

**THE IMPACT OF REFORMULATION ON INSIGHT AND
SYMPTOM CHANGE IN COGNITIVE ANALYTIC THERAPY**

Rebecca Anne Tyrer

Submitted in accordance with the requirements for the degree of
Doctor of Clinical Psychology (D. Clin. Psychol.)
The University of Leeds
School of Medicine
Academic Unit of Psychiatry and Behavioural Sciences

June, 2017

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

This copy has been supplied on the understanding that it is copyright material and that no quotation from the thesis may be published without proper acknowledgement.

The right of Rebecca Anne Tyrer to be identified as Author of this work has been asserted by her in accordance with the Copyright, Designs and Patents Act 1988.

© 2017 The University of Leeds and Rebecca Anne Tyrer

Acknowledgements

I owe a massive thanks to my brilliant supervisor, Dr Ciara Masterson, for her enthusiasm and for her help in developing the research idea and providing feedback on many drafts and re-workings of this thesis. I have enjoyed the opportunity to learn more about therapy process and feel fortunate to have been able to research an area that I can apply so readily to clinical practice in the future.

I would also like to extend my sincere thanks to all of the participants who gave up their valuable time to take part in the research and for sharing their personal experiences of therapy. Similarly, I would like to thank all the therapists who took time to identify and recruit one of their clients into the study.

My family, without their unconditional support and encouragement I would not be where I am today. I feel sad that my Dad is no longer around to see me complete this journey; he inspired me never to give up and supported me to experience other walks of life. To my wonderful mum, for hours of proof-reading and encouragement throughout this journey.

I would like to thank all my friends who have put up with me and made me laugh throughout and last but not least I would like to thank my partner for your love, support and patience and most importantly keeping me in constant supply of delicious treats.

ABSTRACT

Objectives. This study aims to assess: clients' responsiveness to the delivery of CAT-specific tools in order to gain a better understanding about which tools lead to therapeutic change; the impact of CAT upon insight; and clients' perspectives on receiving CAT and how much they ascribe the process of change to CAT-specific tools.

Design. A hermeneutic single-case efficacy design, repeated with a small number of participants, was used to assess whether CAT-specific tools stimulate therapeutic change. Mixed methods were used to generate data on change processes.

Methods. The case-series comprised of six therapist/client dyads. Therapists were asked to keep a weekly record of their delivery of CAT-specific tools. Participating clients were asked to complete the recognition and revision rating scale, two corrective experience questions, the insight sub-scale of the Self-Reflection and Insight Scale and the Clinical Outcome in Routine Evaluation-10. Outcomes were supplemented with qualitative data taken from client change interviews. Template analysis was used to analyse the qualitative data.

Results. For all but two participants there were no statistically significant changes on the CORE-10 in the session immediately or shortly after the introduction of a CAT-specific tool. Five themes emerged from the qualitative data: making links, breaking the links in patterns, experiences that disconfirm beliefs, working in partnership, and real world influences. CAT-specific mechanisms were identified by participants as helpful for bringing about recognition and revision of faulty patterns. Both CAT-specific and non-specific mechanisms of change were identified as being helpful.

Conclusions. CAT-specific tools were seen to facilitate cognitive and emotional insight which was a necessary element of the process of CAT in bringing about behavioural change through revision. It was also found that a genuine therapeutic relationship is an important mechanism operating through, and strengthened by CAT-specific tools.

Key words: Mechanisms, CAT-specific tools, Reformulation, Insight, Change

TABLE OF CONTENTS

Abstract	iv
List of Tables	x
List of Figures	x
Abbreviations	xi
CHAPTER ONE: INTRODUCTION	1
1.1. How Does Psychotherapy Work?.....	1
1.1.1. The elements of psychotherapy and identifying causes of change.	1
1.1.2. Methodological challenges in the psychotherapy literature: mechanisms or mediators?	2
1.1.3. Methodological issues in identifying mechanisms of change in psychotherapy research.	3
1.1.4. Mechanisms of change in psychotherapy: therapy non-specific factors.	4
Insight as a non-specific mechanism of change.....	4
1.1.5. Mechanisms of change in psychotherapy: therapy-specific factors.....	6
Psychodynamic therapy.....	7
Behavioural therapy.	8
Cognitive therapy.....	8
Summary of findings.....	8
1.2. Initial Development of CAT	9
1.2.1. Personal construct theory.	9
1.2.2. Cognitive behavioural science.	10
The contribution of cognitive behavioural science to CAT: the procedural sequence model.	10
1.2.3. Object relations theory.	10
The contribution of object relations theory to CAT: reciprocal role procedures.	12
1.2.4. Developmental psychology.	12
The contribution of developmental psychology to CAT: scaffolding clients' learning.....	13

1.2.5. The CAT journey: session content and techniques.....	14
1.2.6. The CAT journey: theorised mechanisms of change.....	15
Analytic theory.....	15
Cognitive and behavioural theory.....	17
1.2.7. Outcome research on the efficacy of CAT.....	18
1.2.8. Process research on mechanisms of change in CAT.....	19
1.3. Research Question.....	25
1.4. Aims/Objectives.....	26
CHAPTER TWO: METHOD.....	27
2.1. Design.....	27
2.2. Participants.....	28
2.2.1. Therapists.....	28
2.2.2. Clients.....	29
2.2.3. Researcher.....	30
2.3. Measures.....	30
2.3.1. Therapy activity sheet.....	30
2.3.2. CAT process measures.....	30
CAT Recognition and Revision Visual Analogue Scales.....	30
2.3.3. Insight change measures.....	30
Corrective Experience Questionnaire.....	30
Self-Reflection and Insight Scale.....	31
2.3.4. Symptom change measure.....	31
Clinical Outcome in Routine Evaluation-10.....	31
2.3.5. Client Change Interview.....	31
2.4. Procedures.....	32
2.5. Procedural Analysis.....	34
2.5.1. Quantitative analysis.....	34
2.5.2. Qualitative analysis.....	34

2.5.3. Quality checks.....	35
2.6. Ethical Considerations	36
2.6.1. Therapist considerations.....	36
2.6.2. Client considerations.....	36
2.6.3. Information governance and data protection.....	37
2.7. Ethical clearance.....	38
CHAPTER THREE: RESULTS	39
3.1. Contextualising the Sample	39
3.2. Participants' Symptom Change.....	39
3.3. Responsiveness to the Delivery of CAT-Specific Tools	40
3.4. The Client's Perspective	52
3.4.1. Making links.....	53
3.4.2. Breaking the links in patterns.....	54
3.4.3. Experiences that disconfirm beliefs.....	55
3.4.4. Working in partnership.....	56
Comfort of therapy.....	56
Discomfort of therapy.....	57
3.4.5. Real world influences.....	59
CHAPTER FOUR: DISCUSSION.....	62
4.1. Summary of Findings	62
4.2. Explanation of the Findings	62
4.2.1. Research aim one: assess clients' responsiveness to the delivery of CAT-specific tools.....	62
4.2.2. Research aims two and three: explore the effect of CAT on insight / gain an understanding of client experiences of change and how much they ascribe change to CAT-specific tools.....	63
4.2.3. Non-therapy explanations for change.....	64
4.3. Relating Findings to the Wider Literature	65

4.3.1. Evidence that the theoretical underpinnings of CAT are the mechanisms of change.	65
4.4. Critique of the Methodology	68
4.4.1. Therapist sample.	68
4.4.2. Client sample.	68
4.4.3. Differences in the delivery of the study protocol.....	68
4.4.4. Treatment fidelity.....	69
4.5. Strengths and Limitations of the Study	70
4.5.1. Strengths of quantitative process research.	70
4.5.2. Limitations of quantitative process research.	70
4.5.3. Strengths of qualitative research.	71
4.5.4. Limitations of qualitative process research.	72
4.6. Clinical Implications of Findings	73
4.7. Future Directions for Research	74
4.8. Conclusion	75
REFERENCES	76
APPENDICES	86
Appendix A: Therapy Activity Sheet.....	86
Appendix B: CAT Recognition and Revision Visual Analogy Scale.....	87
Appendix C: Insight Sub-scale of the Self Reflection and Insight Scale (SRIS-IN)..	88
Appendix D: Clinical Outcome in Routine Evaluation (CORE-10).....	89
Appendix E: Modified Client Change Interview Protocol.....	90
Appendix F: Recruitment Flyer	98
Appendix G: Therapist Information Sheet	99
Appendix H: Therapist Consent Form	104
Appendix I: Participant Information Sheet.....	105
Appendix J: Participant Consent Form	109
Appendix K: Recognition and Revision Scale Findings	110

Appendix L: Final coding template indicating which participants contributed to each theme	114
Appendix M: NHS Favourable Ethical Opinion Letter.....	116

List of Tables

Table 1: Theorised Mechanisms of Change Derived from Prominent Psychotherapy Models.....	9
Table 2: 16 Session CAT Checklist.....	15
Table 3: Summary of underpinning theoretical concepts in CAT and their corresponding evidenced based mechanisms of change in CAT	23
Table 4: Frequency of measures taken during assessment, treatment and follow-up....	33
Table 5: Guidelines for qualitative research (adapted from Elliott et al., 1999)	35
Table 6: CORE-10 and SRIS-IN outcome scores pre- and post- therapy for each participant.....	40
Table 7: Summary of Sally’s changes reported at the change interview post-therapy..	42
Table 8: Summary of Stuart’s changes reported at the Change Interview post-therapy	44
Table 9: Summary of Colo’s changes reported at the Change Interview post-therapy .	46
Table 10: Summary of Lana’s changes reported at the Change Interview post-therapy	48
Table 11: Summary of Polly’s changes reported at the Change Interview post-therapy	50
Table 12: Summary of Sylvie’s changes reported at the Change Interview post-therapy.....	52

List of Figures

<i>Figure 1:</i> A Tripartite Model of the Relationship in Psychotherapy, as cited in (Wampold & Budge, 2012).....	2
<i>Figure 2:</i> Mechanisms of change in Cognitive Analytic Therapy	25
<i>Figure 3:</i> Visual display of Sally’s scores across therapy on the CORE-10 and SRIS-IN with markers to indicate where CAT-specific tools were implemented.....	41
<i>Figure 4:</i> Visual display of Stuart’s scores across therapy on the CORE-10 and SRIS-IN with markers to indicate where CAT-specific tools were implemented.....	43
<i>Figure 5:</i> Visual display of Colo’s scores across therapy on the CORE-10 and SRIS-IN with markers to indicate where CAT-specific tools were implemented.....	45
<i>Figure 6:</i> Visual display of Lana’s scores across therapy on the CORE-10 and SRIS-IN with markers to indicate where CAT-specific tools were implemented.....	47
<i>Figure 7:</i> Visual display of Polly’s scores across therapy on the CORE-10 and SRIS-IN with markers to indicate where CAT-specific tools were implemented.....	49
<i>Figure 8:</i> Visual display of Sylvie’s scores across therapy on the CORE-10 and SRIS-IN with markers to indicate where CAT-specific tools were implemented.....	51

Abbreviations

ACAT: Association for Cognitive Analytic Therapy
CAT: Cognitive Analytic Therapy
CBT: Cognitive Behavioural Therapy
CCI: Client Change Interview
CE: Corrective Experiences
CEQ: Corrective Experience Questions
CFT: Compassion Focused Therapy
CMHT: Community Mental Health Team
CORE-10: Clinical Outcome in Routine Evaluation-10
CPD: Continuing Professional Development
CS: Conditioned Stimulus
DP: Developmental Psychology
DV: Dependent Variable
EST: Empirically Supported Treatment
HSCED: Hermeneutic single-case efficacy design
IAPT: Increasing Access to Psychological Therapies
ICATA: International Cognitive Analytic Therapy Association
I-EP: Interpersonal Emotional Processing
IV: Independent Variable
ORT: Object Relations Theory
PCT: Personal Construct Theory
PIT: Psychodynamic-Interpersonal Therapy
PSM: Procedural Sequence Model
PSORM: Procedural Sequence Object Relations Model
RCI: Reliable Change Index
RCT: Randomized Controlled Trial
RRP: Reciprocal Role Procedure
SRIS-IN: Self-Reflection and Insight Scale – Insight Subscale
SDR: Sequential Diagrammatic Reformulation
TA: Template analysis
TP: Target Problem
TPP: Target Problem Procedure
US: Unconditioned Stimulus

CHAPTER ONE: INTRODUCTION

Therapies are developed on the basis of theoretical mechanisms of change and are implemented before the change processes are understood (Morley & Keefe, 2007). Although there is evidence that various psychotherapies work, little is understood about the mechanisms that lead to change because most research focuses on the outcome of therapy. While outcome research for the efficacy of Cognitive Analytic Therapy (CAT) is growing, the connection between its therapeutic tools and outcomes is only just starting to be evaluated. In CAT, an agreed reformulation is recorded in a written letter (reformulation letter) and subsequently in a diagrammatic form (sequential diagrammatic reformulation) (Ryle & Kerr, 2002). These reformulation tools aim to capture an overall picture of a client's dysfunction and its developmental origins. This study aims to investigate the effects of reformulation tools on insight and symptom change. A hermeneutic single-case efficacy design (HSCED), utilizing repeated measures with a small number of participants will be used to track the points at which CAT intervention components facilitate symptom change (or not). However, this will not explain the process through which change occurs. In order to better understand why, or how, change comes about, insight will also be considered, as a mechanism of change. While insight in analytic approaches is discussed in the literature, its link to outcomes in therapy has not been well studied. This thesis will aim to uncover ways in which CAT translates into events that lead to therapeutic changes, and thus, better direct strategies that target the change processes.

