A qualitative analysis of Clinical Psychologists’ use of psychological formulation with clients who have had ‘psychotic’ experiences.

Thesis submitted for the degree of
Doctorate in Clinical Psychology
University of Leicester

By Katie Stewart

May, 2014
A qualitative analysis of Clinical Psychologists’ use of psychological formulation with clients who have had ‘psychotic’ experiences.

Thesis Abstract

Part One: Literature Review

Introduction: The current paper provides a systematic review of the current evidence into the impact of sharing the formulation with clients.

Method: A systematic literature search using five databases was carried out. Resulting papers were screened leaving fourteen papers to be included in the final review.

Results: Evidence to support the claim that sharing formulation impacts on clients is limited and the picture is complex. There was some evidence that differences in the content and process of formulation, and the quality of a person’s interpersonal functioning, could have a differential impact on outcome.

Discussion: There is some evidence that formulation has a differential impact on different people. This suggests a level of clinical judgement should be used when deciding what to share, based on therapists’ understanding of the client.

Part Two: Research Report

Introduction: The aim of the current study was to use grounded theory to produce a model of how clinical psychologists use formulation in sessions with clients who have experienced ‘psychosis’.

Method: Two therapy sessions between a clinical psychologist and a client were audio recorded and analysed. The clinical psychologist was then interviewed about their use of formulation within the sessions.

Results: A model of formulation was produced with a core category of formulation as purposeful action.

Discussion: Many current definitions of formulation do not sufficiently capture the active purposeful process identified in the current research. Extensions to definitions of formulation are discussed.

Part Three: Critical Appraisal

The critical appraisal describes a reflexive account of the research process.
Acknowledgements

I would like to thank my research supervisor Jon Crossley for all the help and support he has given me throughout the research process. I would also like to acknowledge the help my Mum, Dad and Brother Andrew have provided.
# Contents

Thesis Abstract ................................................................. 2

Part 1: Literature Review ..................................................... 7

Abstract .............................................................................. 7

1: Introduction ..................................................................... 8
  1.1: Definition of formulation ........................................... 8
  1.2: Background literature ............................................... 8
  1.3: Past literature reviews .............................................. 9
  1.4: Aims .......................................................................... 9

2: Method ............................................................................ 10
  2.1: Literature Search ..................................................... 10
  2.2: Data extraction and appraisal ..................................... 11

3: Results ............................................................................ 11
  3.1: Study characteristics ................................................ 11
  3.2: The impact on therapeutic alliance ............................. 14
  3.3: The impact on outcome ............................................. 16
  3.4: The impact on immediate patient response ................ 22
  3.5: The impact on perceived helpfulness ......................... 22

4: Discussion ...................................................................... 22
  4.1: Summary of results .................................................. 22
  4.2: Limitations ............................................................. 25
  4.3: Clinical implications ............................................... 25
  4.4: Future research ....................................................... 26

Part 2: Research Report ....................................................... 30

Abstract .............................................................................. 30

1: Introduction ..................................................................... 31
  1.1: Formulation ............................................................ 31
  1.2: Hearing voices and having unusual experiences ........ 33
  1.3: A model of psychotherapy ....................................... 33
  1.4: Aims ........................................................................ 34

2: Method ............................................................................ 34
  2.1: Context .................................................................... 34
  2.2: Design ...................................................................... 34
  2.3: Participants ............................................................. 35
  2.4: Procedure .................................................................. 35
Appendices

Appendix A: A flow chart showing the stages of the literature review search. .......... 85
Appendix B: Literature Search .................................................................................. 86
Appendix C: Data extraction form ........................................................................... 87
Appendix D: Papers included in the literature review .............................................. 88
Appendix E: Quality appraisal table for the literature review .................................... 92
Appendix F: Epistemological position .................................................................... 93
Appendix G: Clinical Psychologist information sheet .............................................. 94
Appendix H: Clinical Psychologist consent form ..................................................... 97
Appendix I: Client information sheet ..................................................................... 98
Appendix J: Client consent form ............................................................................ 101
Appendix K: Interview Guide ................................................................................ 102
Appendix L: the analysis ...................................................................................... 103
Appendix M: Coding examples ............................................................................. 104
Appendix N: Examples of earlier models ................................................................. 106
Appendix O: Reflexive Journal extract .................................................................. 108
Appendix P: Example of an alternative interpretation ............................................ 109
Appendix Q: Chronology of research process ....................................................... 110
Appendix R: Guidelines to authors ....................................................................... 111
Appendix S: REC letter ....................................................................................... 116

List of Tables

Table 1. Details of papers included in the review ................................................. 88
Table 2. Quality appraisal .................................................................................... 92

List of Figures

Figure 1: A process model of formulation ............................................................ 40

Word Count

Part one: Literature Review- 6,809
Part two: Research Report- 12,328
Part three: Critical Appraisal- 4,291
Non-mandatory Appendices- 3,663

I declare that the research report is my own and has not been submitted for any other academic award.
Part 1: Literature Review

What does research tell us about the impact of sharing psychological formulations with clients?

Abstract

Introduction: Formulation has been defined as a hypothesis, based on psychological theory and evidence, explaining a person’s difficulties (British Psychological Society, 2011; Johnstone & Dallos, 2006). It is a key part of psychological therapies. It is argued that sharing formulation with clients has a positive impact. However, past narrative reviews (Aston, 2009; Bieling & Kuyken, 2003) have suggested mixed evidence for this claim. The current paper provides a systematic review of the current evidence into the impact of sharing the formulation with clients.

Method: A systematic literature search was carried out. Five databases were searched. Titles and abstracts were screened against the inclusion criteria. This procedure resulted in fourteen papers being included in the final review. Data was extracted from these papers and their quality appraised.

Results: Fourteen articles were synthesised into four categories; the impact on the therapeutic alliance, the impact on outcome, the impact on client’s response in the session and perceived helpfulness. Evidence to support the claim that sharing formulation impacts on clients is limited and the picture is complex. There was some limited evidence that the type of interpretation, the quality of the formulation and the way it was shared, had a differential impact on outcome. The results also indicated that the quality of a person’s interpersonal functioning could moderate the impact. Findings with regard to the therapeutic alliance were mixed. There was no evidence that sharing the formulation impacted on perceived helpfulness.

Discussion: There is some evidence that formulation has a different impact on different people, which suggests therapists would do well to use a level of clinical judgement when deciding what to share, based on their understanding of the client. There is also some indication that when it comes to formulation, more is not necessarily better.
What does research tell us about the impact of sharing psychological formulations with clients?

1: Introduction

1.1: Definition of formulation
Formulation has been defined as a hypothesis, based on psychological theory and evidence, that provides an explanation of a client’s problems (British Psychological Society, 2011; Johnstone & Dallos, 2006). It plays a key role in a number of models of psychotherapy.

Different therapeutic modalities label formulation, and the process of sharing formulation, differently. For example, in Cognitive Analytic Theory (CAT) the term reformulation is used, whereas in psychoanalysis sharing formulation in therapy is labelled an interpretation. To maintain consistency in the current paper the term formulation will be used to cover what is defined above, for all therapeutic modalities.

1.2: Background literature
Literature has recommended that formulation should serve a variety of functions (British Psychological Society, 2011; Johnstone & Dallos, 2006). Whilst it is claimed that the main purpose of formulation is to identify appropriate interventions, it is argued that formulation can be an intervention in itself and have a positive impact for the client (British Psychological Society, 2011). One of the main ways of achieving this impact is through sharing the formulation with clients in therapy.

There are strong claims made in the literature about the benefit to clients of hearing the formulation. It is suggested that it has a positive impact on outcome, improves the therapeutic alliance, is perceived by clients as being helpful, provides greater understanding and hope, and normalises problems (Bieling & Kuyken, 2003; British Psychological Society, 2011; Corrie & Lane, 2010; Marks, 2003; Sturmey, 2009).

The basis of formulation is considered by some to be the scientist-practitioner model, which assumes that psychological practice is based on evidence (British Psychological Society, 2011). It is argued that if formulation is to be based on the scientist-practitioner model, then its use and the claims made about its benefits should be based on evidence (Bieling & Kuyken, 2003). Research reviews can play a key role in this by examining whether there is currently evidence to support the claims made about formulation.
regarding its impact on clients.

1.3: Past literature reviews
Two narrative none systematic reviews have been conducted into formulation, of which there were sections that examined the impact of sharing the formulation with clients (Aston, 2009; Bieling & Kuyken, 2003). Bieling and Kuyken (2003) focused mainly on formulation in Cognitive Therapy (including CAT and Cognitive Behaviour Therapy), but did include some psychoanalytic literature. They concluded that based on research, there was no evidence that formulation improved therapeutic outcomes. They indicated that evidence for the impact the formulation has on the therapeutic alliance is mixed.

Focusing on Cognitive Behaviour Therapy (CBT) formulations, Aston (2009) reviewed both research and non-research papers and presented a thematic analysis of the articles. Part of the review examined the influence formulation had on outcome, but was not specifically related to sharing formulation with clients. He concluded that there was some evidence that formulation was linked to positive outcomes. The differences between the reviews, in the conclusions they have drawn, appear to stem from their inclusion of different papers. Having not reported systematic search criteria, it is not clear how both reviews chose to include the papers that they did. The differences in selection of the articles cannot be completely explained by differences in therapeutic modality and publishing dates. Both reviews have included CBT research that was available when conducting the review that the other has not. This highlights a problem with drawing conclusions from evidence that has not been searched for systematically. There was agreement between the two reviews however, that there is a limited amount of research into the impact of formulation (Aston, 2009; Bieling & Kuyken, 2003).

1.4: Aims
The current review extends the work by Aston (2009) and Bieling and Kuyken (2003) by widening the focus to include any therapeutic model. It also narrows the focus of the review question to examine specifically sharing the formulation with clients. The review focuses on research papers in order to provide a systematic review of the current evidence.
More specifically, the current review aims to examine whether sharing formulation with clients has any impact and if so what this impact is. By synthesising the research findings, and appraising the quality of the research, the current review aims to integrate results from different studies and assess the overall strength of evidence regarding the impact of sharing formulation with clients.

2: Method

2.1: Literature Search

Appendix A shows a flow chart detailing each stage of the search process. A systematic literature search was carried out during January to March 2014 using five databases which included PsychInfo, The Cochrane Database, Psychsource, Scopus and Web of Science. Combinations of the following key words (and variations of these words) were initially used in the searches; psychological formulation, case formulation, case conceptualisation, psychotherapy interpretation, psychotherapy reformulation, outcome, impact, effect. Different combinations of key words were used depending on the database requirements and capabilities. Appendix B shows the searches carried out for each database. A scoping search using the term formulation identified that this returned thousands of papers not relevant to the review. It was therefore decided that there was a need to use terms which would identify specifically psychological formulation. Search terms to identify quantitative research were not used, as authors did not always label their methodology in the title or abstract, and instead this was screened for using the inclusion criteria.

The following inclusion criteria was applied to identify relevant research; peer reviewed quantitative research articles, published in English, 1990 to present, focused on the impact of sharing formulation with clients.

A total of 1,175 papers were initially returned. Duplicates were excluded. Initially titles were read and screened against the inclusion criteria. This process left 43 articles. The abstracts of the remaining 43 articles were read and screened against the inclusion criteria and 19 papers excluded.

The remaining 21 papers were sourced from the University of Leicester Library. These papers were read in full and were again screened against the inclusion criteria. At this stage, it was decided to include only research where impact was rated by either clients, or the therapists and clinicians involved in the study rather than student volunteers, to
enable a focused assessment of impact. This resulted in 14 papers to be included in the final review.

2.2: Data extraction and appraisal
Data was extracted from all papers included in the review using a form developed for the current paper based on Jones (2012) (Appendix C). Table 1 (Appendix D) shows details of the papers included in the review. Given the variety in methodology, quality was assessed using a number of different tools to allow an appropriate appraisal (Jones, 2012; von Elm et al., 2008). From the tools a number of quality questions were identified and all the included papers were appraised in relation to these. Table 2 (Appendix E) shows whether each paper met the quality criteria. Some questions were not appropriate for certain methodologies, but have been answered in order for the reader to assess this.

3: Results

Of the fourteen articles included in the review, four papers were from the same study (Høglend, Dahl, Hersoug, Lorentzen, & Perry, 2011; Høglend, Johansson, Marble, Bøgwald, & Amlo, 2007; Høglend et al., 2008; Høglend et al., 2006), therefore the included papers covered eleven different studies. Data extraction identified that the research could be categorised in terms of the type of impact that was measured. Findings from the studies were therefore synthesised within these categories. The majority of the findings fell into two categories; ‘the impact on therapeutic alliance’ and ‘the impact on outcome’. Two categories included only one paper each; ‘the impact on immediate patient response’ and ‘the impact on perceived helpfulness’.

3.1: Study characteristics

3.1.1: Design

There was variety amongst the papers in the type of design used. Four papers were based on one Randomised Control Trial (RCT) (Høglend et al., 2011; Høglend et al., 2007; Høglend et al., 2008; Høglend et al., 2006), one paper used a quasi-experimental none-equivalent group design (Høglend, Heyerdahl, Amlo, & Engelstad, 1993) and one used a cross-sectional design (Joyce & Piper, 1993). Five papers used a multiple time-
series design (Chadwick, Williams, & Mackenzie, 2003; Connolly et al., 1999; Crits-Christoph, Barber, & Kurcias, 1993; Piper, Azim, Joyce, & McCallum, 1991; Schut et al., 2005) and four papers employed a single-case series design (Chadwick et al., 2003; Evans & Parry, 1996; Gladwin & Evangeli, 2013; Shine & Westacott, 2010). One of these papers used a multiple time-series design in their first experiment and a single-case design in their second experiment (Chadwick et al., 2003). Three of the papers also used mixed methods (Chadwick et al., 2003; Evans & Parry, 1996; Shine & Westacott, 2010). The qualitative results were not included in the synthesis due to its quantitative focus.

3.1.2: Quality

Table 1 in Appendix C shows the results of the quality appraisal. Some elements of quality were high across all papers. All of the articles clearly reported their aims, provided a theoretical context for their research and linked this to their results in the discussion. Method and design were well described by all papers. Limitations were generally well discussed, with only two papers not including a discussion of limitations (Evans & Parry, 1996; Joyce & Piper, 1993). Reliability and validity were also well considered with only three papers failing to discuss this (Joyce & Piper, 1993; Piper et al., 1991; Shine & Westacott, 2010).

For other aspects of quality, there was variability between papers. Reporting of results varied. For some papers, not all results were reported (Chadwick et al., 2003; Høglend et al., 1993; Joyce & Piper, 1993; Piper et al., 1991). Only six papers reported effect sizes or made any consideration of whether they had sufficient power to detect effects (Høglend et al., 2011; Høglend et al., 1993; Høglend et al., 2007; Høglend et al., 2008; Høglend et al., 2006; Schut et al., 2005). Whilst a consideration of power and effect sizes would not be appropriate for the three single-case design studies, a lack of power should have been considered as an explanation for insignificant results in other studies, especially given some studies’ sample sizes. The inclusion of discussions regarding generalisability and alternative explanations was mixed.

3.1.3: Participants

There was variety in how samples were reported. One paper did not report details of their sample (Joyce, 1993). The following descriptions therefore apply to the remaining 13 papers that provided sample details. Identifying the exact age range is not possible as
some papers reported only the mean age. For those papers that did report the range, participants’ ages varied from 15 to 63 years of age. For those reporting the mean, this varied from 31.5 to 37 years of age. All studies included male and female participants except Evans and Parry (1996) and Gladwin and Evangeli (2013) where all participants were female. All four single-case design studies provided detailed descriptions of each of their participants.

3.1.4: Therapeutic orientation

Ten papers were psychodynamically orientated. Of these, two were described as psychodynamic psychotherapy (Crits-Christoph et al., 1993; Piper et al., 1991) one as Short-term Individual Psychotherapy (STI) (Joyce & Piper, 1993), two as Supportive Expressive (SE) psychotherapy (Connolly et al., 1999; Schut et al., 2005) and five as Brief Dynamic Psychotherapy (BDP) (Høglend et al., 2011; Høglend et al., 1993; Høglend et al., 2007; Høglend et al., 2008; Høglend et al., 2006). Two papers described the therapeutic model as CAT (Evans & Parry, 1996; Shine & Westacott, 2010) one as CBT (Chadwick et al., 2003) and one as a combination of CBT and CAT (Gladwin & Evangeli, 2013).

3.1.5: Definitions of formulations

One paper did not explicitly define formulation, but provided an example of a CAT reformulation letter instead (Evans & Parry, 1996). There was general agreement between the other papers about what formulation was. Definitions included providing reasons for thoughts, emotions and behaviours, and making links between these and between the present and past.

Six papers (Høglend, 1996; Høglend et al., 2011; Høglend et al., 2007; Høglend et al., 2008; Høglend et al., 2006; Piper et al., 1991) distinguished between transference and extra-transference interpretations. Transference interpretations were defined as specifically referring to the therapist as object. Extra-transference interpretations were defined as any interpretations that did not refer to the therapist. These papers also specifically referred to interpretations having a dynamic element, that is they were about patient conflicts.
The timing of delivering the formulation for all papers was ‘naturalistic’, that is the therapist was given no instructions about when to share the formulation and this was left to their clinical judgement.

The process of sharing formulation with clients differed in the papers. Psychoanalytically orientated therapy shared the formulation in the form of making an interpretation within the process of therapy. The CBT and CAT orientated studies shared formulation in specific sessions using diagrams and letters. CBT and CAT formulations aimed to be a collaborative process of exploring the formulation and making changes to it together.

3.2: The impact on therapeutic alliance
Five studies investigated the impact of sharing formulation on the therapeutic alliance (Chadwick et al., 2003; Crits-Christoph et al., 1993; Evans & Parry, 1996; Piper et al., 1991; Shine & Westacott, 2010).

Three papers found some significant relationships between sharing the formulation and the therapeutic alliance (Chadwick et al., 2003; Crits-Christoph et al., 1993; Piper et al., 1991). Crits-Christoph et al. (1993) examined the accuracy of therapists’ interpretations, defined as the extent to which interpretations corresponded to an independent formulation developed using the Core Conflictual Relationship Themes (CCRT). Two sessions early in therapy and two later in therapy were analysed by independent judges who rated both accuracy and the therapeutic alliance. The reported inter-judge reliability statistics were good for identification of interpretations, CCRT and accuracy ratings but were moderate for therapeutic alliance. They found that interpretations that were accurate in relation to interpersonal factors (participant’s wishes and the response of others) were significantly positively related to both the therapeutic alliance in later therapy sessions and a change in the therapeutic alliance throughout therapy.

Both Piper et al. (1991) and Chadwick et al. (2003) found significant results in relation to the therapeutic alliance as rated by therapist, but not for the client rated alliance. Piper et al. (1991) measured therapeutic alliance, rated by clients and therapists, using a scale developed for their research. Therefore, there were no pre-existing reliability and validity statistics and the authors do not report whether they have assessed these. Eight audio recoded sessions for each patient were analysed, it is not clear who by, to identify
the proportion of therapist responses that were transference interpretations. The proportion of transference interpretation, was not significantly related to the patient rated therapeutic alliance, but was significantly negatively related to the therapist ratings.

Chadwick et al. (2003) asked clients and therapists to rate the therapeutic alliance two sessions before and for the two sessions where formulation was shared. For clients, there were significant differences between time 1 and 3 and 1 and 4 but not 2 and 3. They argued that this represented a general increase in alliance over time and therefore concluded that this meant formulation had no impact on therapeutic alliance. The effect size is not reported. Given that the descriptive statistics do show an increase between times 2 and 3 it is possible that low power (N=13) explained a non-significant result. Therapists rated the therapeutic alliance as being significantly higher between sessions 2 and 3, as well as significant differences between other time points. The study design does not allow an assessment of how therapeutic alliance would have changed, if no formulation was shared.

