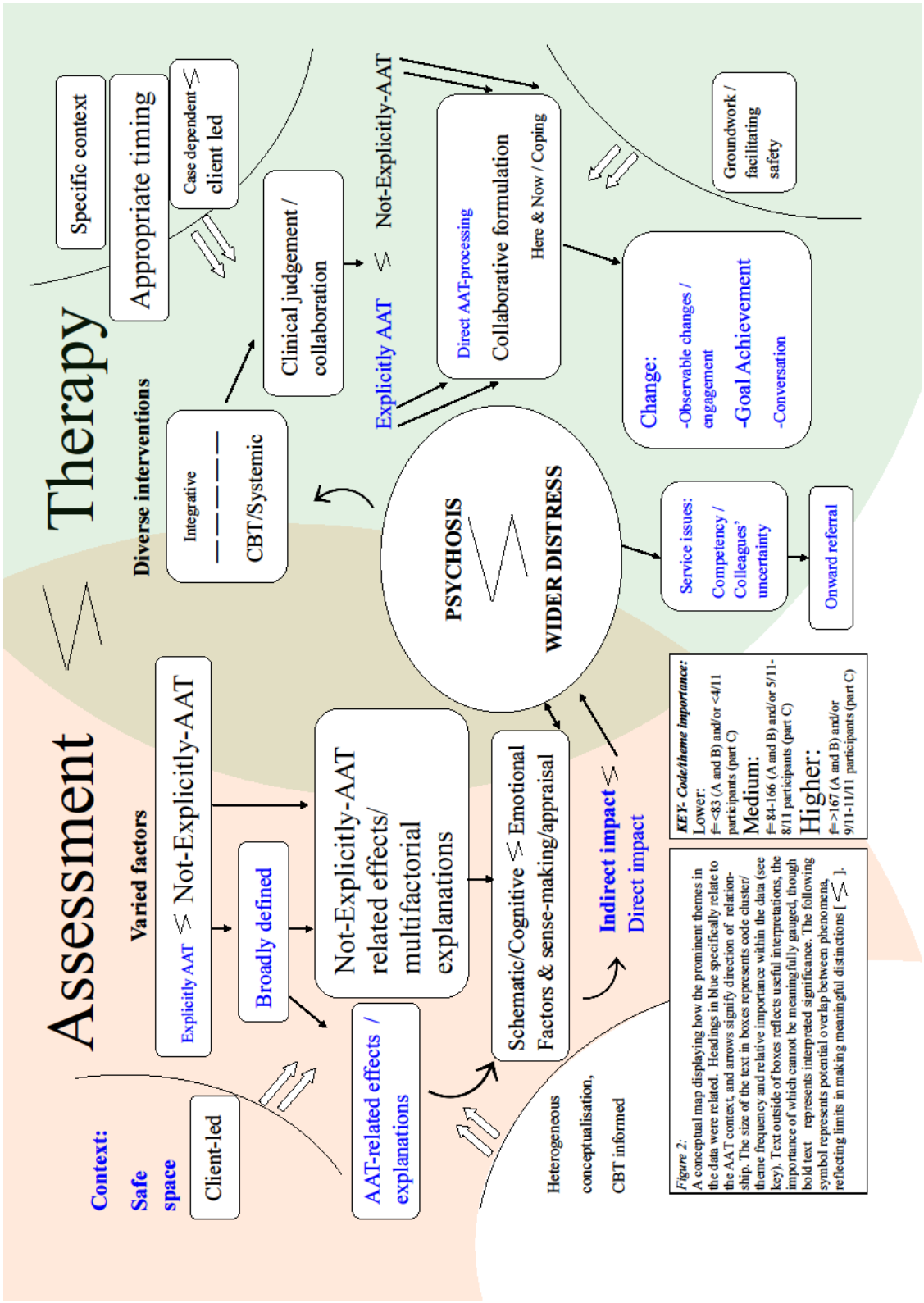

Figure 2: A conceptual map displaying how the prominent themes in the data were related. Headings in blue specifically relate to the AAT context, and arrows signify direction of relationship. The size of the text in boxes represents code cluster/ theme frequency and relative importance within the data (see key). Text outside of boxes reflects useful interpretations, the importance of which cannot be meaningfully gauged, though bold text represents interpreted significance. The following symbol represents potential overlap between phenomena, reflecting limits in making meaningful distinctions [≶].

Figure 2: Conceptual map visually displaying interpretation of the relationships between the findings.

Discussion

Reflective paragraph

I started out on this project with preconceptions about the causal role of AAT in the development of psychosis. Heavily influenced by cognitive explanations and the traumagenic model of psychosis, and shaped by my experiences prior to training, I suspected that AAT would play a dominant role in participants' responses. I believed that dissociative mechanisms were an important 'pathway' to psychosis. It was my expectation that responses to parts A and B of the procedure would likely highlight a central role of AAT in assessment processes and resulting interventions. Whilst the findings confirmed that AAT played an important role in clinicians' responses, I was surprised as the picture was vastly different to that which I had expected. I had presumed that direct AAT-psychosis links between would be common, and that participants would frequently consider unusual experiences as clear reflections or traumatic memories, rooted in real life events. While these links were evident, I was surprised to find that the indirect impact of AAT was remarkably prominent in the data, with an emphasis on schema-related factors. With hindsight this made sense; psychologists are trained to consider developmental and multifactorial perspectives of human problems.

During the interviews I was surprised at the different ways in which participants approached the task. For example, some appeared to present summaries of key variables and then elaborate in detail, whilst others were much more conversational. Reflecting on the first few interviews, I felt quite anxious wondering how I would later make sense of such seemingly broad data. It had already become clear that my own preconceptions and biases were not reflected in participants' responses. However, I attempted to put these worries aside, and instead focus on connecting well with participants. In fact, the interviews appeared to flow well and participants were remarkably easy to engage. Some participants required more reassurance than others, for example asking 'do you want me to keep talking?' During one or two interviews I wondered whether responses were at first a little vague, as if the participants were 'playing it safe'. However, this seemed to resolve later in these interviews, during the specific questions in part C.

I had not expected the sample to reflect upon such wide ranging issues in making sense of clients' distress, and was surprised by such heterogeneous clinical approaches. With hindsight this has helped me develop confidence in my own clinical work, feeling somehow safer in the knowledge that there is no single 'correct way' of working. Again in hindsight, a client-led approach is a familiar concept, frequently encountered throughout training, and conducting the study has reminded me to 'work where the distress lies'. My passion for empowering clients through use of a recovery approach has remained strong. Having learned much from the sample's responses, my position has certainly changed towards more of an integrated biopsychosocial approach, albeit with most focus on the psychosocial. I have developed a more critical stance towards simplistic explanations of psychosis and wider distress, and I finished the project feeling thankful to my participants for sharing some very interesting ideas and perspectives.

Study aims

The aim of the current study was to explore the inclusion and conceptualisation of AAT in a sample of clinical psychologists, particularly considering how this impacted on clinical work in early psychosis. An individual vignette-semi-structured telephone interview approach was used to elicit relevant aspects of participants' understanding and approaches to working practice. The three-part procedure included a case reflection and vignette (parts A and B respectively), followed by AAT-specific questions (part C). Part A and B data were analysed using content analysis and thematic analysis was used to code part C data to address the following research questions:

1) To what extent does a sample of clinical psychologists working in early psychosis routinely investigate AAT with their clients?
2) What is the role of AAT in the sample's sense making of psychosis, and do theoretical models inform clinical formulations?
3) How does inclusion of these factors impact on therapeutic processes in practice?

Key findings will be explored in relation to existing literature, as relevant to the research questions. This chapter will also consider epistemological issues, strengths and limitations of the study, theoretical and clinical implications, and ideas for future research.

Summary of findings

The current study produced 12 key findings. Participants commonly acknowledged AAT-related factors in assessment and therapy with clients experiencing psychosis. In the context of the tasks, links were made between AAT and psychosis, using broad definitions of trauma. Assessment procedures were both collaborative and client-led. In addition to experiences of psychosis, participants commonly considered wider issues of psychological distress. Participants most frequently referred to indirect roles of AAT, particularly when making sense of clients' cognitive/schematic and/or emotional development and how this affected distressing experiences at a later stage in the process, e.g. relational procedures and styles of coping. Links between AAT and psychosis, and wider distress, were commonly addressed therapeutically through collaborative sense-making processes of joint formulation; the CBT model was the most commonly cited theoretical and intervention-based approach. Participants discussed the need for appropriate timing, client willingness, and the role of clinical judgement in working with AAT. There was some limited evidence of direct AAT-processing based interventions. Importantly, participants commonly considered many factors not explicitly related to AAT during assessment and therapy, for example interpersonal and wider social factors, and there was little evidence of prioritisation of any single factor. Where explicit, AAT was one important factor amongst many. Overall the data were suggestive of heterogeneous conceptualisations of psychosis and wider distress, and varied approaches to clinical intervention.

The findings contribute to the trauma-psychosis literature, and suggested that severe adversity played a key role in participants' conceptualisations of their clients' distress and experiences of psychosis, with clear implications for therapy. However, participants' responses were largely unclear regarding the underlying mechanisms. The findings challenge certain themes within the existing trauma-psychosis literature which stress the role of direct links. While AAT was one key factor, among others, links with psychosis were clearly complex. There are important methodological limitations to the study, and also within the existing literature regarding trauma-psychosis links, as outlined later in the chapter.

Assessment Processes

The current study highlighted a number of findings relevant to assessment process, and these will be explored in the next section.

Key Findings

Key finding 1: the majority of the sample routinely investigated AAT with their clients assuming broad definitions.

Broad definitions of AAT were adopted by participants, and both recent and historical AAT-related information was sought during assessment processes. Indeed reference to AAT was common throughout part A and B data. Whilst there are limits in assuming that higher frequencies were indicative of importance, findings suggested that consideration of AAT-related factors was commonplace in participants' routine practice. However, there was little evidence of systematic assessment of AAT with all clients in a routine manner, and this is an important distinction to make. The above key finding bears relevance to the NHS Confederation (2008) policy which stresses the importance of working alongside survivors of violence and abuse in delivering effective mental health services. However, issues of definition may be problematic here, as the data-driven 'AAT' categories were wide ranging, and more inclusive than adversities outlined in the briefing policy. More specifically, participants' mental models of 'trauma' were broad in nature, and varied experiences had the potential to traumatise clients, or at least impact upon individuals significantly. Indeed terms such as 'abuse' were importantly not synonymous with 'sexual abuse'. These findings support concerns in the research literature about narrowly defining 'trauma'. The AAT category also included events and experiences from adulthood in the current study. However, using 'AAT' as a means of acknowledging wide ranging adversity was useful in avoiding parochial ways of defining the phenomena involved, i.e. beyond classic ideas of type I trauma or childhood sexual abuse. Indeed wider conceptualisations of 'severe adversity' are evident in the psychosis literature (Corstens & Longden, 2013; Varese *et al.*, 2012). Similarly Fowler *et al.* (2006) suggest that themes of threat or helplessness may be personally significant without being classified as 'traumatic'; a difficult, but non-abusive,

family environment during early years may also facilitate the development of problematic schematic themes.

Similarly broad conceptualisations were adopted in the current study, suggestive of external validity for inclusive definitions of phenomena involved. However, it is important to remember that not all individuals experiencing psychosis report experiences of AAT. There was also the notion of 'trauma' being distinctly negative and relating to a 'developmental break'. This was similar to the concept of 'disconnection' at different levels of functioning, outlined by Straker *et al.* (2002), and can be clinically useful as a means of helping describe and explain responses with clients. However, this concept is not new; it has been present in the literature since the start of the twentieth century (Janet, 1907). Definitions adopted by the current study's participants were commonly described in phenomenological terms, for example 'shattering one's sense of a safe world', and often lacked detail relating to the mechanisms involved.

The above tensions in defining AAT reflect wider issues within the trauma-psychosis literature, as outlined in the introduction chapter. It is acknowledged that the current study required some degree of artificial categorisation in considering 'explicitly-AAT' and 'not-explicitly-AAT' phenomena, and there are limits to the meaningfulness of such distinctions. For example, it was not possible to ascertain whether participants may, at times, have been conscious of an AAT-context in discussing a particular clinical issue, without overtly mentioning this. What can and cannot be meaningfully attributed to AAT is difficult to gauge using participants' verbal responses alone. Despite methodological challenges in attempting to categorise clinicians' practice, and ascertain the precise contribution of AAT-related factors, there were interesting findings which may be theoretically and clinically useful, and these will be further explored.

Key Finding 2: participants routinely investigated a broad range of factors, often outside of the explicit AAT context, most commonly relating to cognitive/schematic and/or emotional factors and appraisal of experience.

A range of factors were routinely investigated by participants, many of which were not explicitly AAT-related. These informed multifactorial explanations of psychosis, as demonstrated by the conceptual map. Participants most commonly sought information

regarding clients' sense-making or appraisal of their experiences in addition to relevant cognitive/schematic factors and emotional responses, outlined in key finding 5 below. Other information commonly sought related to interpersonal factors and clients' coping styles. There is a growing literature base supporting the involvement of such factors, and it is therefore unsurprising that participants drew upon diverse information relating to wide ranging relevant variables. For example Jackson *et al.* (2004) suggested that clients with a 'sealing' style of coping may not benefit from being encouraged to adopt an 'integrating' style, risking further traumatisation. Similarly clients' strengths and values, and factors from social domains were commonly investigated too. The importance of assessing these factors is rooted in a strong evidence base, and the centrality of social factors is widely documented in the psychosis literature. For example, in a five year follow up tracking 255 individuals, Albert, *et al.* (2011) found that a stable social life with normal social functioning was predictive of good outcomes following first episode of psychosis.

Literature outlining associations between expressed emotion (EE) and early psychosis is highly relevant in light of current participants' highlighting key roles of interpersonal factors and emotion. Indeed familial factors and behavioural patterns, which include criticism, hostility, and emotional over-involvement, are associated with relapse in individuals experiencing psychosis; mediating factors may include affective changes (Amaresha & Venkatasubramanian, 2012; Kuipers *et al.*, 2006). Carers' appraisals, such as higher subjective burden, are important in determining high EE after a first episode of psychosis (Raune *et al.*, 2004) and there is a clear role for family intervention in prevention of EE in the context of psychosis (Patterson *et al.* 2000). Similarly, Allison *et al*. (2013) suggest that perceived lower social rank and inferiority may affect engagement in peer relationships and therefore social decline in early psychosis. Indeed there is substantial evidence base supporting family intervention in early psychosis more generally (Bird *et al.*, 2010). The current study's participants clearly considered it clinically important to address wider social factors, and there was evidence of focussed interventions in their responses. A benefit of the current study's procedure was that it allowed participants to reflect on whatever factors were perceived as salient (parts A and B). This gave credibility to the finding that multiple factors were routinely investigated and that AAT was merely one important factor, among many, worthy of routine investigation with clients. As outlined in the first chapter, clinicians may likely assess according to their preferred approach (Larkin & Morrison, 2006a).

Key finding 3: assessment procedures were both collaborative and client-led; an appropriate context was deemed necessary before AAT was investigated, including engagement and a psychologically safe environment.

The most common recommendation in the existing literature, regarding assessment, is that clinicians ought to routinely inquire about clients' 'trauma' history (Bak *et al*., 2005; Bendall, Alvarez-Jimenez, *et al.*, 2013; Kilcommons & Morrison, 2005; Lardinois *et al.*, 2011; Morrison, 2001; Morrison *et al.*, 2003; Morrison *et al.*, 2005; Read *et al*., 2005; Read *et al.*, 2001; Read & Bentall, 2012; Schäfer & Fisher, 2011). Indeed this has recently been included in NICE guidance for psychosis (NICE, 2014). The suggestion that all service users should be asked about abuse in assessments may be reasonable in principle, and justified by the evidence linking early adversity and later difficulties in life. However, participants' responses highlighted additional factors which are relevant to this principle in practice. The findings underscore the importance of an appropriate context to further AAT assessment. If there was any systematic approach to assessment amongst the findings, it was collaboratively following the client's lead. There appeared to be a client-dependent principle guiding participants, and there were clear examples of situations whereby AAT would not be assessed, despite its potential relevance in clients' presentations. Examples included situations where distress or risk may be exacerbated, and where the client expressed a clear wish to avoid exploration of past traumas, and instead focus on 'here and now' or coping issues. The findings compliment Read *at al.* (2007), where it is suggested that not asking for fear of distressing the client may be sensible in certain situations. However, when concerned about the potential for further disturbing the client, these authors suggest that learning how to sensitively ask and respond may be warranted.

There are multiple possible reasons that clinicians may not engage in systematic and routine assessment of AAT with clients. As outlined in the introduction chapter, certain barriers may prevent inquiry about clients' experiences of trauma and abuse, for example clinicians' anxieties about increasing distress (Young *et al.*, 2001). It is recognised that therapists' affective responses in therapist-client interactions are a common occurrence, and these reactions can influence decision making during interventions (Kimmerling *et al.*, 2000). Hearing about clients' experiences of trauma and abuse can be uncomfortable for clinicians themselves, and it is reasonable to assume some level of anticipatory anxiety in

some situations, especially with complex clients. Additionally, there is evidence to suggest that clinicians whose own traumatic experiences have not been addressed therapeutically are more likely to be affected by such experiences; it may be important for these individuals to consider therapeutic assistance to explore the basis of their discomfort (Center for Substance Abuse Treatment, 2000; Pearlman & MacIan, 1995). For clinicians without trauma histories, processes such as further training or ongoing supervision arrangements may help address any personal biases and motives which may impact upon decision making during therapy. In the current study, participants reported being largely guided by clients' wishes. However, one may envisage a situation whereby a client's distress may be maintained by undisclosed AAT-related issues. Failing to inquire about AAT in this situation may inadvertently lead to the perpetuation of distress, ultimately doing the client a disservice. Clearly a degree of reflexivity is required in order to ensure that AAT-related information is sought in a timely manner, and that not inquiring is appropriately justified.

Morrison (2009) suggests that routine inquiry into abuse history should be commonplace within mental health services. As outlined elsewhere in the current thesis, changes were recently made to national CPA documentation, explicitly including the 'abuse question' (Department of Health, 2008). The implication of the NHS Confederation policy is that all service users should be asked about abuse in assessments (NHS Confederation, 2008). Importantly, the manner in which abuse-related information is obtained and recorded, and in what circumstances, remains ultimately to local determination, as do training arrangements. The findings from the current study go some way in addressing this further. Importantly, factors such as client readiness were commonly deemed necessary in order to investigate AAT explicitly. These additional factors are not essentially captured in simple suggestions outlining the necessity of assessing for abuse. In terms of supporting literature, Hoaas *et al*. (2011) suggest that a strong therapeutic alliance, taking into consideration relational factors including collaboration, goal consensus, and empathy, are necessary for CBT for psychosis to be successful. Indeed participants in the current study discussed the need for sensitively approaching topics which had the potential to negatively impact on the alliance. This may be all the more important when working with distressed clients with histories of severe adversity and disrupted attachment. Indeed Bendall, Alvarez-Jimenez, *et al.* (2013) suggested that the optimum time for assessing abuse history may be once rapport has been established, rather than at initial assessment. It should be noted that some

researchers ascribe to a trauma-psychosis framework more than others; the current findings suggest that uncritically subscribing to this approach may in some situations risk distressing clients, for example, if AAT assessments are inappropriately timed.