To help set the scene, the first part of this literature review will illuminate the challenges faced by researchers in learning more about how change in therapy is brought about, and the methodological issues in studying mechanisms of change. A critical examination of existing research into mechanisms of change across psychotherapeutic models will be presented. In the second part of this review a description of CAT including its development and theoretical origins will be presented with particular emphasis to the theoretical concepts and evidenced based mechanisms of change within it.

1.1. How Does Psychotherapy Work?

1.1.1. The elements of psychotherapy and identifying causes of change.

Research has provided convincing evidence that various psychotherapy models are effective in bringing about change (Luborsky et al., 2002; Wampold et al., 1997), however, little is understood about why or how therapeutic interventions produce change (Kazdin, 2007). In part, this is because psychotherapy is a complicated process and may involve different ingredients of change in different models. Figure 1 (below), 'The Elements of Psychotherapy', demonstrates the complexity involved in bringing about change through psychotherapy.

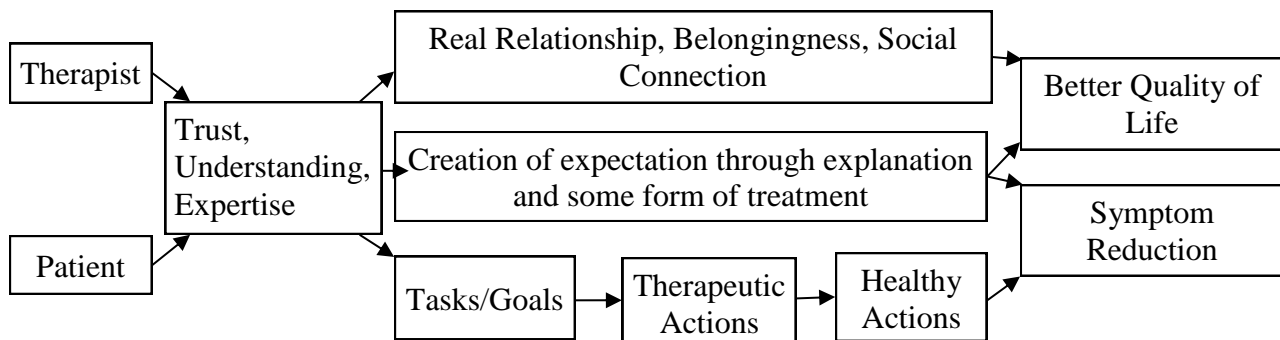


Figure 1: A Tripartite Model of the Relationship in Psychotherapy, as cited in (Wampold & Budge, 2012)

One method for investigating the process of change is through the use of dismantling studies, in which individual components of a therapy can be isolated in order to uncover causal links to therapeutic change (Kazdin, 2007). However, this may be challenging due to the interrelated processes that comprise a therapy, which makes it difficult to separate out therapeutic mechanisms from other elements such as the therapeutic relationship (Norcross & Wampold, 2011).

1.1.2. Methodological challenges in the psychotherapy literature: mechanisms or mediators?

Existing research methods are ineffective in isolating individual mediators and mechanisms of change. A mediator is a variable that shows a statistical relationship between an independent variable (IV) and dependent variable (DV) (Kazdin, 2007). While mediators do not show how change occurs, they may be manipulated in order to test for a causal relationship, in other words, a causal mechanism. Mechanisms are the steps or processes that account for change (Kazdin, 2007). In reviewing the literature for this thesis, a methodological problem was identified. It was found that researchers frequently omitted to define and delineate whether they were investigating a mediator or a mechanism' and which one was at play, i.e. mediators or mechanisms. A possible explanation for this lack of clarity is that mediators are more easily established than their corresponding mechanisms (Kraemer & Wilson, 2002). Furthermore, the intimate relationship between the two poses additional challenges for clearly differentiating between them. This lack of clarity caused significant challenges in identifying which factors in studies were statistically relational (mediators) and which were causing change (mechanisms). For the sake of clarity, this thesis will adopt the term 'mechanism' to mean both factors, reflecting the intimate linkage between them as both are implicated in the change process.

1.1.3. Methodological issues in identifying mechanisms of change in psychotherapy research.

Beutler (2009) argues that psychology researchers are actually preventing increased understanding and optimisation of clinical effects by adhering rigidly to a limited number of scientific methods. For example, randomised controlled trials (RCTs) typically require the specific ingredients of the psychotherapy under investigation to be identified and controlled, and that the therapy is administered in a manualised way so as to enable trial replication. This approach is regarded as the ‘gold standard’ of scientific inquiry and forms the basis of empirically supported treatments (ESTs). However, RCTs cannot control for factors such as the therapeutic relationship between therapist and client, therapist delivery style and skill, and non-diagnostic client factors, which may be the ingredients responsible for producing change (Castonguay & Beutler, 2006; Duncan & Miller, 2006). Furthermore, RCTs are often carried out in populations with ‘pure’ disorders and then applied to populations in clinical settings with more complex difficulties. Therefore, assumptions that the treatment will be equally efficacious across diagnostic categories might not be the case.

There is suggestion to move away from establishing evidence for whole treatment packages for distinct diagnostic categories to focus instead on mediators and mechanisms of change (Rosen & Davison, 2003). This, in part is due to greater emphasis on more individual case formulation informed by empirically tested theories, rather than manual-driven protocols. Individual case formulations (idiosyncratic approaches) enable a theoretically driven treatment to be used with clients who cannot neatly be categorised into populations for which evidence-based treatments have been developed.

Identifying the need to bridge the gap between scientific research, process research and clinical practice, Beutler (2009) set out to illustrate, from his own research, that broader methodologies can be equally, or more, effective than what is currently practised. Riley and Gaynor (2014) and Kazdin (2007) also critique large scale studies, including RCTs, for failing to observe the subtleties of symptom change throughout the phases of treatment, i.e. the timeline problem. To rectify this they propose utilizing single case designs where relationships between components of treatment and outcomes can be examined more closely. Single case research can more easily take account of some of the necessary design criteria for the study of mediators and mechanisms. For example, a timeline could be established to ensure a proposed mediator change occurs before the outcome (Kazdin, 2007).

Findings are mixed when determining whether outcomes originate from ‘non-specific’ mechanisms (i.e. factors common across all therapeutic models) or ‘specific’ mechanisms (i.e. technical factors aligned to one form of therapy). The following two sections will review the evidence in order to illuminate current thinking around non-specific and specific mechanisms of change.

1.1.4. Mechanisms of change in psychotherapy: therapy non-specific factors.

Deducting potential mechanisms of change directly from the theory underpinning the therapy concerned, hence a therapy specific mechanisms, can be a useful first step of analysis (Murphy, Cooper, Hollon, & Fairburn, 2009). However, two challenges make this implausible. Firstly, a specific factor, or mechanism, can often be targeted in different ways. For example, cognitive therapy for treating depression can be conceptualised in different ways. It may either exert its effects using purely cognitive techniques (mechanisms) to alter dysfunctional thoughts (Beck, Rush, Shaw, & Emery, 1979) or may instead use a collection of cognitive interventions in combination with behavioural experiments as is often the case with interventions used in Cognitive Behavioural Therapy (CBT) (Murphy et al., 2009). Second, there is strong evidence that non-specific mechanisms such as the therapeutic alliance and motivational processes may be crucial for change to occur in all therapies and thus, cannot be deducted from one theory (Luborsky et al., 2002). For example, in a number of meta-analyses of the literature, evidence suggests that there is no difference in the effectiveness of cognitive therapies and psychodynamic therapies and relational models of psychotherapy (Berman et al., 1985; Grissom, 1996; Luborsky, Singer, & Luborsky, 1975; Shapiro & Shapiro, 1982; Wampold, 2001). This remained true when non-specific factors such as reactivity, structure and skill level of the therapist were controlled, which is consistent with the Dodo bird verdict, i.e. that there are very few differences in the mechanisms of change in various forms of psychotherapy (Rosenzweig, 1936).

While the therapeutic alliance has been shown to be the most powerful common mechanism in predicting outcomes, it could be argued that this construct may play a greater or lesser role in outcomes depending on the model in which it is operating. For instance, in psychodynamic models of therapy, crucial moments of change arise when clients experience a corrective emotional relationship with the therapist (Messer, 2013) whereas, in cognitive therapy, it has been found that strong therapeutic alliances develop following the implementation of skills developed collaboratively (Tang & DeRubeis, 1999). Furthermore, insight has been regarded as an important non-specific mechanism of change, with various psychotherapeutic interventions encouraging clients to make new discoveries about themselves (Moro, Avdibegović, & Moro, 2012).

Insight as a non-specific mechanism of change.

It is postulated that insight into an experience or relationship is the mechanism that explains how change comes about in therapy. However, while the concept of insight is important in psychotherapy, there are ongoing debates about exactly what it is, how it occurs, when it happens and its consequences (Elliott et al., 1994). Elliott (1984) suggested four multidimensional layers of insight. Firstly, there is metaphorical vision or the realisation of something that has been hidden. This could be seen as making the unconscious conscious. This new layer of insight leads on to Elliott's second layer of making connecting links. These

connections may occur through the process of giving words to felt experiences. Recognising uncomfortable feelings, together with the client making sense of them, could lead to further connections. An example, pertaining to links made in CAT, is when clients are able to make connections between past experiences (perhaps of abuse and neglect) and patterns that are occurring in the present. This might be typical of Elliot's third element of insight when a sudden and often surprising recognition is made, rather like the 'light bulb' effect. Therapy can clearly be seen as enabling clients to make links that were not previously conscious, leading to the fourth element of insight, which is labelled 'newness', the acquisition of new knowledge.

A distinction can be made between 'cognitive insight' and 'emotional insight' (Marková, 2005). 'Cognitive insight' could simply be intellectual understanding, e.g. through reading or being told by one's therapist that childhood experiences have a bearing on patterns of behaviour as an adult. While this new intellectual understanding does not necessarily lead to clients making change, feeling less confused about aspects of their behaviour can be enough to instil change. Emotional insight arises from the process of resistance that clients go through during therapy when exposed to uncomfortable feelings, i.e. the interval between receiving descriptive information from a therapist (intellectual insight) to a state of awareness once resistance is overcome (Freud, 1914 as cited in Moro et al., 2012). The psychoanalytic tradition puts forward the view that emotional insight is the crucial component for producing change and that, if 'intellectual' insight is capable of producing change, simply reading psychoanalytic texts would be enough to modify behaviour (Freud, 1926 as cited in Moro et al., 2012). Thus, both types of insight are needed for change to occur.

Some recent practitioners have also stated that cognitive understanding may not be enough to produce change. For example, Compassion Focused Therapy (CFT), which grew out of Cognitive Behaviour Therapy (CBT), recognises that, while some individuals can understand alternative perspectives about themselves on a cognitive level, this does not always lead to clients feeling any differently (Gilbert, 2010). Gilbert recognised that the skills for self-care and compassion towards oneself are similar to those adopted through the experience of being cared for by others (Gilbert, 2005). Consequently, if individuals do not have these experiences of care and nurture to draw on, they may struggle to feel differently even with new intellectual understanding. Thus, according to this view insight on an emotional level is necessary for it to be considered a mechanism of change.

A study by Elliott and James (1989) confirmed that insight is regarded as highly helpful by clients. However, the mechanism has been widely studied and findings as to whether this is the case are mixed. A study using a case series design (N = 3) found that clients showing the most successful outcomes also scored the highest levels of insight (Lester Luborsky, Bachrach, Graff, Pulver, & Christoph, 1979). However, in an investigation using 40 clients, while 10% of clients described insight as the most helpful event in therapy, insight was not found to significantly correlate with outcome (Llewelyn, Elliott, Shapiro, Hardy, & Firth-Cozens, 1988).

The authors argue, however, that due to errors in measurement, i.e. clients' difficulties in identifying events that were important during processes of change, it would be inaccurate to conclude that insight had no impact on outcome in therapy.

Elliott et al., (1994) set out to explore events in therapy perceived to produce personal insight. They used Comprehensive Process Analysis (Elliott et al., 1994) to understand (a) what aspects of the event led to insight, (b) how the effects both during and post sessions unfolded, and (c) key contexts that assisted in the development of the event. In a cross over design, 40 clients received eight sessions of both Psychodynamic-Interpersonal Therapy (PIT) and Cognitive Behavioural Therapy (CBT) for depressive or anxiety disorders. Six insight events were identified based on clients' descriptions of 'personal insight' as a helpful event following therapy. Insight events were identified on three grounds: insight occurred within the therapy sessions; two analysts agreed that insight was involved in the client's description about helpful events in therapy; and the segments of therapy that corresponded with clients' descriptions of the event leading to insight could be identified. Using an open-coding procedure, 19 themes were found. The themes were selected on the basis of insight occurring in all, or all but one, of six identified events. This research offered an understanding of common features that make up a picture of insight across two therapies. In CBT, insight events often involved reattributing cause to others, whereas in PIT, insight events were linked to making connections between conflict themes brought up in previous sessions. Although these findings provide a useful understanding of common aspects of insight events between the two treatment approaches, the themes contrasted sharply. Given that distinct procedures across the two therapies were capable of producing insight, these findings support the notion of insight as a non-specific mechanism of change.