The two single-case series design studies reported that sharing formulation had no impact on the therapeutic alliance as rated by clients (Evans & Parry, 1996; Shine & Westacott, 2010). Shine and Westacott (2010) measured client rated therapeutic alliance four weeks before and four weeks after sharing a CAT formulation. They carried out only a visual analysis of their data and concluded that the therapeutic alliance did not change after the formulation was shared. The graphs provided in the results support their analysis. In Evans and Parry’s (1996) study, clients rated the therapeutic alliance after every session until five sessions after the formulation was shared. The authors do not discuss their analysis or findings in the result section. They provided graphs, a visual analysis of which supports their conclusion that there was no change in the therapeutic alliance after formulation. Neither of the single case design studies withheld the formulation letter until there was a stable baseline due to ethical considerations. The authors of both studies argued that formulation may have had an impact longer term.

In summary, the research into the impact sharing formulation has on the therapeutic alliance is mixed. None of the studies found any significant results when therapeutic alliance was measured by clients. However, the small samples used in these studies, and
the limitations in analysis, do not provide sufficient evidence to state that formulation does not impact on the therapeutic alliance from the client’s perspective.

There is evidence from one study (Crits-Christoph et al., 1993), that accurate interpretations are related to improvements in the therapeutic alliance. This study did not use an experimental design and therefore cause and effect cannot be inferred. This differed from all the other studies in that it was the only one to measure accuracy of interpretation and the only one to independently rate therapeutic alliance.

The results of Chadwick et al. (2003) and Piper et al. (1991) suggests sharing formulation may impact on therapists’ perception of the therapeutic alliance in different ways. Whilst for Chadwick et al. (2003) sharing the formulation had a positive impact on therapists’ perspective of the therapeutic alliance, Piper et al. (1991) suggested a negative relationship between the proportion of interpretations and therapist rated alliance. It may be that sharing a one off formulation letter can have a positive impact, whilst generating a high proportion of interpretations has a negative impact on the alliance as rated by therapists. Again, neither study is experimental, therefore cause and effect cannot be inferred.

The way therapeutic alliance was measured further suggests some caution in the interpretation of the psychoanalytic papers. The three CBT and CAT studies used therapist and patient self-report measures which had been validated and had good reliability statistics. The poorer reliability in the Crits-Christoph et al. (1993) and the failure of Piper et al. (1991) to report whether their scale was reliable and valid, may mean that the psychoanalytically orientated studies did not have a valid measure of therapeutic alliance.

### 3.3: The impact on outcome

Twelve studies investigated whether sharing formulation impacted on outcome. Four of the papers were based on the same RCT (Høglend et al., 2011; Høglend et al., 2007; Høglend et al., 2008; Høglend et al., 2006). Høglend et al. (2006) randomly assigned participants to either an experimental group of therapy with transference interpretations or a control group of therapy without transference interpretations. The research found both groups showed significant improvements in clinician and patient rated interpersonal functioning and symptom distress. However, there were no significant
difference in outcomes between the two groups. This effect was still found 3 years after the end of therapy (Høglend et al., 2008).

The quality of all four papers was high. The authors assessed the effectiveness of the randomisation process and reported no significant differences between the groups for demographics, diagnosis, symptoms or patient expectancy. Good reliability and validity statistics are reported for the measures used. The authors considered whether they had sufficient power to detect effects and made adjustments to the alpha level to address this. The researchers made considerable effort to reduce bias and found no significant differences between therapists, or patient outcome measures taken pre-treatment, between the two groups. There were significant moderator effects found in the studies, these will be discussed in section 3.4.1 below.

An earlier study using a none-equivalent group design, assigned participants assessed as being highly suitable for BDP by clinicians in the study to therapy with transference interpretations (Høglend et al., 1993). Those rated as not suitable for therapy were assigned to BDP without transference interpretation. Having BDP with transference interpretation did not result in better outcomes. A limitation of the research was the non-randomisation of groups. However, the authors acknowledged this and controlled for differences they found in diagnosis of personality disorder and quality of interpersonal relationships. Also raters in this study were not blind to the aims or participants’ groups.

Using a multiple time-series design, Schut et al. (2005) found that lower concentration of interpretations in therapy was associated with better treatment outcome, when pretreatment levels of the outcome variables were controlled for. There were no significant relationships with frequency of interpretation and outcome. This indicates that spending too much time sharing formulations in sessions, compared to other tasks, may have a negative impact on outcome for clients. Dis-affiliativeness (the therapist belittling and blaming the patient) during the interpretation was related to poorer outcome. This highlights the possibility that how formulation is shared may influence the impact on outcome.

Given the study did not experimentally manipulate the amount of interpretations given, cause and effect cannot be inferred. Confounding variables could have led to both higher concentration of interpretation and worse outcome. For example, patients having low motivation for change could lead to both worse outcome and therapists making a
greater proportion of interpretations to try and increase motivation, thereby becoming more frustrated and being assessed as being more dis-affiliative.

Chadwick et al. (2003) found no significant differences in client rated anxiety and depression scores before and after sharing a formulation over two sessions. The authors do not consider whether they had sufficient power and do not report effect sizes. However, the descriptive statistics reported show very little change in scores. In their second experiment, they used a single-case series design and found that when formulation was shared over four sessions, this did not have an impact on the strength of participants’ beliefs or negative self-evaluations.

Using single-case series designs Evans and Parry (1996) and Shine and Westacott (2010) both found that sharing a CAT reformulation letter did not impact on outcome. The limitations of these studies are discussed in section 3.3 above.

Gladwin and Evangeli (2013) used a retrospective naturalistic single-case series design to examine the impact of sharing a reformulation letter on weekly weight (BMI) of participants diagnosed with anorexia. For seven of the fifteen participants there was a significant increase in weight after, compared to before, the formulation letter was shared. The participants who increased in weight had received formulation letters rated as being significantly lower in quality than those who did not change weight. Quality was defined as comprehensiveness, elaboration of explanations and treatment plan, and greater complexity.

This research differs from the other studies in two main ways. In terms of it using weight as an outcome measure, it does not rely on ratings from participants or clinicians. Also being the only retrospective design clients and therapist were not aware of their participation in the study at the time of therapy. This has the advantage of increased environmental validity but has prevented the researchers from being able to measure and control for possible confounds. The design of the study does not allow an assessment of whether the seven clients would have increased weight without the formulation letter. As with all the papers using single-case series designs that have been included in the current review, there was no stable baseline and the intervention of sharing the formulation letter was not actively withheld.

In summary, the evidence is mixed with regard to the impact of sharing formulation on outcome. The various designs used by the papers, limited the comparisons that could be
made between studies. The results of the RCT and non-equivalent group comparison studies, suggested sharing both transference and extra-transference parts of a formulation can be part of effective therapy, leading to significant improvement in outcomes. They also showed that sharing transference interpretations had no greater impact on outcome than sharing extra-transference interpretations. Because the comparison groups in these studies included therapists sharing formulation, albeit a different type, the results do not allow conclusions to be drawn about the impact of sharing formulation compared to not sharing formulation.

The studies using multiple time-series and single-case series designs provide a mixed picture regarding whether sharing formulation had any impact on outcome. The small sample sizes and methodological drawbacks, limit the overall conclusions that can be drawn from these studies. Therefore, the following possible explanations for the mixed results are offered tentatively.

One possible explanation for the difference in results is that the content of the formulation and how it is shared, rather than simply just sharing the formulation, is what had an impact on outcome. The two studies with the largest number of participants were Gladwin and Evangeli (2013) (N=15) and Schut et al. (2005) (N=14). In Gladwin and Evangeli (2013) it was the participants given the lower quality formulations that had improved outcomes. For Schut et al. (2005) lower frequency of dis-affiliative interpretations, and a lower concentration of interpretations generally, were associate with more positive outcomes. As the quality and process of sharing formulation was not measured by Chadwick et al. (2003), Evans and Parry (1999) and Shine and Westacott (2010) it is not possible to assess whether differences in these areas could explain their findings that sharing formulation had no impact on outcome.

Another possible explanation for the differences is that sharing formulation does not have the same impact on all clients; that is there are individual differences between clients that influence what the impact of sharing formulation will be. This is supported by the findings of Gladwin and Evangeli (2013) where seven participants improved and six did not. Therefore, the studies with small sample sizes may, by chance or recruitment procedure, sample participants for whom sharing formulation has less of an effect. This could also be the case for the other single-case design studies as, although the design should allow individual differences to be examined, the sample sizes were
still small. Analyses that do not include possible moderators in terms of individual differences may not identify significant results. Support for the idea of individual differences influencing the impact of formulation is discussed in section 3.4.1 below.

3.3.1: Participant characteristics as moderators to the impact on clients

Six papers investigated whether the effect sharing formulation had on participants would differ depending on participant characteristics. All the studies examined specifically sharing transference interpretations and all concluded that patient characteristics moderated the impact on outcome. However, there were contradictory findings regarding the specific patterns.

Three studies were based on one RCT (Høglend et al., 2007; Høglend et al., 2008; Høglend et al., 2006). Høglend et al. (2006) found that therapy with transference interpretations, was more effective than therapy without transference interpretations, in terms of outcome for participants who had a history of lower quality of object relations. Quality of object relations was defined as the type of relationships developed with others. Lower quality relations were characterised as more ‘primitive’, that is more dependent or over-controlling. This effect was found only for the clinician rated outcome. The differences were found when assessing outcome three years after the end of therapy (Høglend et al., 2008). Høglend et al. (2007) found therapy with transference interpretation was more effective, compared to the comparison treatment, for participants who had more current interpersonal problems, smaller social networks, more severe symptoms and worse quality of life ratings pre-therapy. A smaller but opposite effect was found for those scoring high on these variables, in that they had better outcomes with therapy without transference interpretations. Participants with a diagnosis of a personality disorder all improved more with therapy with transference interpretations (Høglend et al., 2011). It should be noted that the results of these papers did not support their hypotheses which were based on an assumption in the literature that people with better interpersonal functioning would benefit more from transference interpretations.

Perhaps a natural consequence of asking therapists to refrain from making transference interpretations, was that in the comparison group they also made more non-transference interpretations than the transference group. That is, the two groups differed on two
dimensions, both amount of transference interpretation and amount of non-transference interpretation. Therefore, the treatment effect could be level of transference interpretation or level of non-transference interpretation or a combination of both.

Two of the studies investigating how patient characteristics related to outcome, used multiple time-series design (Connolly et al., 1999; Piper et al., 1991). Consistent with the RCT study, Piper et al. (1991) found that for participants rated as having high quality of object relations, a high proportion of transference interpretation was related to worse outcome. In this study, outcome was a combination of patient, therapist and independent ratings.

Connolly et al. (1999) results differ from those discussed above. They found that for participants assessed as having fewer quality interpersonal relationships, higher percentage of transference interpretation was related to poor outcomes. This included patient rated outcome measures. Symptom change over therapy was controlled for in the analysis suggesting that it was not symptom increase that led to an increase in transference interpretation.

One possible explanation for the difference in results could be a difference in how quality of object relations was measured. As pointed out by Connelly et al. (1999), they define quality of object relations as being about the participants current functioning only. Whereas, the RCT based studies and Piper et al. (1991) defined it as lifelong functioning. However, when Hoglend et al. (2007) assessed current interpersonal functioning they found the same effects of transference interpretations being more effective if participants were rated as having poorer current interpersonal functioning.

Another possible explanation comes from the number of transference interpretations in each session. This shows that in the Connelly et al. (1999) study the number per session was less than one and was therefore similar to the comparison group in the RCT study (0.9). Therefore the variance in the proportion of transference interpretation was smaller in Connelly’s study. However, Connelly et al. (1999) findings are not supported by the RCT comparison group, which was less effective for participants with poor interpersonal relationships while Connelly et al. (1999) concluded from their findings that the opposite is true.
Also, quality was higher in the RCT study and having an experimental design allowed the authors to have more control. Therefore, it may be an aspect of the design or quality that accounts for the differences in results.

3.4: The impact on immediate patient response
One paper by Joyce and Piper (1993) examined the immediate response of patients following an interpretation, by analysing transcripts of therapy. The interpretation made by the therapist was identified and labelled using the Therapist Intervention Rating System. Patient responses were rated in terms of extra-linguistic measures, intersubjective measures and content measures. The responses were then analysed using principle component analysis which identified six factors. Concentration of interpretations did not significantly predict any patient response. The correspondence between the interpretation and the therapists’ formulation was a significant predictor of patient response. More complex interpretations predicted patient responses that were rated as being less demanding and having less working involvement.

The authors do not report all their findings and their failure to report their sample details is a serious methodological flaw. They claim that their ratings of patient responses are appropriately reliable but fail to report any statistics. They also do not discuss the validity of measuring responses based on transcripts, which could miss some elements of response.

3.5: The impact on perceived helpfulness
One of the single case series design studies examined the impact on the client’s perception of the helpfulness of the session (Evans & Parry, 1996). The results suggested there was no impact on perceived helpfulness. This was measured using one Likert scale developed for the study. The methodological flaws of this study have been discussed in the above sections.

4: Discussion

4.1: Summary of results
The aim of the current report was to systematically review research into the impact of sharing formulation with clients. The papers included in the current review used a range of different methods, limiting the extent to which they could be compared. Overall, the review indicated that evidence to support the claim that sharing formulation impacts on clients is limited and the picture is complex.
Stiles, Honos-Webb, and Surko (1998) suggested that assuming linear relationships between process variables, such as formulation and the impact on clients, is not valid, as it fails to take into account the interaction between different factors in therapy, and the responsiveness of the therapist and client to these. This highlights a further possibility, that any relationship between sharing formulation and impact is not a simple linear one, but a complex interaction of different factors. This could mean effects are more difficult to detect with small sample sizes and a failure to consider moderators. This would explain the results of the current review, where those studies with the smallest sample sizes that did not measure moderators, were the ones reporting formulation had no impact.

From the current review, there was evidence supporting the idea of complexity in the relationship between formulation and impact. The results indicated that sharing formulation appeared to impact on outcome for some individuals, and have no impact for others. There was evidence that the quality of a person’s interpersonal functioning could moderate the impact. The better quality papers provided evidence that, contrary to claims from the literature, transference interpretations (interpretations referring to the therapist as object) were more effective for people rated as having poorer interpersonal functioning. Perhaps then, clients present with different needs and if formulation is tailored to these, it can have a positive impact on outcome.

There was some limited evidence that the type of interpretation made, the quality of the formulation and the way it was shared, had a differential impact on outcome. Lower quality formulations (Gladwin & Evangeli, 2013) and lower proportion of interpretations (Schut et al., 2005) were linked to better outcomes. Also, Joyce and Piper’s (1993) finding that more complex interpretations were related to clients being less involved in work post-interpretation is consistent with this. Sharing a high proportion of interpretations, complex interpretations and formulation letters with high complexity, elaboration and comprehensiveness, may have a similar impact on clients. Clients may experience this as overwhelming, too expert or too difficult to understand and use. Alternatively, it may be that clients who present with more complex problems illicit higher proportions of interpretations and more complex formulations, and at the same time change less. This is somewhat speculative and more research is required for any conclusions to be drawn.
Further evidence to support the idea that the type of formulation may differentially relate to impact comes from the papers that measured accuracy. Accuracy of interpretation, defined as correspondence with CCRT formulation, was related to a better therapeutic alliance (Crits-Christoph et al., 1993) and more positive patient response (Joyce & Piper, 1993). One possibility is that clients felt better understood and listened to if an interpretation corresponded more closely to their experience, which strengthened the alliance and led them to respond more positively. Also, therapists who were more empathetic and listened more actively, may as a consequence have made more accurate interpretations and built better relationships. However, accuracy was not measured by clients and therefore it is not clear to what extent interpretations labelled as accurate corresponded to their experience. Thus, given that accuracy, alliance and patient response were rated by clinicians or therapists, there is another possibility. Therapists who were more aware of theory were rated as more accurate and as doing better by other clinicians who were also experts in this theory. Again these explanations are speculative and given in light of the methodological limitations discussed in the results section. However, taken together the research that has investigated different types of formulation adds support to the idea that the impact of sharing formulations is complex.

Findings with regard to the therapeutic alliance were also limited. None of the papers found sharing formulation impacted on the alliance as rated by clients. Due to the small samples and the limitations in analysis, there is insufficient evidence to conclude that formulation has no impact on the therapeutic alliance from the client’s perspective. It is possible that with therapeutic alliance, as with outcome, relationships are complex and were therefore not identified by the designs used and small sample sizes. When the alliance was rated by therapists and clinicians, significant results were found. However, for two of the studies (Crits-Christoph et al., 1993; Piper et al., 1991) there are questions about the validity of the measures of therapeutic alliance used. This leaves only one study that found formulation impacted on therapist rated alliance using a validated measure (Chadwick et al., 2003). Therefore, there is some very limited evidence that sharing formulation could impact on therapists’ perception of the therapeutic alliance. There was no evidence that sharing the formulation impacted on perceived helpfulness. However, this was investigated by only one study, using one question.
Overall, there were more significant results from ratings made by therapists or clinicians about clients, than by the clients themselves. One interpretation of this is that clients were less aware of changes. For example, Hoglend et al. (2010) assert that patients are often not aware of ‘maladaptive behaviour’ and patient ratings reflect actual change less accurately. However, if patients have not noticed the changes then this leads to the question of who therapeutic change is actually for.

The current review supports the conclusions from past reviews that research in the area is limited and evidence is mixed (Aston, 2009; Bieling & Kuyken, 2003). It extends these reviews by identifying possible individual differences, and differences in the process and content of formulation, that could differentially impact on clients.

4.2: Limitations
Methodological flaws and small sample sizes used in the studies means the conclusions of the current review have to be tentative. Four of the papers were based on the same data set and this further limits the number of studies the current review is based on. The highest quality papers were unfortunately slightly less relevant in answering the current review question, as their control group included the use of a different type of interpretation. Therefore, this provided information regarding how sharing different parts of a formulation had a differential impact.

A search term to identify studies into formulation proved problematic. Because the use of the term formulation presented thousands of irrelevant papers, more specific terms to identify psychological formulation were used. There was some variety in the exact term used to refer to formulation. It may be that some papers were missed because of this. It is also possible that papers using other terms for different impacts were missed. The current review included only quantitative papers. Qualitative research could have added to understandings of client’s experience of sharing the formulation.

4.3: Clinical implications
Implications are provided tentatively and are to be taken in light of the limitations of the research and the current review. There was some evidence that formulation may have a different impact on different people. This suggests that formulation is not a ‘one size fits all’ approach and different clients may have different needs in terms of what is helpful in relation to formulation. Taking a person centred approach to formulating, may not simply be a process of adapting the content to the client, but adapting the type
of formulation to respond to the client’s current needs. Therefore, therapists would do
well to use a level of clinical judgement when deciding what to share and when, based
on their understanding of the client. This also highlights the importance of gaining
regular feedback from clients, to help the therapist assess what is useful.

There was also some indication that when it comes to formulation, more is not
necessarily better. Clinicians may want to avoid too much formulation, in comparison to
other aspects of therapy, and formulations that are too complex and elaborative.

4.4: Future research
The current review highlights the need for more research into the impact of formulation.
If formulation backed up by evidence is to be the aim, in line with the scientist-
practitioner model, then at least some of this research should be experimental in nature
and include larger sample sizes. The possibility that there may be individual differences
moderating the impact of formulation, for which there is some limited evidence based
on the current review, should be considered by researchers. Also, an examination of
what type of formulations influence the type of impact on clients would be useful.
Research could examine whether less complexity and comprehensiveness in
formulation, and a lower concentration of formulation sharing, has a more positive
impact on clients.

In terms of future literature reviews, qualitative systematic reviews could examine
client’s experiences of formulation. The impact of formulation for therapists may be a
useful topic for a review as it would allow a discussion of whether formulation is valued
more by therapists than clients.
References


Part 2: Research Report

A qualitative analysis of Clinical Psychologists’ use of psychological formulation with clients who have had ‘psychotic’ experiences.

Abstract

Introduction: Formulation has been defined as a hypothesis, based on psychological theory and evidence, that provides an explanation of a client’s problems (British Psychological Society, 2011; Johnstone & Dallos, 2006). Research into the process of how clinical psychologists formulate has been limited. There is currently no research that has produced a model of how clinical psychologists formulate in sessions. The aim of the current study was to use grounded theory to produce a model of how clinical psychologists use formulation in sessions with clients who have experienced ‘psychosis’.