Clearly there was no simple approach to assessment. Perhaps with wider mental health services in mind, and not specifically EIP, Read *et al.* (2007) suggest that all service users should be asked about abuse history at initial assessment, or once they are settled if in crisis. Interestingly, only 2/11 participants referred to the notion of investigating AAT early in the assessment process. The above finding does not necessarily mean that participants do not engage in this practice, as they may have simply not reflected on it. However, some participants explicitly did not inquire about AAT 'too early' in the process, despite agreeing with its importance in principle. Toner *et al.* (2012, p.175) suggest that 'having the skills to ask about abuse is not enough without consistent and developed personal beliefs about psychosis, and a service culture which is also consistent and supportive'. In a similar vein, the findings of the current study stressed the importance of a necessary context. Whilst the research base for AAT-psychosis links was the most common reason for assessing AAT, critical views of the literature were not always present.

It is possible that assessment processes in the context of therapy for early psychosis may differ from generic mental health services. Existing findings suggest that many clients are not asked about traumatic life events, however this may not be as relevant with the current study's sample of highly trained clinicians (Read, 2006; Schäfer & Fisher, 2011). The fact that the entire sample identified AAT issues as part of the clinical picture, but sometimes chose not to assess, suggested that the process with this client group may be more complex than simply 'asking away'. In agreement with existing literature, there is a key role for training; guidelines for why, when, and how to ask, are certainly very useful (Larkin & Read, 2008; Read, 2006; Read *et al.* 2007). Importantly the evidence suggests that without training, these guidelines are often ineffective (Read *et al*., 2005). An inherent complexity within this issue of assessment relates to the question of what being 'asked about abuse' entails. Indeed there are differences between asking the simple question outlined in CPA documentation, and actively seeking to obtain detailed abuse history in the context of suspected links with psychosis, with the option of exploratory work. Though there was evidence that participants routinely investigated AAT issues, it was sometimes difficult to gauge the depth which was discussed.

Overall the findings were suggestive of complex and client-dependent approaches to assessing clients experiencing psychosis. One important aspect was timely investigation of broadly defined AAT-related issues, amongst other key factors. Acknowledging the limitations of a small sample, there was no mention of formalised trauma-specific assessment formats, such as the Trauma History Questionnaire (THQ) (Green, 1996). Whilst validated measures are essential for use in research studies, they are not necessarily used routinely in clinical practice, and the process of exploration appeared to be much more sensitive and guided by specific factors. Considering the THQ specifically, Hooper *et al.* (2011) comment upon the need for greater integration between clinicians and researchers in designing trauma-specific questionnaires which are useful in practice; the findings of the current study support this. The above findings directly address research question one.

Conceptualisations of Psychosis and Wider Distress

In the following sections, relevant findings will be explored in relation to existing literature and the second research question, specifically considering how participants made sense of clients' experiences of psychosis and wider distress.

Key Findings

Key finding 4: it was often difficult to meaningfully distinguish between the ways participants conceptualised 'psychosis' and 'wider distress' as relevant to clients' difficulties. The sample assumed inclusive approaches to making sense of clients' experiences, acknowledging a range of factors both explicitly and not explicitly related to AAT.

A range of theoretical conceptualisations of psychosis were reported by participants, though they also acknowledged the importance of considering wider issues relevant to psychological wider distress. These findings addressed the second research question as they highlight the heterogeneous manner in which clinicians approached the task, and presumably their work, both within the explicit context of AAT and outside of this.

Cognitive/schematic and/or emotional factors were commonly cited in explaining distress, in addition to interpersonal and social factors, coping styles/attempts, the role of biological/medical factors, and the specific role of stress. The important role of considering wider distress in the context of psychosis is acknowledged in the literature. For example Vorontsova *et al.* (2013) found that depression, and related processes, contributed to the maintenance of paranoia, suggesting depression-focussed therapeutic techniques for clients experiencing psychosis. Concepts from Fowler *et al.*'s (2006) catastrophic interaction hypothesis are relevant; interaction between psychosis and wider distress makes meaningful and distinct categorisation between phenomena difficult, if not impossible. These findings were suggestive of heterogeneous understanding of the subject area, and stress the importance of flexibly working with broader psychological distress in making sense of clients' difficulties; considering 'symptoms of psychosis' was only part of the story.

At many points throughout interviews, there emerged the sense that participants were referring to psychosis as an 'entity'; there are different potential explanations for this. One explanation is that this notion is the result of clinical boundaries imposed by EIP services themselves, for example through specific referral criteria. Alternatively this may have been related to the manner in which procedure and interview questions were framed, making implicit assumptions that certain phenomena may be conceptualised in terms of 'psychosis', whilst others might not. What is, and is not, explicitly considered as 'psychosis' is likely to vary on a case by case basis and, clearly, complex and multifactorial accounts are warranted.

Fitting with heterogeneous understandings of psychosis and wider distress, participants also highlighted the impact of life events more generally. This finding fits within broader developmental conceptualisations of psychosis. For example Beards *et al.* (2013) investigated the role of adult life events in onset of psychosis, concluding that there was some association with increased risk of psychotic disorder and subclinical psychotic experiences. Similarly Bebbington *et al.* (1993) concluded that, prior to onset, there was an excess of life events in clients experiencing psychosis compared to a psychiatrically healthy sample. Clearly there was good rationale for focussing on significant life events, whether these were conceptualised as traumatic, adverse, or otherwise.

The prominence of findings supporting a heterogeneous understanding of psychosis more broadly supports the notion that adoption of simple reductionist biomedical approaches may be at best outdated, and at worst neglectful of key contributory factors amenable to evidence-based psychosocial intervention. However, reductionist psychological accounts are equally problematic. In their simplest form, the findings fit with existing literature which favours a return to a truly integrated biopsychosocial approach to psychosis (Read *et al.,* 2009). Indeed there is evidence suggesting that certain genotypes may be implicated in moderating stress reactivity in the context of psychosis (Peerbooms *et al.*, 2012). The current study's findings, in part, offer support for a traumagenic neurodevelopmental model of psychosis, whereby adversity may increase sensitivity to stress via a primarily behavioural rather than genetic route (Read *et al.*, 2001; Read *et al.*, 2014). This approach implicates biopsychosocial factors in creating neurodevelopmental abnormalities which heighten vulnerability to stress and susceptibility to psychosis. However, clearly factors not explicitly related to AAT and psychosis were also relevant to the study participants.

Additional findings also helped address the second part of research question two, specifically consideration of theoretical approaches. The CBT approach was most commonly cited by participants, and clearly there is much evidence supporting this dominant model in the wider psychosis literature (Chadwick, 2006). It was not always possible to distinguish between 'theoretical' and 'clinical' models which informed participants' understanding, and some overlap was likely in reality. However, an important consideration is that varied approaches were potentially a result of the sample's range of preferred therapy approaches, as evident from their opt-in form responses (see table 1). Similarly the dominance of CBT approaches, and perhaps the centrality of cognitive/schematic factors, may have been a function of greater numbers of CBT-orientated participants who took part in the study. However, participants also referred to other explanatory models commonly cited in the literature, including the stress-vulnerability model (Read *et al*., 2008; Zubin & Spring, 1977) and more generic attachment or developmental theories in the context of psychosis (Berry *et al.*, 2007; Berry *et al.*, 2008). Unsurprisingly, theoretical models were predominantly psychological or psychosocial in nature. These findings go some way in addressing the second part of research question two.

Key finding 5: Participants considered a range of factors in explaining clients' experiences of psychosis, some were explicitly related to AAT, but more commonly they were not. Indirect links between AAT and psychosis were more prominent, for example through schematic impact, than direct connections.

The majority of participants in the current study linked clients' experiences of psychosis to adversities in their histories. Indeed there exists a wealth of research highlighting connections between adversity, particularly childhood trauma, and increased vulnerability to psychosis, though few studies have investigated the manner in which clinicians make sense of links in practice (Arseneault *et al.*, 2011; Elklit & Shevlin, 2010; Read, 1997; Read & Bentall, 2012; Read *et al*., 2005; Romme & Escher, 2011; Schreier *et al*., 2009). However, as outlined elsewhere in the current thesis, there are some serious methodological limitations within this literature; for example many studies rely on small sample sizes and self-reported trauma. Indeed many of the mechanisms by which 'trauma' is connected to psychosis currently remain unclear. Despite this, participants were familiar with 'making links' between AAT and psychosis, and many of their mental models concerned indirect connections between these phenomena, as outlined below.

Indirect links

The most common explanatory mental model, as identified in participants' responses, was the impact of AAT on clients' cognitive/schematic and/or emotional development; in particular consideration of how this interacted with and compounded later distressing experiences, e.g. relational procedures and styles of coping. These types of associations were conceptualised as 'indirect' links in the current thesis, unless stated otherwise. For example, experiences of psychosis were commonly conceptualised as thematic reflections of clients' own internal models of relating or schema. However, other explanatory factors were also commonly highlighted in the context of AAT, including interpersonal and social factors and, less commonly, the role of disrupted processing at biological, neurodevelopmental and emotional levels, e.g. unprocessed trauma.

There were clearly limits in making meaningful distinctions within this broad category of 'cognitive/schematic and/or emotional factors' in the current study. It was difficult to differentiate between longer term impact of individuals' experiences upon

schematic development, for example the effects upon relational styles, from the impact of maladaptive schema, e.g. acute distress associated with situationally activated memories as a result of AAT. Indeed both examples fitted beneath the broader 'cognitive/schematic and/or emotional' category. It was not always possible to ascertain whether participants conceptualised development of 'faulty' schema as a result of AAT, or whether AAT in some way affected processes which contributed to development of psychosis via a different route. At times participants' responses may have related to either or both ways of conceptualising these phenomena. Acknowledging these methodological limitations, at the most basic level, there was much support for the notion of AAT having an impact on negative schema development, which later exacerbated distress associated with experiences of psychosis. However, there was some degree of overlap between these complex phenomena and results should be interpreted with caution. Though a more detailed analysis of specific roles and mechanisms was beyond the scope of the current study, some key points of interest were relevant to the second research question.

The role of schematic factors in the context of AAT-psychosis links is well documented in the literature, and psychosis is associated with negative beliefs about the self, world, and others; 'trauma' may predispose development of maladaptive cognitive schema (Bentall *et al*., 2001; Freeman *et al.*, 2002; Fowler, 2000; Garety *et al*., 2001; Morrison, 2001). Individuals may impose explanations of aberrant salience in a bid to make sense of their experiences via top-down processing (Fowler *et al*., 2006; Kapur, 2003; Phillips *et al.*, 2002; Read *et al.*, 2001). Participants' responses were supportive of these conceptualisations though, as outlined above, explicit discussion of mechanisms supporting supposed AAT-psychosis links were lacking. The findings relate to Garety *et al.'s* (2001) cognitive model of positive symptoms of psychosis, which suggests two key routes, as outlined in detail in the introduction chapter. Essentially the 'combined cognitive and affective route' suggests that biased conscious appraisals may lead to an external explanation, likely worsened by a negative emotional state. The 'affective route' conceptualises stressful events as triggering disturbed affect, which activates biased appraisal processes and maladaptive self/other schemas, again resulting in an externalising appraisal (Baker & Morrison, 1998; Bentall *et al.*, 2001; Myin-Germeys & van Os, 2007). Importantly participants conceptualised AAT-related experiences as being central in the initial development of these maladaptive schema. There is further literature supporting the role of cognitive factors in mediating trauma-psychosis links. For example Gracie *et al.'s* (2007) study with a non-clinical sample

(n=228), explored mechanisms by which trauma may predispose individuals to hallucinations and paranoia, suggesting its role in development of negative schemas, re-experiencing of PTSD, and also interactions between these phenomena. However, retrospective judgements of trauma and cross-sectional methodologies were key limitations; more inclusive definitions of trauma may have led to higher PTSD prevalence compared to other studies.

Kilcommons and Morrison (2005) suggest that both PTSD and psychosis are characterised by intrusions and their subsequent interpretation. These may be influenced by negative beliefs resulting from experiences of trauma and dissociation. The authors investigated whether negative appraisals, stemming from traumatic experiences and responses to trauma, may be implicated in the development of unusual experiences in a small sample (n=32 participants). Their findings suggested that severity of trauma positively correlated with severity of positive symptoms and PTSD; negative appraisals, including cognitions about self, correlated with positive symptoms including hallucinations. The authors suggested that dissociation predicted hallucinations, after controlling for cumulative effects of trauma, and that dissociation may represent functional coping, which could increase likelihood of hallucinations. However self-report of PTSD was a limitation, in addition to a small sample size; the use of multiple tests also increases likelihood of type I errors. For these reasons their findings must be interpreted with caution.

Participants in the current study also commonly investigated clients' appraisal styles. A range of studies suggest the role of these factors are relevant in determining psychosis-related distress in the context of historical 'trauma'. Jackson *et al.*'s (2004) study found that 'sealers' reported increased intrusions and avoidant coping styles approximately 18 months after first episodes of psychosis (n=35). Similarly Bak *et al.*'s (2005) longitudinal population study (n=4045) suggested that a history of childhood trauma resulted in less subjective control over anomalous psychotic-like experiences and increased reports of distress. As early trauma may facilitate development of negative schematic models, individuals' coping resources may be compromised when faced with clinical symptoms. However there were the common limitations associated with self-reported trauma and also use of telephone assessments. Similarly Klewchuk *et al.*'s (2007) study found that participants diagnosed with psychosis with sexual trauma histories had active trauma-related cognitive schema and a bias on free recall tasks. The above findings compliment the notion

proposed by Bentall *et al*. (2001) that cognitively-mediated vulnerability may not be entirely biological in origin, but via complex interactions with adverse social environments. Importantly the current study highlighted the specific roles of interpersonal traumas in the development of negative schema formation and appraisal; whilst mechanistic detail was lacking, participants' responses were largely consistent with the cognitive models of psychosis outlined here.

The findings from the current study were in support of Fowler *et al.*'s (2006) notion of a 'catastrophic interaction hypothesis' and the potential indirect role of trauma upon development of psychosis. Normal emotional responses to stressful life events which commonly occur prior to psychosis onset may be compromised by information processing abnormalities associated with psychosis; these then become exacerbated. In a maintenance cycle, profound negative evaluations and anxiety may worsen positive symptoms, such as persecutory thinking and delusions. Changes acquired through processes of social learning continue to bear significance on functioning through representation of knowledge in self/other schema (Bebbington *et al.,* 1996; Birchwood, 2003). However, Bentall *et al*. (2001) conceptualise paranoia as a protective mechanism; early adversity is again central in the development of a paranoid cognitive style whereby negative events are attributed to external sources. In the current study, the key role of schematic factors in participants' understanding of psychosis goes some way in providing support for these explanations of psychosis, particularly the prominence of indirect pathways and associations with 'trauma'. This is conceptually different to the notion of hallucinations being direct reflections of past traumas, similar to intrusions or flashbacks as observed in PTSD.

Related to cognitive/schematic and/or emotional factors, a minority of participants discussed the acute impact of AAT-related events, similar conceptually to Ehlers and Clark's (2000) cognitive model of PTSD and distress associated with traumatic memories. This was qualitatively distinct from the lasting impact upon relational patterns in the schema categories outlined above. Clearly there may have been a degree of overlap in participants' conceptualisations of these phenomena, and again certain methodological issues made these difficult to distinguish without further probing. However, there was the understanding that these processes may have interacted with existing experiences of psychosis, and thus increased distress via a different route. Mueser *et al.* (2002) suggest that both PTSD and psychosis may be separate but intertwined disorders, on a continuum of responses to trauma,

that worsen the course of emotional distress. Similarly Morrison *et al.* (2003) tentatively conclude that psychosis and PTSD are both implicated as reactions to traumatic events, and that these likely lie upon a spectrum. Schematic beliefs, as well as biological and social variables, including structural changes in the brain resulting from trauma and social support structures, may increase susceptibility to both conditions. However, there are major methodological limitations within this literature, often related to sampling problems. As outlined elsewhere, correlational analyses significantly increase likelihood of making type I errors, and of course not all clients experiencing psychosis report trauma or severe adversity; the above explanations of psychosis may only apply to some individuals. The above findings go some way in addressing the second research question. The thrust of the findings were more aligned with indirect, rather than direct, links between AAT and psychosis. However, there were clear examples of heterogeneous explanations of clients' experiences of psychosis, and the sample did not simply ascribe to a 'trauma causes psychosis' model. Participants commonly cited factors not-explicitly related to AAT in explaining psychosis, which again bears relevance to the second research question. There was frequent mention of cognitive/schematic and/or emotional factors more generally, impacting upon individuals' views of themselves, others, and the world, as outlined in the above sections. This stressed the impact of life events, not necessarily classed as 'traumatic'. As much of the life events literature in the psychosis field is trauma-related, this finding acts as a reminder of the importance of balancing any tendencies towards overemphasising the role of 'trauma'. Indeed there is a growing literature recognising the role of emotional and cognitive/schematic conceptualisations in the development and maintenance of psychosis, not necessarily focussing on the AAT context (Garety *et al.* 2001).

Smith *et al.* (2006) stress the fact that mood, self-esteem, and negative evaluative beliefs ought to be considered in the conceptualisation and clinical intervention with psychosis. Reininghaus *et al.* (2008) comment on important environmental and social and interpersonal factors, including the role of social isolation, and increased risk of psychosis. For example, unemployed clients reporting lower levels of social contacts experienced longer duration of untreated psychosis. Similarly the role of stress was common in participants' explanations of psychosis, not necessarily in the context of AAT. Again this is widely documented in the literature, both in terms of roles in preceding first episodes of psychosis and continued behavioural sensitisation to environmental stress (Myin-Germeys *et al.*, 2005; Raune *et al.*, 2009). The social defeat hypothesis is also of relevance when

discussing a heterogeneous understanding of psychosis. This theory suggests that the common underlying mechanism to a broad range of risk factors, including childhood trauma, lower intelligence, migration, and urban upbringing, may be long term and chronic experiences of social defeat or exclusion; this can lead to a broad of outcomes, some of which are related to psychological difficulties including experiences of psychosis (Selten *et al.* 2013).