1.1.5. Mechanisms of change in psychotherapy: therapy-specific factors.

Whilst most therapeutic models can be viewed as either 'action-oriented' or 'insight oriented' (Scott, 1998), they all have different theorised mechanisms of change. Some mechanisms are well evidenced while others are not. Castonguay et al. (2012) found differences between two modes of therapy, CBT and Interpersonal Emotional Processing Therapy (I-EP), with regards to the type of corrective experiences (CEs) that brought about change. CEs have been defined as, "experiences in which the client comes to understand or experience affectively an event or relationship in a different or unexpected way" (Goldfried, 2012, p. 16). Using a single case design, Castonguay et al. (2012) explored CEs, paying particular attention to non-specific and specific factors which led to their development. The case of a 50-year old male receiving treatment for generalised anxiety disorder was presented. Comprehensive Process Analysis and four quantitative measures assessing anxiety symptoms were used at pre- and post-treatment, and at 6, 12 and 24 months follow-up. In the CBT, CEs manifested themselves through intrapersonal changes (i.e. shifts in client's thoughts) and a reduction of arousal through confronting previously avoided stressful situations. In contrast, in I-EP, CEs resulted from

interpersonal changes (i.e. a new found ability to interact more genuinely with others) and learning to be more aware and open to one's own and others' emotions (i.e. insight). Since the measures of symptom reduction were correlated with different CEs in each therapy, this evidence supports therapy-specific mechanisms of change.

Gibbons et al. (2009) set out to validate the theoretical mechanisms of change proposed by dynamic psychotherapy and cognitive therapy. They assessed whether the mechanisms were specific to the model from which they were derived or were common to both models (i.e. non-specific). The study also explored the relationship between each mechanism and symptom course. Three mechanisms of change advocated by modern dynamic models and cognitive models were examined. The specific mechanism for the dynamic models was 'self-understanding of interpersonal patterns', also commonly referred to as insight (Luborsky, 1984; Strupp & Binder, 1984). For cognitive therapy, the specific mechanism of change was 'compensatory or cognitive coping skills' to manage negative thoughts and events. The non-specific mechanism theoretically linked to both models was 'views in self-concept'. No significant differences were found between the two therapy models in regards to therapeutic outcome. Changes in 'compensatory or cognitive coping skills' and 'views in self-concept' were found in both dynamic and cognitive models. Consequently, the therapy-specific hypothesis of change was not supported. However, changes in 'self-understanding of interpersonal patterns' (insight) only improved significantly in the dynamic psychotherapy group, suggesting a specific mechanism for targeting change in dynamic therapies. Given the ambiguity of research findings about therapy-specific mechanisms of change, further investigation within each individual therapeutic model is needed to identify whether mechanisms of change are subtly different for each type of therapy. The following section aims to do this by analysing three well established therapeutic models, psychodynamic therapy, behavioural therapy and cognitive therapy.

Psychodynamic therapy.

Stemming from the psychoanalytic tradition, psychodynamic therapy is an interpersonal approach that uses transference to uncover unconscious processes from the client's past to increase self-understanding or insight of oneself (Johansson et al., 2010). The aim in therapy is to understand the client's current maladaptive relationship patterns, by looking back to their important relations in childhood and to their relationship with the therapist (Messer, 2013). During therapy, a number of defence mechanisms such as negation, repression and displacement are challenged as the client begins to develop new perspectives about earlier events in childhood. Insight is considered the crucial mechanism that enables clients to establish associations between the affective and cognitive processes that enable them to arrive at new understandings of childhood experiences and their connection to the present (Moro et al., 2012). As the client arrives at important revelations about themselves, interpersonal functioning is seen to improve.

Behavioural therapy.

The premise in behavioural therapy is that behaviours can be learned and unlearned and so the focus is on how present patterns of maladaptive associations and reinforcement may be rectified. Techniques that target behavioural change involve ‘increasing positive reinforcement and decreasing stressful/aversive experiences’ to alleviate symptoms of depression (Riley & Gaynor, 2014) or exposure to achieve habituation of anxiety (McManus, Van Doorn, & Yiend, 2012). Treatments based on classical conditioning (learning by association), such as exposure therapy (Wolpe, 1958), work to create fear extinction by disrupting the conditioned stimulus (CS) and unconditioned stimulus (US). One mechanism that might account for change in exposure therapy is inhibitory learning, whereby new CS-US associations are learnt, serving to extinguish old conditioned emotional responses (Bouton, Mineka, & Barlow, 2001). However, other conditions are more easily explained by consequences of behaviour. Treatments based on operant conditioning (learning by reinforcement) focus on the functional relationship between a particular behaviour and a consequence. Behavioural activation techniques such as contingency management, activity scheduling and skills training may be used to help clients engage in activities that lead to pleasurable consequences and therefore positive reinforcement of the desired behaviour (Kanter et al., 2010). Punishment strategies are also used and work to reduce undesirable behaviour.

Cognitive therapy.

Despite the different variants of cognitive therapy applications, they all share a similar notion that problems arise from cognitively distorted views of experiences maintained by underlying maladaptive cognitive structures (A. T. Beck, 1967, 1976). Cognitive therapy aims to alter an individual’s thinking and belief systems in order to alter verbal meanings and bring about enduring emotional and behavioural change (J. S. Beck, 1995). Consequently, cognitive change is brought about through processes of cognitive reframing, (e.g. developing alternative explanations for negative thoughts to alter its emotional significance) and cognitive decentering (i.e. encouraging an ‘observing’ and ‘describing’ stance of internal experiences including thoughts, feelings and memories etc.), in order to create healthy psychological distance from intense emotions (A. T. Beck, 1970). According to Hayes-Skelton, Calloway, Roemer and Orsillo (2015) altering perspectives of internal experiences through separating from thoughts and feelings, leads to a reduction in controlling, suppressing and avoidant behaviours.

Summary of findings.

The following table summarises the theorised mechanisms of change within psychodynamic, behavioural and cognitive therapies.

Table 1: Theorised Mechanisms of Change Derived from Prominent Psychotherapy Models

Therapy	Theorised mechanisms of change
Psychodynamic therapy	Insight Unconscious beliefs and processes
Behavioural therapy	Positive reinforcement Inhibitory learning of the CS and US association
Cognitive therapy	Cognitive reframing Cognitive decentering

1.2. Initial Development of CAT

Cognitive Analytic Therapy (CAT) was initially developed by Dr Anthony Ryle and formally given its name in 1984 (Ryle, Kellett, Hepple, & Calvert, 2014). Ryle's initial development of CAT arose from his work as a GP, when he became aware of the increasing number of patients presenting with emotional problems associated with relationship difficulties within the family (Ryle & Kerr, 2002). In response to the growing need for cost-effective and accessible interventions for patients, Ryle developed a relatively brief, structured intervention suitable for treating a wide range of psychological difficulties within the NHS (Marzillier & Butler, 1995). Common mental health difficulties, such as anxiety and depression, can be treated using CAT as well as more severe difficulties, such as bipolar personality disorder (Brockman, Poynton, Ryle, & Watson, 1987; Mace, Beeken, & Embleton, 2006; Marriott & Kellett, 2009; Ryle, 1997).

CAT is an avowedly integrative therapy which has arisen from four key theoretical bases. For example, CAT uses ideas about: the assumptions made by individuals regarding 'others', taken from personal construct theory; reflecting on common thinking and behavioural patterns in order to identify options for change, taken from cognitive and behavioural science; reciprocal roles and interpretation of transference and countertransference from object relations theory; and how personality develops through learning, from developmental psychology. These four theoretical origins of CAT: personal construct theory, cognitive and behavioural science, object relations theory, and developmental psychology will now each be discussed in more detail.

1.2.1. Personal construct theory.

Ryle's development of CAT made use of repertory grid techniques (Kelly, 1955). Derived from personal construct theory (PCT), Ryle found the repertory grid technique particularly helpful for exploring the cognitive characteristics of his patients, their relationship

difficulties and measuring the specific nature of change that occurred during therapy (Ryle, 1975). Encouraging reflection through use of the grid technique enabled clients to examine their role within relationships with others and their “fantasies or assumptions” about others (Ryle & Lunghi, 1970, p. 323). This led to new ways of describing a client’s failure to revise ‘faulty’ procedures which are classified as traps, dilemmas and snags (Ryle, 1979). Traps are repetitive cycles where negative beliefs are perpetually confirmed, whereas dilemmas refer to extremes of choice, both of which are disabling; and snags are the self-imposed barriers which prevent reform.

1.2.2. Cognitive behavioural science.

In the broadest sense, CAT resembles many cognitive therapies because its theoretical framework, known as ‘the procedural sequence model’ (PSM), is underpinned by cognitive theory (Ryle, 1990). Both cognitive therapy and CAT identify existing thinking and behavioural patterns that typically function to maintain problems. Such problems are known as vicious circles, rules for living and negative automatic thoughts in cognitive therapy and as traps, dilemmas and snags in CAT (Marzillier & Butler, 1995). Cognitive behavioural interventions aim to counteract well-worn thinking patterns. They require the client to identify thinking patterns and to reflect upon them with a view to promoting behavioural adaptation. CAT has a similar approach. After target problem procedures (TPPs), that is, ‘faulty’ patterns that maintain problems, have been identified, the remaining sessions of therapy are centred on recognising and later revising these procedures.

The contribution of cognitive behavioural science to CAT: the procedural sequence model.

A defining feature of what was to become known as CAT is the procedural sequence model (PSM) of aim directed action, which identifies the links between behaviours and outcomes, and beliefs and emotions, as described in cognitive behavioural models (Ryle, 1982). The central aim of the model is to identify problem procedures (traps, dilemmas and snags) that are self-reinforcing and difficult to revise. The model is also used to depict such faulty procedures in the form of visual ‘maps’, known as sequential diagrammatic reformulations (SDRs). The aim of SDRs is to elicit more detailed reflections on or self-monitoring of maladaptive procedures that may lead to alternative outlooks and behaviours, i.e. ‘exits’ from each maladaptive pattern.

1.2.3. Object relations theory.

Object relations theory (ORT) identifies problems as occurring at a relational level in which representations of self and others are informed by early interactions with significant others (Ogden, 1983; Ryle, 1985). Therefore, as individuals develop into adulthood, their relationships with others are based on internalised expectation of reciprocation, i.e. their predictions of the responses of others. These stable patterns of interacting determine not only the way individuals treat themselves but the quality of their current relationships. The usefulness

of ORT to CAT is that it provides a framework for understanding damaged interpersonal relationships and explanations for clients' possible mistrust and resistance to accept help.

Ogden (1983) provides a historical account of how ORT developed from the work of practitioners such as Freud, Klein, Fairbairn and Winnicott. According to Freud (1938; 1940 as cited in Ogden, 1983), the internal psyche is based on the development of early internalised relationships with external objects. In particular, Freud theorised the formation of the superego through the infant's internalisation of external judgments, orders and threats directed at the ego, the source of which is significant caregivers in the early years. Although Freud did not use the term 'internal object' it was on this foundation of the internal psyche that following object relations theorists based their work (Gomez, 1997). Klein (1946; 1958 as cited in Ogden, 1983), suggested that the infant's ego and internalised object, which are whole at birth, are split from each other in order to separate unmanageable relationship experiences with the mother (or primary carer), namely simultaneous and contradictory feelings of love and hate. Klein was unclear in her theory as to whether the split ego and object within the infant became unconscious fantasies (i.e. ideas) or active agencies (i.e. object relationships). Without an active agency, it has been argued that unconscious fantasies would be unable to protect the ego from the bad aspects of object relationships (Ogden, 1983). Fairbairn (1940; 1944 as cited in Ogden, 1983), like Klein, saw the infant's ego as whole at birth but splitting off as he or she develops in an effort to retain a relationship with an 'ideal object'. In contrast to Klein, Fairbairn (1952 as cited in Gomez, 1997) argued that only the bad aspects of the object split from the ego and that the infant remains connected with the satisfactory object by repressing the unsatisfactory aspects (e.g. an emotionally absent or rejecting mother). The splitting off process changes the object to a 'good enough mother' with accepting and accepted qualities. Through repressing the split-off portion of the ego, the infant enables the relationship with its mother to continue. Fairbairn introduced the concept of 'dynamic structures' where the ego comprises two subdivisions that are capable of acting independently. As a result, it is possible to see the ways in which object representations, which rely extensively on the object to generate meaning, can exist alongside the self component of the ego, where ideas can be generated and feelings are experienced as one's own. Fairbairn's theories were amongst the first to use a relational rather than a psychological analysis of human experience, which led to the development of ORT. The idea of the splitting of the ego was extended by Winnicott (1951; 1952; 1954; 1960, as cited in Ogden, 1983). He suggested that, at birth, the infant has an individuality of personality, a true self, which continues to develop as the mother holds and protects the infant's needs. However, various problems can arise when the mother presents something of herself to the infant (e.g. feeding the baby before he or she is hungry). Consequently, the infant develops a 'false self' which serves to monitor and adapt to the needs of the mother and also to act as a protective barrier that enables the 'true self' to maintain its integrity.

The contribution of object relations theory to CAT: reciprocal role procedures.

The theoretical basis of the reciprocal roles theory came from the ideas of object relations theories (ORT). ORT informed Ryle's clinical thinking about how clients interact with others. He proposed that, through interactions with significant others in early childhood, in addition to the cultural influences in which an individual is brought up, individuals acquire a range of reciprocal role procedures (RRPs) that is, actions used to achieve certain outcomes based on memory, predictions, affect and meaning. These procedures, which aim to elicit reciprocations from others, remain relatively stable into adulthood affecting current relationships, self-judgment and self-management (Ryle, 1985; Ryle et al., 2014). For example, infants who have not experienced responsive and sensitive interactions with their caregiver will have difficulty reproducing this for themselves. Consequently, as adults, these over-dependent individuals may seek out an over-involved or caring other, with the aim that this partner will help them feel better. Alternatively, these adults may choose to engage in casual relationships where few demands are made ('avoidant' behaviours) to avoid feelings of abandonment (Gerhardt, 2015).

Problems can occur when a mutual matching of reciprocal roles in emotionally significant relationships ceases to be maintained. While all individuals have multiple object relationships to draw upon, if an individual has no past or present relationship that compensates or challenges difficult past relationships, further difficulties can arise. For example, a discouraging object relationship in the present may prevent an individual taking action towards a desired outcome.