Method: A grounded theory methodology was used. Two therapy sessions between a clinical psychologist and a client were audio recorded and analysed. The clinical psychologist was then interviewed about their use of formulation within the sessions. The interviews were guided by the ongoing grounded theory analysis.

Results: A model of formulation was produced with a core category of formulation as purposeful action. Formulation was conceptualised as an active process influenced by an integration of ideas at different levels of context. The integration of ideas was sometimes smooth and sometimes complex and contradictory. Through a process of making sense of clients’ experiences, participants were performing actions intended to achieve certain aims. Within sessions participants held aims in mind and looked for opportunities to perform them. They made decisions moment-by-moment and used intuition to guide the action of formulating.

Discussion: Formulation can be a complex, sometimes contradictory process. Complexity can be increased by integrating theories from different philosophical positions and being responsive to a variety of different influences. Through a process of reflection, practitioners can notice the complexities and contradictions. The importance of ongoing reflexivity while formulating is supported by the results.
1: Introduction

1.1: Formulation

Formulation has been defined as a hypothesis, based on psychological theory and evidence, that provides an explanation of a client’s problems (British Psychological Society, 2011; Johnstone & Dallos, 2006). Formulation is a highly valued part of clinical psychology and is a core competency of clinical practice (Division of Clinical Psychology, 2010). Whilst research into the theoretical content on which formulation is based is extensive, research into the efficacy and process of formulation is limited (Bieling & Kuyken, 2003; British Psychological Society, 2011).

Quantitative research in the area has mainly focused on reliability and has found modest evidence (Bieling & Kuyken, 2003; British Psychological Society, 2011). Quantitative research into the effect formulation has on outcome and the therapeutic alliance is sparse; it has often used small sample sizes and shown mixed results (Aston, 2009; Bieling & Kuyken, 2003).

Quantitative research has taken place within a realist epistemological position, where formulation is seen to need to be validated and based on empirical evidence (Johnstone, 2006). An alternative, constructionist perspective would explore the experiences of those involved in formulation, such as the therapist and client. Research investigating the perspectives of clients reported that they described having what was labelled positive and negative reactions in response to the formulation (Chadwick, Williams, & Mackenzie, 2003; Evans & Parry, 1996; Morberg Pain, Chadwick, & Abba, 2008; Shine & Westacott, 2010).

Given the current research is focused on the perspective of clinical psychologists, more space is given to a discussion of the research into therapists’ experience of using formulation. From interviews with therapists, Chadwick et al. (2003) reported six effects of sharing formulation. Pain et al. (2008) used these six themes and asked therapists to rate which they thought applied most. The six effects, in order of applicability starting with the most applicable were, an increased understanding of the client’s difficulties, an increase in the therapeutic alliance and sense of collaboration, a feeling of power and validation when the client agreed with the formulation, providing help with adherence to the Cognitive Behaviour Therapy (CBT) model, an increased
confidence that CBT was the right approach for the client and an increased sense of hopefulness.

As well as therapists’ experiences of the impact of formulation, investigations into how they formulate are important. One of the criticisms levelled at much of the quantitative research is that, because it was designed to be a single event to allow its effects to be measured, it was not an accurate reflection of clinical practice where formulation may be shared as an ongoing process (Bieling & Kuyken, 2003; British Psychological Society, 2011). Although this is less true of the psychoanalytic literature, which generally measured the sharing of interpretations within the process of therapy (see Connolly et al., 1999; Joyce & Piper, 1993; Piper et al., 1991; Schut et al., 2005), research within other therapeutic modalities has tended to measure formulation as a one-off event (Chadwick et al., 2003; Gladwin & Evangeli, 2013; Shine & Westacott, 2010). In light of this, Beiling and Kuyken (2003) maintained that there was a need to undertake exploratory research to investigate how formulation is used in everyday practice. They argued that this research was vital to improve understanding in clinical psychology and inform future research.

There has been limited research conducted into how formulation is used. Christofides, Johnstone and Musa (2012) carried out a thematic analysis into clinical psychologists’ experiences of formulating in multi-disciplinary teams (MDTs). One theme identified participants’ perceptions of formulation as beneficial. In this theme, formulation was seen as helping MDT staff to understand and relate better to clients, and to help the MDT make changes. A second theme explained formulation as a process of ‘chipping in’ where participants informally shared psychological ideas with the MDT when they saw an opportunity to do so, often without specifically naming formulation.

Weiste and Peräkylä (2013), using conversation analysis, identified different uses of formulation in sessions from audio recordings. They found two types of formulation used in both psychoanalysis and CBT. These were ‘highlighting’ formulations, which recognised the client’s description, and ‘rephrasing’ formulations, that transformed the client’s description into a therapeutic idea to encourage psychological reflection. Specific to the psychoanalytic therapy, they identified ‘relocating’ formulations, which were preparations for, or delivery of, interpretations linking past and present. Specific to
the CBT sessions an ‘exaggerating’ formulation was identified that was categorised as a preparation for, or delivery of, an intervention to challenge thinking.

Overall these studies show that clinical psychologists and therapists value formulation and feel it serves a number of purposes. They also highlight that formulation is not used as a single act and can be employed in different ways both within MDTs and client sessions. What is missing from the above research is a model of how clinical psychologists use formulation in sessions which includes their experience of this.

1.2: Hearing voices and having unusual experiences.

‘Psychosis’ is a term used to refer to the experience of unusual beliefs or perceptions, including hearing voices and experiencing sensations that others cannot perceive (British Psychological Society, 2000). Within this area, the medical model, which explains the cause of ‘psychosis’ in biological terms, and seeks to understand clients’ experiences in terms of diagnostic labels, has predominated (British Psychological Society, 2000; Sayre, 2000). Research focusing on formulation with this client group is important to investigate alternative ways to understand experiences beyond diagnosis.

Much of the psychotherapy and formulation research has been carried out with clients who have experienced ‘psychosis’ (Chadwick et al., 2003; Dilks, Tasker, & Wren, 2008; Dilks, Tasker, & Wren, 2013; Pain, Chadwick, & Abba, 2008). Therefore, a focus on the process of formulation in the current research, will add to the increasing body of knowledge regarding therapy with this client group.

1.3: A model of psychotherapy

There is a suggestion that psychotherapy research needs to be enhanced by specifying the inter-related processes involved in therapy, using qualitative methods (Stiles et al., 1998). This was done by Dilks et al. (2008). Using a grounded theory method, they carried out an analysis of therapy sessions and interviews with clinical psychologists and clients who had experienced ‘psychosis’. Their core category for therapy was ‘building bridges to observational perspectives’. This was a process where the clinical psychologist and client took different perspectives in conversation. For the clinical psychologist, there was a shifting of focus from different sources of information including what the client said, what the clinical psychologist observed about the process...
of therapy, and their emotional reaction to the client. The analysis also included a category of using theory as a tool to maintain this observational perspective.

The current research will use a similar method of analysing session and interview data, but will focus specifically on formulation to provide a model of one of the core concepts in clinical psychology.

1.4: Aims
The current research aims to extend the above findings to provide a model of how clinical psychologists formulate in sessions based on both session and interview data.

2: Method
2.1: Context
The current study forms one half of a larger research project investigating formulation in sessions. The current study focused on formulation from the perspective of clinical psychologists, by analysing transcripts of sessions and interviews with clinical psychologists. A separate study is investigating formulation from the client’s perspective, using the same session transcripts and interviewing the clients.

2.2: Design
The data set comprised of two audio recorded sessions (both one-to-one sessions with the same client) and one semi-structured interview for each participant.

A grounded theory methodology was used for a number of reasons. The lack of research into the process of formulation in clinical psychology, necessitated an exploratory approach to the current research and therefore a qualitative method was deemed most appropriate. Other types of thematic analysis, including interpretive phenomenological analysis, were considered as potential alternatives. However, it was felt that a grounded theory had a number of advantages. The research was concerned with the process of how clinical psychologists formulated, rather than their individual experiences of this, making grounded theory more appropriate (Charmaz, 2006; Strauss & Corbin, 1998). It allowed for the construction of a model of formulation based on the data (Charmaz, 2006; Strauss & Corbin, 1998), and this is lacking in the literature. The procedure of carrying out interviews based on session data, used in the current research, lent itself to an approach like grounded theory which advocates for simultaneous data collection and analysis (Charmaz, 2006; Strauss & Corbin, 1998). The grounded theory method used is
based on Charmaz’s (2006) constructivist approach, and is therefore consistent with the researcher’s ‘contextual constructionist’ epistemological position (Madill, Jordan, & Shirley, 2000) (Appendix F).

2.3: Participants
Participants were four clinical psychologists working in different NHS adult mental health services in the East Midlands region. Given the small number of clinical psychologists working in the area, only limited individual information for each participant will be presented to maintain confidentiality. The participants had between two and fifteen years post-qualification experience. Two participants described their approach as integrative, one as eclectic, and one as mainly working in Rational Emotive Behaviour Therapy (REBT) and CBT, with some use of systemic and narrative ideas. The clients were all adults of working age, who had experienced ‘psychosis’. Their experience included unusual beliefs, and for some, hearing voices.

It should be noted that there were a number of clinical psychologists who consented to participate in the study, but were unable to recruit a client to participate. All clinical psychologists who identified clients that consented to participate were included in the research. Prior to commencing the research, it was agreed by the research supervisors, other qualitative researchers and through the university peer review process, that four participants was a sufficient number to meet requirements for a DClinPsy thesis and to begin to develop a model.

Given difficulties with recruitment, the researcher had to take a pragmatic approach to ensuring there were sufficient participants and data collection was completed in time for the DClinPsy thesis. Therefore, theoretical sampling of participants was limited. However, the final participant recruited for the study, Zoe, was a deviant case. The first three participants worked integratively or eclectically, whilst Zoe worked mainly using two models (REBT and CBT).

2.4: Procedure
A favourable opinion was gained from the local NHS Research Ethics Committee. Approval to commence the research was also gained from the host and employing NHS Trusts Research and Development Offices.

Clinical psychologists working in NHS East Midlands’ adult mental health teams were approached to volunteer to participate. Potential participants were sent information
sheets explaining the current study (Appendix G). Those who agreed to participate were asked to sign a consent form (Appendix H) and asked to identify a suitable client they were working with. They then provided their clients with an information sheet (Appendix I), explained the aim and procedure of the current research and gained their consent (Appendix J). Four participants identified suitable clients who consented to the research.

Data collection took place over nine months, between June 2013 and February 2014. Each participant provided two audio recorded one-to-one sessions, with the same client. After transcription, the sessions were analysed using grounded theory. For each participant, either four or five sections from the session transcripts were chosen, with the aim of focusing on these in the interviews. The choice was made by both researchers involved in the wider study, and was based on the ongoing analysis. When choosing the number and size of the sections, consideration was made as to what would be manageable, in terms of participants having time to read the sections and having sufficient time within interviews to cover the sections. The sections were highlighted within the whole transcript and sent to participants in advance of the interview. All participants reported reading the highlighted sections prior to the interview.

From the session analysis, semi-structured interview guides were produced. Later interview guides were also informed by the ongoing grounded theory analysis. This was done in order to theoretically sample ideas to inform the development of a model of formulation. The interview guide included both general questions asked of all participants, and specific questions related to each highlighted section (Appendix K). One section was discussed at a time. Before each section was discussed, participants were given the opportunity to re-read that part of the transcript, in order to refresh their memory of it. The interview process was flexible, with the interview guide being used as a prompt to ensure all areas identified by the analysis were covered. The interviews were then transcribed and analysed. The names of all people, teams and locations mentioned in sessions and interviews were changed when transcribed to maintain confidentiality.

2.5: Selection of sessions

All the sessions were individual therapy sessions. Initially, the aim was to record a session near the beginning of therapy, and one later on in the process of therapy, to
consider the process of sharing formulation at different points in therapy. However, it became clear during the recruitment process that this would not be possible. Participants reported not feeling that the therapeutic relationship had developed sufficiently to ask clients to participate early in therapy. Sessions included in the analysis ranged from the fourth session to the final session. For three participants, the two sessions took place consecutively (Zoe, Sarah, Rachael). For Gemma there was a gap of three sessions. For two of the participants (Rachael, Sarah) both sessions took place in the client’s home, for one participant (Zoe) both sessions took place at the service base, and for one participant (Gemma) the first session took place at the service base and the second at the client’s home.

Participants were asked to choose two sessions to provide for analysis. This was done in an attempt to make the sessions as naturalistic as possible, by removing the pressure to formulate in a pre-determined session. As part of the interview, participants were asked their reasons for choosing the sessions. Two participants reported choosing the sessions because they had planned to formulate within them. Two said it was a practical decision, based on them being the only two sessions it was possible to record.

Participants were asked about the extent to which they felt recording impacted on the session. Zoe said she did not think it had an impact. Gemma, Rachael and Sarah all reported that, because they were aware the research was about formulation, they may have focused more on formulation. Zoe, Gemma and Sarah reported not noticing a difference in how the client was in the session, whilst Sarah thought her client was more self-conscious. All participants felt the sessions included in the research reflected a typical session with the client.

2.6: Analysis
Verbatim transcription was used to transcribe the sessions and interviews. This transcription was chosen because the level of analysis did not require a more detailed transcription (Willig, 2013); this is consistent with (Strauss & Corbin, 1998) suggestion to not do more transcription than is required. Also the transcripts needed to be easily readable for participants and clients.

Data collection resulted in 15 hours of audio recording. Each participant provided two audio recorded sessions of between 45 and 65 minutes long. Interviews were between one and two hours in length.
A simultaneous process of data collection and analysis was used. Both sessions from each participant were analysed together. To analyse the sessions, initially transcripts were read in full. Parts of the session transcripts, which were not identified as being relevant to formulation, were excluded from the analysis (Appendix L). If there was any doubt as to whether something was formulation, it was included in the analysis. The relevant sections were then provisionally coded line-by-line (Appendix M).

Interview transcripts were analysed in full. The first three interviews (Rachael, Sarah, Gemma) were initially read and then line-by-line coded. Memos including analytic ideas were written throughout. Constant comparison of the codes throughout the analysis led to the development of focused codes. From this process, categories and subcategories were developed, and the relationships between them defined, to produce a model of formulation. The final interview (Zoe) was initially read and then analysed to refine and extend an early model. Following this, all data was looked at again and used to refine and develop the emerging model (Appendix N).

2.7: Methods to enhance quality

The researcher used methods to enhance the quality of the research that were appropriate to a ‘contextual constructionist’ epistemological position and grounded theory analysis (Madill et al., 2000; Willig, 2013). Contextual information has been provided in the report to allow the reader to understand the context and consider transferability to other contexts. The research report has been written to provide a complete account of the data so that the reader can consider the fit between the findings and data.

Prior to data collection a bracketing interview was carried out by the research supervisor to provide an awareness of prior assumptions about formulation, in order to attempt to set these aside in the analysis, and to allow a reflexive examination of any influence on the analysis (Fischer, 2009). A reflexive journal was completed throughout (Appendix O). Alternative interpretations were considered in peer and research supervision (Appendix P). The initial analysis used provisional, line-by-line coding that identified actions, to avoid the likelihood that pre-conceived models were imposed on the data (Charmaz, 2006). The analysis was examined using research supervision.
3: Results

The following results are based on the combined analysis of the session and interview data and includes quotes from both. The core category was conceptualised as formulation as purposeful action performed by participants. Formulation was influenced by the action of integrating ideas from different levels of context. Sometimes this integration was smooth; at other times it was a complex and challenging process that resulted in conflicts. The integration of ideas influenced the purpose of formulation. The common purpose of formulation was sense-making. Through sense-making participants were trying to achieve a number of aims, including delivering interventions.

In the session, participants held the formulation aims in mind. Participants were responsive to what clients were bringing, and took opportunities to weave aspects of the formulation into the conversation. Participants made moment-by-moment decisions about which actions to perform. Sometimes decisions were deliberate and sometimes intuitive. Some of the content of sessions was therefore not in the participants’ awareness and this led to a process of them being surprised in the interviews. Through a process of reflection participants noticed contradictions and alternatives that they were previously unaware of.

The model below shows the process of formulation. Category 1 shows ideas within different levels of context. In Category 2 these ideas are fused together through a process of integration. Category 3 describes what participants were aiming to achieve, which was influenced by the integration of ideas (category 2). Category 4 describes the process of how participants formulated in sessions to achieve the aims they held in mind from category 3; by taking opportunities to share formulation, making decisions in the moment about what and how to share formulation and relying on intuition to guide formulating. In category 5, participants used formulation to reflect on the above process and this enabled them to identify contradictions and alternatives.
Figure 1: A process model of formulation

**Category 1: Formulation is influenced by different levels of context**
- Clinical Psychologist
- Theory
- Client
- Teams

**Category 2: Formulation as a process of integrating different levels of context**
- Smooth integration
- Challenges in integration

**Category 3: Formulation as purposeful action: the aims of formulation**
- Making sense
- Using sense making to achieve aims

**Category 4: The process of using formulation in sessions**
- Having a plan in mind
- Taking opportunities
- Making decisions in the moment
- Relying on feelings

**Category 5: Noticing different things through reflection**
- The formulation as a safe place to reflect from
- Identifying conflicts in the formulation
- Identifying alternatives
The analysis indicated a distinction between a description of what was in the formulation (the content) and how the formulation was used (the process). However, this distinction was not clear cut and both were evident across the different categories. In categories 1 and 2 ideas from the different levels of context, and their integration, informed both the content and process of the formulation. Category 3 included what participants were aiming to do with the content and process. Both the production of content and the process of sharing formulation were purposeful actions. Category 4 was about the process of sharing the content of formulations. Category 5 indicated how the content of formulations were used as this was more comfortable than reflecting on process.

3.1: Formulation is influenced by different levels of context

The content of the formulation, the process of formulating and the purpose of this, was influenced by ideas from different levels of context. These were participants’ ideas about themselves as clinical psychologists, theoretical ideas, ideas about the client and their family and community, and ideas about the team. The different levels of context were there continuously throughout the process of formulation and simultaneously provided different ideas that influenced formulation.

3.1.1: Clinical Psychologist

The analysis identified that participants had a concept of their own personal style, preferences and beliefs and this influenced how they formulated.

“I think hopefully what I do is demonstrably psychological but without the need for all the psychobabble that goes with that because I don’t like it I find some of it the psychological language that we use as a profession quite impenetrable at times erm so I suppose that’s just a personal style.” (Interview, Rachael, 956-959)

The way participants spoke about this highlighted a sense of individuality. Despite this there was similarity in how participants described their personal style. For example, all participants said they used everyday language, but they spoke about this as being something personal they brought to the process, rather than something inherent in formulation.

“Oh particularly in my style I use metaphor all the time you know and I think erm you know I think to try to give a rich narrative a thicker one and one that
isn’t laden with psychology language that’s going to have a bit of emotion round…”(Interview,Sarah 716-718).

Sometimes participants’ beliefs about what was helpful stemmed from professional psychology and sometimes from outside psychology. The example below shows how the participant uses a belief based on her upbringing when formulating, and she does this because of her beliefs that cultural messages can help normalise.

“Gemma:……kind of having, having balance, having difference is useful, I think so.

Katie: Yeah, and I guess I’m interested, I’m interested then in that, that’s like a belief for you that sounds like it’s been, sort of as you were growing up perhaps?

Gemma: Yeah, yeah.

Katie: Does that inform your formulation would you say?

Gemma: Yeah, definitely, yeah, yeah, I think we draw on all sorts of things as therapist when we talk about formulations with people and erm a lot of the time it is….more cultural messages, cultural narratives around erm what can be helpful or harmful to people and erm I think drawing those kind of things in to, in to the formulation is really helpful because it sort of normalises it for the person...”(Interview,Gemma,457-467).

Participants’ beliefs about formulation was another influence. They valued formulation and had high expectations of what they could achieve with it. Below Gemma explains why it is important that the formulation fits.

“when I say it fits for me I guess I’m saying that it explains everything that has been presented to me,” (Interview,Gemma,907-908).

3.1.2: Theory

The theoretical model used, not only influenced the content of the formulation, but also informed the purpose of sharing the formulation and how this was done. Below Zoe uses REBT theory to understand the client’s experience. This informs her aim of normalising in order to identify the client’s actual thought, as this is viewed as
necessary to challenge it. She tries to achieve this through modelling when delivering the formulation to the client.