The current study findings have implications for the existing literature implicating 'dose-responses' in predicting later development of psychosis in the context of AAT (e.g. Shelvin *et al.,* 2008). Again, methodological limitations, as outlined elsewhere, mean that literature should be interpreted with caution. The centrality of factors not explicitly related to AAT in participants' responses should act as a reminder that a wide range of factors contribute to psychosis, and prioritising trauma may risk neglecting other important contributing variables. Indeed contributing factors are complex and much of the existing research is complicated by mutually reinforcing feedback loops of stress and symptoms (Conus *et al.*, 2009; Norman & Malla, 1993). Participants acknowledged wide ranging variables relating both to AAT-related factors and otherwise, and multifactorial explanations of psychosis prevailed. Clearly a broad biopsychosocial approach is warranted (Bebbington *et al.*, 2004; Krabbendam & van Os, 2005; Read *et al.*, 2009).

Direct links

A key point of interest was the relatively low occurrence of utterances and themes directly linking AAT and clients' experiences of psychosis, particularly PTSD-type responses. This low prevalence is reported elsewhere in the literature. For example, Hardy *et al.* (2005) found that in a subgroup of individuals who had experienced trauma (n=40), only 12.5% reported hallucinations with similar themes and content to experienced traumas, 45% had experiences which were similar but did not reflect the same content, and 42.5% had no identifiable associations. Whilst there are strong narratives within the trauma-psychosis literature, and service-user led movements, which stress more direct relationships, these were not prominent within the current study's findings. For example Longen *et al.* (2012) suggest that voice hearing experiences may be most appropriately understood as dissociated or disowned components of the self, as a result of trauma and other stressors. Indeed voice hearing has been commonly conceptualised as a dissociative phenomenon (Longden *et al*.,

2012; Moskowitz & Corstens, 2007). However, a more critical reading of the literature only partially supports this. Indeed 'trauma' can lead to a number of different outcomes, for example depression or self-harming behaviours (Gladstone *et al.*, 2004). Allen *et al.* (1997) propose a mechanism by which dissociative detachment, induced by trauma, may lead to psychosis by affecting grounding in the external world, disrupting reality testing processes and development of an inward bias of attention. However, there was little evidence suggesting that participants saw dissociation as a core process in psychosis in the current study. Clearly the relationships involved are complex, as psychosis can be itself traumatic, and can trigger PTSD-type responses (*e.g.* McGorry *et al*., 1991). As participants did not elaborate much on the complexities of the ways PTSD and psychosis may be intertwined, or the potential mechanisms involved, it was difficult to provide further comment.

The low occurrence of direct connections between AAT and psychosis in the current study suggests that these links were not commonly identified in the participants' clients; however, this does not negate the potential significance of such links. There was some evidence of participants making direct links between these phenomena, for example conceptualising unusual experiences as direct reflections of real life adverse experiences. Some studies suggest that hallucinations related significantly to childhood sexual and physical abuse, most strongly for command hallucinations and commenting voices (Hardy *et al*., 2005; Read *et al*., 2003). On a neurodevelopmental level, Read *et al.* (2005) suggest that preferential amygdalic processing during chronic and stressful life events may lead to disruption and bypassing of the hippocampus, and compromising individuals' abilities to accurately encode experiences in context. Indeed there is some evidence that individuals' abilities to integrate contextual information may be affected by the severity of traumatic experiences; increased likelihood of poorly integrated affective states may leave an individual more susceptible to intrusions, which may act as a partial explanatory basis for dissociative experiences (Steel *et al.*, 2005). The effects of adversity on brain development may be important in relation to stress regulation mechanisms in the hypothalamic–pituitary–adrenal (HPA) axis. However, complex genetic and epigenetic effects, and the individualised nature of brain development, make this a complex picture, the details of which are beyond the scope of the current thesis.

In agreement with Fowler *et al.* (2006) the current study suggested that direct links between intrusions associated with traumatic events and psychosis may be one route to

psychosis; and that indirect links may be more important in many cases. Direct and indirect impacts of abuse are difficult to separate, especially without specific elaboration from clients; indeed multifactorial explanations are warranted. However, the above findings again go some way in addressing the second research question. It is possible that the prominence of direct links in the literature may not be observed in clinical practice. However, acknowledging the small sample size in the current study, this is suggested tentatively; clearly more research is needed.

Therapeutic Processes

In the following section, relevant findings will be explored in relation to existing literature and the third research question, specifically considering clinical processes.

Key findings

Key finding 6: CBT was the most commonly cited clinical intervention model, followed by systemic approaches. However, overall the data were suggestive of diverse and heterogeneous approaches to intervention.

Whilst CBT was clearly the dominant clinical model cited, there was little evidence of manualised approaches; integrative approaches were commonly observed in participants' responses. This was interesting as it suggested that, at least with this small sample, clinicians worked flexibly, drawing upon multiple intervention options. There has been a dramatic rise in the prominence of evidence based psychosocial treatments for psychosis, and CBT and family therapy approaches form a major part of the NICE guidance for psychosis (Bird *et al*., 2010; NICE, 2014; Pilling *et al*, 2002; Rector & Beck, 2001). The prominence of these clinical approaches in participants' responses suggested that clinicians were working according to guidance. However, this was only partial as the integrative nature of participants' practice is not strongly reflected in the current NICE guidelines; recent guidance recognises one RCT utilising integrated psychological therapy, reporting a small effect of decreasing transition to psychosis (NICE, 2014).

The wider psychosis literature suggests that integrative approaches can be clinically useful with this population (Shea et *al.*, 2010). Margison (2005) recognises that, despite increased evidence bases for specific psychological treatments for psychosis, many clinicians identify themselves as integrative practitioners. Outlining the tenets of integration, the author suggests there is often a need for adaptation of intervention approach based on client need. Using the Cognitive Analytic Therapy (CAT) model as an example of integrative practice, the author discusses common sets of values between different clinical models. These are cited as attempts to increase collaborative and joint working, facilitating adaptive ways of working with clients experiencing psychosis. Lecomte and Lecomte (2012, p.375) suggest that whilst general psychotherapy research has explored the notion of integration, psychosis research is 'lagging several years behind'. They also cite examples of integration and propose a focus on common factors in psychotherapy, and further integration of research and practice. The common factors in psychotherapy literature suggests that therapeutic effects associated with specific technical approaches only partially explain positive outcomes in psychotherapy, and that factors common across different interventions explain a greater proportion of variance in treatment outcome (Asay, 1999; Messer & Wampold, 2002). However, there may be issues of treatment fidelity in some outcome research (Resnick *et al.*, 2005).

Also advocating integrative approaches, Lysaker and Roe (2012) recognise that people who have the same psychiatric condition may have different experiences, and that recovery does not look the same for two individuals. For example, some may wish to focus on symptom remission, whilst others may desire a changed sense of identity or agency in the world. Indeed there was evidence of this in participants' responses within the current study. The current study's findings suggested that participants were broad in their approach to working with clients' mental distress. This provides an important response to dominant narratives in the literature, which may have a tendency to overstate the potential role and focus of 'trauma'. Indeed there was little evidence of prioritisation of any particular factor in practice; AAT-related factors appeared to be important, but in addition to many others. However, there are methodological issues in making this claim. It was not always possible to ascertain whether responses may have been made with an AAT-related context in mind, without overt expression of this. Another possibility is that a seemingly broad range of approaches may reflect mental models which are not fully developed, with regards to the role of AAT and how this impacts on therapy processes, on participants' behalf.

There may be a risk of bias in some existing literature. For example, in a study investigating how psychological therapists in EIP services ask about trauma, Toner *et al.* (2012) concluded that clinicians were 'trauma-focussed'. However, grounded theory methodology was likely to have introduced the notion of trauma, perhaps with increasing focus, which may have precluded consideration of other important factors. Indeed Fowler *et al.* (2006) suggest that the extent of links between trauma and psychosis may be exaggerated by therapist report. Trauma-psychosis links are complex and remain poorly understood, and even systematic reviews are not entirely consistent on the associations (Morgan & Fisher, 2007; Read *et al*., 2005; van Os *et al*., 2009). As outlined elsewhere, the methodological difficulties inherent within much of the research may unrepresentatively overestimate the aetiological role of trauma, e.g. cross-sectional correlational designs, inpatient samples, and chronic psychosis (Goodman *et al*., 2001). The applicability of self report and clinical notes remains limited as retrospective perceptions of 'trauma' are likely confounded by current beliefs and circumstances; however there are very few ethical alternatives (Morrison *et al*., 2003). Despite limitations, trauma-focussed approaches may fit most appropriately within heterogeneous approaches to research and clinical work. Whilst participants communicated ideas of how AAT and psychosis may be linked in practice, this is a relatively new field of research and much remains unknown.

Key finding 7: participants commonly discussed the need for appropriate timing, the client-dependent nature of therapy processes, and the role of clinical judgement in addressing AAT-psychosis links. They highly valued the therapeutic alliance, collaboration, and being guided by clients' wishes.

The current study's findings allowed insight into the manner in which AAT-psychosis links are potentially explored in participants' practice, addressing current gaps in the literature. The suggestion that there were 'appropriate' and 'inappropriate' times to address AAT links was suggestive of the complex and client-dependent nature of the processes involved. Participants used their clinical judgement in gauging clients' distress levels and perceived abilities in coping with potentially distressing therapy processes. The notion of tentatively making links between AAT history and current experiences of psychosis at an appropriate time was common, though importantly participants were not always led by clients' wishes. It appeared that a guiding principle, and perhaps the most 'standardised' approach, involved placing high value on the individual wishes of each client. This is evident in the literature,

for example Van den Berg *et al.* (2013) propose that clinicians ought to be first familiar with the clinical area, comorbidity issues, and the context of MDT working before considering techniques such as EMDR; importantly the authors propose that clinical judgement and a specific context is required for therapy success. Clear contraindications should mean that treatment is postponed or substituted for a different approach. The findings of the current study were in support of this.

The NHS Confederation (2008) policy, as discussed earlier, suggests that abuse survivors should receive 'appropriate care'. However, exactly what this entails remains open to interpretation. As the current participants reported being guided by clients' wishes, it was likely that their practice was aligned with the national agenda for personalisation, meeting clients' needs in a way which was best for them (Carr, 2010). Participants appeared to manage AAT-psychosis links according to the recovery model, which is applicable in a broad range of mental health settings. Indeed, participants highlighted many concepts relating to the common components of recovery, as discussed by Frese *et al*. (2009). These included facilitating self-direction and autonomy, with clients defining their goals, ensuring the process was individualised and person centred; it also included focusing on individuals' strengths, giving clients choice from different options to facilitate empowerment, ensuring interventions were holistic, and involving family and wider systems as appropriate.

In keeping with the recovery approach, and as outlined in the above sections, participants commonly considered many factors not explicitly related to AAT during therapy; they worked with distress wider than that directly related to psychosis. Much literature supports the notion of recovery-focussed intervention in psychosis and the wider mental health setting. For example, The Tidal Model maintains, as a core principle, that engagement with the person, rather than the disorder, may facilitate recovery; what needs to be done will be largely determined by the individual (Barker, 2001). As outlined by Webster *et al.* (1995), maintaining a safe environment and therapeutic relationship is paramount. Treating all individuals the same, as implied by some standardised packages, is likely to compromise the most helpful aspect of care, notably individualised and person-centred interventions, which may paradoxically impede recovery. The study's findings were supportive of this concept.

In many ways, where AAT was concerned, the processes outlined by participants were reminiscent of Herman's (1997) three stage 'recovery from trauma' model. In particular there was much support for the first two stages; establishing a good therapeutic alliance based upon safety and trust, and retelling the 'trauma story'. In acknowledging the complexity of the client group, and the need for appropriate timing, participants' were aware of the potential for further distressing clients, but sought to manage this. Callcott and Turkington (2006) acknowledge that excessive stress is a real concern when addressing traumatic memories, and care must be taken not to trigger relapse. Whilst addressing the effects of trauma may be important in early psychosis, there were clearly some complex clinical implications of embarking upon such work, and this was not completed with every client with a history of AAT in the current study. However, there was support for the notion that treating underlying trauma may facilitate treatment gain, reduce likelihood of transition to psychosis, and decrease chances of post-psychotic PTSD, as suggested by Bendall *et al.* (2013).

Regarding the role of clinical judgement and decision making, there are two main approaches outlined in the health literature. Firstly the hypothetico-deductive approach involves staged and sequential data collection, leading to the generation of a hypothesis, and hypothesis-directed selection of the next data to be collected (Elstein & Schwarz, 2002). New data are then used to reformulate active hypotheses and make differential diagnoses; once a certainty threshold is achieved, management decisions can be made. In a clinical psychology setting this might be equivalent to hypothesising different formulations of clients' difficulties, reformulating following further data collection, and considering different intervention options. Whilst there was little evidence of explicit and sequential data collection approaches in the current study, there was some evidence of deductive reasoning in devising formulations; for example the process of tentatively asking about AAT history at the appropriate time in light of the evidence base linking trauma and psychosis.

A more inductive approach to clinical decision-making requires pattern recognition and scheme-inductive reasoning (Coderre *et al.*, 2003). Experts' clinical judgement does not often involve routine testing of different hypotheses in familiar situations, and a recognition strategy may be utilised to match presentations to diagnoses via a categorisation process (Groen & Patel, 1985). Inaccessibility of participants' thought processes made it difficult to ascertain which reasoning approaches were adopted in guiding participants' decisions in the

current study. The fact that cognitive processing frequently occurs outside of awareness is methodologically, and often clinically, problematic; this is documented in the literature (Kihlstrom, 1999). Similarly, the fact that a number of participants alluded to the frequency of AAT-related issues within the clinical population does not necessarily mean that patterns were more readily recognised. Whilst participants were clearly experienced, there was little overt evidence of inductive reasoning, though method issues made identification difficult. However, there was some limited evidence of conceptualisation of 'prototype' clients and of clinicians accessing illness scripts, as participants discussed previous clients with similar or related presentations (Schmidt *et al.*, 1990).

Key finding 8: links between AAT and psychosis, and wider distress, were most commonly addressed through collaborative sense-making processes of joint formulation. These processes were also most common in working outside of the AAT context.

Participants commonly reflected on helping clients make links between AAT histories and experiences of psychosis through collaborative sense-making processes, rooted in joint formulation. Formulation is commonly accepted as the dominant model in clinical psychology, and may be conceptualised as the summation and integration of information gathered from assessment (Division of Clinical Psychology, 2010; Division of Clinical Psychology, 2011). This provides a framework for describing important factors in the development and maintenance of clients' difficulties, and how these may relate. Central to formulation is the process of collaborative empiricism and 'sense-making', allowing development of specific intervention plans (Bieling & Kuyken, 2003; Johnstone & Dallos, 2006; Kuyken *et al.*, 2005). However, the process of formulation can also be considered an intervention in itself, as suggested by participants' responses in the current study.

Importantly there is much support for engaging clients in sense-making processes within the psychosis literature (Morrison *et al.*, 2003). Startup *et al.* (2006) suggest that low 'sense-making', judged by lack of curiosity and minimisation of the condition's impact, may predict poorer outcomes for people with psychosis. The prominence of formulation in the current study findings indicated that joint sense-making was a clinical priority. Steel *et al.* (2005) suggest that tactfully sharing formulations which appropriately link trauma and psychosis may facilitate incorporation of intrusive experiences within a narrated

autobiographical account, and thus reduce the likelihood of externalising biases. Similarly Fowler *et al.* (2006) suggest that helping clients construct personal narratives based on shared formulation may minimise the tendency to perceive experiences of psychosis as evidence of external threat. The fact that participants commonly reported these processes provides support for Raune *et al.'s* (2006) suggestion that exploring event-theme relationships at the first episode of psychosis, rather than after relapse, may help highlight important maintenance factors, which may be amenable to change. The current study suggested that participants may have used formulation to help develop a 'framework for integrating unassimilated experiences into existing representational structures', as suggested by Longden *et al.* (2012, p.58). However, a methodological limitation was that it was not possible to distinguish deeper formulation from better therapeutic rapport.

The literature contains examples of CBT formulations being used to facilitate change by helping develop alternative explanations for clients' experiences. This includes the specific acknowledgement of life experiences in guiding interpretation of intrusions (Morrison, 2001). However, this is not specific to CBT, and formulation processes are a core part of other therapies also, including integrative CAT approaches (Kerr, 2001). Indeed Gumley and Clark (2012, p.298), in advocating integrative approaches in first episodes of psychosis, suggest that recovery can be understood through development of a coherent narrative, allowing the individual to contextualise their experiences 'within their wider historical, interpersonal, and developmental context'. Highly relevant to the current study's findings, Morrison (2001) acknowledges that the main therapy intervention may then focus directly on clients' cognitive behavioural reactions following their interpretations; for example considering thought control strategies, or an indirect focus considering schematic beliefs relating to self/social knowledge, and the context in which these developed; these latter processes were very common in participants' responses. It was also acknowledged that the process of helping clients identify links between past trauma and current symptoms may act as a normalising process, and thus reduce distress (Morrison *et al*., 2005). The prominence of formulation processes within the findings is supportive of this assertion, though more empirical research is needed to establish the efficacy of this process alone.

Some participants specifically referred to exploration of the relationship between the client and their experiences of psychosis. Romme and Escher's (2000) Maastricht Approach is a specific formulation-based intervention. A 'construct' is formed through systematic

assessment of the interplay between interpersonal stresses and personally salient triggering events prior to onset of psychosis; an assumption is that clients' difficulties may represent psychosocial problems. A similar approach is outlined by Longden *et al*. (2011). These techniques acknowledge direct links between life history and experiences of psychosis and some clinicians report their usefulness in practice. However, these approaches tend to assume that intrusions are both meaningful and in some way associated with 'trauma'; this may be problematic as not all clients experiencing psychosis report historical trauma and the clinical effectiveness of such approaches is yet to be thoroughly established. As suggested in the current study, more indirect links may be equally, or more, prominent. Clearly there is a role for clinical judgement in determining the most appropriate approach.

Key finding 9: there was some limited evidence of direct AAT-processing based intervention, including experiential elements of cognitive restructuring or exposure/rescripting.

Some participants highlighted intervention approaches which directly helped clients process AAT-related issues, though these did not appear frequently. There is strong evidence supporting psychological treatment approaches for psychosis, however there remains a paucity of research focussing specifically on intervention approaches for individuals with potential aetiological involvement of 'trauma'. Whilst the Department of Health recently recognised the need to address PTSD symptoms in some individuals experiencing psychosis, there is a call for further research (NICE, 2014).

A minority of participants referred to rescripting processes in addressing trauma-psychosis links, and this is relevant to the third research question. Rescripting and imaginal exposure are common within the trauma literature and are effective in treating PTSD (Ehlers & Clark, 2000; Hagenaars & Arntz, 2012; Smucker *et al.*, 1999). Other potential strategies to address trauma and psychosis links in the literature include re-examining meaning attributed to trauma, using verbal reattribution to generate alternative explanations, and behavioural reattribution to reduce avoidance (Larkin & Morrison, 2006a). Morrison *et al.* (2003) suggest that, when appropriate, clinicians may wish to help clients determine whether positive symptoms reflect traumatic memories; the aim is then to help clients reconceptualise attribution of an external cause to an internal one. Callcott and Turkington

(2006) also advocate 'reliving' interventions where individuals clearly see links between their trauma history and current experiences of psychosis.