Once recognition is achieved, CAT therapists may consciously avoid reinforcing a client's RRP in order to assist reinterpretation of restrictive or damaging relationships to provide a new and possibly corrective experience that might provide an opportunity for change through the emergence of new procedures created in session. ORT's main contribution to CAT is the foundation in which psychological structures formed in a child's early years influence later behaviour in adulthood. Accordingly, an important contribution to the therapeutic work carried out in CAT involves working with interpersonal processes to create reform. For example, therapists might use processes of transference, countertransference and projective identification, which result from externalisation of an internal object relationship in therapy sessions, to understand their client's RRP. This led Ryle to expand the PSM model to include aspects of object relations theory and became known as the procedural sequence object relations model (PSORM).

1.2.4. Developmental psychology.

Developmental psychology (DP) is broadly concerned with the complexities of human development throughout the lifespan (Smith, Cowie, & Blades, 2003), but particularly infancy and childhood where the most dramatic changes occur. Vygotsky's theories are particularly influential in this field, emphasising the role of interpersonal processes (cooperation with

others) and society in facilitating learning (Smith et al., 2003). According to Vygotsky, individuality does not operate in isolation, but is constructed and maintained in reciprocal relationships with others who share a common culture (Smith et al., 2003).

Developmental psychologists have criticised the object relations school for neglecting the role of conscious learning from experiences in a child's development, and instead emphasising innate conflicting drives such as splitting and projection. Growing evidence from developmental psychologists (such as Stern, 1985; Murray, 1992, Trevarthen, 1993; Aitken & Trevarthen, 1997; Tronick, 1998; Brazelton & Cramer, 1991 as cited in Ryle & Kerr, 2002) have noted that an infant's formation of mind and personality is shaped by external social experience, supporting ideas put forward by Vygotsky that cultural, interpersonal processes throughout childhood (between the infant and significant others) are key to an infant's development.

The contribution of developmental psychology to CAT: scaffolding clients' learning.

Developmental psychology's emphasis on the actual experience of joint and sign-mediated activity between mother and child, (such as gestures, mimicry, rhythms, movement and sound) influenced the later development of CAT, putting greater emphasis on the learning involved in personality development (Leiman, 1994). This important development was informed by Vygotsky's ideas of how reality is given meaning and how self and others are defined through observation and actual experience being remembered and later copied. This line of thought led to the modification of the object relations ideas regarding the acquisition of reciprocal roles, to include the ways in which patterns of reciprocal roles are consciously learned through social interactions and experiences (Ryle & Kerr, 2002).

CAT draws on Vygotskian ideas in relation to the processes involved in the formation of the self, notably Vygotsky's concept of 'scaffolding' learning so as to support and extend a child's learning up to and slightly beyond his or her potential (known as the 'zone of proximal development'). The range of reciprocal roles held by a client is often reflective of the style of scaffolding a child has received. For example, the amount of support and space received in relation to new learning and activities, and the possibilities conveyed to a child, will determine an individual's sense of self and their procedural abilities and restrictions (Leighton, 1995). It is crucial, therefore, for therapists to identify possible restrictions in these areas and to provide a different empathetic relationship with appropriate scaffolding, where a client can feel safe to engage in the joint creation of 'tools' (Ryle, 1982). The reformulation letter can be viewed as a scaffolding and 'transitional' (Winnicott, 1953, p. 89) tool in this context, enabling the client to continue working on change outside of the therapy context.

The multiplicity of CAT's theoretical origins is useful for understanding the content and techniques of CAT sessions, which are presented in the next section.

1.2.5. The CAT journey: session content and techniques.

At the start of therapy, clients are asked to complete a ‘psychotherapy file’, which involves reflecting on how often certain patterns of thinking, feeling and acting, in the form of traps, dilemmas and snags, occur. Clients are supported to identify their main target problems (TPs), i.e. difficult symptoms and behaviours and the underlying ‘faulty’ patterns that maintain them (known as target problem procedures, TPPs). After a list of individual TPs and TPPs have been constructed, these are then written, in the first person, on the client’s weekly rating scale to be monitored throughout therapy, for example, a client who identifies ‘over vigilance’ as a TP could identify a TPP as follows: ‘Believing that people are a direct threat to me, I feel I need to protect myself by watching people closely all the time. This watchfulness means that I notice many small incidents or behaviours all the time and then join them together to make a conspiracy theory. When this happens, I then withdraw from social situations, which reinforces my belief in the conspiracy theory and so limit my opportunities to learn that people can be trusted.’ (Kellett & Hardy, 2014, pp. 455–456). At session four, a ‘narrative reformulation’ letter is presented to the client, detailing their TPs and TPPs. This prose account also details the developmental origins of these presenting problems.

The procedural sequence object relations model (PSORM) of CAT illustrates, through a sequential diagrammatic reformulation (SDR) map, how individuals have developed their own sequences of aim directed action. The SDR describes the stability of the client’s mental, behavioural and environmental processes based on their assumptions about how their aims may be achieved. The SDR sets out a cyclical loop as follows: (1) the perception; (2) appraisal based on knowledge, values, possible plans and expected outcome; (3) the outcome; (4) consequence of the enactment (importantly others’ responses); and (5) confirmation or revision of the sequence (Ryle, 1982). Continual recognition and revision, (depicted as ‘exits’ from the SDR) forms the remainder of the work in therapy. Whilst this is useful for some individuals, others have more difficulty revising their maladaptive procedures and consequently become caught up in repetitive difficulties that characterise a range of psychological problems. At the end of therapy, goodbye letters are exchanged, summarising the progress made, challenges that may lie ahead, and an acknowledgement of the significance of ending therapy. Table 2, below, gives a detailed outline of the CAT protocol and what happens in each session.

Table 2: 16 Session CAT Checklist

Session No.:	Week
Give psychotherapy file	1
Set diary keeping of TPs	1
Receive psychotherapy file back	2
Check diary monitoring of TPs	2/3
Review psychotherapy file and agree list of TPs	3
Create SDR	3
Create list of TPs and TPPs	3
Read out reformulation letter and TP/TPP list	4
Monitoring of TPPs	4
Set up rating sheets of TP/TPPs	4
Review client's week relative to TP/TPPs	5-16
Check diary monitoring of TPPs	5-16
Discuss meaning of ending	5-16
Rate TP/TPPs on week-by-week rating sheet	5-16
Check Sequential Diagrammatic Reformulation (SDR)	5
Discuss SDR	6
SDR available for reference	7-16
Discuss mutual goodbye letters	14
Create goodbye letter	14
Read goodbye letters	15
General review of change	16
Set follow-up date	16
Rate TP/TPPs, evaluate change and assess for further help	FU

From the International Cognitive Analytic Therapy Association (ICATA, 2014)

1.2.6. The CAT journey: theorised mechanisms of change.

Analytic theory.

According to object relations theories and hence the psychoanalytic tradition, emotional insight is a key mechanism of change and is therefore also theorised to be important within CAT. ORT explains an individual's need for object relatedness in order to maintain sanity and survival and consequently explains their resistance to separating from attachments. This would include those that are considered 'bad' internal object relationships which prevent people

achieving their aims (Fairbairn, 1944; 1958 as cited in Ogden, 1983). Individuals who do not experience positive early relationships have been described as searching for an idealised relationship, or the ‘search for the object never known’ (Stevens & Price, 1996). Such individuals seek to protect the internal object relationship from the self component of the internal object relationship, where an attempt is made to change the ‘bad’ object into a ‘good’ object so as not to risk absence of object relatedness. It is also protected from the object component of the internal object relationship which (unlike the self component) resists changing due to the risk of losing one’s sense of self. ORT provides a useful framework for thinking about resistance to change, even when a client might know their behaviour is self-defeating. However, once resistance is overcome, clients can begin to internalise descriptive information and subsequently gain emotional insight, which facilitates change (Moro et al., 2012).

Within the analytic tradition, transference and countertransference are also considered mechanisms of change. According to ORT, if the internal object aspect of the ego, with its origins in early object relationships, is externalised, the client will experience another individual (in this case, the therapist) in the same way he or she has unconsciously experienced the early object relationship. This is known as transference. On the other hand, if the externalisation process involves assigning the self component of the internal object relationship to the therapist, then transference will involve the client experiencing the therapist in the same way that they experience the self component of the ego. It is also possible for therapists to unconsciously engage with the object and self components of the ego projected by the client, which is known as countertransference.

Therapists can actively engage with and use transference and countertransference to gain knowledge and understanding of a client’s unconscious internal object relationships (Ogden, 1983). Therapists can use this information to build an internal formulation of a client’s difficulties and then decide whether it would be beneficial to immerse themselves in their client’s reciprocal roles (by taking up a complementary role) or bring unconscious transference into the conscious realm in order to “destroy” it and thus bring about change (Freud, 1905 as cited in Bird, 1990, p. 336). Equally, if therapists are able to recognise that a countertransference process is being played out in sessions, they may choose to resist a client’s transference in order to challenge their client’s “phantasy” about others and disrupt their faulty reciprocal role procedures, thus bringing about change (Bion, 1952 as cited in Ogden, 1983, p. 232).

Therapists work with transference and countertransference clinically through, for example, role enactment so that a new interpersonal experience may be created (Ryle & Kerr, 2002). Where possible, therapists may deliberately resist interpersonal pressure to comply with the client’s identification with internal relationships in order to prevent being immersed in the client’s reciprocal roles. Through this technique, clients may internalise a new reciprocal role. For example, by the therapist being caring towards the client, the client will feel valued and may

learn ways to become caring towards others and themselves, or at least be able to notice and reflect on differences in interactions they have with their therapist.

These uses of transference and countertransference by the therapist, which create a relationship experience that is different and unexpected, can also help develop the client's insight. Thus, during the process of therapy, therapists make use of themselves as a fellow human being, rather than an 'expert' offering a cure, in order to foster a relationship with their client that may be unlike previous relationships (DeYoung, 2003). This can be considered as a 'renewed' experience of relational failure where a more positive version of relationships is relived in the present-day environment, involving adequate adaptations (Winnicott, 1955). The resulting gain in insight or increased self-understanding has been proposed as a central process (i.e. mechanism of change) which can be considered as 'new seeing'. As CAT theory proposes that individuals always see and feel towards themselves and others in the context of a reciprocal role with a real or imagined other, clients may begin to take on a different way of relating to themselves and others. It is worth recognising that, with increased insight, one might start to see a worsening in symptoms as the client's world is challenged and previously repressed thoughts and feelings are brought to the surface.

Cognitive and behavioural theory.

The cognitive intervention components of CAT that bring about change can be traced back to the use of repertory grids derived from personal construct theory (Kelly, 1955). These grids enabled clients to use cognitive descriptions to talk about phenomena linked to psychodynamic formulations such as fantasies or assumptions about others and splitting mechanisms (Ryle & Lunghi, 1970; Ryle, 1978). This common language assisted in bringing about change by increasing a client's capacity to describe their judgments and feelings about significant reciprocal relationships in a systematic way (Ryle & Lunghi, 1970) and then reflect on and recognise faulty procedures. The therapeutic task is to help clients understand what they might be bringing to the challenges being faced in the present (i.e. problematic relationships). As Ryle stated, 'Reformulation, with the development of new tools of self-reflection offers in most cases, the possibility of rapid change, mediated by practice and sustained by self observation of a conscious level' (Ryle, 1990, pp. 214–215). CAT implements a number of cognitive intervention components that are thought to increase conscious understanding through self-reflection in order to bring about lasting change. Drawing on the meanings of unrevised patterns, encapsulated within the reformulation tools (SDR and letters), clients may monitor their recognition of faulty procedures (including associated thoughts and feelings). Once clients are able to recognise their faulty procedures, behavioural therapy principles are applied as they take an active role in empirically testing new procedures (i.e. exits from problematic procedures) (Marzillier & Butler, 1995).

However, while the field of psychotherapy is reliant on collecting evidence to support theoretical developments, it is important to recognise its implications for practice. No matter

how interesting, appealing and plausible a theory may be, it is techniques, not theories that are used with clients (London, 1964). Accordingly, the final two sections of this review will look at research evidencing mechanisms of change, firstly, outcome research that demonstrates a causal relationship between CAT and therapeutic change, followed by process research designs, which focus more closely on the processes that bring about therapeutic change.

1.2.7. Outcome research on the efficacy of CAT.

In a systematic literature review Calvert and Kellett (2014) evaluated the outcomes and quality of methodologies of 25 studies that examined the efficacy of CAT with different populations. The methodologies were evaluated by matching studies to the 'hourglass' model, which sets out three stages for guiding psychotherapy evaluation (Salkovskis, 1995). In the first stage, i.e. the early development of a therapy, preliminary ideas are tested with a small number of clients under controlled conditions through single-case studies. In the second stage, attempts are made to establish efficacy through larger randomized controlled trials (RCTs). Finally, in the latter stages of treatment development, if findings show promise, practice-based studies are conducted to ensure external validity or clinical utility. This cycle may then be repeated to test more refined questions, for example, which clinical population is most suited to the therapy (Parry, Roth, & Fonagy, 2005). The 'hourglass' model differentiates efficacy studies that test using RCT designs and clinical effectiveness studies that gather data about outcomes of treatment in clinical practice.

Twenty-five outcome studies of CAT were reviewed in Calvert and Kellett's (2014) paper. Ten studies tested preliminary ideas under controlled conditions with small numbers of participants (stage 1). Four studies used larger RCTs and sought to identify mechanisms of change (Stage 2). Wider clinical utility was assessed using larger clinical effectiveness studies in 10 studies (Stage 3).