“yes I suppose it’s a modelling, you know, it’s, it’s kind of I use myself erm and I often invent fictitious friends or family members in order to permission give for clients to talk about their internal worlds, erm - I think, one of the things within REBT is that erm the hot cognitions, the cognitions that are directly linked to emotions, tend not to be politically correct, they tend to involve a lot of swearing, they tend to use, to involve a lot of absolutes, erm and when you ask people what they say to themselves they tend to deliver very, erm - socially acceptable, tame language and actually if you’re going to challenge what someone thinks, you need to know what they really think, so I use a lot of modelling to say, might it be this, or might it be that, in order to, as I say, to normalise - what, what people say to themselves in their heads.”
(Interview,Zoe,167-175).

3.1.3:Client

Formulation was influenced by the participants’ understanding of the client. Again this influence affected both the content of the formulation, in that it included information that the client brought, and also informed how the formulation was shared.

“the level of detail in formulation will vary so erm - you know this, because this guy was intellectual, thoughtful, lives in his head quite a lot, there were quite a lot of discussion of the richness of exactly what he says to himself with the intellectual processes that he goes through to change it or identify it.”(Interview,Zoe,303-306)

There was an element of participants being influenced by their perception of what they thought would be useful for the client. For the participant below there was a sense of an external expectation that formulation should be based just on what the client says they want, but that in reality it is also informed by what participants think the client needs. However, what the client said provided limits for where the formulation could go.
“it was based on what she told me she wanted but there probably was an element of this is what I think you need as well if I’m going to be honest I think there probably was an element of me imposing what I thought she wanted on her as well because I think we all do that even if we say we’re not doing that I think we do do that but I think I was trying to do that within the parameters that she’d set to try to be respectful of where she was.” (Interview, Rachael, 754-758).

3.1.3.1: Family and community

Within the ‘client’ context, participants drew on information about the client’s family and community to inform both the content and how they formulated. The example below shows how Sarah’s idea that the family appeared stable led her to use a multifactorial formulation.

“...he had a very you know what appears to be a very stable family background all sorts of things it was almost hard to formulate in some ways so it looked more like this sort of multifactorial...” (Interview, Sarah, 773-774)

3.1.5: Teams

All participants spoke about how the context of working in a team dominated by the medical model influenced formulation. Being within teams that adopted a medical model, meant that formulation based on psychological models was an alternative that needed to be promoted to clients, families and teams, to encourage them to engage with formulation.

“creating a rich narrative is key to counter balance the very strong narrative of the medical model and I think to really convince somebody that it’s more than just the chemistry in your brain you know you need to convince them that the formulation is very powerful.” (Interview, Sarah, 756-759)

3.2: Formulation as a process of integrating different levels of context

The content and process of formulation involved an integration of ideas from the different levels of context. The variety of influences both between and within the different levels of context, provided participants with different paths to follow. Sometimes the paths led in similar directions and could be smoothly integrated. However, sometimes the paths could lead in different directions, creating challenges for participants.
3.2.1: Smooth integration

When ideas from the contexts were perceived by participants as being similar, their descriptions of the integration process were smoother. Below the participant integrates the client’s religious beliefs with theory.

“…there’s quite a lot of overlap between Buddhist ideas and REBT ideas about being fallible, about making mistakes, about being in the middle about actually you’re only sort of erm, you’re only able to move on when you accept your flaws…” (Interview, Zoe, 270-272).

The analysis identified that the integration process for Zoe was smoother, compared to the other three participants. Zoe was the only participant who did not describe herself as being eclectic or integrative in terms of orientation. The process was smoother for Zoe both within the ‘theory’ context and between different contexts. This can be seen in the example above, where ideas from the ‘client’ context (the client’s religion) is integrated smoothly with the ‘theory’ context. This showed that for Zoe, working with fewer models was related to a smoother process throughout, not just in terms of integrating different theories.

The analysis indicated that the models chosen by participants were informed by their preferences and style. This reflected a process of participants integrating their values with theory. For Zoe, choosing to work in specific models could indicate a preference for a smoother process of formulating. Choosing to work integratively could be influenced by a personal preference for variety. For example, for Sarah an “onion” model of formulation, informed by a number of different psychological theories, means that she brings in information from a variety of contexts. She describes this as something she enjoys.

“…I have that sort of onion view of the sort of internal then the family then social network and then cultural sociocultural political I really like all that.” (Interview, Sarah, 551-552).

This example also shows a wider theoretical context, leads to her using a greater variety of ideas within each context (for example ideas about the client’s internal world and family and culture). This highlights how a greater number of models requires integration of more theories, and also leads to more ideas within other contexts being
relevant when formulating. Bringing all this together when formulating could be a more challenging and complex task that cannot always be smooth.

For the participants working eclectically and integratively, the analysis indicated that more choice was involved in terms of the model used. These participants chose which theories were relevant to the client and integrated the client’s story into these models. Sometimes, especially when there was a focus on one theory or part of the formulation, this process could be smooth. In the example below, Sarah’s preference for psychoanalytic theory, and her perception that this is relevant to explaining the client’s experience, led her to ask about the client’s dream in the session. The participant describes integrating what the client tells her about his dream, with psychoanalytic theory.

“But this dream that was very important really because if you think about this sort of denial he’s in he’s had this dream where he’s flying alongside a plane ...I think also because I’m more integrative and I quite like psychodynamic stuff I don’t I do think of dreams as a real gift in terms of some of the more unconscious things going on and this one for me he’s both the superhero and the plane. Superhero trying to keep the plane up. And the plane struggling and needing to come down.” (Interview, Sarah, 822-828)

This example, shows the participant focusing on one part of her “onion” formulation, specifically the psychoanalytically informed part. As can be seen in the sections below, the integration process becomes more complex when a wider perspective of the whole formulation process is integrated. That is, the analysis indicated that parts of the formulation process could be integrated smoothly, even when the overall process was complex.

3.2.2: Challenges in integration

There were times when integration became more challenging. Sometimes participants perceived conflicts. In response to reading the session transcript, Rachael realised that she acted differently to her preferred non-expert style. She explains this is a response to a perception that the client wanted an expert style. Noticing the conflict between
maintaining a sense of her non-expert style, and responding to her perception of what the client wanted, is an uncomfortable position.

“Well I erm I d- I don’t know actually I don’t know if I’m taking an expert position or whether I’m telling her what I’ve observed about her from what she has said erm so I’m not sure that is I’m not sure that is an expert position maybe. I think that’s perhaps me sharing an observation of how she comes across erm but if it is taking an expert position I think it’s done quite gently I don’t think I’m telling her exactly what she’s feeling but I’m wondering about things perhaps and it’s quite for this client its quite difficult sometimes to not take an expert position because she’s very much what do you think about that what do you know can you explain why this is happening. I think my general style is not to take an expert position with clients…” (Interview,Rachael,400-407)

For Sarah, integrating different models into the formulation created difficulty. Psychoanalytic theory led her down a path of understanding the client’s narrative as a defence against ‘reality’. Narrative theory led her to be curious about the client’s story and not make assumptions of an ‘external reality’. The examples below show contradictions between these two different assumptions about the nature of ‘reality’.

“But that’s not really the reality and he just felt he was going to create himself a job. I mean you know we’ve always got to be curious about what the reality is…” (Interview,Sarah,45-46).

“…much as I wanted his narrative it was still feeling a bit defensive to me…” (Interview,Sarah,591-592).

Sometimes participants were not aware of contradictions. In the following example, the participant provides contradictory explanations in different parts of the interview. Rachael describes her decision to maintain a non-blaming position when formulating, even though this differed to the client’s position that she is to blame. She explains that she maintained a non-blaming position because anyone would have taken this position based on the client’s story.

“I genuinely feel that if she’d have told the same story to anybody else they’d have told her it wasn’t her fault as well.” (Interview,Rachael,520-521).
However, earlier in the interview Rachael had explained how other people had taken a blaming position. This was an important part of her formulation. Rachael made sense of the client’s experience of paranoia, as a response to her internalising messages from other people that she was to blame for being raped.

“..actually people in her life over the years have kind of reinforced this belief that it was her fault they’ve kind of told her things like how could you have been so stupid to go off with this bloke erm what were you thinking what were you doing that’s really daft you shouldn’t do that and that over the years she’s just internalised that I’m to blame it’s all my fault” (Interview,Rachael,109-113)

This example also reflects the potential influence of cultural discourses on formulating. In this case, feminist ideas would seem important; specifically discourses around people never being to blame for being raped and that this idea has to be strongly promoted to counter a victim blaming culture. These discourses could have prevented Rachael taking anything other than a non-blaming position. The participant did not speak about this, however it is likely it would have an influence. This highlights how the impact of cultural discourse may not always be explicitly discussed.

Despite the process for Zoe being generally smoother, there was a hint of contradiction. Holding on to Bentall’s ideas strongly, a position that can feel necessary in teams dominated by the medical model, provided a contrast with the participant’s belief that all views are valid, leading to a need to justify her position.

“Zoe: ...Bentall ideas of erm- experiences being on a continuum and being explained by lots of different erm reasons other than you’ve got a faulty gene or a faulty chemical or some fictitious, we can’t find it yet.

Katie:So would you tend to say you’re quite influenced by those ideas and I guess your formulation is quite influenced by those ideas and perhaps your language then and what you’re communicating?

Zoe:And actually I can justify that because erm as I say I never, I will never persuade someone to stop medication erm although if people want to stop medication I will say that’s absolutely fine but can I give you some tips on the best way of doing it- Erm - But in terms of the diagnosis, there’s, there’s enough of the medical model pushing”(Interview,Zoe,552-560).
This shows again that for all participants, as the number of influences increase, it becomes harder to always integrate the different levels of context smoothly.

3.3: Formulation as purposeful action; the aims of formulation

This category describes why participants formulated and what they were trying to achieve. The analysis indicated that what participants included in the content of their formulation, and how they shared this, was purposeful and was used to achieve certain aims. The purpose of formulation was influenced by the ideas from the different contexts that were integrated together. The purpose common throughout formulation was sense-making. By sense-making participants were trying to achieve a variety of aims, for example normalising, validating and challenging.

3.3.1: Making sense

The choice of formulation content and the process of sharing formulation, was an action performed for the purpose of making sense of the client’s experiences, in both the interview and sessions. Below Rachael explains that she worked with the client to achieve the aim of making sense of the origins of ‘paranoid, anxious thoughts’.

“...the client and I were able to make sense of where they (paranoid anxious thoughts) came from you know try to track it back rather than it’s just this frightening overwhelming thing that happens to you now we’re trying to understand its origins....”(Interview,Rachael,867-869)

In the session, Gemma shared the formulation with the aim of making sense of what the client said. Here she explicitly shares the aim, describing it as understanding vulnerability to paranoia. This example also highlights how the integration of ideas from the ‘theory’ (schema theory) and ‘client’ (ideas about the client being isolated) contexts influenced the sense-making.

“Paul:...I'm not getting any responses from people, is kind of er, I think that might be adding to my paranoia, because I’m starting to think that, I don’t know maybe, I know like they're not, but at the same time I’m thinking that, you know, it’s like a conspiracy like, "don’t hang out with Paul", or something like that.

Gemma:Mhm, well in terms of the framework we’ve been using recently to understand your vulnerability to paranoia, erm, it kind of fits for me potentially,
you let me know if it fits for you, with this kind of social isolation idea, erm, that when you're isolated from people that you're friendly with, or care about you, that can erm, increase your vulnerability of paranoia.” (Session,674-683).

3.3.2: Using sense making to achieve aims

The way participants chose to make sense had a purpose. There were a large number of aims that participants were trying to achieve, including normalising, validating, engaging, setting up an intervention, increasing self-efficacy, motivating and challenging.

In the example below, Rachael is trying to make sense of the client having fewer panic attacks in order to re-enforce the intervention, increase self-efficacy, promote a psychological understanding, whilst not dismissing the client’s medical explanation.

“Rachael: And maybe the medication has helped a bit to settle the anxiety down. But I also think the way you think about things has changed hugely and in particular how much kinder you are to yourself now than you used to be from some of the things you talk about something I think you put an awful lot of pressure on yourself now and you’re very hard on yourself sometimes. And I can imagine in the past if you were starting to feel quite panicky you know you would’ve you might have got really down on yourself because you were feeling quite anxious and panicky and that in itself could have made it worse.” (Session,124-130)

Here Sarah explains how she was trying to use the formulation to intervene.

“So it was just a little bit of trying to help him to to just decide to you know for now it’s best to stay put so there was definitely a little bit of intervention in that formulation if you like.” (Sarah,284-286)

The intervention aim in the above example was encouraging the client to ‘stay put’. This aim was identified from the process of sense-making. Sarah had understood the client’s problems as being related to him not coping with living in the US and therefore staying in the UK was helpful. She explains the sense she made of the ruthless, competitive culture in the US and how this was unhelpful for the client.

“…..ruthless competitiveness because that’s important in terms of this formulation because that sort of phrase immediately creates adrenaline doesn’t
it ruthless competitiveness and that’s what I felt was something he would get into and not be able to control.” (Sarah, 499-502)

3.4: The process of using formulation in sessions

This category indicated how participants formulated in sessions. For each session, participants held in mind the aims they wanted to achieve in that session.

Participants occasionally explicitly set the agenda for what they wanted to focus on. More commonly participants used a process of being responsive to what clients were bringing, and taking opportunities to weave sense-making into the conversation, in a way that made it relevant to the discussion. The process required participants to be constantly making decisions about how to share aspects of the formulation to achieve the aims they had in mind. Sometimes decisions were deliberate and sometimes intuition was relied upon as a guide through what could be a complex process.

3.4.1: Having a plan in mind

Participants had a plan in mind for what they wanted to achieve in sessions. For example, Gemma had the intention to focus on a specific schema and introduces this towards the beginning of the session to direct the formulation process.

“Gemma: Awesome ok, so shall we look at the schema stuff that we discussed last time then.

Paul: Sure.

Gemma: So what we were doing was picking out some of the schemas that you scored highest on and thinking about how that might have made you vulnerable to feelings and thoughts around paranoia at the time that you first came into contact with our service.” (Session, 151-155).

3.4.2: Taking opportunities

Sharing the formulation in sessions was a process of taking opportunities to introduce the formulation in a way that was responsive to the client. Sarah takes the opportunity to bring in the attachment part of the formulation in reaction to Chris saying he sleeps better when his girlfriend is there.

“Chris:….. Kat calms me and spending evening and nights with her. I have my best sleep with her next to me erm and yeah.
Sarah: Well that’s interesting because we talked about attachment if you remember last time and you know you are someone who is securely you have a secure base here you’ve got a good attachment to your mum and to your parents to your family and you’ve been a massive distance over there so I’ve put that in the formulation of last time that actually that separation was dis-regulating you see at some level that our secure attachments actually regulate us yeah." (Session, 1288-1294)

3.4.3: Making decisions in the moment

The process of formulation also involved participants making decisions moment-by-moment about which path to take. This included decisions about what part of the formulation to share and how to share it. These decisions were based both on the plan the participant had in mind and a reaction to what was happening in the moment.

Two of the aims held in mind by Gemma when formulating in relation to the schemas were to hypothesis test and provide hope. Collecting evidence to test the hypothesis that a social isolation schema was active, required a focus on making links between unhelpful behaviour and how this related to low mood. Gemma was also trying to provide hope of a helpful alternative, by framing the formulation in a positive way that highlighted how having more social contact improves mood. The example below shows how Gemma had initially decided to go down the latter path with her question and in her response changed to the former path.

“Gemma: Ok and can you see any ways in which if we’re in sort of a more difficult or negative state of mind that it can be helpful to us to be around other people?

Paul: Yeah I know that erm sometimes when you are feeling low it is better to be around people because the infectious thing can work both ways, they can bring you up.

Gemma: Yeah, so we can presume perhaps at this time when you weren’t socialising because you were working so much or you were too tired that you had less opportunity to be brought up in your mood." (Session, 296-302)
When looking at the session transcript, Gemma noticed she had made a decision to hypothesis test rather than provide hope in the moment, and felt disappointed as a consequence.

“I’m kind of disappointed that I didn’t pick up on that more, erm, and just kind of focussed on the more negative, the sort of data collection in terms of the social isolation at the time.” (Gemma,732-734)

3.4.4: Relying on feelings

Whilst the decisions made in sessions were sometimes deliberate and within participants’ awareness, some of what participants did in sessions when formulating was intuitive.

“I think that so much of it is sort of a gut reaction that you just kind of go with what feels right at the time, that you haven’t, you have a general sense of what you want to achieve in a session or kind of the trajectory that you’re hoping for for this client-but it’s not, it’s not as conscious as the reflections today might make it sound” (Interview,Gemma,1016-1020)

The challenge of integrating so much information, may prevent participants from always being able to engage in a conscious decision making process, and may lead participants to rely on feelings of security to guide them.

“Erm I’m not sure really maybe erm maybe it feels and I was certainly not consciously doing this but it feels to introduce the idea kind of it feels I don’t know more comfortable safer to talk more generally to begin with and then kind of relate it more to her more specifically to her but I don’t think there was any conscious process going on there...” (Interview,Rachael,391-394)

Zoe did not speak about relying on intuition. She spoke in a way that indicated that she had a more definite awareness of what she was trying to do.

“I mean I knew where I was going” (Zoe, 332)

Thus, a reliance on intuition may have been less necessary when the integration process was smoother, as the ideas and aims were clearer meaning the participant was better able to hold them in mind.
3.5: Noticing different things through reflection

Analysis of the interviews highlighted how the process of reflecting on the use of formulation could be challenging, but it allowed participants to notice things they were previously not aware of. All the participants spoke about how reading the session transcripts led them to be surprised at how they had formulated.

3.5.1: The formulation as a safe place to reflect from

Participants explained the content of their formulation with relative ease. Participants knew the content of their formulations very well and all participants used them in the interview to explain how they were formulating and why in sessions.

“And I think in terms of formulation - this is one of the key ideas erm - this idea of fundamentally not being ok, because he’s mad, erm and there almost being you know some of the perfectionist idea, you know perfectionist ideas don’t just kind of come out of nowhere, they’re around from earlier but they get strengthened by certain things. Erm and so they’re having to do well, having to achieve status, you know he gave a whole list I think early on of, of benchmarks that make you ok, erm none of which he had achieved...” (Interview, Zoe, 409-414)

This contrasted with the difficulty participants sometimes had explaining the process of using formulation. This indicated that describing the content of a formulation is more comfortable than reflecting on doing it, explaining how and why. For some participants this partly reflected a difficulty explaining processes that are not fully conscious. An example from Sarah indicates the difficulty with articulating a process of intuition when formulating and how this becomes conscious.

“...formulation’s less of an intellectual exercise and a whole lot of it is actually reflective that you’re actually picking up cues all the time in that subliminal almost mentalisation that’s going a bit far but it’s sort of you know it does inform and then the relevance begins to emerge more consciously. I can’t really explain it...” (Sarah, 525-529).

Zoe also used descriptions of the formulation content in the interview, despite her having a more definite awareness of what she was doing in sessions. This highlighted that even when the integration process was smoother and less reliant on intuition, the
content of formulation was still used to answer questions about how and why participants formulated.

For all participants there was a wide range of contexts to integrate and an expectation that the formulation could achieve a wide range of tasks. This process could be overwhelming for participants. Using the formulation to provide a temporary safe certainty was one way of managing this so participants still felt able to do their job, and give the client what they needed.

“there is safety and a sense of reassurance in having a formulation that seems to fit to us because erm-Uncertainty isn’t, isn’t very helpful when you you’re doing therapy with somebody who erm is asking for something from you that they think you can provide so erm having a formulation that feels like it fits-helps you to think that you can provide what the client is asking for” (Gemma.911-915)

Temporary certainty in a formulation therefore provided a safe place for participants from which they could begin to explore the contradictions and complexity within the process and identify alternatives.