Only one participant reported using EMDR with clients in the current study. Interestingly another disclosed, after the debrief, that despite having training in this approach, she was nervous about using it due to the lack of evidence base in psychosis and complexity of the client group. In an exposure-focussed pilot study, Van den Berg and Van der Gaag (2012) conducted a maximum of six EMDR sessions with adults with a psychotic disorder and comorbid PTSD (n=27). Treatment protocols were not adapted and did not involve a stabilisation period, nor did they avoid direct exposure to trauma-related stimuli. The authors concluded that EMDR therapy was safe and effective in the treatment of PTSD in subjects with a psychotic disorder, having a positive effect on auditory verbal hallucinations, delusions, anxiety symptoms, depression symptoms, and self-esteem. Though a discreet stabilisation period was not involved, a potential confounding variable in practice is that clients are often already working within wider teams and taking antipsychotic medication. De Bont *et al*. (2013) conducted a similar feasibility trial and concluded that prolonged exposure and EMDR were equally safe with patients with PTSD and comorbid psychotic disorders. The notion of using such procedures without first establishing a safe therapeutic environment does not fit with the gist of participants' responses in the current study. Van den Berg *et al.* (2013) acknowledge that many clinicians remain reluctant to use trauma-focussed interventions with clients experiencing psychosis. The authors propose this technique is combined with existing CBT approach protocols. They suggest that due to the complexity of the client group, EMDR ought to be administered in combination with other CBT strategies and more comprehensive psychological treatment, such as that outlined by Morrison, Renton *et al.* (2004). Whilst EMDR was not commonly advocated by participants, the gist of the findings was supportive of this last assertion.

Clearly AAT-focussed therapy with clients experiencing psychosis is not a simple procedure and there is currently a lack of scientific basis for use of this approach. Drawing on case examples, Van den Berg *et al.* (2013) provide guidelines on the conceptualisation and treatment of comorbid PTSD in clients with psychosis; they also highlight the importance of safety in this work, and advocate integrative approaches. The current study's findings therefore compliment some of the suggestions outlined in this paper. The authors

suggest that EMDR may be used to address symptoms of psychosis directly linked to specific life events, experiences which indirectly affect psychosis through impact on core beliefs and assumptions about the self, others, and the world, and also psychosis-related imagery, e.g. intrusive images. They suggest that obstacles ought not to dissuade clinicians from using EMDR, and provide adaptive coping strategies to help address these, e.g. working slowly, or possibly using shorter session duration to account for poor concentration or cognitive impairments. An important omission was comment on the processes leading to initial consideration of EMDR; meaningfully identifying potential aetiological events on a timeline, as recommended, is likely to be sensitive and complex, as suggested by the current study, and this is a serious limitation. Currently the question of what constitutes appropriate help for those with psychosis with a history of trauma is unclear. Evidence concerning the efficacy of psychological interventions addressing 'trauma' in people with first episode psychosis remains inconclusive, and the overall quality of existing studies is generally low (NICE, 2014). However, as indicated by the current study's findings, this area is clearly important in the clinical domain, and more research and guidance is warranted.

Key finding 10: 'here and now', or coping related techniques, were prominent in participants' responses, with an emphasis on preparatory work and facilitating safeness.

Participants emphasised the need for preparatory work in working with clients in EIP services, including a focus on coping. Indeed there is much support in the literature regarding the importance of building trust and engagement with clients experiencing psychosis (Beck & Rector, 2005). Callcott & Turkington (2006) suggest that therapy may be best delivered after a period of engagement and in the context of positive support of both professionals and wider social relationships. The current findings provide further support for recommendations made in the literature. Findings stressed the importance of taking time to engage clients. Similarly there is much support for coping-based work for clients with psychosis in the literature. Tarrier and Haddock (2004) outline the roles of normalisation, role play, combining strategies to work towards in vivo implementation, consideration of new responses to existing problems, external verbalisation to avoid internalisation of problems, and more behavioural coping skills.

Therapy processes focussing on the 'here and now' were prominent in the current study. This was interesting in light of the literature highlighting the role of maladaptive coping in maintenance of psychosis. Lee *et al.* (2011) found that maladaptive coping patterns were associated with higher rates of depression and anxiety, and greater levels of negative symptoms in both ultra high risk (n=33) and recent onset (n=22) clinical groups. These coping strategies may have already emerged in prodromal stages, and coping-based interventions are therefore warranted. Phillips *et al*. (2012) reported a similar finding, suggesting that appraisal of stressors differentiated ultra high risk individuals (n=143) from a control group (n=32), and this affected coping and distress levels. Another study found that individuals experiencing early psychosis with a greater sense of self-efficacy and perceived social support, and better use of problem-focused coping strategies coped more successfully with daily stressors (Macdonald *et al.,* 1998). Stress management and development of coping skills are clearly important components of intervention. This clearly has implications for AAT-focussed working, and wider clinical intervention, and goes some way in addressing the third research question.

Key finding 11: clinical change was most commonly gauged through the quality of client engagement, completion of individual therapy goals, and through conversational approaches.

Clients' continued engagement in therapy and completion of therapy goals were commonly cited as ways of gauging clinical change with clients experiencing psychosis in the context of AAT. The changing climate of the NHS means there is increasing pressure to 'prove our worth' as effective clinicians and demonstrate clinically significant change. In a systematic review of therapy engagement measures, Tetley *et al.* (2011) suggested that whilst this construct was important to assess, there was little consensus on a definition of engagement. They concluded that further work was necessary to develop adequate measures, as existing versions lacked generalisability across different clinical populations. Whilst there was some limited evidence of use of outcome measures in the current study, symptom rating scale scores may only comprise a limited part of outcome measurement in psychosis (Mortimer, 2007). An increasingly popular approach is measuring therapeutic alliance from the client's perspective, which would fit with the client-centred nature of participants' responses. For example the Session Rating Scale (Duncan *et al.,* 2003) may be useful in providing services with more objective data. Additionally, this may be useful in terms of maximising therapy

effectiveness, considering the links between client feedback and positive outcomes (Lambert, 2010; Shimokawa *et al*., 2010). The use of reliable and valid methods of gauging clinical change will likely form an important part of future practice, and this is likely to have implications for clinicians in EIP services. Although more research is needed, it is important to acknowledge the limits of self-report, and inherent problems with assuming that members of the same 'clinical population' are in some way homogenous.

Key finding 12: Service level factors were considered when working with clients presenting with AAT-psychosis links. Participants were conscious of competency levels and discussed the option of onward referral. They acknowledged non-psychology colleagues' wariness and uncertainty in working with AAT-related issues.

Service level factors appeared to affect the ways AAT-psychosis links were potentially addressed in practice. The option of referring clients was raised in the context of AAT work, e.g. adult psychological therapies service referral. Whitfield *et al.* (2005) suggest that even just identifying trauma-symptom associations can be valuable in terms of making appropriate onward referrals. Participants were conscious of the need to work within levels of competence, as outlined in BPS literature '*The Core Purpose and Philosophy of the Profession'* (Division of Clinical Psychology, 2010). Finally, participants reflected on their non-psychology colleagues' lack of confidence in working with AAT-related issues. Some studies suggest that as few as 30% of mental health staff had received training in assessing for abuse (Read *et al.*, 2007). Clearly there is need for widespread training on how to ask and appropriately respond to these issues, including dissemination of knowledge and skills from evidence-based clinical approaches (Fadden, 2006). This is all the more important considering the seeming prominence of traumatic and adverse experiences within this clinical population. Multidisciplinary team approaches have been the lynchpin for people experiencing psychosis for the past two decades (Leadbetter *et al.* 1994; NICE, 2014). Running reflective practice groups may be a useful method of helping foster inclusive psychologically-informed approaches to clinical work within EIP settings (British Psychological Society, 2007). The next section will consider the limitations of the current study and the implications of findings. It is first important to discuss epistemological issues as relevant to the current study.

Critique of Findings

Epistemological issues

Qualitative researchers rely, perhaps not explicitly, on an underlying logic of quantification in making sense of data patterns (Morgan, 1993). Qualitative content analysis is appropriate when the data and research aims would benefit from description of patterns in the data, as well as the benefits of grounded theory in making interpretations about the reasons for these patterns. Morgan's (1993) description of qualitative content analysis is somewhere between numerical quantitative content analysis and interpretative aspects of grounded theory, and this approach best describes the philosophical underpinning of the current study. Ontological conditions and epistemological implications of in-depth interview research are discussed by Lucas (2012). The author mentions the tendency in qualitative research for researchers to stress the limits of generalisability, but then go on to generalise findings anyway. Indeed a central ontological condition that researchers must address when considering participant selection processes, is the 'lumpiness and complexity of the social world' (Lucas, 2012, p.391). Where possible, probability sampling gives every potential participant a non-zero chance of selection, which helps address the problem of social world lumpiness to some extent. Where non-probability sampling is used, Lucas (2012) warns against generalisation of findings to wider populations, suggesting that all one can do is note that these findings exist. For this reason, efforts were made to maximise the sample's representativeness in the current study's recruitment strategy. Whilst non-probability sampling can offer each participant's contribution as an idiosyncratic instance, it remains limited in terms of wider applicability. However, purposive sampling frameworks can be useful, particularly in selecting potential participants who may provide rich information on issues of importance (Patton, 1990).

Credibility checks were used for the content analysis approach for parts A and B data, as outlined in the method chapter. Ideally further procedures would have been useful. External credibility checks were not deemed necessary for the more interpretative thematic analysis performed upon part C data, as outlined in the method chapter. If the study was repeated, multiple perspectives may help bolster credibility for part C data, perhaps by

utilising different researchers in the coding process, or at least checking the findings with participants to gauge the fit with their experiences. In line with Shenton's (2004) suggestions, the researcher attempted to present a representative picture of the issues under study, and provide enough detail of the study context to allow the reader to assess transferability of findings. In clearly stating each stage of the research, the current study goes some way in addressing the author's dependability criteria and a similar study could be replicated. The above processes attempted to demonstrate that themes emerged from the data not the researcher's preconceived ideas. There were a number of limitations in the current study, and these are outlined in the next section.

Limitations

The sample size of this study was small, despite efforts to maximise recruitment. This limits the extent to which findings may be applied to similar settings, and further research is needed to provide further support for the claims outlined in the current thesis. However, one benefit of a smaller sample size was the potential for data immersion, which may have helped enhance the validity of in-depth inquiry into the subject matter (Crouch & McKenzie, 2006). Larger samples in qualitative studies can limit the deeper level analysis which is central to these approaches. Ultimately, sample size is a matter of judgement with qualitative research, though the limitations of the uses to which the findings are put, ought to be considered (Sandelowski, 1995).

Clinical psychologists were the only professionals recruited to the current study. However, it may have been interesting to recruit psychological therapists and psychiatrists too. The potential for self-selection biases must also be acknowledged with the recruitment strategy. Whilst the AAT focus was withheld from participants in the study advert, participant information sheet, and during parts A and B of the procedure, one cannot assume that the sample was representative of all clinical psychologists working in early psychosis. Indeed it is difficult to ascertain participants' motivations for engaging in the study. There are various factors which may influence individuals' decisions to participate in research studies. It is important to consider recruitment issues which may lead to a certain biasing of responses; these may include different levels of optimising and impression management. For example, those who may exert more cognitive effort may enjoy the intellectual challenge, opportunity for expression, and altruistic feelings (Krosnick, 1991). Wishing to help a

trainee, or perhaps communicate specific agendas or personally meaningful issues may be other examples, potentially including AAT-related issues. The fact that all participants met the criteria to continue to part C of the procedure may also be evidence of this; indeed self-selection biases are a common occurrence in psychological research. Similarly, there may have been issues which participants did not wish to reflect on; they may have 'steered away' from topics on which they were not confident, in a bid to prevent giving undesirable impressions. This may explain the relative paucity of responses relating to mechanisms involved in AAT-psychosis links; in reality the sample were grappling with high levels of complexity and unknowns, though not all participants reflected on this. These variables may limit the representativeness of the study sample. Similarly, one must acknowledge that participants were solely recruited from EIP services. It may be that AAT-psychosis links are conceptualised differently in other settings, such as CMHT or adult therapies services.

Important design limitations should be addressed if the study were to be replicated. The covering letter and interview schedule asked clients to imagine the client in the vignette had "been allocated […] for assessment and psychological therapy". In hindsight, this wording did not fit with the client-centred approach adopted by many participants. Indeed referral does not necessarily mean that assessment or therapy will necessarily commence. The broad focus of the study did not allow for differentiation between different types of traumas and adversities, nor did it differentiate between childhood and adult experiences, which is a clear limitation. Indeed one may assume that experiences during formative years may be more significant in clinicians' sense making of psychosis and wider distress, though the coding framework did not consider the potential for varying impact at different life stages.

Whilst interviews were conducted in a relatively standardised way, the semi-structured method cannot eliminate the possibility of researcher bias. In hindsight, other data collection methods could have helped minimise this potential. Verbal responses were recorded in the current study, though written responses have been used elsewhere in vignette research (Johnson & Lamontagne, 1993). However, this approach may have been less attractive for prospective participants. There are inherent limitations with vignette methodology, especially in using a single vignette. It has been suggested that 'paper people' remain rather abstract, and impose lower interpretational demands on participants, compared to videos or real life examples. Similarly, written vignette information is more difficult for

participants to retain, compared to those which are observed visually (Hughes & Huby, 2004). Whilst written vignettes were practical in light of pragmatic constraints, more visual methods may have improved applicability to real life processes, and thus improved external validity. Indeed the situational context is likely to impact upon participants' interpretations (Loman & Larkin, 1976). The use of a single clinical vignette means the applicability of results remains limited. However, a strength of selecting vignette content was that specific representations of complex real life practice were captured. In terms of believability, three participants rated the vignette as 'extremely believable', five rated it 'very believable', and three as 'somewhat believable' following debrief. This suggested some degree of external validity, though further exploration of factors limiting believability would have been useful.

Whilst the development of a data-driven coding framework allowed insight into a range of relevant issues, its inherently superficial nature did not allow the issue of 'significance' to be gauged meaningfully for part A and B data. The main method of gauging 'importance' in the findings was by calculating the frequency of particular code utterances, and proportion of participants that raised certain themes. An assumption was that higher frequencies and proportions were indicative of increased importance, and this in particular informed the secondary analysis, interpretation of findings, and formation of the conceptual map. This assumption did not account for the potential significance of less frequent utterances, or points of interest which may have stood alone. Also, there are inevitably many reasons why particular utterances might be more or less frequent, not necessarily indicative of importance, and this is a limitation. For example personal interest in a particular subject may increase a particular utterance frequency, as may certain response styles, e.g. regular summarising. Whilst this method was deemed an appropriate way of gauging 'importance', especially considering the complexity of data, other qualitative methods may have allowed different points of interest to be elicited. For example, different findings may have resulted from use of grounded theory or interpretive phenomenological analysis approaches. Despite its limitations, the content analysis method was justified in providing reliable information on the extent to which certain factors were highlighted by participants, particularly in relation to assessment phases, as demonstrated visually on the conceptual map. Whilst content analysis data could have been analysed quantitatively, this was not deemed appropriate for the current study. For example, increased statistical support for the 'extent to which' certain factors appeared would not have been meaningful with a

small sample size, and would not have been sufficient in addressing the wider research questions. The non-linear data were most appropriate for qualitative analysis.

In terms of the inter-rater reliability exercise conducted as part of the current study, the overall agreement rate of 69% was deemed sufficiently close to the '70% agreement or above' as evident in the literature. With the adoption of stricter agreement criteria, however, agreement rates dropped quite substantially to 49% and 58% for both raters respectively. It was apparent from the debriefing exercise that the inherent complexity of the coding framework may have prevented observation of higher levels of agreement. A potential method of bolstering the reliability of the coding framework would have been to redefine confusing categories/codes or problematic aspects of the framework as identified by raters; one could then engage further raters in completing the same exercise to check whether the changes to the coding framework led to increased levels of agreement. Unfortunately this was not possible in the current study due to pragmatic constraints, and in particular the very limited number of responses from potential raters/volunteers. Issues relating to inherent levels of complexity within the coding framework could not be resolved and, in light of constraints, it was felt that the lenient agreement criteria were justified in the current study.

Using participants' own terminology for exploring AAT-related issues in part C of the procedure was useful in ensuring conversational flow. However, this may have itself facilitated broad discussion, which could account for the dominance of broad conceptualisations of AAT in the data, and this potentially threatens internal validity. For example some participants talked at length about childhood abuse, while others discussed issues such as bullying in adult life. Focussing on specific factors such as 'childhood abuse' may have been one way of limiting the phenomena under investigation, at the risk of diverting from the interview narrative. Whilst themes emerged from part C data through thematic analysis, one must note that overarching categories did at times relate, somewhat, to interview questions; for example definition-related themes in responses to 'do you have a definition of psychological trauma?' This was to be expected and, despite diligence on behalf of the researcher, one cannot assume that all themes emerged entirely naturally.

There are clear limits to the meaningfulness of the AAT construct, as outlined earlier in this chapter. The nature of the interview method and qualitative analyses meant that assumptions had to be made in categorising between factors which were 'explicitly AAT-related' and 'not-explicitly-AAT-related'. However, it may be conceptually

problematic implying there are clear-cut distinctions present, introducing potential threats to internal validity, and these tensions are reflected in the wider literature. For example, there may have been instances whereby AAT-related issues were represented in participants' minds, though not captured or accounted for in the coding framework where this was not discussed explicitly. The AAT construct becomes further complicated when considering other methodological problems relating to difficulties in quantifying severity of 'trauma' and 'abuse', as outlined in the future research section. Similar conceptual problems may have arisen by introducing, what were essentially artificial groupings of cognitive, schematic, and emotional factors. A limitation here was the difficulty in distinguishing between the effects of single events and more complex AAT, particularly considering the temporal nature of interactions and effects on cognitive, schematic, and emotional factors. However, few alternatives were possible in the current study without interrupting participants, which may have affected interview flow, and due to pragmatic constraints such as limited time. Despite the above limitations, there are some important theoretical and clinical implications of the current study's findings.