Appraisals of the methodological quality of studies in Calvert and Kellett's (2014) paper found that just over half (52%) were of high quality. The studies that met high quality criteria were predominantly RCTs, whilst single-case studies received the lowest quality ratings. The majority of studies included in the review were uncontrolled practice-based methodologies with small samples and a lack of contemporaneous controls compromising the internal validity of evidence.

The popular uptake of CAT for more complex and severe difficulties is reflected in the outcome studies covered by Calvert and Kellett's (2014) systematic review. Almost half (44%) of the studies presented were completed with clients with personality disorders. While 60% of studies for personality disorders were considered high quality, methodological limitations were highlighted, warranting the need for more rigorous research.

Evidence of CAT's efficacy was tenuous for a range of other presenting difficulties such as eating disorders, child sexual abuse, dissociative disorders, morbid jealousy and physical health conditions, due to many of the studies being low quality as assessed by the

Downs and Black tool for measuring the reliability and validity of outcome studies (Downs & Black, 1998). However, six studies offered some support for the effectiveness of CAT for people with depression and anxiety disorders, although four of them were low quality and covered only one stage of the hourglass model.

Using the hourglass model to cluster existing outcome research for CAT, Calvert and Kellett (2014) concluded that there is a lack of chronologically coherent and coordinated research upon which the utility of CAT can be based, both within and across diagnostic categories. Consequently, process research may be more useful for identifying factors that might be responsible for bringing about change in CAT. The following section will examine process research from wider psychotherapy literature in order facilitate this end.

1.2.8. Process research on mechanisms of change in CAT.

While outcome research has evaluated the efficacy of CAT as a whole treatment package, this type of research provides little information as to the components of CAT that are effective. In contrast, process studies can be used to establish causal links between intervention components and symptomatic improvement. A widely acknowledged view among therapists practicing CAT is that their role in the change process involves the joint creation of tools with their clients to aid self-reflection on current difficulties (Denman, 2001). Assessing the process of creating 'exits' from maladaptive procedures as a method of change in CAT requires examination of the co-construction of SDRs, behavioural modifications, and subsequent discussions in therapy about these behaviours. However, Calvert and Kellett (2014) note that there is limited process research available.

This section will review the research that is available: five single case studies and three single case series that do identify which processes bring about change in CAT and how this comes about (Bennett, 1994; Evans & Parry, 1996; Kellett, 2005, 2007; Kellett & Hardy, 2014; Rayner, Thompson, & Walsh, 2011; Shine & Westacott, 2010; Yeates et al., 2008).

One of the earliest process studies in CAT was undertaken by Evans and Parry (1996). They set out to explore the impact of therapists presenting the reformulation letter to their clients. According to Ryle (1990), presenting the reformulation letter serves three important functions. Firstly, it helps the development of therapeutic relationship; secondly, it sets the scene for ongoing work; and thirdly, it increases a client's sense of being understood, which for some clients could be a new experience. Four participants took part in the study, completing a series of measures followed by an interview, three to four sessions after the presentation of the reformulation letter. During interviews, participants commented on the positive impact of receiving the reformulation letter, stating that it contained information they acknowledged previously cutting off from conscious thought. Participants said that the reformulation letter had not only led them to a greater understanding of their difficulties but that they felt understood and heard by their therapists resulting in a greater sense of trust. However, despite these comments, the outcome measures did not reveal support for the reformulation letter on impacting client

identified problems, helping alliance or perceived helpfulness of therapy. One possible explanation for this discrepancy provided by the authors was that the session immediately following the reformulation session was too soon a period to measure the impact of receiving the letter.

In a single case experimental design, Kellett (2005) noted that specific dissociative symptoms (i.e. depersonalisation, identity confusion and identity alteration) reduced over the course of CAT. Furthermore, sudden gains in the improvement of specific dissociative symptoms were found to be due to the effects of CAT-specific tools. Notably, the effect of the reformulation letter on reducing depersonalisation and the SDR on reducing identity confusion was evidenced. Improvements continued to be made after the intervention phase of CAT and the client reported frequent referral to the SDR for means of self-reflection and symptom management.

Kellett and Hardy (2014) presented a single case experimental design study of a man receiving 24 session CAT for paranoid personality disorder. The client described high levels of distrust which prevented him establishing effective friendships. The study investigated potential change mechanisms in CAT using outcome measures in addition to a client change interview, designed to elicit information about change brought about in therapy and attributed causes. Rates of suspiciousness and the sum of paranoid complaint measures reduced after the presentation of the reformulation letter. Qualitative data from the client change interview (CCI) supports the finding that the reformulation letter facilitated the process of change. The client also noted other important variables including trust in the therapeutic alliance, the use of the SDR for reflection and mindfulness of paranoia in facilitating the changes recorded. In particular, the client noted in his goodbye letter the importance of understanding the feelings associated with trust.

Rayner et al., (2011) used a grounded theory method to investigate clients' experiences of CAT tools and more specifically their understanding of how these tools link to accounts of change. Nine participants took part in the study and identified the change process as understanding their experiences and linked this to the reformulation letter. The SDR appeared to further aid understanding in relation to recognising, questioning and doing things differently. Importantly, clients recognised awareness of behaviours and revision of faulty procedures as a gradual process of change that came with insight and practice. Clients discussed CAT tools as helpful in the continuance of change after therapy had ended. However, it should be noted that two participants did not find the SDR helpful, experiencing it as incongruent and not generalisable to a wider context. For these participants, the therapeutic relationship was given greater importance in the process of change.

Shine and Westacott (2010) separately explored clients' experiences of change in CAT and the effect of the reformulation on the working alliance. They carried out a case series (n = 5) and found that, while the reformulation letter and SDR were reported by clients to be helpful,

quantitative data showed these tools did not produce significant changes in the two areas measured: the clients' reported difficulties and the therapeutic alliance. A possible explanation for not finding change in the therapeutic alliance is that it was already strong. Another reason is that the session directly after reformulation was too soon a period of time in which to reliably assess the impact of the reformulation letter on the alliance. Other research, including Evans and Parry (1996) and Rayner et al. (2011) supports the claim that the reformulation tool has a more cumulative, gradual impact on the working alliance. The qualitative analysis of the Shine and Westacott (2010) study revealed themes related to the therapeutic style and process. CAT tools were referred to across a number of themes: 'feeling heard', particularly in relation to hearing the reformulation letter being read out; 'understanding [their behaviour] patterns'; 'having something tangible', i.e. the SDR map and letters; and 'working together', including the co-construction of tools which led to a sense of empowerment and control. It is interesting to note that, whilst the quantitative data in this study did not reveal a significant change resulting from the CAT tools, the qualitative data was consistent with that of the Rayner et al. (2011) study. In both, clients stated that the CAT tools were helpful in the process of change.

In a single case study by Kellett (2007), CAT was employed to treat histrionic personality disorder. Findings showed a gradual improvement in mental health and personality integration over the course of therapy, however, gains in response to CAT-specific tools were not found. One aspect of this was that the client's sense of emptiness did not improve over the course of treatment and there was a 'sudden deterioration' on termination of therapy. A possible non-treatment factor that might account for the absence of gains in this area is that the client fell pregnant late in the intervention phase of treatment and became particularly concerned with how this might affect her physical appearance. Those gains that were reported resulted not from the creation of the SDR itself but from the revision work that followed its creation. For example, by scaffolding and supporting the client to increase desirable behaviour, e.g. attending sessions without sexualised clothes to draw attention to herself, the client began to change her typical histrionic responses. Rather than the SDR having a direct impact on the process of change, this was more related to the working alliance. Here, the CAT tool played an indirect role by assisting the therapist to better understand and therefore manage the working alliance. This was possible through the SDR enabling clearer identification of transference and counter-transference processes.

The Kellett (2007) and the Shine and Westacott (2010) studies present a mixed picture about the relationship between the SDR and the therapeutic alliance. The study by Shine and Westacott (2010) did not show a significant relationship between these two factors. However, Kellett (2007) noted that the SDR tool was important for the therapeutic alliance, thus supporting the literature on the therapeutic alliance being a non-specific mechanism of change, and demonstrating that CAT tools can facilitate these changes indirectly.

Yeates et al. (2008) reported findings from two single case studies. In the first CAT was used to work with a 48-year-old male who had identified problems in his relationship with his partner following a traumatic brain injury. The study's quantitative results supported the SDR as a mechanism of change in CAT. The results suggested that, following the completion of the SDR, the client's levels of anger increased and he reported reduced satisfaction in his relationship with his partner. A possible explanation for this is that sharing and reviewing the SDR required the client to reflect on what was happening in the present, which increased his understanding of the difficulties in his relationship and his failure to 'exit' from damaging procedures. Subsequently, an alert system on the client's mobile phone was devised to assist him to remember 'exits' from maladaptive patterns identified in therapy. Personal message alerts were programmed to be received by the client at times that corresponded with situations that triggered arguments at home (e.g. when his children misbehaved after school). These alert systems could be seen as personally created 'signs' that carried symbolic meaning for the thing the client wished to remember. After the introduction of alerts, the quality of the client's relationship with others was improved and maintained until follow-up, perhaps because the SDR served as an explanatory model for the client and helped him to predict and, therefore, reduce the occurrence of arguments.

In Yeates et al's. (2008) second case study, a 68 year old male who had suffered two strokes received 24 sessions of CAT. The strokes resulted in cognitive deficits and difficulties carrying out tasks of daily living that involved planning and sequencing, leaving the client feeling angry and frustrated. The client also felt a fragmented sense of self following the strokes. He commented to his therapists on how his diagrammatic reformulation tool (SDR) supported him in remember different aspects of himself, enabling him to integrate them visually. The client noted on how the reformulation letter served as a containment tool which he could refer back to help him recognise and reflect on current challenges. An alert pager for daily living tasks, including shaving and leisure activities, was set for various times during the day to prompt him to carry out such tasks independently.

In another single case study, Bennett (1994) found that the reformulation letter and SDR facilitated greater self-observation and control, which in turn enhanced the clients capacity to actively seek alternative ways of behaving. This study provided detailed examples of when the client had been able to successfully 'exit' from a procedural pattern and the consequences in terms of feelings and behaviour. It is important to note that, while the study reported change after the reformulation tools were presented, there were no objective measures tracking change throughout the therapy. It is impossible, therefore, to assess the effectiveness of specific CAT intervention components at the time they were used.

While the above process research in CAT is promising, the process of change in common psychological difficulties is under researched. The evidence so far suggests that the reformulation letter and SDR tools are responsible for producing change in therapy, however,

this is not always a direct effect. Qualitative research has provided valuable information about clients' experiences of CAT tools and their perceived value in the process of change. As the literature review did not reveal anything that brought together the theoretical origins of CAT and evidence for adjoining therapy specific mechanisms of change within the model, Table 3 has been developed to summarise theoretical concepts and their corresponding evidenced mechanisms highlighted in this section.

Table 3: Summary of underpinning theoretical concepts in CAT and their corresponding evidenced based mechanisms of change in CAT

Theoretical concepts	Evidenced mechanisms of change
Underpinning concepts within personal construct theory: - Reflecting on role within difficult relationships including assumptions made about others.	The delivery of the reformulation letter facilitated the development of a trusting relationship with others (Evans & Parry, 1996; Kellett & Hardy, 2014) – reduction in assumptions made about others.
Underpinning concepts within cognitive and behavioural science: - Recognising common thinking and behavioural patterns to identify options for change. - Revising well-worn thinking patterns.	SDR tool facilitated self-reflection and symptom management (Kellett, 2005) – Recognising patterns and revising. The use of the SDR for reflection and mindfulness of paranoia in facilitating the changes (Kellett & Hardy, 2014) - Recognising patterns and revising. SDR appeared to further aid understanding in relation to recognising, questioning and doing things differently (Rayner et al., 2011) – Recognising patterns and revising. SDR and reformulation letter aided understanding behaviour patterns (Shine & Westacott, 2010) – Recognising patterns. Revision work that followed the creation of the SDR (Kellett, 2007) – Revising.

	<p>SDR appeared to help the client reflect and understand difficulties in his relationship (Yeates et al., 2008) – Recognising patterns.</p> <p>SDR supported client to recognise and integrate his different states (Yeates et al., 2008) – Recognising patterns.</p> <p>Reformulation letter and SDR facilitated greater self-observation and control, leading client to actively seek alternative ways of behaving (Bennett, 1994) - Recognising patterns and revising.</p>
<p>Underpinning concepts within object relations theory:</p> <ul style="list-style-type: none"> - Identify problems occurring at a relational level - Therapists may consciously avoid reinforcing clients' RRP's in order to assist reinterpretation and possibly provide an opportunity for a new procedure. 	<p>SDR map provides tool for managing transference and counter-transference in the therapeutic relationship (Kellett, 2007) - identifying relational problems, reinterpretation and new procedures.</p>
<p>Underpinning concepts within developmental psychology:</p> <ul style="list-style-type: none"> - Draws on Vygotsky's concept of 'scaffolding' to support and extend learning up to and slightly beyond his or her potential (known as the 'zone of proximal development'). - Provide appropriate scaffolding, taking note of clients' abilities and restrictions to engage in joint creation of tools. - CAT tools can provide scaffolding to enable 	<p>Reformulation letter and SDR were reported to be helpful in the continuance of change after therapy had ended (Rayner et al., 2011)</p> <ul style="list-style-type: none"> - Scaffolding work outside the therapy context. <p>SDR to make change within their zone of proximal development (Kellett, 2007) – Scaffolding work slightly beyond client's potential.</p> <p>Reformulation letter as a tool to refer back to in order to facilitate greater reflection and</p>

clients to continue working on change outside of the therapy context.	containment (Yeates et al., 2008) – Provide appropriate scaffolding.
---	--

Drawing on the range of psychotherapeutic theories that underpin CAT (notably personal construct theory, cognitive behavioural science, object relations theory and developmental psychology) and existing process research, it is hoped that this thesis will contribute to current understanding and aid formulations regarding elements within CAT implicated in the change process. The distinct treatment phases in CAT enable case tracking through an objective means of assessing a client’s responsiveness to phases of treatment. The literature points to the complexity of extracting mechanisms involved in the change process of CAT and therefore the aforementioned theoretical concepts and evidenced based mechanisms of change are not considered the sole mechanisms through which CAT operates. This research aims to show whether CAT-specific tools are influential in bringing about change by capturing change as it happens in therapy. Due to the complexity in researching mechanisms of change in psychotherapy, Figure 2 (below) has been developed to depict current hypotheses regarding the process of change within CAT. The figure assumes the tools are proxies for the mechanisms responsible for change. Hypotheses are not mutually exclusive and this thesis will gather further, more defined evidence for the underlying theoretical bases for the approaches used in CAT that are responsible for change.