3.5.2: Identifying conflicts in the formulation

Through reflection, participants became aware of conflicts and how they had influenced the process of formulating. Participants realised how uncomfortable feelings in relation to conflicts when integrating different ideas, lead them to favour certainty in formulation. For example, Sarah had spoken of difficulties integrating ideas about promoting a psychological message that the culture of the US was not helpful, whilst staying person-centred and valuing the client’s medical model narrative that he could return to the US if he took medication. Sarah became aware during the interview of how her anxiety related to this difficulty, led her to favour a certain explanation that the culture of the US led to the client’s problems.

“Yes that’s right open all the time but as you’ve heard today you can almost pick up my mind closing down at times and wanting to say you know my bit about the states there that I think it’s been really important this conversation for me to realise I came in quite strongly there about the states and that belies how I was anxious to keep him stay put. I was going more stereotypical than I should have really do you see what I mean?” (Interview,Sarah, 536-540)
3.5.3: Identifying alternatives

Three of the participants identified alternative courses of action that they could have taken when formulating.

“So I think what’s going on here is you know I talked to her earlier about wanting to shake her sometimes so maybe that’s a good example of what’s going on I can see that this doesn’t help her and I’m trying to shift her from that but in doing so probably shut down avenues that I could have explored with her.”
(Rachael, 1083-1086)

While Zoe did not identify different paths to follow, she did reflect on different ways of following the paths.

“maybe a more erm a more formulation informed word would be fairness or the justice of it because those were kind of ideas that he talked about before.”
(Zoe, 333-335)

This may reflect her clarity in the aims she wanted to achieve. This indicates that when formulation is a smoother process, reflection may be less valuable in identifying alternative actions than when it is a more complex process of integrating conflicting influences. However, even when integration is smoother, reflection can allow the identification of different ways of doing formulation.

4: Discussion

4.1: Summary

The aim of the current study was to use grounded theory to produce a model of how clinical psychologists use formulation in sessions with clients who have experienced ‘psychosis’.

The core category identified was that of formulation as purposeful action. Formulating was an active process influenced by an integration of ideas from different contexts; this was sometimes smooth and sometimes complex and conflicting. The integration process influenced the purpose of formulation. The common purpose of formulation was to make sense of clients’ experiences. However, the sense-making was not neutral and passive, but an action performed by participants with the intention of achieving certain aims.
Within sessions, participants held aims in mind and looked for opportunities to achieve them by weaving formulation into the conversation. Participants made decisions moment-by-moment. As well as making deliberate choices, intuition was used to guide the action of formulating. Reflecting on the use of formulation could be challenging, but it allowed participants to make surprising observations about their clinical practice and notice different ways of acting and interpreting.

4.2: Extending definitions of formulation

The results of the current research suggest that some definitions of formulation do not fully capture the use of formulation in practice. In the introduction, formulation was defined as a hypothesis, based on psychological theory and evidence, that provides an explanation of a client’s problems (British Psychological Society, 2011; Johnstone & Dallos, 2006). This definition does not fully do justice to how formulation was used by participants in the current research. Whilst it corresponds to what a formulation is, it does not define what formulating was for participants. Formulation as purposeful action chosen to achieve certain aims, is more consistent with the idea that formulation is an intervention in itself (British Psychological Society, 2011; Johnstone, 2011). However, definitions of formulation as intervention, can sound like the intervention is a neutral by-product of psychological sense-making (British Psychological Society, 2011; Johnstone, 2011; Johnstone & Dallos, 2006), and therefore still does not provide a full explanation of the use of formulation in the current research.

From the perspective of the scientist-practitioner model, the idea that formulation should be a scientific, reliable and valid application of science to practice (Bieling & Kuyken, 2003; Kuyken, 2006) does not fully conceptualise the findings of the current research. Whilst participants did base formulations on theory, formulation was not simply a place where science met practice. Participants brought themselves and their contexts into the process. This fits with ideas that formulation is not simply ‘rational’, ‘dispassionate’ and ‘intellectual’ but is a ‘subjective’ ‘interpersonal’ process, influenced by clinicians’ personal and professional experience (Dallos, Wright, Stedmon, & Johnstone, 2006; Stedmon & Dallos, 2009). Also, in the current research, participants’ ideas about themselves and their practice were integrated with their ideas about the client and theory. Therefore, what participants were doing could be understood in terms of Harper and Spellman (2006) description of formulating; as the development of personally and theoretically congruent styles that fit for practitioners and clients.
The results of the current research provide support for the suggestion by Dallos and Stedmon (2013) and Dallos, Stedmon and Johnstone (2013) that formulation move from being conceptualised as a noun or ‘formulation as event’ to being conceptualised as a verb or ‘formulating as a process’. They describe the verb formulating as a dynamic active process which takes place in the moment. This is consistent with the identification of formulation as action, occurring in the moment-by-moment of sessions, in the current study. Dallos and Stedmon (2013) and Dallos et al. (2013) also describe how formulating is inseparable from the therapeutic relationship and this can also be seen in the current research. For example, participants used formulation in a way that was responsive to clients and to achieve aims related to the therapeutic alliance such as engagement.

Further to this, the analysis indicated that formulating was not a neutral process used to gain an accurate explanation of the client’s experience. Instead, it was an active process intended to be useful for both the clinical psychologist and the client. It therefore fits with the proposal that formulation be an ongoing collaborative dynamic process adapted to particular purposes (Dallos et al., 2006; Harper & Spellman, 2006).

This is consistent with shifts from the idea of formulation as a scientific process to formulation as a moral process. Participants took moral positions when formulating, for example not blaming someone for being raped. Clinical psychologists in the current study could therefore be described as ‘participant actors’ where, from their role in the therapeutic interaction, they take action and become a ‘social controller’ or a ‘moraliser’ (Cecchin, 1992). A key ‘moraliser’ action taken by the participants was to use formulation to provide alternatives to the medical model. Participants were therefore doing what Pilgrim (2000) suggested they should; taking professional responsibility to challenge diagnosis by attempting to provide powerful, useful formulations.

However, despite taking positions of usefulness and morality in formulation, at times participants shifted to the scientist-practitioner model of seeking accuracy in the current research. An example is where Gemma gets caught between hypothesis testing, which could be seen as residing in the scientist-practitioner model of validity seeking, and providing hope, which may reside more in the ‘moraliser’ or being useful camp. This could reflect wider tensions in psychology between the two positions, with some models tending towards more truth seeking and accuracy (Bieling & Kuyken, 2003), and some
towards usefulness and morality (Cecchin, 1992). Therefore, when formulating integratively, the positions of the different theories have the potential to clash.

4.3: Difficulties in integration
 JOHNSTONE (2011) argues that integrative formulation comes up against problems, when theories based on incompatible philosophies are integrated. In the current research this could represent a realist positivist epistemology of truth seeking, clashing with more constructivist epistemologies of usefulness, morality and fit. Therefore, one explanation for the tension in formulating in the current study is that it is an element of integrating theories from contradictory philosophical positions. Johnstone’s (2011) position, suggests that integration does not inevitably lead to tension and contradiction, and it can be avoided through a consideration of whether theories are philosophically compatible.

The extent to which a smooth integration is considered useful, perhaps also depends on personal philosophy. Johnstone (2011) argued that smooth integration of conflicts is an aim of therapy. Based on this perspective, formulation should seek a smooth integration to aid the client in integrating personal conflicts. However, Cecchin (1992) argued that contradictions are unavoidable and it is from them that new stories can be developed. Davies (2013) highlights that therapists’ metaphors for their practice can conflict with what is done. An awareness of this conflict can provide important information about therapists’ assumptions and values, and can generate new perspectives. From this point of view, noticing the contradictions in a formulation could be useful in generating change. Either way, what seems to be key is being reflexive and noticing conflicts. From there, clinical psychologists can make a decision about what to do with this knowledge.

It should also be pointed out that the analysis indicated that for participants in the current research complexity and conflicts did not solely come from differences between theories. They were also related to integration between themselves, their perspective of the client and other contexts they worked in. That is some of the complexity emerged from working with other people.
4.4: Formulating includes people

A hypotheses’ value lies in its ability to resonate, build relationships and encourage people to engage in changes (Cecchin, 1992). That is, it is about a connection between people, with the aim of bringing about change. This fits with the definition of formulation as an ‘interpersonal’ process (Dallos at al. 2006) mentioned above. Consideration of the interpersonal nature of formulation is useful when understanding the results of the current study.

The idea of responsiveness in therapy (Stiles, Honos-Webb, & Surko, 1998) provides a theoretical framework to explain how participants negotiated the interactional element of formulating. Using this idea, formulation in the current study can be seen as a process of responsiveness to various contexts. Formulating involved acting in response to theoretical orientation, client and clinician characteristics, culture and the experience of sessions. This took place over multiple timescales, using a perception of normal conversational rules, to guide decisions about when and how to share formulation (Stiles et al., 1998). Use of intuition could be a form of responsiveness, outside of conscious awareness.

4.5: ‘Chaos’ in formulation

Further to this, the interpersonal nature of formulating and a responsiveness from both the clinical psychologist and client, can lead to what Stiles et al. (1998) label as ‘chaos’. That is, formulating is unpredictable, taking people in unexpected directions. This provides an explanation for the current results in that participants, by being responsive, ended up doing formulation in ways they did not expect. This is one way of accounting for the surprise experienced by participants in the interviews.

If formulating has the potential to be ‘chaotic’, clinical psychologists may search for ways to manage this in order to function effectively in their work. One way of doing this, suggested by the analysis in the current research, would be to use the formulation as an anchor. Kuyken (2006) argued that therapists seek to reduce dissonance, created by the opening up of possibilities for new hypotheses as a consequence of the continual generation of new information, by generating a consistent formulation. Similarly, Johnstone (2006) suggested that having certainty in formulation can protect therapists from the uncertainty of pain and confusion in therapy.
Creating safety by having temporary stability when formulating could be useful. Stedmon & Dallos (2009) suggested that having a ‘safe base’ can prompt reflection. While Cecchin (1992) argued that stability creates the conditions for change, which then leads to a new stability. Feeling a sense of stability with a formulation could be a place from which to be reflective and create change, for both the clinical psychologist and client, which then feeds back into the formulation, which become static for a time thus allowing further change. Therefore, perhaps using the formulation to provide temporary certainty and safeness, could be useful for both therapist and clients, if change is allowed to flow from it.

Formulation in the current study therefore, appeared to be useful for participants in providing certainty, within the ‘chaos’ generated by being responsive to so many influences. By allowing themselves to challenge this certainty in the content of the formulation, participants were able to notice different ways of doing formulation. The results of the current study therefore suggest that too much reliance on the formulation, could get in the way of reflecting, if a person does not allow themselves to move beyond the safety the formulation can allow. A consequence of this could be what Johnstone (2006) warned of. That in meeting their own emotional and intellectual needs, psychologists run the risk of not meeting the needs of clients.

4.6: Formulating as ‘quick’ and ‘slow’ thinking
The results of the current research fit with Kahneman’s (2012) theory about ‘quick’ and ‘slow’ thinking. A ‘quick’ system relies on intuition and does not require a large amount of effort and resources. The ‘slow’ rational system is much more effortful. Kuyken (2006) argued that when therapy is smooth the intuitive ‘fast’ system can proceed freely. However, when problems occur in therapy such as ruptures in the alliance and poor outcome the rational system will start to engage. This interpretation differs from the current analysis, where participants spoke about intuition kicking in when formulating was complex. It could be that intuition provides an illusion of smoothness, which is not disrupted until something happens that leads someone to decide that it is worth the extra effort to use the ‘slow’ system. The interview process of the current research which involved an examination of session transcripts, may have disrupted this ‘fast’ system, alerted participants to a lack of smoothness and encouraged the ‘slow’ system to engage. This is consistent with Stedmon and Dallos (2009) suggestion that reflection, likely requiring the use of the ‘slow’ system, can be prompted by unexpected
situations and social engagement. In the case of the current research, the surprise experienced by participants when reading session transcripts, and conversations in the interviews, may have prompted reflection. That this took more effort was reflected in the initial difficulty participants sometimes had, and their reliance on the content of the formulation when answering how and why.

What is indicated by the current study is the usefulness of finding time to encourage the ‘slow’ system to engage, without waiting for poor outcome or alliance ruptures. Kahneman (2003) argued that a lack of time and mood can be a barrier to the ‘slow’ system. This highlights the importance of having time and a safe space to reflect on formulation. Without this, the ‘fast’ intuitive system could lead practitioners into a sense of smoothness, when potential complexity is there, and risk leaving practitioners in the ‘comparative safety of complacency’ (Stedmon & Dallos, 2009).

4.7: Past research

The results of the current research supports some of the findings of Christofides et al. (2012) who examined how clinical psychologists formulated in MDTs. Clinical psychologists in both studies used formulation to achieve certain outcomes, tried to weave formulation into conversations and took opportunities to share formulation ideas when they arose. Also, there were overlapping ideas regarding formulation often being a complex and messy process, and that talking about it in the interview helped participants gain clarity. Therefore, Christofides et al. (2012) provides further evidence for having wider definitions of formulation and the usefulness of reflection.

Christofides et al. (2012) and the current research, also found participants saw formulation as a powerful and beneficial tool that could challenge the medical model. This could reflect an underlying philosophy in clinical psychology that informs how the profession formulates. However, there is also the potential that this reflected a selection bias in recruitment for both studies, where clinical psychologists who wanted to promote formulation, were more likely to volunteer to participate. It is similarly possible that the researchers’ interest in formulation, influenced what participants said and did, and what was identified in analyses.

One interesting difference between the current research and that of Christofides et al. (2012), is in how formulation was shared. Christofides’ et al. (2012) themes identified a lack of confidence in sharing formulation with MDTs, which was not identified in the
current research. This highlights the possibility that psychologists feel more confident sharing formulation with clients, compared to teams. This could reflect clinical psychologists feeling they have more power with clients, have stronger relationships or that clients are more receptive to psychological ideas than teams. Alternatively, this may again reflect a recruitment bias, where participants in the current study identified clients who they felt confident to share formulation with.

The finding in the current study that formulation is used in different ways, for different purposes, is consistent with the finding by Weiste and Peräkylä (2013) who identified four types of formulation from audio recordings of sessions. This study provides support for the idea that formulation is used to deliver interventions.

There are also similarities between the Dilks et al. (2008, 2013) study and the current research. Although Dilks et al. (2008, 2013) research was about therapy in general, they identified an active and ongoing process, where theory was used as a tool informed by different sources of information including personal preference and beliefs. Consistent with the current study, Dilks et al. (2008, 2013) also identified tensions occurring through conflicting beliefs. These were both a belief in an external reality that the clinical psychologist could accurately see, and a belief in collaboration and respecting the client’s view. This adds support to Dilks at el.’s (2008, 2013) assertion that these tensions are a core process in therapy where the goal is both challenging the client’s beliefs and respecting them.

The similarities between the current study and Dilks et al. (2008, 2013) were conceptualised differently. The difference appears to be partly due to the different perspectives of the researchers and participants, with a greater influence of psychoanalytic ideas within both for Dilks et al. (2008, 2013), as compared with the current research. However, the similarities suggest an element of overlap between formulation and the overall process of therapy.

There are similarities between the current study and the work of Schön (1991). He examined case studies of different professions, including transcripts of senior practitioners supervising junior practitioners, to examine professional knowledge and decision making. He found that practitioners actions, rather than being informed by professional knowledge that was explicit and formal, were guided by implicit procedures and intuitive knowledge. This highlights the possibility that the use of
intuition to guide action that was identified in the current research, transfers to professions other than clinical psychology. According to Schön (1991), this reliance on intuition and implicit procedures led everyday professional practice to take place within a messy ‘swampy lowland’. Formulation within the current research can be seen as residing in these ‘swampy lowlands’. Schön (1991) described how the ‘swampy lowlands’ included unique experiences, unexpected experiences and value conflicts. All of these were identified in the current study. For example, all sessions were unique. The surprise identified from the interviews highlights how participants did not expect session transcripts to contain what they did. Value conflicts can be seen as happening when Rachael disagrees with her client in terms of whether she is to blame for being raped.

4.8: Limitations

Only limited theoretical sampling of participants was possible in the current study due to difficulties with recruitment. Also, the inclusion of data from audio recorded sessions, limited the number of participants it was practical to recruit given the time available. These limitations meant that theoretical saturation was not possible. It is likely that the model created could have been extended given more time. The model in the current research should therefore be seen as an emerging work in progress, rather than a complete theory of formulation.

The context within which recruitment occurred, and the difficulties with this, are likely to have impacted on the analysis. Given participants’ perspective of needing a good enough therapeutic relationship before recording sessions, the process of formulation identified in the model is likely with engaged clients and therapy based on a good relationship. Also, if the sessions provided by participants had been from the start of therapy, the process of formulation identified may have been different.

This research is specifically focused on clinical psychologists formulating in sessions with clients on a one-to-one basis. The model therefore may not transfer to formulation with more than one person or staff. The extent to which the model of formulation transfers to other client groups is unclear. Some of the conflicts within the integration process were a direct response to the idea of the client having unusual beliefs, which may not be applicable with clients with a different presentation. However, other conflicts were not specifically related to unusual beliefs, for example it could be
assumed that the issue of blame in rape would transfer to other client groups. As discussed above, some of the conflicts may be inherent in integration of models with different philosophical positions, which again could transfer to integrative formulation in other settings. Also, it is likely that difficulties associated with being responsive when formulating would transfer to other contexts.

The active coding suggested by Charmez (2006) could have influenced the interpretation by the researcher, of formulation as action. A different method may have led to different results. However, the epistemological position of the researcher, and Charmez’s (2006) version of grounded theory, does not pretend to produce the correct version of the data. The analytic method is part of the context that influences the model created.

4.9: Future research
Qualitative research could be carried out to extend the model by recruiting more clinical psychologists, other client groups and work in other situations. It would be interesting to investigate how formulation and intervention differ, as well as how formulation is used as intervention. The method of using session transcripts in interviews allowed an examination of the complexities of therapy sessions, which may not have been identified if participants had just been interviewed. This method therefore is a useful way of examining practice, which is not simply an examination of what someone says they do, but also includes an interpretation of what they actually do.

Clearly, the client’s perspective on formulation is valuable. The results of the current study will therefore be enhanced by the data from the other half of the current project that is focusing on the client’s perspective. In addition, future quantitative research would do well to consider the complexity of formulation in practice when designing research.

4.10: Clinical Implications
The results of the current research support the idea of reflexivity in formulation. Based on the findings it would be useful for clinicians to hold on to a concept of formulation as a complex, sometimes contradictory process. Complexity can be increased by integrating theories from different epistemological positions and being responsive to a variety of influences. Therefore, expecting a smooth process may sometimes be an unrealistic aim in therapy. However, through a process of reflection, practitioners can
notice the complexities and contradictions, and use this to enhance their practice. To do this clinicians need to have sufficient time and a safe space to reflect. Audio recording sessions could further enhance the capacity to reflect on complexity, by encouraging clinicians into a ‘slow’ thinking process. Therefore, one recommendation stemming from the current research is ensuring time for supervision and reflective practice, and an increased use of audio recordings.

The results support a shift in clinical psychology away from viewing formulation purely as a neutral process of sense-making. The use of formulation from a moral position further highlights the importance of reflexivity. Taking ownership of what and why we formulate as we do, with a consideration of the influence of ourselves and the wider context, requires an awareness that can be gained through reflexivity.
References


doi:10.1348/147608308X288780


Part 3: Critical Appraisal

This critical appraisal is based partly on the reflexive journal I completed throughout the research process.

*Research methodology and design*

I had a few reasons for choosing to undertake qualitative research. I had never undertaken a qualitative research project before and I saw this as an opportunity to do something different and extend my experience of research. At times this has seemed like an unwise decision, as it would have been much easier for me to have undertaken quantitative research, of which I have more experience and confidence. However, at no time have I felt any regret for the decision, despite it being a very difficult research process.

I have also found myself shift in my epistemological position in recent years. I think I had previously, unquestioningly perhaps, taken a realist position. Although with hindsight I am not sure if a more constructivist position was lurking beneath all the time. I certainly believed in a scientific process of quantitative research. However, I found myself becoming increasingly disillusioned with quantitative measurement. Again, looking back this had been there in the past. Even thinking back to undergraduate psychology, where there was a requirement to participate in research, I felt that the measurements used on me did not sufficiently validly measure my experience.