Theoretical implications

The current findings challenge homogenous understandings of psychosis in practice. Treating all clients the same is likely to compromise the likelihood of positive therapeutic outcomes, and both research and clinical approaches must continue to recognise the importance of individual differences. There is a growing body of evidence supporting the efficacy of psychosocial interventions in early psychosis (Penn *et al.*, 2005). Though more RCTs are needed, such intervention may be beneficial across varied domains and can help clients with symptomatic and functional recovery. In light of such evidence, it is becoming increasingly difficult to justify approaches which prioritise biology and downplay the role of psychosocial factors in the onset and maintenance of psychosis. Similarly, overly simplistic psychological and psychosocial approaches which suggest that 'trauma causes psychosis' are equally insufficient, and clearly integrated biopsychosocial approaches are warranted in this field. In assuming that stand alone factors sufficiently explain variance in clients' experiences of psychosis, one runs the risk of focussing too narrowly on certain variables and neglecting others which may be important. However, with the case of AAT-related factors, and indeed with the AAT construct itself, one risks broadening criteria to be so inclusive that specificity and meaningfulness are diminished. One of the key implications in

the current study is that clinicians appear to operate within a more heterogeneous world than researchers may sometimes be willing to promote. The current study's findings have some important clinical implications, which will be outlined in the next section.

Clinical Implications

The findings of the current study may be of interest to clinicians working in EIP settings, including non-psychologists who work clinically with clients experiencing psychosis with AAT histories. Findings provide a reminder of the complexities involved in planning interventions with this client group, and the centrality of client-led collaborative processes and facilitating development of coping skills. At an appropriate time, clinicians may wish to collaboratively establish whether clients could find it useful to explore potential AAT-psychosis links. Exploration of potential links was dependent upon certain factors and an appropriate context, and suspected links did not necessarily mean that AAT-related factors were explored or addressed in therapy. Broad ranging indirect effects of AAT were identified within the data, most notably the impact on clients' beliefs relating to the self, others, and the world. It may be clinically useful to consider helping clients formulate these within personal narratives. Clinicians may wish to consider different options for further AAT-specific intervention; having clients present with AAT-related problems does not necessarily implicate direct AAT-focussed intervention, and working with the indirect effects may be equally, if not more, important. However, explicitly choosing not to address 'trauma' may be an important clinical decision in itself, for example if this is explicitly against clients' wishes or if they lack adequate coping skills. Clinicians might then consider how to support clients without imposing AAT-focussed interventions. In any case, the benefits of assessing AAT history may be limited outside of the context of a collaborative working relationship. This may have implications for the NHS Confederation (2008) policy suggesting that all service users should be asked about abuse in assessments. Clearly this is a complex issue and there is a key role for clinical judgement in guiding responsible interventions.

Findings may be relevant to clinical psychology training programmes and psychosis teaching in healthcare settings. Trainers may wish to consider adopting wider categories of AAT in core teaching on the trauma-psychosis literature, as used in the current study. However, participants' responses were suggestive of diverse and heterogeneous approaches

to clinical intervention and there was little evidence of prioritisation of any single factor, indeed AAT was one important factor among many. This finding is a reminder of the importance of working broadly with clients' distress, beyond psychosis, within EIP settings. As interpersonal factors were commonly implicated within broader distress, there is a key role for systemic work, though integrative approaches were commonly cited by participants too. There was overwhelming support for formulation-based working within the context of AAT and outside of this. Facilitating formulation-based practice within teams, providing consultation as necessary, could be an important role for clinical psychologists working in EIP settings, e.g. reflective practice groups.

More generally the results confirmed that clinical psychologists play a key role in EIP services. Clinical psychologists' broad skills are well suited to meeting EIP clients' needs, especially considering AAT-psychosis links and the complexities therein. In the context of NHS cuts and limited budgets, services should consider organisational mechanisms which help disseminate skills and knowledge within wider teams; simplistic CBT approaches are unlikely to be sufficient by themselves. Future research is warranted in the trauma-psychosis field, and the current study raised a number of potential areas for future exploration.

Future research

More research is needed exploring the specific ways in which clinicians make sense of trauma-psychosis links, and the manner in which this impacts on therapy processes. Participants focussed heavily on cognitive/schematic and/or emotional factors in explaining psychosis and wider distress, both within the AAT context and outside of this. More research specifically considering how these factors are most helpfully addressed, taking into account individual differences and alternative explanations of psychosis, may be useful in informing training methods.

The current study highlighted the role of clinical judgement in aiding complex decisions with people experiencing psychosis in the context of AAT. Future research specifically focussing on clinical decision making could help provide further insight into the specific processes involved. For example, Morrison *et al.* (2003) suggest that psychosis and PTSD may occur upon a spectrum in response to traumatic events. Participants did not

elaborate on these complexities and the existing clinical approaches to resolving such issues, as practiced by those in the field, remain largely unknown. More specific qualitative exploratory research may help elucidate specific mental models or approaches, which may, again, have implications for clinical pathways and training methods. A possible future research project could adopt IPA methodology to overtly investigate the experiences of a sample of clinical psychologists' working with early psychosis in relation to: inquiring about AAT (including issues such as how, when, and why), making sense of links between AAT and psychosis, and the implications for therapeutic intervention. Use of IPA methodology, which is particularly well suited for exploring clinicians' experience, would allow identification of similarities and differences which were perhaps unattainable with the current study's methodology (Wilkes & Milton, 2006). While explicitly disclosing the research aims from the outset may introduce certain methodological issues, there would be potential for rich data collection through use of interviews, and further exploration of topics raised by the current study's participants. The exploratory nature of the current study did not facilitate rich data regarding different approaches toward clinical decision making as outlined by Croskerry (2009). It may be that a combination of 'system 1' approaches (based on intuitive pattern recognition) and 'system 2' approaches (more conscious reasoning processes) are utilised by clinicians. A more overt semi-structured interview method explicitly seeking to explore the above complexities may be useful.

A key methodological problem in much of the literature is the difficulty in quantifying severity of 'trauma' and 'abuse', as outlined elsewhere in the current thesis. Focussing future research on clinicians' conceptualisations of the phenomena involved may ensure that findings remain clinically useful. The current study did not differentiate between conceptualisations of type I and II traumas, or the impact at different stages of development. One might assume that earlier psychological insults have the potential to cause more developmental disruption. Indeed practice may differ significantly in light of such information, and clarification of key clinical processes may help inform practice and training methods for mental health staff teams. Future studies could utilise multi-vignette designs to help isolate important factors which affect clinical decision making in practice.

Participants used a range of clinical approaches, beyond those outlined in NICE guidelines. Due to its potential prominence, more research is needed investigating the use of integrative clinical approaches in practice. Despite frequent reports of their usefulness with

complex clients, integrative approaches are not easily amenable to RCT methodology. The limits of RCT methodology in psychotherapy research, and wider medical settings, are widely acknowledged (Prescott *et al.,* 1999). Commenting specifically on problems with RCTs in trauma research, Hunt (2012) highlights the difficulty in matching seriousness of trauma, and the near impossibility of conducting well-controlled studies. A range of research methodologies are needed in order to further develop this literature, perhaps relying upon observational study designs or interrupted time series analyses (West *et al.,* 2008). Indeed poorly developed treatment protocols may impact upon client participation and ultimate recovery potential (Bendall *et al.,* 2011; Bendall *et al.,* 2013). This is all the more important considering that new generation antipsychotic drugs have not fulfilled the promise of substantially increasing effectiveness, or tolerability in relation to symptoms of psychosis (Kingdon, 2006).

Finally, there is a need for greater differentiation when it comes to defining 'abuse' and 'trauma', especially considering whether instances of severe adversity are included. The current study suggested that clinicians assumed broad conceptualisations of these phenomena, suggestive of external validity for wider categories of 'adversity', including events and experiences in adulthood. As clinicians deal with clients 'on the ground', they are perhaps more likely to naturally assume heterogeneous approaches out of necessity, whereas researchers may not be. Greater collaboration and integration between clinicians and researchers is likely to be helpful (Wiechelt *et al.,* 2005).

Whilst academic debate over the specific roles of 'trauma' and 'abuse' is likely to continue, research should continue to explore psychosocial factors as relevant to clinical practice. Despite its potential to benefit clients, there remains a general paucity of psychosocial study and further research is needed.

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Appendices

Appendix 1: literature review search strategy

The first literature search was conducted between 19.01.13 and 20.01.13, and the second on 18.05.14. The following databases were used to search for peer-reviewed journal articles published in English: OVID was used to search AMED, Embase, Medline, PsycARTICLES, PsycINFO. EBSCO was used to search the CINAHL database. Title and keyword searches were conducted using the following search terms (search combinations comprising both literature searches are outlined below):

1. (clinic* practice OR clinc* OR practice Or psych* therap* OR therap* OR treat* OR intervention* OR psychotherap* OR rehab* OR plan* OR manage* OR implication* OR recommendation* OR process*) AND
2. (theor* OR models OR concept* OR formulat* OR make sense) AND
3. (trauma* OR advers* OR abus* OR life event* OR event* OR life experience* OR lived experience* OR experience* OR violen*) AND
4. (psychos* OR psychot* OR schizo* OR voice hearing OR voice* OR delusion* OR hallucinat*)

Search 1:
1.1: OVID used to search AMED, Embase, Medline, PsycARTICLES, PsycINFO, search terms 2,3, and 4 (2-4, as above) by TITLE (a) and then KEYWORD(b) = 210(a) + 46 results after removing duplicates. Then after applying exclusion criteria and irrelevant articles = 1 result retained after the first literature search. Another relevant paper was identified in the second literature search.

1.2: EBSCO used to search CINAHL database using search terms 2, 3, & 4 by TITLE(a) then WORD IN MAJOR SUBJECT HEADING(b) (excluding Medline results) = 16 + 317(b) results after removing duplicates and irrelevant articles = 0 results retained. Another relevant paper was identified in the second literature search.

Search 2:
2.1: OVID used to search AMED, Embase, Medline, PsycARTICLES, PsycINFO, all 4 search terms (1-4, as above) by TITLE (a) and then KEYWORD(b) = 105(a) + 0(b) results after removing duplicates. Then after applying exclusion criteria and irrelevant articles = 3 results retained. Another relevant paper was identified in the second literature search.

2.2:EBSCO used to search CINAHL database using all 4 search terms by TITLE(a) then WORD IN MAJOR SUBJECT HEADING (excluding Medline results) = 8(a) + 65(b) results after removing duplicates and irrelevant articles = 0 results retained from literature searches on both occasions.

Additional searches for retained articles: lead author searches, cited reference list = 27 results **= TOTAL OF 31 ARTICLES RETAINED**

Appendix 2: extra information surrounding national policy (source: email contact with former members of the National Mental Health Development Unit).

The National Mental Health Development Unit (NMHDU), launched in April 2009, was charged with supporting the implementation of this NHS briefing policy in a bid to promote best practice. Whilst initially funded by the Department of Health in collaboration with the NHS, Local Authorities and other major stakeholders, it was disestablished in 2011 as part of the Government's reduction of quangos; however, much of the published policy is still implemented. The aforementioned NHS briefing paper outlined the findings of a two year pilot involving fifteen mental health provider trusts across the country, investigating the efficacy of one-day sexual abuse staff training and supportive practice guidance on routine inquiry into abuse in mental health services. In essence the policy suggested that, after training, staff should routinely inquire about violence and abuse in mental health assessments, respond to disclosures, and provide ongoing therapeutic support through the care planning process. The pilots were successful in that training appeared to enable staff in undertaking routine exploration of abuse. National training was scheduled to be rolled out before funding was cut and the NHMDU disestablished. Despite the absence of the NHMDU, these policies remain in effect. The National Centre for Social Research is conducting research into the long term effect of violence, trauma and abuse among service users, considering how it is experienced by different groups.

Appendix 3: University of Leeds ethical approval letter

Faculty of Medicine and Health

Research Office

University of Leeds
Worsley Building
Clarendon Way
Leeds LS2 9NL
United Kingdom

✆ +44 (0) 113 343 4361

UNIVERSITY OF LEEDS

30 May 2013

Mr Thomas Mountjoy
Psychologist in Clinical Training
Programme in Clinical Psychology
Leeds Institute of Health Sciences
Charles Thackrah Building
University of Leeds, LS2 9LJ

Dear Thomas

Re ref no: **HSLTLM/12/066**

Title: **Do clinical psychologists working in early psychosis connect clients' experiences of trauma with current presentation and does this inform therapy processes?**

I am pleased to inform you that the above research application has been reviewed by the Leeds Institute of Health Sciences and Leeds Institute of Genetics, Health and Therapeutics and Leeds Institute of Molecular Medicine (LIHS/LIGHT/LIMM) joint ethics committee and I can confirm a favourable ethical opinion based on the documentation received at date of this letter and granted subject to the following condition:

- **No research commences until Trust R&D approval has been obtained.** (Please provide confirmation of NHS R&D approval to the committee when it has been received)

Document	*Version*	*Date*
Ethical_Review_Form_V3 (3)_29_04_13_SID200256050	1	30.04.13
BPS SOURCE_OFFICIAL CONTACT EMAIL_26.04.13	1	30.04.13
Consent Form_26.04.13	1	30.04.13
Interview schedule_26.4.13	1	30.04.13
opt in form_26.04.13	1	30.04.13
Participant Information Sheet_26.4.13	1	30.04.13
Poster advert_26.04.13	1	30.04.13
SERVICE MANAGERS_OFFICIAL CONTACT EMAIL_26.04.13	1	30.04.13
Vignette_draft 4_with covering letter_26.04.13	1	30.04.13
R and D_OFFICIAL CONTACT EMAIL_26.04.13	1	30.04.13
HSLTLM12066 Reviewer comments_resubmitted version	1	21.05.13
Participant Information Sheet_21.5.13	2	21.05.13
R and D_OFFICIAL CONTACT EMAIL_21.5.13	2	21.05.13

Please notify the committee if you intend to make any amendments to the original research as submitted at date of this approval. This includes recruitment methodology and all changes must be ethically approved prior to implementation. Please contact the Faculty Research Ethics Administrator for further information FMHUniEthics@leeds.ac.uk

Ethical approval does not infer you have the right of access to any member of staff or student or documents and the premises of the University of Leeds. Nor does it imply any right of access to the premises of any other organisation, including clinical areas. The committee takes no responsibility for you gaining access to staff, students and/or premises prior to, during or following your research activities.

Please note: You are expected to keep a record of all your approved documentation, as well as documents such as sample consent forms, and other documents relating to the study. This should be kept in your study file, which should be readily available for audit purposes. You will be given a two week notice period if your project is to be audited.

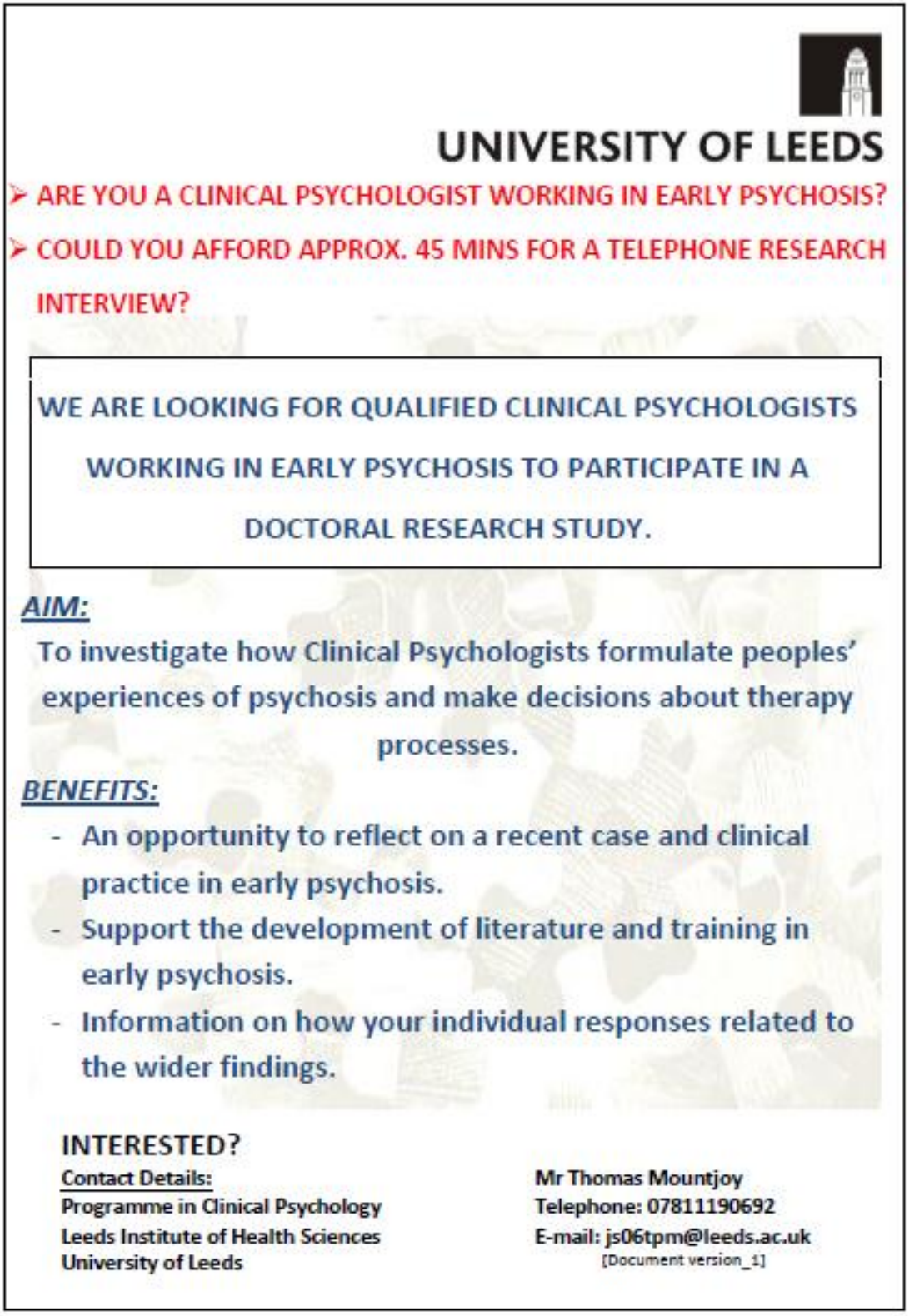
It is our policy to remind everyone that it is your responsibility to comply with Health and Safety, Data Protection and any other legal and/or professional guidelines there may be.

I wish you every success with the project.

Yours sincerely

Professor Darren Shickle
Acting Chair, LIHS/LIGHT/LIMM Joint REC, University of Leeds

Appendix 4: Study advert



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- ARE YOU A CLINICAL PSYCHOLOGIST WORKING IN EARLY PSYCHOSIS?
- COULD YOU AFFORD APPROX. 45 MINS FOR A TELEPHONE RESEARCH INTERVIEW?

WE ARE LOOKING FOR QUALIFIED CLINICAL PSYCHOLOGISTS WORKING IN EARLY PSYCHOSIS TO PARTICIPATE IN A DOCTORAL RESEARCH STUDY.

AIM:

To investigate how Clinical Psychologists formulate peoples' experiences of psychosis and make decisions about therapy processes.

BENEFITS:

- An opportunity to reflect on a recent case and clinical practice in early psychosis.
- Support the development of literature and training in early psychosis.
- Information on how your individual responses related to the wider findings.