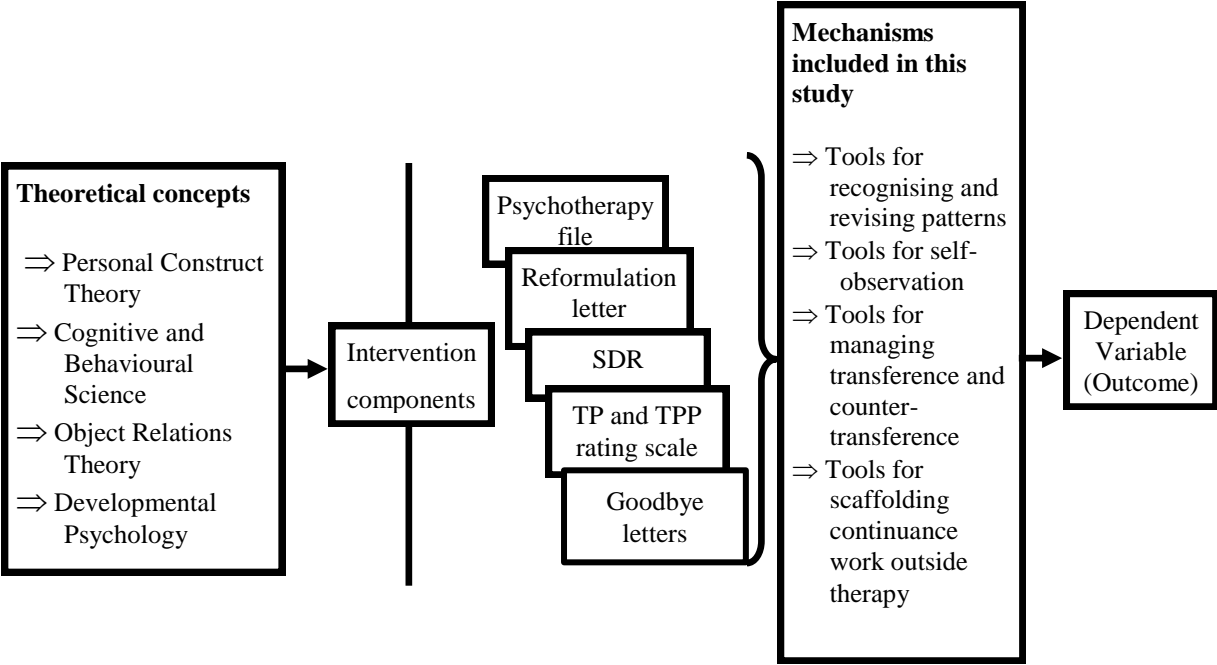


Figure 2: Mechanisms of change in Cognitive Analytic Therapy

1.3. Research Question

How do CAT techniques impact on insight and symptom change?

1.4. Aims/Objectives

The aim of the current study is to better understand the relationship between tools used in CAT and their impact on client insight and symptom change. The proposed study seeks to:

- I. assess clients' responsiveness to the delivery of CAT-specific tools (i.e. reformulation letter, mapping with therapist and recognition and revision rating scales) on symptom change.
- II. explore the effect of CAT on insight.
- III. gain an understanding of client experiences of change and how much they ascribe change to CAT-specific tools.

CHAPTER TWO: METHOD

2.1. Design

The study utilised a hermeneutic single-case efficacy design (HSCED) of 16 sessions of CAT with a one or three month follow-up (dependent on therapists' decisions of what time frame was most suitable for their client or what their service guidelines set out for follow-up). Clients presenting in an NHS adult psychological therapy service had been screened initially and identified as suitable clients to receive CAT, prior to being asked to take part in the study. Participating clients were asked to complete multiple measures during their therapy.

The design of the study was influenced by an A/B design (where clients receive assessment (A), treatment (B) and follow-up) and a single-case experimental design. Given the real life setting, however, systematic manipulation (i.e. implementing parts of the intervention at specific times) could not be achieved, thus the study could not be considered a true experiment (Morley, in press). The assessment phase usually consists of three to four sessions leading up to the client receiving their prose reformulation letter and signifies the end of the baseline phase and the start of the treatment (B) phase. The therapists' lack of adherence to this protocol made it difficult to separate out assessment and intervention. Consequently, a decision was made to utilize a hermeneutic single case efficacy design (HSCED).

HSCED approaches utilise a mixed methodology, which include quantitative process-outcome measures and qualitative client interviews in order to first establish evidence for causal links between processes of therapy and outcome and then consider competing explanations from non-therapy processes (Elliott, 2002). Combining both quantitative and qualitative methods is essential to understand the change processes in psychotherapy, as both methods have particular strengths and weaknesses (Elliott, 2010). Furthermore, the mixed methodology chosen enables objective, quantitative outcomes alongside the complexity of qualitative case description. As therapists are expected to evidence their own therapy outcomes through the use of standardised and idiographic measures, this study enabled therapists to participate without moving too far from their clinical role.

Tracking a small number of clients also enables researchers to pinpoint potential mechanisms of change by looking at the extent to which data points shift when corresponding CAT-specific tools are introduced (Morley, 1994). Carefully case tracking clients as they receive CAT, together with their process-outcome measures, enables analysis of factors impacting on symptomatic change and personal goal attainment through the use of idiographic measures (Morley, 1994). It was expected that change would resemble 'sudden gains' after the implementation of CAT-specific tools. Tang and DeRubeis (1999) described these gains as rapid and dramatic changes in symptoms, that are not attributable to overall fluctuation of scores. The reformulation tools (reformulation letter and SDR) were expected to lead to insight and symptom change and the timing of their implementation was marked on the graph

accordingly. Additionally, the commencement of the recognition and revision rating scales were marked as these provided an indication of when personal problems and idiographic goals were defined and monitored. From a theoretical point of view the goodbye letter has the potential to help cement change. As the goodbye letter was given to participants in the final session in the current study, it was not possible to measure its impact on symptom change and insight. It is not, therefore, marked on the graph or discussed in the results.

2.2. Participants

A total of six therapist/client dyads were included in the study. The six therapists had either completed, or were in the process of completing, a course of CAT. Initial contact was made by speaking at a CAT continuing professional development (CPD) away day and emailing therapists. This generated initial interest from 12 practitioners, with eight therapists who were particularly interested in completing the project. From these eight, six dyads with complete data sets were included in the final sample.

Participating clients spanned a wide age range, between 26 and 73 years of age; five participants were female and one was male; and four participants identified themselves as White British, one as White South American and one declined to comment. Although recruitment was not determined by clients' psychological difficulties, low mood and anxiety were present across all participants. Four participants had some previous trauma or difficult early experiences, two participants had long standing chronic pain, two were taking anti-depressant medication and one participant was struggling with grief.

2.2.1. Therapists.

Participating therapists were either qualified CAT practitioners or were undertaking the accredited CAT practitioner training course with the Association for Cognitive Analytic Therapy (ACAT). All therapists worked in an NHS adult psychological therapy service, drawn from a range of trusts.

Therapist one is a White British male who has worked as a psychological therapist for the past 10 years, and previously worked as a social worker. He completed CAT practitioner training seven years ago and was also a registered psychotherapist.

Therapist two is a White Other 44 year old female. She has over 16 years of experience as a qualified clinical psychologist and was undertaking training to become an accredited CAT practitioner at the time of the study.

Therapist three is a White British 43 year old male who qualified as a clinical psychologist in 2001. He completed CAT practitioner training ten years ago and has always worked in secondary mental health settings.

Therapist four is a White British 52 year old female who works as a psychological therapist, having previously worked as a mental health nurse for more than 20 years. She completed CAT practitioner training in 2013.

Therapist five is a White British 48 year old female who works as a clinical psychologist. She completed CAT practitioner training 13 years ago and has also completed the CAT supervisory training.

Therapist six is a White British 44 year old male who works as clinical psychologist. He completed CAT practitioner training 10 years ago and has also completed the CAT supervisory training.

2.2.2. Clients.

The inclusion criteria for clients were that: they presented in an NHS adult psychological therapy service; they had been contracted to receive the prescribed 16 sessions of CAT; they had a reasonable level of written English in order to fill in the measures. Although it would have been possible for the therapists to work through the questions with their clients, it was decided that this additional burden would have interfered with therapy. Pen portraits of each of the clients are given below, using pseudonyms to protect confidentiality.

Sally is a White British 26-year old female who had recently started a new relationship. She was referred for low mood and generalised anxiety, and had not had any previous contact with mental health services. She worked full time and lived with her father and step-mother.

Stuart is a 28-year-old single male who, when asked about his ethnicity and religious identity, responded that he would rather not say. He was studying a social science degree at university and worked part time in the care sector. He was referred to the Community Mental Health Team (CMHT) due to depressed mood and suicidal thoughts. His care co-ordinator had previously attempted to work with him using a CBT approach but this had not been successful.

Colo is a 29-year old South American female who moved to the UK six years ago with her husband with whom she lives. She was not working and had suffered with anxiety and low mood for the past three years. Colo struggled to spend time on her own and experienced panic attacks. Services had explored concerns with her low BMI, but Colo did not consider herself to have an eating disorder. Colo had been previously seen for CBT in an Increasing Access to Psychological Therapies (IAPT) service.

Lana is a married, White British 39-year old female and lives with her husband and two school age children. She was referred for difficulties regulating her emotions, particularly when feeling angry or anxious. She also suffered with physical health conditions and had just handed in her notice at work when starting therapy.

Polly is a married, White British 73-year old female. She was referred to the service with depression and had been seen previously by mental health services. She also suffered from chronic pain and a severe lack of energy. Before retiring, Polly worked as a teacher of children who are deaf. She lives with her husband and has two grown up children who live locally.

Sylvie is a single, White British 55-year old female. She was referred to the service with low mood, anxiety and grief reaction and had been seen previously by mental health services.

She also suffered from chronic pain and a severe lack of energy. Sylvie was an artist but was not working at the time of therapy and was living on her own.

2.2.3. Researcher.

The interviewer and lead data analyst is a White British 28-year old female trainee clinical psychologist. She has several years of experience working in mental health services and recent experience of using CAT. It was hoped that the researcher's relatively limited experience of CAT would bring a more neutral position to analysis of the participants' experiences.

2.3. Measures

2.3.1. Therapy activity sheet.

A therapy activity sheet was completed by the therapist at the end of each session. While CAT is largely unstructured, there are a number of 'prescribed' activities that therapists should incorporate into their therapy. In order to ensure accurate recording of the therapeutic tools used, therapists were asked to indicate from a checklist of activities, which aspects of therapy had taken place in each session. The 'Therapy Activity Sheet' (see appendix A) was adapted from the International Cognitive Analytic Therapy Association (ICATA) 16 session CAT checklist (ICATA, 2014). All other measures were completed by the client.

2.3.2. CAT process measures.

CAT Recognition and Revision Visual Analogue Scales. In CAT, clients and their therapists work together to identify the clients' main problems known as 'target problems' (TPs) and the 'target problem procedures' (TPPs) that maintain them. TPs and TPPs are written, in first person language, into the CAT recognition and revision visual analogue scales, to monitor how much clients are able to recognise and revise problematic patterns (ICATA, 2014) (see appendix B for recognition and revision scale). Problems at the start of therapy are placed at the midpoint of the scale and clients are asked to rate change from 'less', equating to worse, to 'more', equating to improved. The recognition and revision scales were included as they captured specific problems for each client. This idiographic level of measurement should be incorporated into single case designs to enable more relevant investigation of specific problem behaviours for the individual client (Morley, 1994).

2.3.3. Insight change measures.

Corrective Experience Questionnaire. Two open ended questions devised in a previous study (Heatherington, Constantino, Angus, Friedlander, & Messer, 2012) were employed to uncover corrective experiences (CEs) resulting from therapy. These questions were completed after every fourth therapy session. The questions read:

1. Have there been any times since you started the present therapy that you have become aware of an important or meaningful change in your thinking, feeling, behaviour or relationships? This change may have occurred in the past 4 weeks or anytime during the present therapy – please describe such change as fully as possible.

2. If yes, what do you believe took place during or between your therapy sessions that led to such change?

Self-Reflection and Insight Scale. (SRIS; Grant, Franklin, & Langford, 2002). The SRIS is a 20-item measure comprised of two sub-scales, self-reflection (SR: the ability to monitor constructively one's performance) and insight (IN: the ability to evaluate and understand higher meta-cognitive processes of thoughts and behaviour). The SRIS-IN consists of eight items and, given the focus on insight as a mechanism of change in the current study, it was decided to administer this rather than the full SRIS, in order to reduce the burden on participating clients (see appendix C for the SRIS-IN). For the SRIS-IN scale, higher scores are indicative of greater insight. Test-retest reliability on the SRIS-IN scale found Coefficient alpha of .78.