This being the first time I had undertaken a qualitative research project, choosing a specific qualitative method felt like a daunting process. I was drawn towards doing a thematic analysis as it appeared less complicated. However, I finally decided on using a grounded theory with the help of research supervision to strengthen my confidence.

I have reflected on my decision to use a research design that included session data, both in the analysis and to inform the interviews. This specific design appeared to be quite an unusual one. I could find only one study that combined session and interview data to look at clinical practice (Dilks et al., 2008). I was unable to find any papers that used session data to structure interviews. I was aware that this did not mean there was not
any research that had used a similar method, especially given many papers do not accurately describe their methods in their abstracts. However, my inability to find a similar methodology did mean that this was a completely new procedure, for which there was no pre-described method to follow specifically with regard to the design. My experience of this process was that it allowed me to be innovative and creative but at the same time could lead to me feeling uncontained. Fortunately, research supervision provided containment by allowing me to discuss the decisions I was making and why.

I think that using this design has resulted in the creation of a very different model to what would have been produced based only on interviews. I felt the design added to the model in allowing an analysis of the process of formulation in sessions, rather than just participants’ dominant stories about this. I think it also generated different data in the interviews that may not have been generated without reference to the sessions. For example, I do not think that I would have been able to identify participants’ surprise at what they had done in sessions, without the use of the session transcripts.

However, I feel a disadvantage of the design used was its complexity. I noticed when writing the current research report that I felt a considerable amount of the word count was used explaining the procedure. I also think that providing a complete representation of the complexity and messiness of formulation, which was identified perhaps partly as a consequence of the design, added another layer of difficulty when producing a model and writing the results.

**Recruitment**

Some clear limitations of my research revolved around my recruitment. Both my research supervisor and my initial scoping regarding interest in my research, raised my hopes that recruitment would be easy. There was quite a bit of interest it seemed. However, with clinical psychologists leaving the local area, it soon became clear that recruitment would be more of a challenge. Also, the necessity to have consent from clients, added another level of complication, with some volunteers not able to identify suitable consenting clients. This limited opportunities for theoretical sampling. Also the design, which meant there was between three to four hours of transcripts per participant, limited the number of participants that it was possible to include in the study in the time available.
Prior to commencing the research, I had discussions with my research supervisor and other qualitative researchers about the number of participants required for a DClinPsy thesis and to provide sufficient data to begin to develop a model. This was also addressed in the peer review process. It was agreed that four participants was appropriate for this, which I achieved.

Choice of sections

The design of the study involved making decisions about what parts of the session transcript to discuss in the interview. This was a joint decision between myself and the other trainee involved in the research. I also had considerable discussions about how to make these selections with the other researcher, both his and my research supervisors and other qualitative researchers.

The first step in this process was choosing what was and was not formulation. We therefore imposed our own views of what it is. We decided to do this broadly and inclusively. However, this could have influenced my analysis, in which I interpreted that formulation was wider than simply providing explanations for clients’ problems. When I looked at the data I thought that it was not clear cut when formulation was happening, it was fluid and part of a process. The clinical psychologists did not clearly identify when they were and were not formulating. However, rather than getting too caught up in this, instead I used it in my analysis. The exact difficulty of identifying where formulation starts and ends occurred because when I looked at the data it was weaved into general therapeutic conversations. It was not distinct and separate from other therapeutic conversations.

We identified far more parts of the session that were formulation than it would be possible to have highlighted and discussed in the interviews. Therefore, we had to choose which of a number of possible sections of formulation to highlight. We initially did this separately and then came together to make a final decision. My decisions were based on my ongoing analysis. The difficulty, as I always find with making decisions, is that they have consequences and they can leave you with the feeling that there was a better alternative. I managed this to some degree by trying to be thorough with my procedure. I broke down the transcript into a shortlist of potential sections and for each one set out the codes and memos related to that section. This enabled me to make a decision that was based on my analysis and codes. I gradually reduced my shortlist by
removing sections that I thought did not add anything to the analysis. I eventually took my highlighted sections to a meeting with the other trainee and we made a final decision together on what was included.

Prior to the process, I had wondered if I would find it difficult to make decisions with another trainee. However, I found the process useful and enjoyable. I had no trouble compromising with the other trainee. I felt a relief at being able to collaborate with decision making and to share the process with someone else.

Interviews

I found my experience of interviewing participants a strange one. Having to some extent got used to therapy sessions by the second year of my training, I found a shift to carrying out research interviews difficult. Thinking back to teaching on the differences between undertaking clinical sessions and research interviews was useful. I found myself aware of my hypotheses from the analysis of the sessions and conscious of not wanting to force my interpretations on to the participants. Finding a balance between reflecting enough to help participants feel listened to, in order to help them open up, whilst not reflecting too much so as to excessively influence the data, was a useful lesson I have learnt.

During the interviews I had the experience of not feeling like my questions were always answered. As indicated in my results, participants used the content of the formulation in answer to questions about how, why and what they were doing when formulating. In the interview, this left me feeling both frustrated and confused. Frustration was perhaps related to me thinking, “why haven’t you answered my question”. Confusion was related to me thinking, “have you answered it and either I have not understood it or I have missed it”. When transcribing the frustration re-appeared. I thought, “why am I typing out the content of the formulation again” and “is this going to tell me anything about how you formulate”. The confusion however was no longer there, as I was able to see whether I had missed the answer. My understanding of this, when looking back at the transcripts, was that sometimes I had missed an answer and sometimes it still did not seem to be there. I noticed that sometimes an answer was within the detail of the formulation, so perhaps it would have been difficult for me to filter this out in the moment of the interview.
The frustration dissipated as I started to move into a more interpretive frame of mind and consider why this was happening. My interpretation was that it reflected a difficulty answering the question. That participants, given the difficulty, relied on what they knew, what they could be certain of, the content of their formulation. This further highlighted to me the value of qualitative research when exploring complex experiences. The qualitative data and an interpretative qualitative analysis, allowed an identification of the complexity involved in the process of formulation, such as its use to provide temporary certainty and safety.

I was aware that I was examining other people’s clinical work in my research and from my perspective this brought with it stress. When initially scoping for my research, a clinical psychologist highlighted the importance of curiosity when examining sessions and ensuring it did not feel like criticism. I agreed with this sentiment and it no doubt influenced my interviews and analysis.

I also found myself being surprised in the interviews. I was surprised by what the participant said about rape and blame. It felt like she was justifying to me why the client was not to blame. I thought, “I agree with you”, “I would never think someone was to blame for being raped”, “I don’t need it justifying to me”. When I have been in similar situations myself, I have taken the same position as the participant. I therefore wondered if we were both influenced by feminist ideas about not blaming women for rape and if this belief, or any strong discourse, could potentially limit flexibility and possibilities for intervention in therapeutic work.

I found it helpful to reflect on how hard I would have found it to shift even slightly from this position. This perhaps meant I questioned the position the participant took less, because I would have taken the same stance. This led me to wonder why it could be difficult to take a different position in certain circumstances. I thought that this difficulty was not related to theories or models, but that it was something about me. Therefore, I wondered whether it was something about the participant, how she sees herself and her personal beliefs, that had such a strong influence, both about the blame part of the formulation and how she chooses to share this with the client. I have since wondered whether some positions taken in formulation can be difficult to shift from because they are a more integral part of our core beliefs about ourselves or the world.
I was again surprised at another the participant’s need to justify challenging the medical model. This felt the same as the surprise I experienced when I thought that the client not being to blame was justified in another interview. I noticed at this point that my surprise had come at having positions I agree with justified in interviews. I wondered whether the participants assumed I held a different position and needed to justify it to me, or were they justifying it to themselves. Also, during the analysis I remembered that I had identified other examples of justification that had been less obvious to me during the interview and still seemed less surprising to me. Perhaps then, I would not feel surprised at justifications when I would use them myself. It led me to think there might be similar reasons between participants for why they used justifications, because they felt conflicted between different beliefs and actions.

Analysis

My experience of the analysis was that it proceeded in waves. At times it felt exciting, creative, innovative and important. However, at other times it felt like a chore, something I had to force myself to do. There were other times when it felt overwhelming, as if there was no way I would be able to do it.

I recognised that the different waves of emotions were in response to different parts of the method of analysis. Trying to keep the analysis grounded in the data, using action codes in order to not make leaps, staying open, made the analysis much harder. This is what felt like a chore. It would have been much easier and quicker to have imposed categories earlier on in the process. I ended up feeling like I should have cut corners and was penalising myself because I had not.

The thousands of codes I generated from this process felt overwhelming. Feeling overwhelmed then, mainly came towards the end of the analysis, when the amount of data and the number of codes became greater.

The memo writing and focused coding were initially related to feeling excited, this was where I had the opportunity to be creative. However, later on, as the deadline loomed, this state became harder to induce. Feeling overwhelmed by codes led to a loss of confidence and anxiety. I had wondered whether my feelings were a reflection of how the participants felt about formulation. That is, feeling overwhelmed by the amount of information they had to integrate, struggling to think of things that do not immediately come to mind, that aren’t concrete. Perhaps there was a similar feeling of missing
something when structure is placed on rich complex information, whether that structure is formulation or a model of formulation.

I think as a consequence of the anxiety, I felt like I was being dragged into being descriptive, because it felt more comfortable and safe. Moving into an interpretive frame of mind in the analysis started to feel less safe, more confusing, more pressured. I had thought that my wanting to rely on describing other people’s words was much easier, because I did not have to take as much responsibility. In fact, I have noticed as I am writing this, my description of “being dragged into being descriptive” sounds like something I have no control over. Perhaps then, this experience was my natural response to a difficult process. Where I was trying to manage the potentially overwhelming nature of the analysis, by temporarily letting go of responsibility and control, to rest from the anxiety for a bit.

The feelings I had that part of the analysis was a chore, in the end may have added to the quality of my analysis. It meant that when developing my model of formulation, it was not simply based on my interpretive flights of excitement. It helped me to ground my model in my coodes.

I also had the odd ethical dilemma. I felt concerned about whether the process would hurt the participants, what they would think about it and whether is it really fair to point out contradictions. I did not however, feel like the critical part of me was triggered when contradictions were evident. Rather, I was concerned that my participants may feel criticised as a consequence. I realised though, that despite it being important to be ethical when researching, it is perhaps overstepping my remit somewhat to take this amount of responsibility. I therefore feel like this is something I have been able to resolve by hopefully writing my results with sensitivity and understanding.

I had decided not to complete the literature review and background reading around formulation prior to the analysis. However, it was not possible to come to the research with no understanding of formulation given my experience of clinical training. Also, it was necessary to provide background literature for the research proposal. The section below, ‘My own position on formulation’, will describe my perspectives on formulation in more detail. However, the decision not to engage in more reading than was necessary prior to the analysis was to reduce the likelihood of imposing this knowledge in the data. When I did then read more literature this meant that I became aware of other
things that I could have looked at in my data. This highlighted to me how prior knowledge changes the context within which the analysis takes place, even when an attempt is made to bracket this off.

Towards the end of the analysis, when I had my model of formulation, I found myself feeling like it was incomplete. I noticed that when I drew diagrams of my later models I wanted to add some arrows to suggest a cyclic process. I thought surely noticing things through reflection should feedback into the different levels of context and the integration process. I wondered had I missed this in my analysis. I had a look back at my codes and I had not coded this. I started to look back at my data and then stopped. I thought that perhaps I was imposing both my views of what should happen, and my aesthetic need for the model to appear cyclic, onto my data. I decided that I was and therefore deleted the arrows I had previously included.

The limited time available to carry out the research has left me feeling somewhat disappointed with the process. I feel that I have not been able to fully do justice to my research. I realise that throughout the DClinPsy course we have been consistently told that juggling placement with research means that we cannot produce perfection in work. In fact, it has been helpful to keep in mind what one tutor said, “done is better than perfect”. However, I think in this regard it is not a seeking of unrealistic perfection that has led to the disappointment. I think instead it may reflect my values regarding formulation and having only the one opportunity to produce a thesis. Just getting it done was ok for me with regard to other academic work, but not for my thesis.

My own position on formulation

I will discuss here my initial views on formulation based partly on the bracketing interview carried out before the start of my data collection and my personal reflections at the time. I will consider how this has changed through the process of carrying out my research.

I read with interest Lucy Johnstone’s (2011) paper and her personal reflections on what influenced her position on formulation. I found it useful in reflecting on my own journey. It was interesting that something stood out to me. She described hating her rigid and rule-based school life. This stood out to me for two reasons. It felt an accurate description of my own school experience and it reminded me in my bracketing interview that I had said to my supervisor that I hated rigidity and I thought this
influenced my views on formulation. I did wonder whether an interest in formulation was therefore a natural place for a rebel to sit. Maybe not because surely formulation can be as rule based and rigid as a person would want. It perhaps though explains an influence for my own beliefs about formulation.

Based on my own practice I entered the research process with certain expectations and beliefs. I thought formulation would take two forms. One form included formulation taking place as an event through sharing a letter or diagram. The other form involved formulation occurring more within the process of the session. My use of the words formulation as ‘event’ and ‘process’ came from some teaching I attended facilitated by Lucy Johnstone. These are her labels and I have found them useful to use in my own conceptualisation of formulation. At the time of the bracketing interview, I reflected that I would have myself leaned towards formulating as process. I was concerned that formulation as event could have the potential of being too rigid, that it is just given and stays as it is. As discussed above, I did not want this.

Since then I have changed my perception that sharing formulation as an event has to be rigid or rule based. I have noticed a shift in my practice, where I share formulate as event much more than I used to. I think this change has partly been due to me becoming more aware of my assumptions as a result of the bracketing interview and my reflections throughout the research process. As a consequence of this increased awareness, I have tested out my assumptions in my own practice, and have adapted them as a result.

I was surprised to find from my data that formulation as event was less common than I expected and formulation as process was a much more common feature. I am aware however, that this may simply reflect sessions that happened to be included in my study. I have also revised my opinion of Cognitive Behaviour Therapy (CBT) from my data. I had expected that CBT may include less formulation as process. However, given that even the participants influenced by CBT used formulation as process much more than formulation as event, this has changed my perception.

At the time of the bracketing interview I did not believe in the appropriateness of seeking validity in a formulation. I had been involved in a systemic family therapy clinic for about six months. This influenced my position in that I considered formulation as being about fit and usefulness. I have wondered to what extent this influenced what
I interpreted from the data. Whilst I had beliefs that formulation should be about usefulness, I did not assume other people would agree with me. I expected that there would be a range of views. I also considered whether my position led me to see action in the formulation where there was none. However, I am not sure that it was this that influenced the interpretation of formulation as action. I think that looking for action came partly from my research supervisor and partly from reading Charmaz (1995, 2006) suggestion for active coding. Also, the research aim, which focused on ‘how clinical psychologists’ formulated’ is likely to have influenced the analysis. Asking a ‘how’ question of the participants and the data, is likely to have led to the identification of process activities. Therefore, I think that the model of formulation that I have produced is rooted in the research aim and method of analysis.

Also, whilst I believed formulation should have utility, I did not expect it to be used to achieve the amount of aims that I identified in my analysis. I generated hundreds of codes about the actions being performed with the formulation, from both the sessions and interview transcripts. They were so varied and numerous it felt an impossible task to combine them into categories. It was at this point that I decided that what was important for the model was not what was being done but the fact that formulation was being used to do it.

I had begun to see formulation as being able to make a difference, by being an alternative to the medical model. In this way, I was influenced by attending training by Lucy Johnstone and Jaquie Dillon from the hearing voices network. Also having a placement at the time in an early intervention team, which was heavily influenced by the medical model, had led me to seek alternatives to what was a dominant team discourse. I wondered if my experience of being in a team dominated by the medical model, and a frustration with this, might be a common one. However, I did not know if other psychologists would share this belief.

I was aware that this interest influenced my asking participants about it. This was in response to them speaking about the medical model in the first place. It was therefore in the data initially, and then picked up on by me, which generated further data. For example, Sarah spoke about her client having a medical model explanation. Hearing this I asked more about where she thought this came from. Again, for all participants I asked why they used the type of language they did when formulating and specifically around
what terms they used for experiences related to ‘psychosis’. In this way, the data can be seen as being constructed by me and the participants.

My reflections did bring me to a position of realising it is impossible not to be influenced by your own perceptions when researching. An alternative to asking about something which sparks an interest, is to not ask about it. Therefore influencing the data in another way. I also felt that maintaining an awareness of my assumptions has allowed me to approach my research with more openness and a greater curiosity for what other people do.
References


doi:10.1348/147608308X288780

Appendix A: A flow chart showing the stages of the literature review search.

<table>
<thead>
<tr>
<th>Process of literature search</th>
<th>Papers remaining</th>
</tr>
</thead>
<tbody>
<tr>
<td>Systematic literature search using PsychInfo, The Cochrane Database, Psychsource, Scopus and Web of Science. (See appendix B for searches carried out).</td>
<td>1175</td>
</tr>
<tr>
<td>534 paper were duplicates and were excluded.</td>
<td>641</td>
</tr>
<tr>
<td>Titles of 641 papers were read. Any titles not meeting the inclusion criteria (peer reviewed, published in English, published in 1990-2014, quantitative research articles, focused on the impact of sharing formulation with clients) were excluded.</td>
<td>43</td>
</tr>
<tr>
<td>Abstracts of 43 papers were read. Any abstracts not meeting the inclusion criteria (quantitative research articles that focused on the impact of sharing formulation with clients) were excluded.</td>
<td>21</td>
</tr>
<tr>
<td>21 papers sources from University of Leicester Library.</td>
<td>21</td>
</tr>
<tr>
<td>21 papers were read in full. Any not meeting the inclusion criteria (quantitative research articles, that focused on the impact of sharing formulation with clients, research where impact was not rated by either clients, or the therapists and clinicians involved in the study) was excluded.</td>
<td>14</td>
</tr>
<tr>
<td>Quality appraisal and data extraction.</td>
<td>14</td>
</tr>
</tbody>
</table>
Appendix B: Literature Search

<table>
<thead>
<tr>
<th>Database</th>
<th>Search Terms</th>
<th>Papers</th>
</tr>
</thead>
<tbody>
<tr>
<td>PsychINFO</td>
<td>Formulat* (Title) AND DE &quot;Psychotherapy&quot; (all fields)</td>
<td>55</td>
</tr>
<tr>
<td></td>
<td>TI formulat* AND TI Psychol*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>DE &quot;Case Conceptualization” AND (impact* OR effect* OR outcome*)</td>
<td>55</td>
</tr>
<tr>
<td></td>
<td>(TI &quot;Case formulat*”) AND (impact* OR effect* OR outcome*)</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>(impact* OR effect* OR outcome*) AND Reformul* AND Psychotherp*</td>
<td>148</td>
</tr>
<tr>
<td></td>
<td>(impact* OR effect* OR outcome*) AND (Interpretat* AND psychotherap*)</td>
<td>207</td>
</tr>
<tr>
<td></td>
<td>(DE &quot;Case Conceptualization&quot;) OR (Interpretat* AND psychotherapy*) OR (TI &quot;Case formulat*”) AND DE &quot;Therapeutic Alliance’</td>
<td>47</td>
</tr>
<tr>
<td>Psychsource</td>
<td>Formul*</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>“Case conceptuali*ation”</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Reform*</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>(interpret* AND psychoanalysis) AND (effect OR impact OR outcome)”</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>(interpret* AND psychoanalysis) OR Formul* “Case conceptuali*ation” OR AND “therapeutic alliance”</td>
<td>0</td>
</tr>
<tr>
<td>Web of Science</td>
<td>(&quot;Case Conceptualization”) OR (Interpret*) OR (Formulat*) OR (reformulat*)</td>
<td>112</td>
</tr>
<tr>
<td></td>
<td>AND (impact*) OR (effect*) OR (outcome*)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Refined: Psychology, English, Articles</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Interpret*) AND Psychodynamic OR psychoanal* AND (impact*) OR (effect*) OR (outcome*)</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>(&quot;Case Conceptuali<em>ation&quot;) OR (Interpret</em> AND psychotherapy*) OR (TI &quot;Case formulat*”) AND &quot;Therapeutic Alliance”</td>
<td>14</td>
</tr>
<tr>
<td>Scopus</td>
<td>(&quot;Case Conceptualization”) OR (Interpret* AND psychotherapy*) OR (TI &quot;Case formulat*”) AND (impact*) OR (effect*) OR (outcome*)</td>
<td>312</td>
</tr>
<tr>
<td></td>
<td>Limits: Psychology</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(DE &quot;Case Conceptualization&quot;) OR (Interpret* AND psychotherapy*) OR (TI &quot;Case formulat*”) AND &quot;Therapeutic Alliance”</td>
<td>29</td>
</tr>
<tr>
<td>Cochrane Library</td>
<td>(&quot;Case Conceptualization&quot;) OR (Interpret* AND psychotherapy*) OR (TI &quot;Case formulat*”)</td>
<td>94</td>
</tr>
</tbody>
</table>

Peer reviewed journals, English, 1990-2014. It was necessary to put psychology as a limiter in some databases due to the high number of unrelated papers retrieved if this was not used.
## Appendix C: Data extraction form

<table>
<thead>
<tr>
<th>Title:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Authors:</td>
<td></td>
</tr>
<tr>
<td>Publication Date:</td>
<td>Volume, pages:</td>
</tr>
<tr>
<td>Aims</td>
<td></td>
</tr>
<tr>
<td>Hypotheses:</td>
<td></td>
</tr>
<tr>
<td>Design/methodology/Data collection method</td>
<td></td>
</tr>
<tr>
<td>Variables measured</td>
<td></td>
</tr>
<tr>
<td>Measures used</td>
<td></td>
</tr>
<tr>
<td>Participants</td>
<td></td>
</tr>
<tr>
<td>Definition of Formulation</td>
<td></td>
</tr>
<tr>
<td>Model</td>
<td></td>
</tr>
<tr>
<td>Recruitment procedure</td>
<td></td>
</tr>
<tr>
<td>Context/setting</td>
<td></td>
</tr>
<tr>
<td>Analysis</td>
<td></td>
</tr>
<tr>
<td>Findings</td>
<td></td>
</tr>
<tr>
<td>Conclusions</td>
<td></td>
</tr>
<tr>
<td>Ethics</td>
<td></td>
</tr>
<tr>
<td>Clinical Impact</td>
<td></td>
</tr>
<tr>
<td>Limitations</td>
<td></td>
</tr>
<tr>
<td>Included in review?</td>
<td></td>
</tr>
</tbody>
</table>
## Appendix D: Papers included in the literature review

Table 1. Details of papers included in the review

Studies marked with * are separately reported findings from the same clinical trial, therefore all study details are not repeated.