INTERESTED?

Contact Details:

Programme in Clinical Psychology
Leeds Institute of Health Sciences
University of Leeds

Mr Thomas Mountjoy
Telephone: 07811190692
E-mail: js06tpm@leeds.ac.uk
[Document version_1]

Appendix 5: Participant information sheet

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Participant Information Sheet

How do Clinical Psychologists formulate peoples' experiences of psychosis and make decisions about therapy processes?

Introduction
I would like to invite you, as a clinician in the field of early psychosis, to participate in a doctoral research study. Before making a decision, please consider the information below which outlines the basis of the research and what is asked of participants. Please take some time considering whether you would like to participate in this study.

Background to and purpose of the study
In recent years, evidence supporting the efficacy of psychological interventions in the early stages of psychosis has grown steadily. I am interested how clinical psychologists formulate contributory factors when making sense of clients' experiences of psychosis. The wider context of the study is how clinicians gather information and make clinical decisions in practice.

Despite an increased evidence base, and widespread interest, there still remains a paucity of research investigating how clinical psychologists work with early psychosis. It is hoped this research will provide an understanding of the ways that formulating different factors may impact upon the process of therapy. Increased understanding of these relationships may fill significant gaps in the research literature and help elucidate theory-practice links.

Who is eligible to participate in the study?
If you are a qualified clinical psychologist, registered with the Health and Care Professions Council (HCPC), and working within an Early Intervention Psychosis service in the United Kingdom, we would like to invite you to participate. You should be working directly with clients and be prepared to reflect upon examples of recent clinical work.

What will happen if I take part?
The lead researcher will arrange *a single telephone interview lasting from approximately 45 minutes* with an additional 30 minutes available for a debrief following the research interview, should you wish to discuss the research process. The telephone interview should take place in a quiet place where you will not be interrupted, preferably not during NHS clinical time.

What will I be asked to do?
You will be asked to reflect upon a complex client in your service who has been engaged in therapy with you for at least 3 months. This individual must be somebody you are confident has experienced a first episode of psychosis. You should be prepared to talk for approximately 5-10 minutes about your perceptions of the salient factors contributing to this client's experience of psychosis. It will be useful hearing how your formulation informed your clinical work with this client. This part of the research interview will involve a little preparation

and you may use notes if you wish. Any notes must not contain client-identifiable information.

You will be asked to 'think aloud' your initial responses to a hypothetical clinical vignette, which will be sent to you in advance. You will be asked to consider the potential salient factors which may contribute to the client's experiences of psychosis, consider the information necessary to best make sense of their experiences, and give ideas regarding possible options for therapy. A part of the research interview will also be devoted to more specific questions regarding certain aspects of your approach and working practice. Importantly, the study is not an examination of knowledge but rather seeks to explore how clinicians make sense of psychosis, and how this links to clinical practice.

Do I have to participate?
It is entirely your decision whether you take part in this study or not. Should you decide to participate, please complete the consent form (attached- providing initials and name electronically will be accepted in lieu of a wet ink signature) and return to the lead researcher via email (preferably an NHS email address) or the postal address below. You will then be contacted in due course and a suitable time for the research interview will be arranged. Ideally all interviews will take place between May and November 2013. You may complete the Opt-In form via telephone prior to the interview, or return this with the consent form if you wish. Please keep this information sheet in your records. If you do not wish to participate, simply discard this information sheet and attached documents.

You may withdraw from the study prior to, during, or after the interview without giving a reason. I am obliged to say that confidentiality would only be broken under exceptional circumstances. There may be times when issues of harm to self and others or professional conduct matters may require immediate discussion with an appropriate supervisor from my supervisory team. After discussing concerns with this supervisor, and if appropriate, I would contact you to explain the situation and discuss how to take the issue forward. There may be situations when participants can address such issues with their own manager/supervisor (preferred option), however there may be circumstances whereby I would need to discuss concerns with appropriate individuals within your trust/governing body, e.g. manager, Trust, or HCPC.

What are the benefits of participating in this study?
This study will explore important factors involved in clinicians' decision-making and identify the practice of clinical psychologists working in early psychosis. In the short term you will have the opportunity to reflect upon a recent case and your clinical approach. In the longer term your involvement and expertise may help develop the clinical psychology literature in the field of psychosis. This may have important implications for training, plus potential value for clinicians and their clients within early intervention services. Upon completion of the study, all participants will be informed of the findings. I will also aim to provide you with information on how your responses fitted within the wider findings upon completion of the study.

Will information be kept confidential?
All information obtained will be kept in accordance with the Data Protection Act (1998). Information collected will be kept strictly confidential and accessible only by those involved directly in the study. Both the interview responses and debrief will be recorded with a dictaphone. The interview will later be transcribed anonymously by a paid transcriber for analysis by the lead researcher. Participants are asked to refrain from using client-identifiable information and use pseudonyms where necessary. In the event of a lapse, this information will be removed from the audio recording and will not be subsequently transcribed. The importance of not disclosing such information will then be reiterated at the start of the interview.

Some quotes from the interview may be used anonymously in the results section of the final thesis. Additionally, the results from the study may be formally submitted for publication and presentation at conferences. Upon completion of the study, the raw data will be handed to the department's Research Officer for secure archiving and later safe disposal in line with University of Leeds policy.

Who is involved with the study?
The lead researcher is Tom Mountjoy, Psychologist in Clinical Training, and the project will be submitted in part fulfilment of the requirements for the degree of Doctor of Clinical Psychology, University of Leeds. The research supervision team includes:

Dr. Mitch Waterman, Senior Lecturer in Emotion and Cognition,
Dr. Alastair Cardno, Senior Lecturer in Psychiatry,
Dr. Anjula Gupta, Consultant Clinical Psychologist.

Does this study have ethical clearance?
The project has been approved by Leeds Institute of Health Sciences and Leeds Institute of Genetics, Health and Therapeutics and Leeds Institute of Molecular Medicine (LIHS/LIGHT/LIMM) joint ethics committee at the University of Leeds.

Contacts for further information:
Should you require further information about the study, at any time, please contact a member of the supervisory team (details below). You may also wish to contact Dr. Gary Latchford who is independent of the study but employed within the University of Leeds.

If you are interested in participating in this study, I would be pleased to hear from you. Please complete the consent form (attached) and send via email OR post to:

Lead Researcher:
Thomas Mountjoy
Programme in Clinical Psychology
Leeds Institute of Health Sciences
Charles Thackrah Building
Clarendon Road
Leeds, LS2 9LJ
Telephone: 07811190692
E-mail: js06tpm@leeds.ac.uk

Thank you for taking the time to read this information sheet.

If you have any questions, please contact a member of the supervisory team:

Primary Academic Supervisor:
Dr. Mitch Waterman
Senior Lecturer in Emotion and Cognition
Institute of Psychological Sciences
University of Leeds
Leeds LS2 9JT
Telephone: 0113 3435733
E-mail: M.G.Waterman@leeds.ac.uk

[Document version_2]

Academic Co-Supervisor:
Dr. Alastair Cardno
Senior Lecturer in Psychiatry
Leeds Institute of Health Sciences
Charles Thackrah Building
Clarendon Road
Leeds, LS2 9LJ
Telephone: 0113 3432720
E-mail: A.G.Cardno@leeds.ac.uk

Field Supervisor:
Dr. Anjula Gupta
Consultant Clinical Psychologist
Psychology and Psychotherapy Service
17 Blenheim Terrace
Leeds
LS2 9HN
0113 3431962
Email: anjula.gupta@nhs.net

If you have concerns about the current project, you may wish to contact Dr. Gary Latchford who is not involved directly in the project but aware of its aims:

Independent Contact:
Dr. Gary Latchford
Research Director
Programme in Clinical Psychology
Leeds Institute of Health Sciences
Charles Thackrah Building
Clarendon Road
Leeds, LS2 9LJ
Telephone: 0113 3432736
E-mail: g.latchford@leeds.ac.uk

[Document version_2]

Appendix 6: Consent form

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Consent Form

Title of study: How do Clinical Psychologists formulate peoples' experiences of psychosis and make decisions about therapy processes?

Name of Lead Researcher: Thomas Mountjoy

Please *add your initials to the boxes* to indicate your agreement with each statement. Additionally, please *complete your name and date* at the end of this form and return to the lead researcher.

1. I confirm that I have read the participant information sheet (version 2) for this study, have understood it, and have had the chance to ask questions. I am satisfied with the responses given. ☐
2. I meet the inclusion criteria outlined in the participant information sheet. I am a practising fully qualified clinical psychologist working in a UK-based Early Intervention Psychosis Service. ☐
3. I understand that my participation is voluntary and that I am free to withdraw from the study at any time, without giving explanation. ☐
4. I understand that patient identifiable material must not be disclosed if discussing real-life case material. ☐
5. I understand that the single telephone interview will be audio-recorded and later transcribed, and that anonymised quotes may be used in the write up of this research study and subsequent publications. ☐
6. I agree that Thomas Mountjoy (lead researcher) will be able to access non-anonymised data and Dr. Mitch Waterman and Dr. Alastair Cardno (academic supervisors) and Dr. Anjula Gupta (field supervisor) will have access to anonymised data. ☐
7. I understand that Thomas Mountjoy (lead researcher) may not be able to maintain confidentiality if disclosures relating to breaches of professional conduct are made. ☐
8. I agree to take part in the above study and understand that completion of this form will be accepted in lieu of a wet ink signature. ☐

....

NAME OF PARTICIPANT **Date**

[Document Version _1]

Appendix 7: Opt-in form

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OPT-IN FORM

Should you wish to participate in this study, having read the Participant Information Sheet, please complete the Consent Form and return via email or post (details below). You may complete and return this Opt-In form at the same time OR complete this via telephone prior to the research interview if you wish:

Email:

js06tpm@leeds.ac.uk

Post:

Thomas Mountjoy
Psychologist in Clinical Training
Programme in Clinical Psychology
Leeds Institute of Health Sciences
Charles Thackrah Building
Clarendon Road
University of Leeds
LS2 9LJ

Title of study: How do Clinical Psychologists formulate peoples' experiences of psychosis and make decisions about therapy processes?

Researcher: Thomas Mountjoy is the Lead Researcher and the project will be submitted *in part fulfilment* of the requirements for the degree of Doctor of Clinical Psychology, University of Leeds.

The research supervision team includes:

Primary Academic Supervisor: Dr. Mitch Waterman, Senior Lecturer in Emotion and Cognition, Institute of Psychological Sciences, University of Leeds, Leeds, LS2 9J.

Academic Co-Supervisor: Dr. Alastair Cardno, Senior Lecturer in Psychiatry, Leeds Institute of Health Sciences, Charles Thackrah Building, Clarendon Road, Leeds, LS2 9LJ.

Field Supervisor: Dr. Anjula Gupta, Consultant Clinical Psychologist, Psychology and Psychotherapy Service, 17 Blenheim Terrace, Leeds, LS2 9HN.

Please complete the following:

1. Full Name:

2. Current Position, Banding, and Type of Service (e.g. Clinical Psychologist, Band 7, Early Intervention Service):

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3. Your contact details (please provide details of preferred method, e.g. e-mail address, phone number, post address):

4. Number of years experience working clinically with people experiencing psychosis (if necessary please specify number of years in Early Intervention Psychosis (EIP) or otherwise, e.g. 2 years in EIP, 1 year in CMHT):

5. If relevant, please identify your preferred therapy mode or approach when working clinically with people experiencing psychosis (e..g. CBT, Psychodynamic, Systemic, Integrative etc).

6. Where did you see the recruitment advert for participants? (please tick)

☐ NHS source

☐ Division of Clinical Psychology source

☐ Other – [please specify] .....

7. Have you completed and returned the consent form? **YES / NO**

Thank you for choosing to participate in this research project. I will be in contact with you in due course.

Thomas Mountjoy
Psychologist in Clinical Training
University of Leeds

[Document Version_1]

Appendix 8: Sample R&D letter of approval

Mr Thomas Mountjoy
Psychologist in Clinical Training
Programme in Clinical Psychology
Leeds Institute of Health Sciences
Charles Thackrah Building
University of Leeds
LS2 9LJ

CONFIDENTIAL

Dear Mr Mountjoy

Re: Do clinical psychologists working in early psychosis connect clients' experiences of trauma with current presentation and does this inform therapy processes?

Reda ID: 156

Following the recent review of the above project I am pleased to inform you that the above project complies with Research Governance standards, and NHS Permission has been granted on behalf of Trust management. We now have all the relevant documentation relating to the above project. As such your project may now begin within

The final list of documents reviewed and approved is as follows:

Document	Version	Date
Protocol	1	31st May 2013
Instructions for interview and vignette	1	
Advertisement	1	
Interview Schedule	1	
Participant Information Sheet	2	
Consent Form	1	
Evidence of Insurance		21st September 2012
CVs of researcher and research supervisors		

This approval is granted subject to the following conditions:

- You must comply with the terms of your approval. Failure to do this will lead to permission to carry out this project being withdrawn. If you make any substantive
- changes to your protocol you must inform us immediately.
- You must comply with the procedures on project monitoring and audit[1].
- You must comply with the guidelines laid out in the Research Governance Framework for Health and Social Care[2](RGF). Failure to do this could lead to permission to carry out this research being withdrawn.

1

- You must comply with any other relevant guidelines including the Data Protection Act, The Health and Safety Act and local Trust Policies and Guidelines
- If you encounter any problems during your research you must inform your Sponsor and us immediately to seek appropriate advice or assistance.
- Research projects will be added to any formal Department of Health research register.

Please note that suspected misconduct or fraud should be reported, in the first instance, to local Counter Fraud Specialists for this Trust. R&D staff are also mandated to do this in line with requirements of the RGF.

Adverse incidents relating to the research procedures and/or SUSARs (suspected unexpected serious adverse reactions) should be reported, in line with the protocol requirements, using **Trust incident reporting procedures in the first instance and to the chief investigator**[3].
They should **also** be reported to:

- The R&D Department
- the Research Ethics Committee that gave approval for the study (if applicable)
- other related regulatory bodies as appropriate.

You are required to ensure that all information regarding patients or staff remains secure and *strictly confidential* at all times. You must ensure that you understand and comply with the requirements of the NHS Confidentiality Code of Practice (http://www.dh.gov.uk/assetRoot/04/06/92/54/04069254.pdf) and the Data Protection Act 1998. Furthermore you should be aware that under the Act, unauthorised disclosure of information is an offence and such disclosures may lead to prosecution.

Changes to the agreed documents MUST be approved by in line with guidance from the Integrated Research Applications System (IRAS), before any changes in documents can be implemented. Details of changes and copies of revised documents, with appropriate version control, must be provided to the R&D Office. Advice on how to undertake this process can be obtained from R&D.

Projects sponsored by organisations other than the Trusts are reminded of those organisations obligations as defined in the Research Governance Framework, and the requirements to inform all organisations of any non-compliance with that framework or other relevant regulations discovered during the course of the research project.

The research sponsor or the Chief Investigator, or the local Principal Investigator, may take appropriate urgent safety measures in order to protect research participants against any immediate hazard to their health or safety.

The R&D office should be notified that such measures have been taken. The notification should also include the reasons why the measures were taken and the plan for further action.

Note that NHS indemnities only apply within the limitations of the protocol, and the duties undertaken therewith, by research staff with substantive or honorary research contracts with this Trust.

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[2] Details from:
http://www.dh.gov.uk/PublicationsAndStatistics/Publications/PublicationsPolicyAndGuidance/PublicationsPolicyAndGuidanceArticle/fs/en?CONTENT_ID=4108962&chk=Wde1Tv
[3] SUSARS – this must be within 24 hours of the discovery of the SUSAR incident

Once you have finished your research you will be required to complete a Project Outcome form. This will be sent to you nearer the end date of your project (Please inform us if the expected end date of your project changes for any reason).

We will require a copy of your final report/peer reviewed papers or any other publications relating to this research. Finally we may also request that you provide us with written information relating to your work for dissemination to a variety of audiences including service users and carers, members of staff and members of the general public. You must provide this information on request.

If you have any queries during your research please contact us at any time.

May I take this opportunity to wish you well with the project.

Yours sincerely

Appendix 9: Interview schedule

Interview Schedule

How do Clinical Psychologists formulate peoples' experiences of psychosis and make decisions about therapy processes?

[To counterbalance, alternate between]: A > B > C
B > A > C

[Introduce self, University of Leeds, reiterate study topic]
"The interview will begin shortly and should last approximately 45 minutes. As per the information sheet, there is the option of a 30 minute debrief after the interview has finished. If at any point you wish to stop the interview, please let me know, and this will be ok. There are two main parts to the interview, with the possibility of some follow up questions afterwards. As arranged, I am recording our conversation to allow for transcription and later analysis. The [first/second] part will involve discussion around your work with a client experiencing psychosis, and the way you make sense of their experiences psychologically. The [first/second] part will involve thinking aloud your response to the vignette I sent in advance, and thinking about how you might respond to such a case in real life practice. Please remember not to disclose any personally identifiable information relating to actual clients. Do you anticipate any interruptions or needing to take a break at any point? Are you feeling settled and comfortable? Unless you have any questions, are we ok to begin?

PRE-INTERVIEW: COMPLETE OPT-IN FORM [IF WAS NOT RETURNED VIA EMAIL/POST]

PART A: GENERAL QUESTIONS [ALL PARTICIPANTS]

Question 1- This part will involve discussion around your work with an anonymised client experiencing psychosis, and the way you make sense of their experiences psychologically. Without giving me any personally identifiable information, please tell me about the client you've chosen to reflect on today [presentation, referral, assessment outcome, initial formulation]

- In your opinion, what are the most important factors in best explaining this client's distress?
- What factors may be maintaining their distress?
- In your opinion, what are the salient factors which contributed to your client's experience of psychosis/unusual experiences?
- Are there any other risk factors that you consider important in understanding psychosis?
- What psychological models have been useful in helping you understand your client?
- How did you share your understanding of the problems with your client?
- How has this formulation informed your therapy?

Question 2- In your opinion what causes psychosis?

- How do you make sense of psychosis?
- How do you understand or explain psychosis from a psychological perspective?
- What do you routinely inquire about in assessments?
- Why do you inquire about that?
- How do you obtain this information?
- How do you use this information in therapy?
- Can you think of any other important factors?
- Are there any other risk factors that you consider important in understanding psychosis?
- What psychological models have been useful in helping you understand psychosis?
- Do you align yourself with a particular therapeutic modality? How is psychosis understood within this modality?

PART B: VIGNETTE [ALL PARTICIPANTS]

"I would like you to consider the client presented in the vignette I sent in advance. Please imagine this client has been allocated to you for assessment and psychological therapy"

-What are your initial thoughts about this client?
- What might be going on for this client? How might you tentatively formulate what is going on for this client? How might you make sense of her experiences?
-What are your initial thoughts about the salient factors in Sara's case?