2.3.4. Symptom change measure.

Clinical Outcome in Routine Evaluation-10. (CORE-10; Connell & Barkham, 2007). The CORE-10 is a self-report questionnaire which was completed before each therapy session. It is a shortened measure devised from the CORE-OM, a 34 item questionnaire (see appendix D for the CORE-10). Items for the CORE-10 were selected to cover: depression and anxiety (two items each), trauma and physical problems (one item each), general, social and close relationship functioning (one item each) and a further item pertaining to risk, making a total of 10 items (Barkham et al., 2013). The CORE-10 was selected as it is routinely completed in secondary mental health care services and has sufficient psychometric data to use a Reliable Change Index (RCI) (Jacobson & Truax, 1991). Furthermore, it has been demonstrated to be sensitive to therapeutic change and shows strong covariance, with an internal reliability at .90, and good convergent validity, with the CORE-OM in both a clinical sample at $r = 0.94$ and a non-clinical sample at $r = 0.92$ (Barkham et al., 2013).

2.3.5. Client Change Interview.

The revised version of the client change interview (CCI; Elliott & Rodgers, 2008) lasts between 60 to 90 minutes and took place at the end of therapy. The CCI is a useful instrument for helping clients to reflect on their experience of therapy and elicit which aspects of therapy (if any) they considered had been influential in bringing about change. In addition to exploring a person's perceptions of change since starting therapy, the revised version also asks questions about which resources the person has found useful or hard to utilise in bringing about change (see appendix E for the CCI). Interviews used graphic illustrations of symptom and insight change, produced from the participant's quantitative data. The graphs also included markers indicating when CAT-specific tools (reformulation letter, SDR and recognition and revision rating scales) were implemented to stimulate reflections on what might have contributed to clients' apparent change during therapy. An example of a graphic illustration is included in appendix F.

2.4. Procedures

Participating therapists recruited one client from their caseload who they believed would benefit from CAT and who they intended to work with using the traditional 16 sessions of CAT (Denman, 2001). In order to generate sufficient data and to allow for drop outs, eight therapist/client dyads were originally recruited. Due to one participating client dropping out of therapy and one incomplete data set, two of the participant dyads were not included in the final sample, resulting in six data sets from participants who completed therapy.

Recruitment for the current study involved a presentation at a CAT CPD away day and invitations via email to take part in the study (see appendix F for recruitment flyer). Therapists interested in taking part received an information sheet outlining the study, their responsibilities and how data would be protected and kept confidential. A waiting period of at least 24 hours was given before therapists were asked to sign a consent form (see appendix G and H respectively for therapist information sheet and consent form).

Potential client participants were informed about the study by their therapist. Participating therapists were provided with a client participant information sheet to hand to potential clients during the first session of therapy. This information sheet outlined the nature of the research and explained the right to withdraw from the study at any time before analysis. The letter informed potential participating clients that a series of measures would be collected throughout therapy and at the first follow-up session, and that their therapist would be required to keep a record of the activities carried out in therapy. Potential participants were informed how their data would be stored and used for the study without divulging any identifiable information. It was explained that they would be asked to choose a made up name (pseudonym) in order to remain anonymous. The information sheet also informed participating clients that their therapist would be contacted by the researcher at the end of therapy to provide a pen portrait (some information about their background and what brought them to therapy). Finally, the information sheet explained that participating clients could indicate on the consent form if they would be happy to be approached at the end of therapy to take part in the optional interview with the researcher. Participating clients were given at least 24 hours to read over the information sheet, which included a phone number for them to contact the researcher with any questions, before signing the consent form at their following therapy session (see appendix I and J respectively for client participant information sheet and consent form).

Therapists were asked to complete a therapist activity sheet after each session in order to track their use of the CAT protocol. Data from client participants' recognition and revision scales, describing their TPs and TPPs were used from session four onwards. The scales were completed within sessions and are regarded as one of the key tools used in routine CAT practice. Participating clients were required to complete two corrective experience questions (CEQ) at every fourth session and at follow-up (taking approximately 10 minutes to complete). The SRIS-IN was also completed by participating clients every fourth session and in the first

and follow-up sessions (taking approximately 2 minutes to complete). The CORE-10 was completed by participating clients in every session (taking approximately 2 minutes to complete). Table 4 outlines the administration of all measures over the course of therapy.

It should be noted that while therapists were asked to administer questionnaires in the first session (before participating clients were asked to sign their consent form) this data was not used for the study unless informed consent was given.

Table 4: Frequency of measures taken during assessment, treatment and follow-up

Measure	Session no.																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	FU	
Therapist Activity Sheet	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Recognition and Revision Scale				*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
CEQ				*				*				*					*	*
SRIS-IN	*			*				*				*					*	*
CORE-10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

Note: FU refers to 1 to 3 month follow-up. This table depicts measures to be administered over a 16 session CAT.

At the end of therapy, therapists were contacted by the researcher to provide information for a pen portrait of themselves and their participating client. Therapists were asked to provide some demographic details, occupation and their experience and qualifications in CAT. For their participating client, therapists were asked to provide some demographic information and some details about the difficulties that brought their client to therapy.

At the final therapy session, therapists were asked to discuss with those participating clients who had indicated a willingness to consider being interviewed by the researcher, whether they were still happy for this to happen. The therapists then provided the researcher with the contact details of consenting participating clients to arrange a suitable time for the interview. All interviews took place at the participating clients' service locations. Interviews were audio-recorded and transcribed. Data was analysed through thematic coding using template analysis (King, 1999). Template analysis was chosen as it enables the researcher to organise themes to

suit the needs of the research question i.e. the participating client's experience of change and how much they ascribe that change to CAT-specific tools.

2.5. Procedural Analysis

2.5.1. Quantitative analysis.

Reliable and clinically significant change was calculated from clients CORE-10 scores pre and post therapy using reliable change analysis (Jacobson & Truax, 1991). The data from the SRIS-IN was used descriptively by illustrating scores on a graphed depiction of change alongside participant scores on the CORE-10. This graph was analysed visually by the researcher for evidence of change following the implementation of CAT-specific tools, and used as an additional resource within interviews to prompt reflections by participants.

The study set out to collect data from clients' recognition and revision scales, depicting their TPs and TPPs, and alternative patterns that they could implement in order to exit from faulty patterns from session four onwards. It was hoped that these idiographic measures of change could be linked back to therapy events. However, only three of the six therapy dyads used these measures and all three used the measures differently. Consequently, it was not possible to make a connection between therapy events and ideographical change. Although this data was not analysed, it is presented in appendix K.

2.5.2. Qualitative analysis.

Qualitative data was collected from the corrective experience questions (CEQ) and client change interviews (CCI). Initial analysis of the CEQ highlighted problems with the data in that responses to the questions tended to be over general. This meant that specific links to therapy events could not be established in the majority of cases. Given the rich and detailed data generated by the CCI the decision was made to not perform any further analysis of the CEQ data.

Template analysis (TA) was used to analyse the CCI data. The approach begins by developing a coding 'template', often by defining a priori codes in advance to identify material relevant to the researcher, in this case, material relating to CAT-specific or non-specific mechanisms of change. The next stage of analysis involves reading and marking any sections of the data which appear to capture information related to the research question, a priori codes and new codes may be organised to form an initial template. In the current analysis, segments corresponding to participants' experiences of change during therapy were marked. In line with TA, after the first three interview transcripts were coded, segments were grouped to produce the initial coding template. The initial template consisted of six themes: (1) making links; (2) breaking the links in patterns; (3) engendering self-expression; (4) discomfort of therapy; (5) a jumbled picture; and (6) real world influences. This template was then applied to the remaining three transcripts. Although all relevant material could be organised into the initial template, some reworking was undertaken to take better account of the scope of themes which were either too broadly or narrowly defined (see appendix N for the final coding template).

2.5.3. Quality checks.

A key element when undertaking qualitative analysis is to ensure adequate methodological and procedural rigour. Elliott, Fischer and Rennie (1999) provide seven guidelines that can be used by qualitative researchers to ensure accuracy of analysis. Table 5 sets out the guidelines and outlines how these guidelines were applied to the current study.

Table 5: Guidelines for qualitative research (adapted from Elliott et al., 1999)

Guideline	How guidelines were addressed in the current study
1. Owning one's perspective	During supervision there were ample opportunities for reflection. An overview of each participant was shared and feelings towards them reflected on, to avoid any potential bias or unchecked assumptions about each participant's perspectives of therapy.
2. Situating the sample	Pen portraits were provided of each participating therapist and client in order to provide the reader with information about the range of presenting difficulties and situations. Situating the sample in this way enables the reader to judge the relevance of findings.
3. Grounding in examples	In order to show transparency in interpretations of the data, direct quotes from participants were used in the final write up of the qualitative results. The use of quotes provides the reader with a sense of the original accounts and adds clarity to the findings. Furthermore, original accounts enable the reader to decide for themselves conclusions that can be drawn from the data.
4. Providing credibility checks	Credibility can be established by consulting colleagues about the formation of research themes and sharing full data and transcripts from interviews. Supervision was used to compare and contrast initial interpretations of the transcript, including any alternatives overlooked, providing a broader perspective when analysing the transcripts. For example, It was decided that one theme, 'engendering self-expression', was too narrowly defined and was subsequently changed to 'working in partnership'. This then enabled the 'discomfort of therapy' theme to be collapsed into the 'working in partnership' theme. Making these changes was useful as it enabled the identification of influences that brought about comfort in therapy as well as those that made being with the therapist uncomfortable. Following appropriate revisions to the initial template, the final template was then used to help the researcher describe and reflect on the essence of the data being analysed. The final template, in addition to indicating which participants contributed to each theme is displayed in appendix L.

5. Coherence	The themes are grouped in such a way as to display narratives first pertaining to CAT-specific mechanisms of change, through the use of tools, followed by evidence relating to non-specific mechanisms. The first three themes were seen to promote change and were organised around elements of the three core phases of CAT: (a) reformulation; (b) recognition; and (c) revision. Accordingly, these themes largely provided evidence for CAT-specific mechanisms of change. The final two themes were seen to both promote and prevent change and largely pertained to non-specific mechanisms of change.
6. Accomplishing general vs. specific research tasks	Pen portraits provide the reader with details of the sample which gives a clear indication about how far the findings might be generalisable. Furthermore, in the discussion, limitations of the current study are provided, the client sample is compared to a wider context (i.e. prevalence of adult mental health difficulties seen in practice within the UK) and caution for generalisability is addressed accordingly.
7. Resonating with readers	Although participants did not have a chance to read over the qualitative interpretations of their data, it is hoped that by addressing guidelines 1-6, an accurate description, which resonates with people who have received CAT is provided.

2.6. Ethical Considerations

2.6.1. Therapist considerations.

Therapists may have found the research process exposing as their work was being analysed. Furthermore, adhering closely to the CAT protocol could have increased workload and reduced the flexibility of their practice. Another time burden on therapists involved recruiting clients into the study and ensuring the standardisation and administration of data collection. Despite this additional burden the advantages arguably outweighed the costs, as therapists had the opportunity to be involved in clinically relevant research and an opportunity to reflect in more depth about their routine clinical work with the researcher's support.

2.6.2. Client considerations.

Participating clients were those receiving CAT. Although there is a small risk that the increased reflection on the experience of therapy that was required by this study could increase participants' distress, such reflection can also be useful for participants' in processing their therapeutic experiences and, in doing so, bring about change. Furthermore, therapists are trained to support clients with any such problems that may arise.

While this research required participants to potentially increase the frequency of completion of measurement, several of the measures are used routinely in services, for example, the completion of the CORE-10 is a routine measure in some services. Additionally, the CAT

recognition and revision visual analogue scales depicting clients' TPs and TPPs are part of CAT therapy protocol, although not all therapists use them. As these measurement activities are common practices within CAT services, those completed for the research purposes did not represent an additional burden for the participating clients. However, had these burdens been too problematic, it was expected that the therapist and client participants would agree to stop collecting the data and withdraw from the study. Any additional time burden caused by the other measures (SRIS-IN and the corrective experience questionnaire) were considered to be compensated for by their potentially positive impact on the therapeutic process, such as greater reflection and the therapists making use of the measures to facilitate conversations about change.

One form of data collection was excluded due to ethical considerations: a CAT practitioner suggested using client goodbye letters as a useful summary of the changes made during therapy. It was thought that the letters might offer some information about client insight. However, it was decided that this would be too exposing and could potentially effect what participating clients felt comfortable writing about, possibly negatively impacting on the therapy process. Instead, it was decided to ask clients to complete the two corrective experience questions. If they chose to, participants could add information from their goodbye letter into their answers.

Being aware of the difficulties participants might have in discussing personal problems with the researcher, who would be unfamiliar to them, it was decided that the client change interview, scheduled to take place at the end of therapy, would be made an option rather than a requirement of the study. In order to minimise potential distress, participants were informed that they were free to withdraw from the interview at any stage without prejudice and did not have to answer any questions they were uncomfortable with.

Interviews were audio recorded and deleted after transcription. Transcripts were stored on a password protected, encrypted device. Participants were asked if they wanted to be sent a copy of their transcripts, to provide an opportunity to respond to any inaccurate information or sections they preferred not to be quoted directly. The researcher postponed analysis for two weeks, after which point, it was assumed participants were happy for their data to be used.

2.6.3. Information governance and data protection.

The measures remained in the participant's personal file, at the NHS service premises where they were seen. Data was not taken away while therapy was ongoing. The researcher collected data at the end of therapy and after the one to three month follow-up. No measures required identifying information about the participant and anonymity was preserved through the use of a pseudonym that was chosen by the participants on their consent forms to enable the researcher to match up participant data to the therapy record sheet.