Some definitions were similar across studies and have therefore been used in a key to avoid repetition. CBT = Cognitive Behaviour Therapy, CAT = Cognitive Analytic Therapy, SE = Brief Supportive-expressive Psychotherapy, BDP= Brief Dynamic Psychotherapy Short-term Individual Psychotherapy, CF= Case formulation, QOR= Quality of object relations, TA= Therapeutic Alliance F= Female, M=Male

<table>
<thead>
<tr>
<th>1st Author/year</th>
<th>Aim</th>
<th>Sample</th>
<th>Method</th>
<th>Analysis</th>
<th>Main Findings</th>
<th>Model of therapy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chadwick (2003)</td>
<td>To examine whether case formulation enhances the TA and reduces distress.</td>
<td>N=13 M=7 F= 6 Mean age = 31.5 Diagnosis of schizophrenia</td>
<td>Mixed methods Experiment 1-Multiple time series Experiment 2-Single case series Repeated Measures Formulation delivered over 2 sessions. TA, anxiety and depression measured at baseline, 2 sessions before and 2 sessions after formulation.</td>
<td>Friedman 2-way ANOVA for related samples 6 post hoc tests using Wilcoxon Signed Ranks Test</td>
<td>CF has a significant impact on TA for therapists but not for clients. CF had no significant effect on distress as measure by anxiety and depression.</td>
<td>CBT</td>
</tr>
<tr>
<td>Connolly (1999)</td>
<td>To provide data that could be helpful in clarifying guidelines for use of transference interpretations in SE. Investigating whether the proportion of transference interpretations is differentially related to outcome depending on the level of interpersonal functioning.</td>
<td>N=29 F=76% Mean age 37 years Diagnosed with Axis I or II disorders.</td>
<td>Multiple time series % of transference interpretations identified by judges listening to audio recordings of 3 sessions early in process of therapy. Interpersonal Functioning assessed by clinicians. Treatment outcome self-report questionnaires completed after every session.</td>
<td>Multiple Regression</td>
<td>Higher levels of transference interpretations are related to worse outcome for patients rated as having worse quality interpersonal relationships. For patients with high quality interpersonal relationships there was no interaction between treatment outcome and transference interpretations. The proportion of transference interpretation predicted subsequent outcome when previous change was controlled for.</td>
<td>SE</td>
</tr>
<tr>
<td>Crits-Christoph (1993)</td>
<td>To investigate the relationship between accuracy of therapists interpretations and the development of the therapeutic alliance.</td>
<td>N=33 F=25, M=8 Age= 15-48 Range of Axis I and II diagnoses.</td>
<td>Multiple Time Series. 2 early sessions and 2 later on in therapy analysed by independent judges to measure interpretation accuracy and therapeutic alliance.</td>
<td>Correlations Multiple Regression</td>
<td>Accurate interpretations in relation to participant’s wish and the response of others were significantly positively related to the TA in later therapy sessions and a change in the therapeutic alliance throughout therapy. Accurate self-response interpretations were</td>
<td>Psychodynamic Psychotherapy</td>
</tr>
<tr>
<td>Study</td>
<td>Authors</td>
<td>Purpose</td>
<td>Methodology</td>
<td>Results</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>---------</td>
<td>---------</td>
<td>-------------</td>
<td>---------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Evans (1996)</td>
<td>To examine whether clients would perceive the formulation sharing session as more helpful than other sessions. Reformulation would lead to an increase in therapeutic alliance. Client’s problems would decrease after the reformulation session.</td>
<td>N= 4 females Age 24 – 42 years. Categorised as “difficult to help”</td>
<td>Mixed Methods Single case series. Interview. Formulation session introduced between the third and sixth session. Symptom checklist completed pre and post therapy. Clients completed the Personal Questionnaire (PQ) before sessions and TA and Perceived helpfulness after every session until 5 sessions after reformulation was given. Visual analysis. No statistical test carried out. No change in step or slope of TA or PQ or Perceived helpfulness following re-formulation. No short term impact of reformulation was found on any of the measures.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Gladwin (2013)</td>
<td>To examine the relationship between changes in weight and the delivery of shared written case formulations.</td>
<td>N=15 females Age ranged from 19-35 Outpatient with a diagnosis of anorexia nervosa.</td>
<td>Retrospective naturalistic single case series. Medical notes were read to determine when the formulation letter was shared (as the cut off for the before and after phase of the design) and participants weekly weight. The formulation letter was analysed by the authors using the Case Formulation Content Coding Method. Wilcoxon signed rank test. For 7 participants there was a significant increase in weight after, compared to before the formulation letter was shared. For 2 of these the weight gain was “unrelated” to the timing of the letter. 6 participants showed no weight increase. There was no difference in BMI at baseline between these 2 groups. The group who increased in weight were given formulations rated as lower quality.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>*Hoglund (2006)</td>
<td>To investigate the effect of transference interpretations in dynamic psychotherapy.</td>
<td>N=100 52 experiential group 48 control group Demographics not reported. Diagnosed with Axis I or II disorders.</td>
<td>RCT of dynamic psychotherapy with and without transference interpretations. Outcome assessed at baseline, 1 year after the start of therapy using patient self report measures and clinician ratings based on audio recorded interviews. Linear Mixed Models No significant time X treatment effects. No significant differences between groups on any of the outcome measures. Quality of Object Relations was found to be a moderator of treatment effects for the clinician rated outcomes. For participants scoring low on QOR there was a significant treatment effect (only for the clinician measured Psychodynamic Functioning Scale). This group improved more in the BDP.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>*Hoglund (2008)</td>
<td>To investigate long-term effects of receiving transference interpretations.</td>
<td>N=100 52 experiential group 48 comparison group. Depressive</td>
<td>RCT of dynamic psychotherapy with and without transference interpretations. Outcome measures administered pre-treatment, 1 year and 3 years after treatment termination. Not stated but appears to be linear mixed models. For participants with low QOR there was a significant treatment effect (only for the clinician measured Psychodynamic Functioning Scale). This group improved more in the BDP.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Study</td>
<td>Authors</td>
<td>Objectives</td>
<td>Design</td>
<td>Participants</td>
<td>Intervention</td>
<td>Measures</td>
</tr>
<tr>
<td>-------</td>
<td>---------</td>
<td>------------</td>
<td>--------</td>
<td>-------------</td>
<td>--------------</td>
<td>----------</td>
</tr>
<tr>
<td>8</td>
<td><em>Hogland</em> (2011)</td>
<td>To investigate whether patients with a diagnosis of a personality disorder will improve more with transference interpretations.</td>
<td>RCT of dynamic psychotherapy with and without transference interpretations.</td>
<td>N=46</td>
<td>Experimen tal group 23= compariso n l group. Personalit y disorder diagnosis</td>
<td>Not reported but appears to be a mixture of t-tests and Chi squared.</td>
</tr>
<tr>
<td>9</td>
<td><em>Hogland</em> (2007)</td>
<td>To explore whether interpersonal functioning, severity of psychopathology and quality of life moderated the effect of transference interpretation on therapy outcome.</td>
<td>RCT of dynamic psychotherapy with and without transference interpretations. GAF, GSI, QOR Scale completed by clinicians. Patients completed Inventory of Interpersonal Problems, Visual analogue scale of Quality of life, Quantity and quality of social relations pre-treatment to examine possible moderators.</td>
<td>N=100</td>
<td>Experimen tal group 48 = control group. Depressiv e disorders, anxiety disorders, personalit y disorders interpersonal problems.</td>
<td>Linear Mixed Models</td>
</tr>
<tr>
<td>1</td>
<td>Hogland (1993)</td>
<td>To investigate whether high frequency of transference interpretation affects long term dynamic change.</td>
<td>Quasi experimental none equivalent group comparison. Participant’s suitability for BDP with transference interpretation assessed by clinicians. The suitable group were given therapy with transference interpretations and the non-suitable group were given therapy without transference interpretations. Outcome was measured by clinicians, therapist and patients completing a number of measures pre-therapy and 2 and 4 years post therapy.</td>
<td>N= 43</td>
<td>Experimen tal group 21= compla rison group 29=men mean age 32 range 20-53yrs</td>
<td>Multiple Regression</td>
</tr>
<tr>
<td>10</td>
<td>Joyce (1993)</td>
<td>To integrate theoretical empirical and clinical information on the best use of transference</td>
<td>Cross sectional. Therapist Intervention Rating System used to identify type of interpretations from audio recorded sessions. Patient responses were rated in terms of extra-linguistic measure,</td>
<td>Not reported. 105 participate d in the associated clinical trial. 60</td>
<td></td>
<td>Multiple regression Principle component analysis conducted on the patient</td>
</tr>
<tr>
<td>Study</td>
<td>Authors</td>
<td>Objective</td>
<td>Study Population</td>
<td>Methods</td>
<td>Results</td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>---------</td>
<td>-----------</td>
<td>------------------</td>
<td>---------</td>
<td>---------</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Piper (1991)</td>
<td>To investigate the relationship between the proportion of transference interpretation, the therapeutic alliance and outcome.</td>
<td>N=64 Range of Aix I and II diagnoses. Mean Age 32: 62% women</td>
<td>Multiple time series Therapist intervention rating scale used to categorise therapist interventions. QOR measured using a scale (not named in the report) by an interviewer after carrying out an interview with the patient. TA- (Researcher own scale) measured by patients and therapists</td>
<td>For high QOR participants there were significant inverse relationships between proportion of interpretation and therapist rated TA (but not patient rated) and for proportion of interpretations and outcome. Analysis showed QOR did not moderate the outcome effect. No significant relationships between proportion of non-transference interpretations and TA or outcome (No statistics are reported. Only reported for the high QOR group.).</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Schut (2005)</td>
<td>To investigate whether high frequency of transference interpretation affects long term dynamic change.</td>
<td>N=14 9=F, 5=M Ave age 35.9 Diagnosis of avoidant personality disorder.</td>
<td>Multiple time series Transcripts of one audio recorded session early on in therapy analysed to identify type of interpretation. Treatment Outcome – Before and after therapy patients completed Beck Anxiety Inventory, Beck Depression Inventory Disorder Inventory, Inventory of interpersonal problems, Wisconsin Personality. Assessors rated Global Assessment of Functioning</td>
<td>Correlations Negative correlation between concentration of interpretation and outcome. Dis-affiliativeness during the interpretation was related to poorer outcome. Concentration of interpretation was positively related to disaffiliative interactions.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Shine (2010)</td>
<td>To investigate whether reformulation impacts upon TA and outcome.</td>
<td>N=5 4=F 1=M Axis I diagnosis Age ranges from 22 to 63 years old.</td>
<td>Mixed method. Single Case series design. Simplified Personal Questionnaire (SPQ) Working alliance Inventory Revised Short-Form completed by client 4 weeks before reformulation letter given and 4 weeks after.</td>
<td>Visual analysis. No statistical test carried out. No change in step or slope of TA or SPQ following reformulation. No immediate impact of reformulation on TA or SPQ.</td>
<td></td>
</tr>
</tbody>
</table>
### Table 2: Quality appraisal

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aims and hypotheses clearly stated</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Theoretical and research context</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Method and Design clearly described</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Sample described</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Partly</td>
<td>Partly</td>
<td>Partly</td>
<td>Partly</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Was possible bias addressed?</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Statistical results reported</td>
<td>Some</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Some</td>
<td>Y</td>
<td>Some</td>
<td>Some</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Effect Size reported</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N/ A</td>
<td>N/ A</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>N/ A</td>
</tr>
<tr>
<td>Power calculated</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N/ A</td>
<td>N/ A</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>N/ A</td>
</tr>
<tr>
<td>Are reliability and validity</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Only for some scales</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Study question/hypotheses answered?</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Alternative explanations for results considered</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Limitations considered</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Generalisability discussed</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>N</td>
</tr>
</tbody>
</table>
Appendix F: Epistemological position

A ‘contextual constructionist’ epistemological position was taken (Madill, 2000). From this position, knowledge is seen as being dependent on the situational context. That is, the context within which the researcher and participants sit, effects the knowledge gained through the research procedure. This position acknowledges that different researchers may make different interpretations of the data. Therefore, accuracy and validity are not sought in the analysis. Instead the aim is for a complete account of the data, which takes into account the context.
Appendix G: Clinical Psychologist information sheet

Participant Clinical Psychologist Information Sheet

Date: 5th November, 2012
Version Number: 1

Chief Investigator:
Katie Stewart
Trainee Clinical Psychologist
University of Leicester
104 Regent Road
Leicester
LE1 7LT
0116 2231639
kjs13@le.ac.uk

A qualitative analysis of Clinical Psychologists’ use of psychological formulation with clients who have had psychotic experiences.

As you will be aware psychological formulation is a central part of Clinical Psychology practice. However, research into the use of psychological formulation in practice is sparse (Bieling & Kuyken, 2003; British Psychological Society., 2011). That is, despite the importance placed on formulation in Clinical Psychology, evidence into its use in practice is limited.

This study aims to examine how psychological formulation is used in sessions with clients who have had psychotic experiences. This will involve an analysis of naturalistic data from audio recorded therapy sessions and interviews and a focus group with Clinical Psychologists.

What you will be required to do as part of this study

If you participate in this study, I will be available throughout to support you with this process. You will be asked to identify a suitable client and gain their consent to have
their clinical sessions audio recorded. This will require you discussing the research with the client. I will provide information sheets and consent forms for clients. I will also meet with you so that we can discuss the research further. The client’s decision to agree to have their sessions recorded will need to be written in their clinical notes. You will be required to ensure the clients meet the inclusion criteria including ensuring ongoing capacity to consent to their sessions being recorded.

I will also provide you with an audio recorder and tapes. You will be asked to record all therapy sessions with the client and then identify two sessions where psychological formulation is discussed. You will be required to keep the audio recorder and session recordings securely locked at your NHS base.

You will then be sent sections of the transcripts of the two sessions and some of the initial analysis. You will be asked to read this before an interview with the researcher about how formulation was used in the session.

A focus group including all the Clinical Psychologists that have participated will then take place to discuss the themes identified in the analysis.

Please be assured that the researcher will in no way be judging or evaluating your clinical practice and is interested and curious to understand how formulation is used in day to day practice, however that may be. The aim is that sessions be as realistic and natural as possible. It is therefore important that you do not feel pressured to do anything differently to your usual practice.
Withdrawal from the study

You are free to withdraw from the study at any time without giving any reason. If you would like to withdraw from the study please contact Katie Stewart.

Dissemination

This research will use verbatim quotations from sessions, interviews and focus groups when written up as a report.

This research is being carried out as a requirement for the Doctorate in Clinical Psychology at the University of Leicester and a copy of the full research thesis will kept by the University of Leicester. It may also be published in scientific journals and presented at conferences.

If you would like a copy of the summary research report please indicate this on your consent form.

If you would like to participate in this study please contact Katie Stewart.
Appendix H: Clinical Psychologist consent form

Centre Number:

Study Number:

Patient Identification Number for this trial:

CLINICAL PSYCHOLOGIST CONSENT FORM

Title of Project: A qualitative analysis of Clinical Psychologists’ use of psychological formulation with clients who have had psychotic experiences.

Name of Researcher: Katie Stewart

Please initial all boxes

1. I confirm that I have read and understand the information sheet dated 5th November, 2012 (version 1) for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without my legal rights being affected.

3. I understand that the data collected during the study, may be looked at by individuals from the University of Leicester, from regulatory authorities or from the NHS Trust, where it is relevant to my taking part in this research. I give permission for these individuals to have access to my data.

4. I agree to my clinical therapy sessions and interview being audio recorded with verbatim quotations from these being used anonymously when disseminated.

5. I agree to take part in the above study.

__________________________________________________________________________
Name of Participant Date Signature

__________________________________________________________________________
Name of Person taking consent. Date Signature

Please tick this box if you would like a copy of the summary research report.
Appendix I: Client information sheet

Client Information Sheet

Date: 28th December, 2012
Version Number: 2

Chief Investigator:
Katie Stewart
Trainee Clinical Psychologist
University of Leicester
104 Regent Road
Leicester
LE1 7LT
0116 2231639
kjs13@le.ac.uk

A qualitative analysis of Clinical Psychologists’ use of psychological formulation with clients who have had psychotic experiences.

The purpose of this information sheet is to provide you with more information about this research. This is so that you have enough information to decide whether you would like to participate.

About this study
Psychological formulation is a way of describing a client’s problems and explaining why the problems have developed and are maintained, based on psychological theory (British Psychological Society, 2011). This is an important part of the work of Clinical Psychology (British Psychological Society, 2011). Therefore research into how this is done is valuable for psychologists. One way of studying how psychological ideas are discussed in sessions is to audio record these sessions.

This study will involve audio recording (using an audio tape recorder) therapy sessions between your Clinical Psychologist and you. I will listen to the recording of the session and will type up what was said. I will then look at what was said to examine how the Clinical Psychologist shares the psychological formulation with you. I will interview the Clinical Psychologist about their experiences of using formulation. These interviews
will also be typed up. I will look at the sessions and interviews to identify any themes that explain how formulation has been used.

What will happen if I agree to participate?

If you agree to take part, your clinical therapy sessions with your Clinical Psychologist will be audio recorded. If at any time during your therapy you have any questions or concerns about your sessions being recorded, you can speak to your Clinical Psychologist or to me (the Chief Investigator) about this.

How will the session recordings be kept?

Your Clinical Psychologist will store the session tape recordings securely on NHS premises and the tapes will not have your name or any personal details written on it. I will listen to and type up the sessions. I will remove names, as well as other potentially identifiable information that are discussed in the session when I type it up. The University of Leicester will store the anonymous typed up sessions in a locked room for five years, after which they will be destroyed.

When I report the results of the research, both verbally in presentations and in written reports, I will not include any actual names.