-What further information is necessary to seek during the assessment phase?
-How would you gather this information?
-Why do you gather it?
-How would that impact on what you do in therapy?

-What are your aspirations for therapy, even though you might want more information?
-Could you describe a potential therapy plan you might initiate at this point?

PART C: TRAUMA-SPECIFIC QUESTIONS [PARTICIPANTS HIGHLIGHTING TRAUMA IN PARTS A OR B]

Checklist- *[proceed to part C if participant mentions any risk factors below during answers to parts A or B]…*

- Trauma, e.g. specific incident or ongoing ☐
- Adversity, e.g. poverty or ongoing stressors ☐
- Abuse; physical, sexual, emotional ☐
- Life events, e.g. specific occurrences, e.g. bullying ☐
- Life experiences, e.g. familial strife, bullying ☐
- Violence, e.g. personal experience, witnessing ☐
- Overwhelm, i.e. unable to cope, helplessness ☐

- You mentioned [*enter participant's wording*], how do you find this useful in making sense of psychosis?
-How do you go about obtaining information on [*enter participant's wording*]?
-How does this information link to therapy?

-How do you define psychological trauma? What do you mean by 'trauma'?
-How do you understand the links between trauma and psychosis?
-Can you think of a client with clear links between past trauma/life events and later experiences of psychosis?

-How did you arrive at this formulation?
- Is this something you assess for with every client? Or are there patterns you look for? [i.e. hypothesis-driven or pattern recognition; data collection method]
-What was the process of therapy? [With a clear trauma-psychosis link]
-How do you know when your therapy is succeeding with clients who have clear trauma-psychosis links? [i.e. positive outcome criteria]

-When is it necessary to thoroughly assess clients' trauma history?
-If you suspect unprocessed trauma is maintaining your client's psychosis, what do you do?
-What psychological models have been useful in helping you understand links between trauma and psychosis?

FOLLOWING DEBRIEF:

-**Question 1**- How believable is the character presented in the vignette?

Extremely unbelievable

Very unbelievable

Somewhat unbelievable

Undecided believable

Somewhat believable

Very believable

Extremely believable

[Circle participant's answer]

-**Question 2**- Do you still consent to participating in this research study?

-**Question 3**- On completion of the study, would you like me to contact you with information on how your responses fitted within the wider findings? **YES/NO**

- **REMINDER:** To protect the validity of the research, please could I ask that you refrain from discussing the explicit aims of this research with any colleagues who may also be participating in the study. Thank you again for your involvement.

[End of interview- stop recording]

[Document Version_1]

Appendix 10: Covering letter, including vignette

UNIVERSITY OF LEEDS

Date: [ADD]

Dear [CLINICIAN'S NAME],

Research Project: How do Clinical Psychologists formulate peoples' experiences of psychosis and make decisions about therapy processes?

Re: Instructions for Research Interview

Thank you for agreeing to participate in this research project entitled 'How do Clinical Psychologists formulate peoples' experiences of psychosis and make decisions about therapy processes?' Please find attached the clinical vignette for your perusal in preparation for next week's research interview.

During the research interview you will be asked to 'think aloud' your initial responses to this vignette, as outlined in the Participant Information Sheet. Please consider the potential salient factors which may contribute to this client's experiences of psychosis, and consider what further information would be necessary in best making sense of her experiences. I am also interested in hearing your ideas regarding possible options for therapy. It might be useful to have the vignette to hand during the research interview.

In another part of the research interview you will be asked to reflect upon a complex client in your service who has been engaged in therapy with you for at least 3 months. This individual must be somebody whom you are confident has experienced a first episode of psychosis. You should be prepared to talk for approximately 5-10 minutes about your perceptions of the salient factors contributing to this client's experience of psychosis. It will be useful to hear how your understanding of the client informed what you did with them in practice; there may be more specific questions regarding your approach and working practice. As this part of the research interview will involve a little preparation, you may use notes if you wish. Please remember, notes must not contain client-identifiable information.

Importantly, the study is not an examination of your knowledge but rather seeks to explore how clinicians make sense of psychosis, and how this links to clinical practice. Please remember to use a good quality phone line and set aside at least 45 minutes for the research interview. Thank you again for your participation in this project and I look forward to speaking with you soon,

Yours sincerely,

Thomas Mountjoy
Psychologist in Clinical Training
University of Leeds

Document version_1

You have been allocated this client for assessment and psychological therapy. The following information was obtained from clinical notes and through discussion with her key worker:

Sara is 28 years old. She identifies herself as white British and from a working class background. Recently, Sara had a six-week inpatient admission. She was picked up by the police in a very distressed state following an incident in which she had threatened her neighbours and made serious allegations. She was distraught at the thought of being watched, was shouting in response to hearing voices, and had not slept for three days.

In February 2012, Sara started 'feeling strange', unusually low, and cut off from the world. She first started hearing voices during October 2012. Sara heard an unknown woman's voice whispering her name; the same voice later began commenting on her actions. Despite her best efforts to ignore this voice, it became increasingly hostile and was joined by an aggressive and argumentative voice. In the following weeks Sara began thinking that passersby in the street could read her mind and she became more reluctant to leave the house. Consequently she experienced a rapid deterioration in mood.

During her teenage years Sara reported being 'in with the wrong crowd' but distanced herself from this group of people. After leaving secondary school with five GCSEs, she attended college and later found employment as a nursery assistant for a local day care centre. Whilst at first enjoyable, Sara found this a stressful and challenging work environment. She felt 'singled out' and harassed by a senior manager and had subsequently filed a complaint against this member of staff. Sara is not currently working and has been signed off work by her GP. She does not know how to make sense of her experiences and is offended when professionals hint at this being 'all in her head'. Sara is taking antipsychotic medication which she finds mildly effective.

Sara's best friend is her closest source of support. She is relatively close to her mother and has not seen her father since her parents separated when she was six years old. Sara is recently single after the breakdown of a long-term relationship in December 2012, and she has moved back home with her mother. She has mixed feelings about this as they are 'too alike' and she dislikes her mother's new partner.

Sara has been referred to you for psychological input following the recent inpatient admission. She is particularly worried about sensitive information influencing her future employability. It has taken Sara some time to recognise the benefits of engagement with health professionals. Whilst particularly anxious about seeing a psychologist, she is willing to meet you for an initial appointment as she wants to better understand her situation.

Appendix 11: Coding framework rules for content analysis

The following 'rules' were adhered to systematically whilst coding transcripts. As the framework evolved, broad categories, or themes, were derived from the data. These are presented in the left hand column of the framework; codes and brief descriptions are in the middle and right hand columns respectively. Most codes are self-explanatory from the short descriptions, though guidance is outlined below for more complex categories and codes.

Content of coding

Meaning units coded within the 'therapeutic process' codes were those alluding to specific behavioural processes which were implemented to help instigate change with the client (see '1 codes').

Following an extensive refinement process, the final coding framework contained some categories which were 'explicitly AAT-related' and 'not explicitly AAT related' using a list format (see '1 codes'). Other categories were not separated this way, though the explicitly AAT-related and not-explicitly-AAT-related distinction was contained within the codes (e.g. codes 5B and 5C). The researcher had to consider whether a meaning unit was 'explicitly related to AAT' or was 'not explicitly related to AAT', and code accordingly. For example code A1 was assigned if the participant was clearly talking about formulating with the client in the context of AAT, however code 1I was assigned this was not explicitly in the context of AAT.

Similarly, when participants were attributing explanatory factors to clients' experiences, the framework utilised two different categories with separate codes. The '11 codes' were assigned if participants were explicitly talking about psychosis. However, if it could not be determined whether participants were talking about psychosis, or if wider notions of psychological distress were being discussed, then '10 codes' were used. The individual codes of 10B and 10L were purposefully broad and included emotional factors, cognitive/schema factors which were highlighted in explaining clients' distress or experiences of psychosis respectively. Because participants frequently referred to 'internalised models of relating, the 11CC code was added ('explicitly mentions psychosis symptom reflection of own schema/model of relating') in addition to the wider schema 11FF code ('mentions role of cognitive/schema/emotional conflict factors).

The '5 codes' were assigned when participants sought more information. As a rule, if a participant said "I don't know much about X", this was taken as "I would seek more information on X"; similarly utterances whereby the participant was clearly wishing to clarify an aspect of the client's history were given 5 codes as appropriate. These '5 codes' (broadly assessment related) were qualitatively different from '1 codes' (broadly therapy processes) and the coding framework was designed to capture these differences.
Some meaning units, such as 'identify client's primary goals for therapy', at first seemed as if they would fit within '5 codes'; however, because of the collaborative and active nature of this process, fitted more comfortably within the 1 codes/therapy processes, e.g. code 1P. Codes 5N and 5O were differentiated, as the latter referred to utterances regarding the client and another individual (e.g. interpersonal factors), as opposed to independent social factors (e.g. culture at work). Where participants clearly sought information about early attachment

history the code 5E (distal life events/context/developmental) was assigned, rather than code 5O (relationships/interpersonal factors).

Some clarification on how to differentiate between code 5K (schematic/emotional factors) and code 5L (personal experience/sense-making/appraisal). The 5K code was assigned when participants sought information about a client's mental representation (domain specific aspect of an individual's experience which arranges incoming information, generating meaningful perceptual, cognitive, emotional, and behavioural experience); for example, "I'd look for evidence of self-blame", or "I wondered about her predisposition for feeling wary of others". Emotional factors were included here due to the difficulties in meaningfully differentiating from schematic factors. The 5L code was assigned when participants sought information relating to estimated significance, which was qualitatively different; for example "I wanted to know more about her experiences of those events".

As a rule, throughout the coding process, formulation was classed as a therapy process (see '1 codes'), which allowed some degree of standardisation and minimised scope for confusion or duplication. Helping 'promote insight' was assigned code 1I, as this was taken as another form of aiding the client in making sense.

Generic references to 'identifying client's aims' were considered therapy processes (see code 1P), rather than information seeking, as they were generally didactic and collaborative in nature. Also, utterances such as 'use of thought challenging' was classed as CBT, even if it's not explicitly said, as it follows this tradition most closely (see code 1L.3).
The '3 codes', in the 'stages' category, were assigned when participants referred to sequences/ordering in their therapeutic input. The sequence that was captured here, not the content which they were outlining, which would be captured in 'therapeutic process' category (see 1 codes). For example, a 3A code was assigned where participants explicitly described any stage led by the client, whether assessment or therapy. Similarly, any information seeking element within this meaning unit would warrant additional assignment of the appropriate '5 code', i.e. multiple codes for one meaning unit. Code 8A was assigned when participants restated background information, or gave information which was clearly unrelated to the research questions.

Process of coding

Limited interpretation was required in general, as the framework was designed to be used literally, i.e. without having to make much interpretation. However, some codes required more interpretation than others. For example code 1A was assigned if a participant talked around the issue of engaging their client in a sense-making process in the context of AAT, often interpreted as 'formulation', as outlined above. Similarly, there were implications with some of explicit therapy codes. For example such code 1L.12 did not capture the notion of being 'generally collaborative', and to assign this code the participant must have explicitly discussed a technique relating to systemic therapy practice.

A code was assigned only once if the participant was talking about the same issue within continuous text. Straightforward repetitions were identified on transcripts using arrows. The same code was assigned twice, however, if the participant discussed two separate issues which incidentally related to the same code, for example "ongoing difficulties with mum played a really significant role in his distress" would warrant a 10K code, but if the participant then said "and he had a troublesome split from his girlfriend around that time, which added to his distress" this would also be given 10K, even if mentioned straight

afterwards, as was a separate event/issue. Clear and direct repetitions or summaries were not coded multiple times, even in a later paragraph. Adopting this rule systematically ensured that certain codes were not overrepresented as a result of participants' linguistic styles; however, this was sometimes difficult to account for, even adhering to the above rule.

There was one exception to the rule regarding multiple codes. It was important to gauge how often AAT material was raised throughout the transcripts, so all instances of explicitly AAT-related utterances were coded using the 16A/16B codes. The 16A code was assigned if the participant simply mentioned AAT, for example 'he was abused'. The 16B code was given if the participant elaborated on the experience/phenomenon in some way, for example "she was abused for years by her uncle". Another example of 16B code would be an instance when the participant mentioned 'horrors throughout in childhood', offering some quantification of severity.

In addition to utterances clearly relating to 'abuse' and/or 'trauma' (as defined by the participant), certain experiences were systematically classed as AAT throughout the coding process, in line with the AAT construct outlined in the first chapter. This included bullying, references to 'traumatic memories' as well as 'traumatic events', plus any material that communicated the impression of severe adversity, i.e. beyond everyday/common life stresses. This involved some degree of interpretation. Importantly, if it became clear that an identified topic had been conceptualised by the client according to AAT criteria, even later in part A or B of the transcript, then earlier instances were coded accordingly, e.g. assigned a 16A/16B code as appropriate. More common experiences, such as relationship breakups, were not defined as AAT, unless the participant specifically discussed or defined this in terms of AAT criteria, i.e. severely adverse event.

By coding transcripts as literally as possible, with emphasis on manifest content, inferences were minimised. For example if the participant said that the "robbing the self attacking part of her mind" went a long way in explaining the therapeutic benefit, it was coded according to '9 codes', and not 'factors that explain distress' ('10 codes'), despite the fact this could potentially be inferred. This ensured that the primary context of meaning units was coded systematically.

The '10 and 11 codes' were not disaggregated into differing time periods, as in '5 codes', as this would have complicated what was already a complex coding framework. It was the opinion of the researcher that this would have compromised the abstraction process.

Appendix 12: Final version of coding framework

Mentions direct therapeutic process (rooted in action)		AAT:
	1A	-Engage client in exploration/formulation of relevant factors/sense-making process
	1B	-Formulation of relevant factors, clinician only [AAT]
	1E	-Mentions generic trauma-processing work
	1F	-Mentions explicit trauma-processing technique, e.g. experiential/exposure/rescripting/imagery
	1G.1	-Explicitly refers to compassion-focussed therapy approach (generic)
	1G.2	-Explicitly refers to compassion-focussed therapy techniques, e.g. seeing self as child
	1G.3	-Explicitly refers to narrative therapy approach (generic)
	1G.5	-Explicitly refers to narrative therapy techniques, e.g. developing alternatives stories
	1G.4	-Refers explicitly to integrative working/multiple intervention options
	1G.6	-Explicitly refers to CBT approach (generic)
	1HH	-Explicit techniques for validating client's experience, e.g. normalising conversations
	1JJ	-Exploration of relationship between client and their experiences of psychosis (e.g. voice/hearer)
	1KK	-Talks about generic intrapersonal work/relating to self, e.g. self esteem
	1LL	-Refers to generic therapy techniques for increasing awareness/'making links', e.g. patterns, reflections
	1MM	-Explicitly refers to preparatory work/action, e.g. engagement
	1NN	-Explicitly refers to 'supportive role', not linked to specific model
	1OO	-Identify client's hopes/aims for therapy/primary difficulties
		Non-AAT:
	1I	-Engage client in exploration/formulation of relevant factors/sense-making process
	1J	-Formulation of relevant factors, clinician only [non-AAT]
	1K	-Mentions work on 'here and now' issues/coping, inc. techniques
	1L.1	-Explicitly refers to schematherapy approach (generic)
	1L.5	-Explicitly refers to schematherapy technique, e.g. limited reparenting
	1L.2	-Explicitly refers to CBT approach (generic)
	1L.3	-Explicitly refers to CBT technique, e.g. thought challenging, positive risk taking
	1L.4	-Explicitly refers to behavioural techniques, e.g. behavioural experiments, behavioural activation
	1L.6	-Explicitly refers to role of psychoeducation
	1L.7	-Explicitly refers to ACT/compassion-focussed therapy approach (generic)
	1L.71	-Explicitly refers to ACT/compassion-focussed therapy techniques, e.g. mindfulness
	1L.8	-Explicitly refers to motivational interviewing work, e.g. with drug usage

	1L.9	-Explicitly refers to narrative therapy approach (generic)
	1L.12	-Explicitly refers to narrative therapy techniques, e.g. externalising, push boundary of self knowledge
	1L.10	-Refers to generic interpersonal work, e.g. boundaries, attachments, communication
	1L.11	-Explicitly refers to systemic approach, inc. constructionist approaches, family therapy
	1L.12	-Explicitly refers to use of systemic techniques, e.g. inc. absent others' views, partner, support network+
	1L.13	-Explicitly refers to use of generic CAT approach
	1L.14	-Explicitly refers to use of specific CAT technique, e.g. drawing out patterns, SDR
	1L.15	-Explicitly refers to 'supportive role', not linked to specific model
	1N	-Mentions need to address issues of risk
	1O	-Use of collaborative approach, e.g. open dialogue, co-creating, mutual curiosity
	1P	-Identify client's hopes/aims for therapy/primary difficulties
	1Q	-Identify barriers to therapy/goal completion
	1R	-Explicitly refers to preparatory work/action, e.g. engagement, facilitate safeness, generic 'info gathering'
	1S	-Refers explicitly to integrative working/multiple intervention options
	1T	-Use of metaphors with client, e.g. fear as food, formulation as road map
	1U	-Exploration of relationship between client and experiences of psychosis (e.g. voice/hearer)
	1V	-Explicitly talks about differentiation of input for different symptoms/factors contributing to distress
	1W	-Explicit techniques for validating client's experience, e.g. normalising conversations
	1X	-Talks about generic intrapersonal work/relating to self, e.g. self esteem, identity
	1Y	-Refers to generic therapy techniques for increasing awareness/'making links', e.g. patterns, reflections
	1Z	-Role for antipsychotic medication, helping support medical plan
	1ZZ	-Refers to generic relapse prevention work
Mentions more abstract therapeutic concept	2A	-Mentions notion of instilling a sense of safety, inc. use of boundaries
	2B	-Mentions notion of helping increase client's sense of control/power
	2C	-Focus on alliance building/therapeutic/validating relationship
	2D	-Highlights role of MDT approach/involvement, inc psychological consultation for team working
	2F	-Mentions notion of supporting 'recovery'/strengths focus/values-based living
	2G	-Mentions notion of corrective/positive emotional experience
	2H	-Suggests that assessment and treatment stages cannot be separated
	2I	-Attempt to connect client's embodied emotions/responses and language
	2J	-Adapting session setup/format to suit client's needs, i.e. implicitly accommodating
	2K	-Lack of progress/change in therapy

	2L	-Explicitly suggests it's not always necessary to 'make links', e.g. if potential for harm
	2M	-Need for intervention beyond 'ridding symptoms', e.g. deeper sense-of-self/exploratory work
	2N	-Fact that assessment/therapy takes time with this client group
	2O	-Suggests there is 'no formalised treatment plan'
Stages [refers to sequences in therapy/reasoning behind this]	3A	-Process guided by client's wishes / what's important to them, inc. Ax/Tx
	3E	-Explicitly acknowledges complexity of how AAT affects therapy
	3F	-Shift of focus away from unusual experiences/psychosis to other salient issues
	3H	-Considers different therapy models or therapy focus, inc. switching
	3J	-Not introducing something which would be met with resistance/overload client
	3K	-Shift between here-and-now and past/origin focus re: distress
	3L	-Highlights a routine approach to working with clients, i.e. some standardised practices
	3M	-Considers assessment/formulation/collaboration as 'platform', i.e. beneficial in itself/before intervention
	3N	-Explicitly states 'no set model of formulation'
	3O	-Clinical judgement guides model usage [clinician led]
	3P	-Sensitively introducing alternative explanations, takes time, e.g. 'trickle' approach
	3Q	-Making links between Hx and current experiences early in therapy
Research/theory	4A	-Refers to research/theory generically linking AAT with psychosis
	4B	-Refers to research/theory specifically linking AAT with psychosis, e.g. CSA & commenting voices
	4C.1	-Refers to stress vulnerability model and psychosis
	4C.2	-Refers to Read's research, linking abuse & psychosis
	4C.3	-Refers to Morrison's psychological integrity model
	4C.4	-Refers to generic attachment/developmental theory and psychosis
	4C.5	-Refers to generic 'CBT' model of psychosis
	4C.6	-Refers to White's work on bereavement
	4C.7	-Refers to Chadwick, Birchwood & Trower's work
	4C.8	-Refers to Ellis' REBT
	4C.9	-Refers to Garety's model of appraisal
	4C.10	-Refers to Gilbert's compassion-focussed work
	4C.11	-Refers to Wilson's model of psychosis
	4C.12	-Refers to Well's model of meta-cognition
	4C.13	-Refers to Carver's theory of coping
	4C.14	-Refers to Beck's cognitive model of schizophrenia

	4C.15	-Refers to generic cognitive science literature
	4C.16	-Refers to Anderson & Anderson's collaborative therapy work
	4C.17	-Refers to Romme and Escher's work
	4C.18	-Refers to voice dialogue approach, inc. Corstens, May & Longden's work
	4C.19	-Refers to Jakko Seikkula's work
	4C.20	-Refers to David Smail's work
	4C.21	-Refers to stages of change model
	4C.22	-Refers to John Burnham's work
	4C.23	-Refers to generic 'CAT' model
	4C.24	-Refers to generic 'psychodynamic' ideas
	4C.25	-Refers to generic 'social model' of psychosis
Seeking further information	5A	-Explicitly seeking info linking past AAT life events to current experiences
	5B	-Seeking info re: life events/context proximal to onset- explicitly re: AAT
	5C	-Seeking info re: life events/context proximal to onset- not explicitly re: AAT
	5D	-Seeking info re: distal life events/context/development- explicitly re: AAT
	5E	-Seeking info re: distal life events/context/developmental- not explicitly re: AAT
	5F	-Seeking info re: life events/generic history [time not specified]- explicitly re: AAT
	5G	-Seeking info re: life events/generic history [time not specified]- not explicitly re: AAT
	5H	-Seeking info re: coping styles of client/coping efforts
	5I	-Seeking info re: effectiveness of coping efforts
	5J	-Seeking info re: client's experiences of help/using resources
	5K	-Seeking info on client's schema/emotional response, inc. worries, self-image/esteem
	5L	-Seeking info on client's personal experience/sense-making/appraisal, inc. narratives
	5M	-Seeking info re: demographics, e.g. religion, sexuality
	5N	-Seeking info re: social issues/systemic/cultural factors/social constructions, e.g. class, inequality, power
	5O	-Seeking info re: relationships/interpersonal factors, inc. parenting
	5P	-Seeking info re: strengths, abilities, values, protective factors
	5Q	-Seeking info on medication/biological factors, inc. drugs, sleep deprivation
	5R	-Explicitly seeking info linking past non-AAT life events/experiences to current experiences
	5S	-Talks about 'a routine' Ax procedure/topic exploration for information gathering
	5T	-Talks about 'no routine' Ax procedure followed for information gathering
	5U	-Talks about clarifying maintenance factors, generically, e.g. cross-sectional

	5V	-Talks about clarifying contributing/risk factors, generically, e.g. longitudinal
	5W	-Seek info re: risk issues
	5X	-Seek info on family Hx of MH problems
	5Y	-Seek info on legal issues/financial issues
Reason for seeking information	6A	-Seeking AAT information communicates appropriateness/relevance in therapy
	6B	-Seeking non-AAT information to formulate client's problems, facilitate goal-direction/therapy relationship
	6C	-Research base as reason for AAT Ax
	6D	-Inclusive approach to information gathering, e.g. knowing more facilitates CBT
	6E	-Refers to the relevance/importance of certain factors, e.g. formative early experiences
	6F	-Assessment can stand alone, e.g. firstly assessing appropriateness for therapy
	6G	-Centrality of AAT info in formulating client's coping styles
	6H	-Research base as reason for non-AAT Ax
Approach to information gathering	7A	-Complete AAT Ax early during Ax process
	7B	-Clinical judgement guides AAT information gathering process [clinician led]
	7B.2	-Clinical judgement guides non-AAT information gathering process [clinician led]
	7C	-Client guides AAT information gathering process, idiosyncratic [client led]
	7C.2	-Client guides non-AAT information gathering process, idiosyncratic [client led]
	7D	-Respect client's wishes not to discuss personal history
	7E	-Explicitly acknowledges no set way of gathering AAT info
	7F	-Explore AAT Hx if current intervention is ineffective
	7G	-Engagement/preparation necessary before AAT Ax
	7I	-Talks about engagement/trust necessary before specific non-AAT Ax questions
	7H	-Rechecking AAT Hx as formulation builds
	7J	-Suggest exploration of personal Hx as potentially useful option
	7K	-Give client options/choices re: what we could explore
	7L	-Suggests AAT hypothesis is routinely considered with clients
	7M	-Balance to be found re line of questioning, deemed appropriate mutually, i.e. story unfolds
	7N	-Use of tools to facilitate assessment, inc. formalised outcome measures, genograms, timelines
	7O	-Sensitive approach to gathering information, e.g. non-blaming
Listing info	8A	-Simply lists background information from case or vignette/or irrelevant information

Explains potential mechanism of therapeutic benefit		AAT:
	9A	-Processing of trauma-related conflict, e.g. through voicing, formulation, psychosis as AAT response
	9B	-Client's increased sense of control
	9C	-Client's increased understanding of symptoms in light of AAT, e.g. voice's function
	9D	-Client's increased sense of safety/decreased fear
	9E	-Role of emotional validation
	9F	-Enhancing coping enables focus on distress-driving factors
	9H	-Explicitly refers to psychological reorganisation/stabilisation, inc. at schematic level
	9AA	-Development of positive/alternative imagery or story
		Non-AAT:
	9I	-Acknowledges difficulty in attributing change to specific factors
	9J	-Reduced role of social isolation
	9K	-Reduced cannabis intake
	9L	-Role of medication
	9M	-Client's increased sense of control/power, inc. disempowering voices
	9N	-Processing core conflict reduces distress-driving factors
	9O	-Explicitly mentions increasing understanding of symptoms/situation, e.g. increased self-reflection
	9P	-Client's increased sense of safety/decreased fear
	9Q	-Role of emotional validation/normalising
	9R	-Explicitly refers to psychological reorganisation/stabilisation, inc. schematic level changes, self relations
	9S	-Social reconnection/increased confidence
	9T	-Development of positive/alternative imagery or story
	9U	-Prolonged period(s) of therapy
Attribution of factors relevant in explaining psychological distress [not explicitly psychosis]		AAT:
	10A	-Explicitly links AAT Hx with current experiences of distress, e.g. linking, memories increased w/distress
	10B	-Mentions role of emotional conflict/cognitive/schema factors, e.g. self-blame, low self-esteem, values
	10D	-Client's experiences were not validated
	10F	-Coping efforts maintain difficulties, e.g. stress associated w/keeping secrets
	10FF	-Symptom/experience a reflection of AAT-related life events.
	10GG	-Explicitly mentions role of interpersonal issues, e.g. conflict, involving client, significant people
	10HH	-Role of social isolation, inc. self-limiting behaviours

	10II	-Explicitly retriggering existing maladaptive schema, inc. attachment issues
	10KK	-Role of social factors, e.g. social inequality, work environment, family experience/dominant narrative
	10LL	-Overtly differentiates between causal and maintenance roles/interaction of relevant factors
		Non-AAT:
	10G	-Explicitly refers to role of stress
	10I	-Explicitly retriggering existing maladaptive schema, inc. attachment issues
	10J	-Role of social isolation
	10JJ	-Lack of meaningful activity/loss of supportive environment
	10K	-Explicitly mentions role of interpersonal issues, e.g. conflict, high expressed emotion
	10L	-Mentions role of emotional conflict/cognitive/schema factors, inc. appraisal/sense-making, self esteem
	10M	-Role of biological/medical factors, inc. drugs, birth complications, issues of diagnosis, genes
	10N	-Explicitly mentions role of sleep disruption
	10P	-Role of social factors, e.g. social inequality, work environment, family attitudes
	10Q	-Overtly differentiates between causal and maintenance roles/interaction of relevant factors
	10R	-Role of coping style/attempts, e.g. sealing, self-harm, passivity, compromising own needs
	10S	-Advocates integrated/biopsychosocial understanding
	10U	-Talks about impact of psychosis symptoms on other areas of life/functioning
	10V	-Talks about disrupted information processing / neuropsychological factors inc. LD
	10W	-Suggests that known contributing factors may be insufficient explanation, much unknown
	10X	-Explicitly links life events/Hx (non-AAT) with current experiences of distress
Attribution of factors relevant in explaining [explicitly] psychosis		AAT:
	11A	-Explicitly links AAT Hx with current experiences of psychosis, inc. present triggering memories
	11B	-Psychosis symptom/experience content a reflection of AAT-related life events, inc. direct/indirect
	11C	-Explicitly mentions role of stress in context of AAT
	11D	-Disrupted information processing in context of AAT, inc. non-processed trauma
	11E	-Breach of psychological integrity is anxiogenic
	11F	-Explicitly talks about psychosis serving psychological function
	11FF	-Mentions role of emotional conflict/cognitive/schema factors, e.g. fear, self-blame, appraisal
	11AA	-Client's experiences were not validated
	11BB	-Current PTSD/AAT-type responses further interfering with existing psychotic experiences
	11CC	-Explicitly mentions psychosis symptom reflection of own schema/model of relating

	11DD	-Differentiates between causal and maintenance roles/interaction of AAT-related factors
	11EE	-Explicitly mentions role of interpersonal factors, inc. conflict
	11HH	-Role of social factors, e.g. work environment, systems, cultural stories, impoverished community
	11II	-Role of coping style, e.g. sealing, avoidance
		Non-AAT:
	11GG	-Psychosis serving psychological function, e.g. communication of what can't be said, companion
	11G	-Psychosis as a reflection of own schema /model of relating, inc. within self
	11H	-Disrupted information processing / neuropsychological factors
	11I	-Explicitly mentions role of sleep disruption
	11J	-Role of social isolation
	11K	-Potential role of biological factors, inc. drug use, genetics, neurotransmitters
	11L	-Mentions role of emotional conflict/cognitive/schematic factors, e.g. fear, appraisal, self-consciousness
	11M	-Explicitly mentions role of stress/accumulated stresses
	11O	-Role of coping style, e.g. sealing, avoidance
	11Q	-Acknowledges that known contributing factors may be insufficient explanation, much unknown
	11R	-Talks about role of dissociative processes
	11S	-Client's experiences were not validated by others
	11T	-Explicitly mentions role of interpersonal factors, inc. conflict
	11U	-Role of social factors, i.e. work environment, class, cultural stories, role loss
	11V	-Differentiates between causal and maintenance roles/interaction of relevant factors
	11W	-Advocates integrated/biopsychosocial understanding, inc notion of vulnerability
	11X	-Symptom content/experience a reflection of significant life events
	11Y	-Explicitly refers to personality factors
Questioning of certain existing approaches	12A	-Questioning of medical/genetic approach, inc. inappropriate prioritisation of biological factors.
	12B	-Critical of the 'psychosis as dysfunction' views within psychology/psychiatry

Multifactorial understanding of psychosis	13A 13B	-Acknowledgement of multifactorial understanding of psychosis -Psychosis as existing on a continuum, i.e. not something different
Evidence of therapy success	14A 14B	-Reduction in symptoms, e.g. frequency of voices -Improved ability to cope across different domains
Mentions service factors	15A 15B 15C	-Service guides scope of clinician's work -Other team members' role in gathering info/disseminating/theorising/groundwork, e.g. screening Ax. -Limited by the service/service factors
AAT-related information in any form	16A 16B	-Simply mentions AAT in any form, very simple description. -Elaborates on detail of AAT info somehow, e.g. context, chronicity, differentiation, beyond a simple descriptive word or example

Appendix 13: Code frequencies for theoretical and intervention/therapeutic-related processes mentioned less frequently by participants in part A and B data.

Table 2: The range of theoretical models and approaches mentioned less frequently by participants.

Theoretical model/approach	No.participants	Utterance frequency
Research/theory generically linking AAT with psychosis	2	3
Research/theory specifically linking AAT with psychosis	1	2
Read's research, linking abuse & psychosis	1	1
Morrison's psychological integrity model	1	1
White's work on bereavement	1	1
Chadwick, Birchwood & Trower's work	1	1
Ellis' REBT	1	2
Garety's model of appraisal	2	2
Gilbert's compassion-focussed work	1	1
Wilson's model of psychosis	1	1
Well's model of meta-cognition	1	1
Carver's theory of coping	1	1
Beck's cognitive model of schizophrenia	1	1
Generic cognitive science literature	1	1
Anderson & Anderson's collaborative therapy work	1	1
Romme and Escher's work	1	1
Voice dialogue approach	2	2
Jakko Seikkula's work	1	1
David Smail's work	1	1
Stages of Change model	1	1
John Burnham's work	1	1
Generic 'CAT' model	1	1
Generic 'psychodynamic' ideas	1	1
Generic 'social model' of psychosis	1	1

Table 3: The range of AAT-related intervention approach and therapy processes mentioned less frequently by participants.

Intervention approach/therapy process	No. participants	Utterance frequency
Generic trauma-processing work	2	4
Compassion-focussed therapy approach (generic)	1	2
Compassion-focussed therapy techniques	1	1
Narrative therapy approach (generic)	1	1
Narrative therapy techniques	1	1
Integrative working/multiple intervention options	1	1
CBT approach (generic)	1	1
Validation techniques, e.g. normalising conversations	1	1
Generic intrapersonal work/relating to self, e.g. self esteem	1	1
Generic techniques for increasing awareness	2	2
Preparatory work/action, e.g. engagement	1	1
Supportive role, not model-linked	1	1
Identify client's hopes/aims/primary difficulties	1	1

Table 4: The range of intervention approach and therapy processes, not explicitly AAT-related, mentioned less frequently by participants.

Theoretical model/approach	No. participants	Utterance frequency
Schematherapy approach (generic)	1	2
Schematherapy techniques	1	2
ACT/compassion-focussed therapy approach (generic)	2	2
ACT/compassion-focussed therapy techniques	1	1
Motivational interviewing work	2	2
Narrative therapy approach (generic)	1	3
Narrative therapy techniques	2	9
Generic CAT approach	1	1
Specific CAT techniques	2	5

Table 5: The range of abstract therapeutic concepts mentioned less frequently by participants.

Abstract therapeutic concepts	No. participants	Utterance frequency
Supportive role, not model-linked	1	1
Address issues of risk	2	4
Differentiation of input for different symptoms/factors	2	4
Role for antipsychotic medication/medical support	1	1
Generic relapse prevention work	1	1
Not always necessary to 'make links', i.e. harm	2	2
Need for intervention beyond 'ridding symptoms'	1	2
Suggests there is 'no formalised treatment plan'	1	1
Considers different therapy models or therapy focus	2	3
Explicitly states 'no set model of formulation'	1	1
Clinical judgement guides model usage [clinician led]	2	2
Sensitively introducing alternative explanations	1	1
Making links (Hx and current experiences) early in therapy	1	1

***Appendix 14*: Code/theme combinations and calculations used in determining importance for conceptual map elements**

Explicitly AAT Assessment factors (codes 5B+5D+5F):
f=15, low
Non-Explicitly-AAT Assessment factors
(5R+5C+5E+5G+5H+5K+5L+5N+5O+5P+5W):
f=223, high

Broad definitions of AAT:
7/11, medium

AAT related effects/explanations
(11A+11B+11D+11FF+11CC+11EE+11HH + 10A+10B+10F+10GG+10KK):
f=137, medium

Non-Explicitly-AAT effects/explanations
(11U+11I++11J+11K+11L+11M+11O+11T+11V+11W +
10G+10I+10J+10K+10L+10M+10P+10Q+10R+13A):
f=249, high

Schematic/cognitive/emotional factors (generally):
(11FF+11CC+11L+10B+10I+10L):
f=132, medium
AAT-affects schema, 8/11, medium
AAT reflected in schema content, 7/11, medium

Direct impact of AAT:
3/11, low

Collaborative formulation (1A+1JJ+1I):
f=85, medium
linking AAT through formulation, 6/11, medium

Direct AAT processing (CODE 1F):
f=5, low
3/11, low

Here and Now / Coping (1K):
f=22, low
3/11, low

CBT/Systemic (1L.2+1L.3+1L.4+1L.6+1L.19+1L.10+1L.11):
f=91, medium
CBT, 4/11, low

Collaboration (1O):
f=31, low

Client-led (therapy) (1P+1Q):
f=27, low
Client-led, 5/11, medium
Case-dependent, 3/11, low

Client-led (assessment)
7/11, medium

Specific context, therapy:
5/11, medium

Groundwork/facilitating safety (1R+1W):
f=34, low
Preparatory work, 4/11, low
Information gathering, 4/11, low

Integrative/diverse (1S+1T+1X+1Y):
f=40, low

Heterogeneous conceptualisation:
Complex array of factors theme, 4/11, low
Critical simplistic, 4/11, low
Multifactorial approach, 3/11, low

Timing (therapy):
Takes time, 6/11, medium
Appropriately timed, 9/11, high

Clinical judgement (therapy):
5/11, medium

Change:
Observational changes:
Therapy goals, 5/11, medium
Outcome measures, 3/11, low
Increased cognitive control**,** 3/11, low

Engagement:
4/11, low

Conversation:
4/11, low

Onward referral:
3/11, low

Colleagues' wariness/uncertainty:
3/11, low

On CD-ROM:

***Appendix 15*: Earlier drafts of the coding framework.**

***Appendix 16:* Tables of code frequencies from across all part A and B transcripts, and identification of codes and code clusters relevant to the research questions.**

***Appendix 17:* All coded transcripts including parts A and B, and part C.**

***Appendix 18:* Tallies of themes from all part C data, across participant transcripts.**