Withdrawal from the study

You are free to withdraw from the study at any time without giving any reason and this will not affect your medical or psychological care or legal rights. If you would like to withdraw from the study please contact your Clinical Psychologist who will inform me of this.

Reporting of Research

I will use verbatim quotations from sessions when I write this research up as a report. I am carrying out this research as part of my Doctorate in Clinical Psychology at the University of Leicester. Therefore I will provide a copy of this research to the University of Leicester and they will keep a copy of this. I may also publish this research in scientific journals and present it at conferences.

If you would like a copy of the summary research report please indicate this on your consent form.
What to do if you would like to participate

If you would like to participate in this study please inform your Clinical Psychologist. You will also need to complete a consent form to confirm that you agree to participate.

If you have any concerns or wish to make a complaint, please contact the Patient Advice and Liaison Service (PALS) at Leicestershire Partnership NHS Trust, Ground Floor, Bradgate Mental Health Unit, Groby Road, Glenfield General Hospital, Leicester, LE3 9EJ; Telephone: 0116 225 6647; E-mail: pals@leicspart.nhs.uk.
Appendix J: Client consent form

Centre Number:
Study Number:
Patient Identification Number for this trial:

CLIENT CONSENT FORM

Title of Project: A qualitative analysis of Clinical Psychologists’ use of psychological formulation with clients who have had psychotic experiences.

Name of Researcher: Katie Stewart

Please initial all boxes

6. I confirm that I have read and understand the information sheet dated 28th December 2012 (version 2) for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

7. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without my medical or psychological care or legal rights being affected.

8. I understand that data collected during the study, may be looked at by individuals from the University of Leicester, from regulatory authorities or from the NHS Trust, where it is relevant to my taking part in this research. I give permission for these individuals to have access to my data.

9. I agree to my clinical therapy sessions being audio recorded and to verbatim quotations from the sessions being used anonymously in reports which may be published in scientific journals.

10. I agree to take part in the above study.

Name of Participant ___________________________ Date ____________ Signature ______________

_____________________________ ___________________________ ______________
Name of Person taking consent. Date Signature

Please tick this box if you would like a copy of the summary research report ☐
Appendix K: Interview Guide

General questions for all participants;

- Where the participant was in the process of therapy.
- The location of the sessions.
- The overall aim of the session.
- Why the participant choose the sessions.
- How typical of work with the client the sessions were.
- Participants’ thoughts regarding the effect of recording the sessions.

The guide was split up for each highlighted section of the session transcript and included questions about;

- What participants were doing in each section.
- How they were formulating in that section.
- Why they were formulating in that way in the section.
- Focused questions indicated from the analysis.
Appendix L: Example of session data not identified as formulation and therefore excluded from the analysis

“Gemma: Ok so last time we met we were talking about the impending stag-do.
Paul: Yeah.
Gemma: So it’d be interesting to kind of hear how that went and how things have been since then.
Paul: Erm that went really well er.
Gemma: Did it?
Paul: Yeah little bit of communication difficulty but I got through it OK.
Gemma: Yeah? How did you get through it then?
Paul: Er a couple of the guys speak quite good English.
Gemma: Ah ok.
Paul: Er and I was learning a bit of sign language out there.
Gemma: OK.
Paul: Er when we got to like to the evening, when we’d been drinking, and we couldn’t understand each other, we just write it on phones and stuff just to get through conversation.”
Appendix M: Coding examples

Initial active line-by-line coding

| Rachael: But then I don’t think you do I think when someone very close to you dies I don’t think you ever get over it. I think you maybe you find a way to live with it but I’m not sure that you ever kind of get over it and can just carry on as if nothing’s ever happened. Erm but the fact that you – I think you’d almost been a bit stuck with your grieving in the sense that you hadn’t been to the grave for a very long time and and yet you were thinking about him quite a bit and it’s almost as if it was making it difficult for you to find some way of, uhh what’s the word, mana- keep – erm living with it. Keep – | Making links to what the client just said about visiting her brother’s grave. Speaking about how people in general cope with grief. Trying to normalise grieving process. Suggesting death creates permanent change. Putting into everyday language. Personalising. Making sense of client’s experience as being stuck with the grieving process. Communicating psychological ideas about grief as a process of learning to live with grief. |
| Claire: (Overlapping) Yeah that’s right - Rachael: (Overlapping) Finding a way of incorporating what had happened in to your day to day life. But the fact that you’ve wanted to go to the grave is a sign that things are changing for you that you’re in a place now where you’re not going to let things – you’re going to take control of things rather than let situations control of you if that makes sense? Suggesting that incorporating her brother’s death into her life is a useful change. Reinforcing what the client is doing well. Putting into everyday language. Making sense of the client visiting the grave as a sign of her taking control. Communicating an idea that having control is good. Checking out. |
Zoe: …… I think my process is that I give clients the tools earlier on and it’s much more driven by them, erm whereas actually we were having quite a few what I call naval gazing, intellectual conversations about things which not that I don’t ever do that, but disproportionately with this person I think, yeah.

Katie: So it differed did it?

Zoe: Yeah, you’d, if I’d of given you, picked any two, you’d have still recognised it was me and, erm you know it wasn’t - what am I trying to say? Erm - as I say I think there was erm a disproportionate amount of talking about theory and ideas and concepts and religion and what is you know, the meaning of everything which you might not have seen in sessions with other clients.

<table>
<thead>
<tr>
<th>Clinical Psychologist personal style</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formulating matched to client</td>
</tr>
<tr>
<td>Integration by maintaining a sense of personal style while adapting formulation to client</td>
</tr>
</tbody>
</table>
Appendix N: Examples of earlier models
Appendix O: Reflexive Journal extract

Reflexive journal extract dated 8/10/13

“I was surprised at what the participant said about rape and blame. It felt like she was justifying to me why the client wasn’t to blame. I thought – I agree with you, I would never think someone was to blame for being raped, you don’t need to justify it to me. When I’ve been in similar situations myself I’ve taken the same position as the participant. I therefore wondered if we were both influenced by feminist ideas about not blaming women for rape and given this belief is it hard to even consider shifting from this position.”
Appendix P: Example of an alternative interpretation

3.5.1 The formulation as a safe place to reflect from
Participants explained the content of their formulation with relative ease. Participants knew the content of their formulations very well and all participants used them in the interview to explain how they were formulating and why in sessions.

“And I think in terms of formulation- this is one of the key ideas erm -this idea of fundamentally not being ok, because he’s mad, erm and there almost being you know some of the perfectionist idea, you know perfectionist ideas don’t just kind of come out of nowhere, they’re around from earlier but they get strengthened by certain things. Erm and so they’re having to do well, having to achieve status, you know he gave a whole list I think early on of, of benchmarks that make you ok, erm none of which he had achieved erm and the fact that he has this mental illness means that actually he needs to super achieve of those things which is where the anxiety comes from, which is where erm you know he pushes himself, he makes even more impossible demands and erm perfectionist demands of him because erm not only do you need achieve them at the correct time scale he’s also got to compensate for this huge drag factor of, of psychosis, so that was you know, that was the kind of central element of the formulation.” (Zoe, 409-419)

An alternative interpretation for participants’ use of the content of the formulation when answering questions is that participants did not have my research question in mind when answering. They had their clinical head on and this included doing formulation, not explaining what and why they did it.
Appendix Q: Chronology of research process

May (2012) Submitted research proposal

September (2012) Submitted research proposal for peer review

December (2012) Submitted REC application

January (2013) Began recruiting participants

January-May (2014) Thesis written up

October (2013) Recruited final participant

February (2014) Final interview

June (2013) Transcription and analysis of first session recordings

August (2013) First interview
Appendix R: Guidelines to authors

British Journal of Clinical Psychology

Edited By: Julie Henry and Mike Startup

Impact Factor: 2.333

ISI Journal Citation Reports © Ranking: 2012: 30/114 (Psychology Clinical)

Online ISSN: 2044-8260

The British Journal of Clinical Psychology publishes original contributions to scientific knowledge in clinical psychology. This includes descriptive comparisons, as well as studies of the assessment, aetiology and treatment of people with a wide range of psychological problems in all age groups and settings. The level of analysis of studies ranges from biological influences on individual behaviour through to studies of psychological interventions and treatments on individuals, dyads, families and groups, to investigations of the relationships between explicitly social and psychological levels of analysis.

The following types of paper are invited:

• Papers reporting original empirical investigations

• Theoretical papers, provided that these are sufficiently related to the empirical data

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

• Brief reports and comments

1. Circulation

The circulation of the Journal is worldwide. Papers are invited and encouraged from authors throughout the world.

2. Length

Papers should normally be no more than 5000 words (excluding abstract, reference list, tables and figures), although the Editor retains discretion to publish papers beyond this length in cases where the clear and concise expression of the scientific content requires greater length.

3. Submission and reviewing
All manuscripts must be submitted via http://www.editorialmanager.com/bjcp/. The Journal operates a policy of anonymous peer review. Before submitting, please read the terms and conditions of submission and the declaration of competing interests.

4. Manuscript requirements

• Contributions must be typed in double spacing with wide margins. All sheets must be numbered.

• Manuscripts should be preceded by a title page which includes a full list of authors and their affiliations, as well as the corresponding author's contact details. A template can be downloaded from here.

• Tables should be typed in double spacing, each on a separate page with a self-explanatory title. Tables should be comprehensible without reference to the text. They should be placed at the end of the manuscript with their approximate locations indicated in the text.

• Figures can be included at the end of the document or attached as separate files, carefully labelled in initial capital/lower case lettering with symbols in a form consistent with text use. Unnecessary background patterns, lines and shading should be avoided. Captions should be listed on a separate sheet. The resolution of digital images must be at least 300 dpi.

• All papers must include a structured abstract of up to 250 words under the headings: Objectives, Methods, Results, Conclusions. Articles which report original scientific research should also include a heading 'Design' before 'Methods'. The 'Methods' section for systematic reviews and theoretical papers should include, as a minimum, a description of the methods the author(s) used to access the literature they drew upon. That is, the abstract should summarize the databases that were consulted and the search terms that were used.

• All Articles must include Practitioner Points – these are 2–4 bullet points to detail the positive clinical implications of the work, with a further 2–4 bullet points outlining cautions or limitations of the study. They should be placed below the abstract, with the heading ‘Practitioner Points’.

• For reference citations, please use APA style. Particular care should be taken to ensure that references are accurate and complete. Give all journal titles in full and provide DOI numbers where possible for journal articles.

• SI units must be used for all measurements, rounded off to practical values if appropriate, with the imperial equivalent in parentheses.

• In normal circumstances, effect size should be incorporated.

• Authors are requested to avoid the use of sexist language.
• Authors are responsible for acquiring written permission to publish lengthy quotations, illustrations, etc. for which they do not own copyright. For guidelines on editorial style, please consult the APA Publication Manual published by the American Psychological Association.

5. Brief reports and comments

These allow publication of research studies and theoretical, critical or review comments with an essential contribution to make. They should be limited to 2000 words, including references. The abstract should not exceed 120 words and should be structured under these headings: Objective, Method, Results, Conclusions. There should be no more than one table or figure, which should only be included if it conveys information more efficiently than the text. Title, author name and address are not included in the word limit.

6. Supporting Information

BJC is happy to accept articles with supporting information supplied for online only publication. This may include appendices, supplementary figures, sound files, videoclips etc. These will be posted on Wiley Online Library with the article. The print version will have a note indicating that extra material is available online. Please indicate clearly on submission which material is for online only publication. Please note that extra online only material is published as supplied by the author in the same file format and is not copyedited or typeset. Further information about this service can be found at http://authorservices.wiley.com/bauthor/suppmat.asp

7. Copyright and licenses

If your paper is accepted, the author identified as the formal corresponding author for the paper will receive an email prompting them to login into Author Services, where via the Wiley Author Licensing Service (WALS) they will be able to complete the license agreement on behalf of all authors on the paper.

For authors signing the copyright transfer agreement

If the OnlineOpen option is not selected the corresponding author will be presented with the copyright transfer agreement (CTA) to sign. The terms and conditions of the CTA can be previewed in the samples associated with the Copyright FAQs below:

CTA Terms and Conditions http://authorservices.wiley.com/bauthor/faqs_copyright.asp

For authors choosing OnlineOpen

If the OnlineOpen option is selected the corresponding author will have a choice of the following Creative Commons License Open Access Agreements (OAA):

- Creative Commons Attribution Non-Commercial License OAA
- Creative Commons Attribution Non-Commercial -NoDerivs License OAA
To preview the terms and conditions of these open access agreements please visit the Copyright FAQs hosted on Wiley Author Services http://authorservices.wiley.com/bauthor/faqs_copyright.asp and visit http://www.wileyopenaccess.com/details/content/12f25db4c87/Copyright--License.html.

If you select the OnlineOpen option and your research is funded by The Wellcome Trust and members of the Research Councils UK (RCUK) you will be given the opportunity to publish your article under a CC-BY license supporting you in complying with Wellcome Trust and Research Councils UK requirements. For more information on this policy and the Journal’s compliant self-archiving policy please visit: http://www.wiley.com/go/funderstatement.

For RCUK and Wellcome Trust authors click on the link below to preview the terms and conditions of this license:

Creative Commons Attribution License OAA

To preview the terms and conditions of these open access agreements please visit the Copyright FAQs hosted on Wiley Author Services http://authorservices.wiley.com/bauthor/faqs_copyright.asp and visit http://www.wileyopenaccess.com/details/content/12f25db4c87/Copyright--License.html.

8. Colour illustrations

Colour illustrations can be accepted for publication online. These would be reproduced in greyscale in the print version. If authors would like these figures to be reproduced in colour in print at their expense they should request this by completing a Colour Work Agreement form upon acceptance of the paper. A copy of the Colour Work Agreement form can be downloaded here.

9. Pre-submission English-language editing

Authors for whom English is a second language may choose to have their manuscript professionally edited before submission to improve the English. A list of independent suppliers of editing services can be found at http://authorservices.wiley.com/bauthor/english_language.asp. All services are paid for and arranged by the author, and use of one of these services does not guarantee acceptance or preference for publication.

10. Author Services

Author Services enables authors to track their article – once it has been accepted – through the production process to publication online and in print. Authors can check the status of their articles online and choose to receive automated e-mails at key stages of production. The author will receive an e-mail with a unique link that enables them to
register and have their article automatically added to the system. Please ensure that a complete e-mail address is provided when submitting the manuscript. Visit http://authorservices.wiley.com/bauthor/ for more details on online production tracking and for a wealth of resources including FAQs and tips on article preparation, submission and more.

11. The Later Stages

The corresponding author will receive an email alert containing a link to a web site. A working e-mail address must therefore be provided for the corresponding author. The proof can be downloaded as a PDF (portable document format) file from this site. Acrobat Reader will be required in order to read this file. This software can be downloaded (free of charge) from the following web site: http://www.adobe.com/products/acrobat/readstep2.html.

This will enable the file to be opened, read on screen and annotated direct in the PDF. Corrections can also be supplied by hard copy if preferred. Further instructions will be sent with the proof. Excessive changes made by the author in the proofs, excluding typesetting errors, will be charged separately.

12. Early View

British Journal of Clinical Psychology is covered by the Early View service on Wiley Online Library. Early View articles are complete full-text articles published online in advance of their publication in a printed issue. Articles are therefore available as soon as they are ready, rather than having to wait for the next scheduled print issue. Early View articles are complete and final. They have been fully reviewed, revised and edited for publication, and the authors’ final corrections have been incorporated. Because they are in final form, no changes can be made after online publication. The nature of Early View articles means that they do not yet have volume, issue or page numbers, so they cannot be cited in the traditional way. They are cited using their Digital Object Identifier (DOI) with no volume and issue or pagination information. E.g., Jones, A.B. (2010). Human rights Issues. Human Rights Journal. Advance online publication. doi:10.1111/j.1467-9299.2010.00300.x
14 January 2013

Ms Katie Stewart
Trainee Clinical Psychologist
Leicestershire Partnership Trust
Department of Clinical Psychology
104 Regent Road
Leicester
LE1 7LT

Dear Ms Stewart

Study title:
A qualitative analysis of Clinical Psychologists’ use of psychological formulation with clients who have had psychotic experiences.

REC reference:

Protocol number:

IRAS project ID:

Thank you for your letter of 29 December 2012, responding to the Committee’s request for further information on the above research and submitting revised documentation.

The further information has been considered on behalf of the Committee by the Chair.

We plan to publish your research summary wording for the above study on the NRES website, together with your contact details, unless you expressly withhold permission to do so. Publication will be no earlier than three months from the date of this favourable opinion letter.

Should you wish to provide a substitute contact point, require further information, or wish to withhold permission to publish, please contact the Co-ordinator.

Confirmation of ethical opinion

On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation as revised, subject to the conditions specified below.

Ethical review of research sites

NHS sites

The favourable opinion applies to all NHS sites taking part in the study, subject to management permission being obtained from the NHSC R&D office prior to the start of the study (see “Conditions of the favourable opinion” below).
Non-NHS sites

Conditions of the favourable opinion

The favourable opinion is subject to the following conditions being met prior to the start of the study.

Management permission or approval must be obtained from each host organisation prior to the start of the study at the site concerned.

Management permission ("R&D approval") should be sought from all NHS organisations involved in the study in accordance with NHS research governance arrangements.

Guidance on applying for NHS permission for research is available in the Integrated Research Application System or at http://www.rdforum.nhs.uk.

Where a NHS organisation's role in the study is limited to identifying and referring potential participants to research sites ("participant identification centre"), guidance should be sought from the R&D office on the information it requires to give permission for this activity.

For non-NHS sites, site management permission should be obtained in accordance with the procedures of the relevant host organisation.

Sponsors are not required to notify the Committee of approvals from host organisations.

It is the responsibility of the sponsor to ensure that all the conditions are complied with before the start of the study or its initiation at a particular site (as applicable).

Approved documents

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

<table>
<thead>
<tr>
<th>Document</th>
<th>Version</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertisement</td>
<td></td>
<td>05 November 2012</td>
</tr>
<tr>
<td>Interview Schedules/Topic Guides</td>
<td></td>
<td>28 November 2012</td>
</tr>
<tr>
<td>Investigator CV</td>
<td></td>
<td>05 November 2012</td>
</tr>
<tr>
<td>Investigator CV</td>
<td></td>
<td>28 November 2012</td>
</tr>
<tr>
<td>Participant Consent Form: Client Consent Form</td>
<td></td>
<td>05 November 2012</td>
</tr>
<tr>
<td>Participant Consent Form: Clinical Psychologist Consent Form</td>
<td></td>
<td>05 November 2012</td>
</tr>
<tr>
<td>Participant Information Sheet: Participant Clinical Psychologist Information Sheet</td>
<td></td>
<td>05 November 2012</td>
</tr>
<tr>
<td>Participant Information Sheet: Client Information Sheet</td>
<td></td>
<td>28 December 2012</td>
</tr>
<tr>
<td>Protocol</td>
<td></td>
<td>23 August 2012</td>
</tr>
<tr>
<td>REC application</td>
<td></td>
<td>20 November 2012</td>
</tr>
<tr>
<td>Referees or other scientific critique report</td>
<td></td>
<td>26 July 2012</td>
</tr>
<tr>
<td>Response to Request for Further Information</td>
<td></td>
<td>29 December 2012</td>
</tr>
</tbody>
</table>
Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

After ethical review

Reporting requirements

The attached document "After ethical review – guidance for researchers" gives detailed guidance on reporting requirements for studies with a favourable opinion, including:

- Notifying substantial amendments
- Adding new sites and investigators
- Notification of serious breaches of the protocol
- Progress and safety reports
- Notifying the end of the study

The NRES website also provides guidance on these topics, which is updated in the light of changes in reporting requirements or procedures.

Feedback

You are invited to give your view of the service that you have received from the National Research Ethics Service and the application procedure. If you wish to make your views known please use the feedback form available on the website.

Further information is available at National Research Ethics Service website > After Review

12/EM/0460 Please quote this number on all correspondence

We are pleased to welcome researchers and R & D staff at our NRES committee members' training days – see details at http://www.hra.nhs.uk/hra-training/

With the Committee's best wishes for the success of this project.

Yours sincerely