At the end of therapy, therapists were contacted by the researcher to provide information for a pen portrait for their participating client. Participants were able to ask their

therapist not to include certain information about aspects of their background or problems as was clearly stated in both the therapist and client information sheets.

2.7. Ethical clearance

Ethical approval was granted by the National Health Service Research Ethics Committee in addition to relevant Trust Research and Development (R&D) bodies (See appendix M).

CHAPTER THREE: RESULTS

3.1. Contextualising the Sample

The results from six client/therapist dyads are presented. The results will address the three research aims: (1) assess the impact of CAT-specific tools on symptom change through evaluation of the CORE-10 using reliable change analysis (Jacobson & Truax, 1991); (2) explore the effect of CAT on insight through visual analysis of participant's graphed data; (3) understanding participating clients' experiences of change, particularly in response to CAT-specific tools using template analysis of the change interview data (Elliott & Rodgers, 2008).

3.2. Participants' Symptom Change

Pre- and post- therapy scores on the CORE-10 for each participant with the associated reliable change index (RCI) value (Jacobson & Truax, 1991) is shown in Table 6. For there to be reliable change the magnitude of the observed change for a participant needs to be greater than would be expected due to measurement error. For the CORE-10, scores that show a difference of six or higher indicate statistically reliable change ($RCI = 6, p < 0.05$; Barkham et al., 2013). In addition, for clinically significant change to be achieved, participants' scores must also move them from a clinical population to a non-clinical population. For the CORE-10, the clinical cut-off score is set at 11 (Barkham et al., 2013).

Four participants made statistically reliable change. Clinically significant reductions were found for two of these participants (Sally and Lana) with two others either not scoring above clinical cut-off at pre- treatment (Colo) or not falling below clinical cut-off post-treatment (Polly). Two participants did not make reliable or clinically significant reductions (Stuart and Sylvie).

It was not possible to calculate the reliable change analysis for the SRIS-IN data, as no appropriate normative data was available. Across the time-series, gradual increases in insight as measured by the insight subscale of the SRIS can be seen for all of the participants, see table 6 for pre and post scores on the SRIS-IN for each participant.

Table 6: CORE-10 and SRIS-IN outcome scores pre- and post- therapy for each participant

Participant	CORE-10		Reliable change	Clinically Significant Change	SRIS-IN	
	Pre-	Post-			Pre-	Post-
Sally	21	7	yes	yes	29	31
Stuart	9	7	no	no	28	33
Colo	6	0	yes	no	24	32
Lana	16	3	yes	yes	26	36
Polly	20	13	yes	no	22	27
Sylvie	15	13	no	no	33	37

3.3. Responsiveness to the Delivery of CAT-Specific Tools

Figures 3-8 illustrate the scores for each participant on the CORE-10 and SRIS-IN. Markers to indicate the session in which CAT-specific tools were used are included on the graphs: reformulation letter, SDR commenced, SDR completed, and recognition and revision scales commenced. The timing of the presentation of the reformulation letter varied across participants, from session four to session eight. For all but one participant (Sally) there were no statistically significant changes on the CORE-10 in the session immediately after the reformulation letter was read, although scores either remained consistent or reduced to indicate symptom improvement with the exception of one participant, who made a one point increase in symptoms (Sylvie). It should be noted however, that this symptom increase was not prolonged and had reduced by the following session. Clinically significant change in symptom reduction was formally demonstrated for Sally. There was no clear pattern of symptom reduction during the course of mapping, although for Lana, there was a significant improvement in symptoms shortly after the commencement of the SDR.

Half of the participants (Colo, Polly and Sylvie) completed the recognition and revision rating scales between sessions. For two of these participants there was a decrease in symptoms on the CORE-10 over the course of using recognition and revision rating scales (Colo and Sylvie) but an increase for the third participant (Polly). Interestingly however, rates of recognition and revision for all three participants for all idiographic patterns of TPPs improved (see appendix K). As only three participants constructed idiographic measures identifying their personal goals for therapy the following results are based on symptom outcomes.

Sally

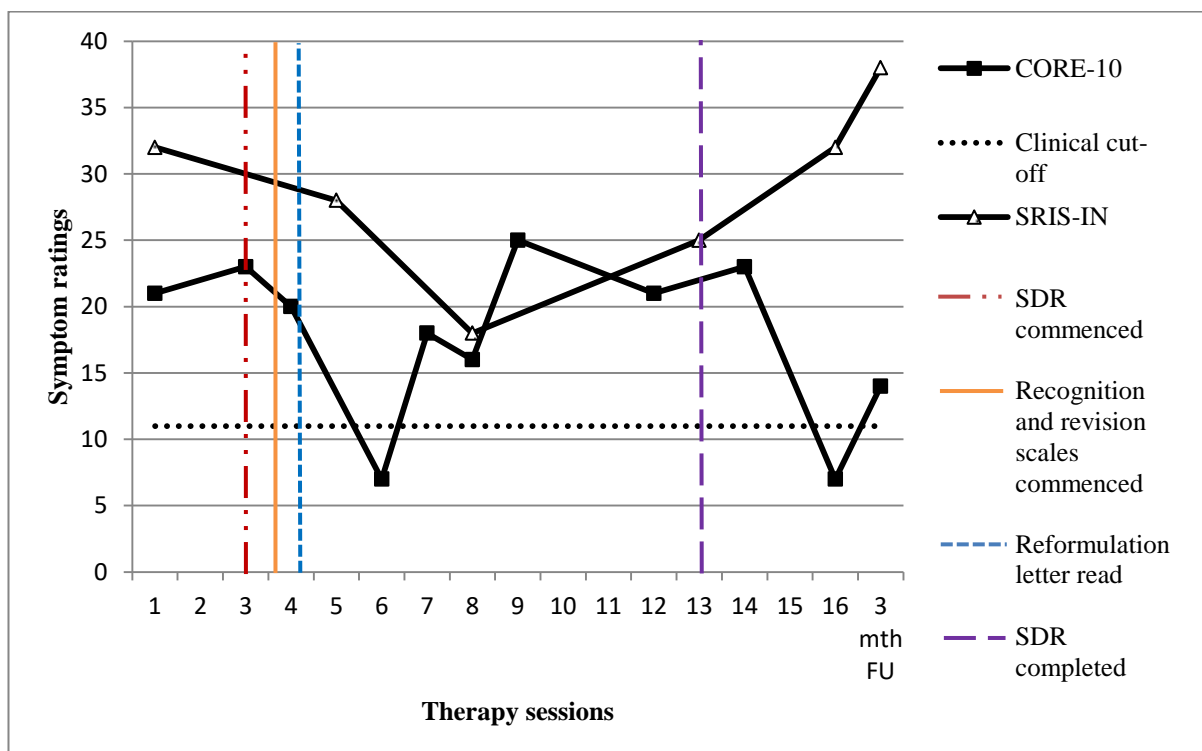


Figure 3: Visual display of Sally’s scores across therapy on the CORE-10 and SRIS-IN with markers to indicate where CAT-specific tools were implemented

Sally made reliable and clinically significant change during the course of therapy, however, clinically significant change was not maintained at three-month follow-up with her scores falling above clinical cut-off. Visual analysis shows improvement following the session in which the reformulation letter was presented, however, during the change interview she stated that the changes were due to incidents occurring outside of therapy. She reflected on the fact that just prior to commencing therapy she had started a new job and had found the six month probation period stressful, she had also made a decision to stop contact with her mother. Sally felt that her symptom scores on the CORE-10 improved around session six because this was ‘festival season’ and she was enjoying time with her friends. She explained that her symptom scores began to worsen again after this because her mother re-entered her life. Sally put final improvement in her symptom scores down to ‘getting her life on track’, in particular, that she had begun to achieve her business ambitions.

Visual analysis of Sally’s SRIS-IN revealed a decline until session eight followed by an increase until the end of therapy. While this might be explained by Sally’s narrative of her mother coming back into her life, it could also reflect the fact that she expressed an inability to determine strategies for revision. The recognition and revision rating scales were created in session four but were not followed up throughout therapy; this may have been because Sally was unable to come up with strategies to work on outside therapy.

In the change interview (Elliott & Rodgers, 2008), as table 7 summarises, Sally stated five key changes she had reported during the course of therapy. On a Likert scale from 1, ('very much expected change') to 5 ('very much surprised by change'), Sally rated that she was 'somewhat surprised' by three out of the five changes (greater self-compassion, less anxious and becoming more realistic through new insight). She also reported that she 'somewhat expected' to become more observant and 'very much expected' to give herself permission to feel. Sally scored the importance of changes highly, however, for all but one change, mechanisms were put down to events occurring outside of therapy.

Table 7: Summary of Sally's changes reported at the Change Interview post-therapy

Change	Expectancy of change	Change mechanism; therapy or out-of-therapy event	Importance of change
More observant	Somewhat expected it	Out of therapy event	Extremely important
Greater self-compassion	Somewhat surprised by it	Out of therapy event	Extremely important
Less anxious	Somewhat surprised by it	Therapy	Extremely important
Giving self-permission to feel emotions	Very much expected it	Out of therapy event	Moderately important
New insight - Making links to the past	Somewhat surprised by it	Out of therapy event	Very important

For Sally, although visual analysis shows improvement after the SDR commenced, and following the presentation of the reformulation letter, she was clear during her change interview that all but one of her changes was due to events occurring outside of therapy.

Stuart

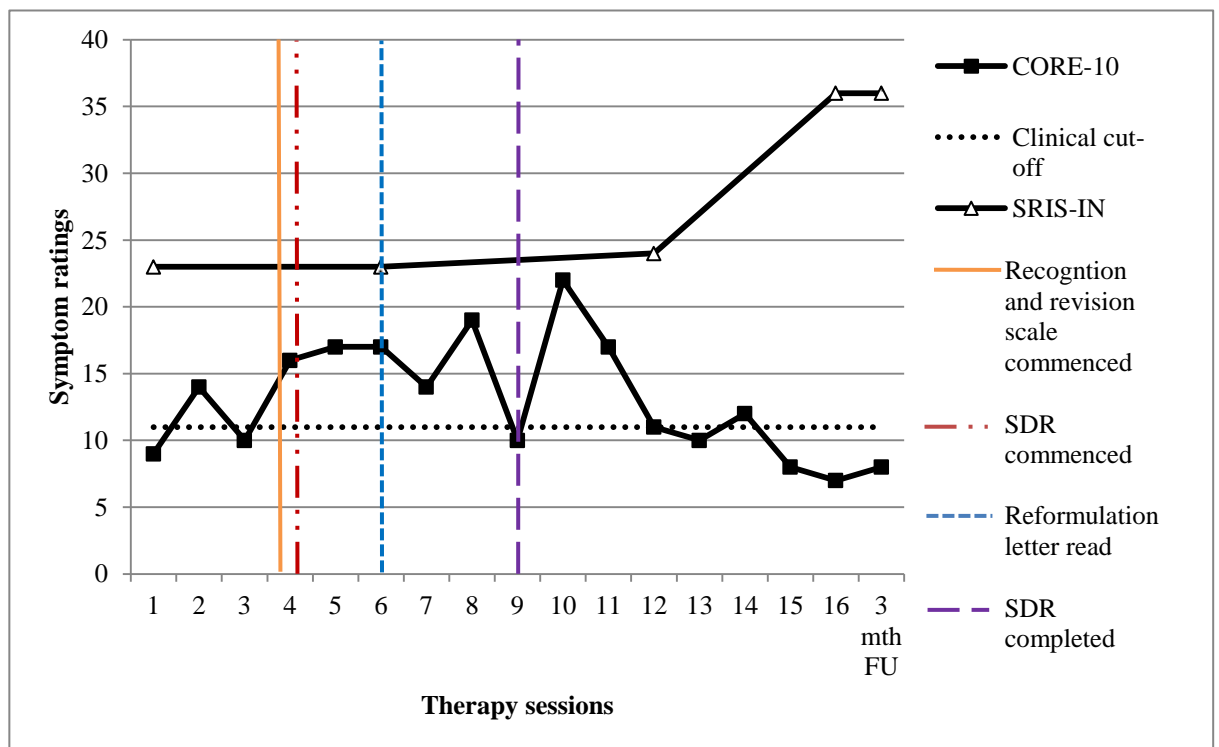


Figure 4: Visual display of Stuart's scores across therapy on the CORE-10 and SRIS-IN with markers to indicate where CAT-specific tools were implemented

Stuart did not make reliable or clinically significant change during the course of therapy. However, it is important to note that his scores were two points below clinical cut-off at the start of therapy. Although the graphed time-series of Stuart's measures displayed in figure 4 do not show specific change in response to CAT-specific tools, Stuart stated during the change interview that he had found the process of mapping useful, but that it was not until session ten when the map was related to an enactment taking place in the therapy room, that he experienced a clear change. He added that it was in this moment that he felt a positive sense of connection that he had wanted to achieve for a long time. This moment coincides with a gradual reduction of symptoms from his highest symptom score to ending therapy.

Visual analysis of Stuart's SRIS-IN remained consistent during the course of therapy until his final score, at session 16, where his insight scored sharply increased. It is not clear why Stuart's insight score increased in his final therapy session. Stuart did mention that he was still noticing the effects of the moment of new awareness he had experienced during session ten and that he was continuing to work hard to recognise and revise similar enactments. Therefore, it might be that it was after Stuart began making changes outside therapy that his insight started to increase.

In the client change interview (Elliott & Rodgers, 2008), Stuart identified five key changes, as summarised in Table 8. He rated initial expectation of change as low and indicated

that changes would have been unlikely to have occurred without therapy. Stuart reported high importance on the change achieved.

Table 8: Summary of Stuart’s changes reported at the Change Interview post-therapy

Change	Expectancy of change	Change mechanism; therapy or out-of-therapy event	Importance of change
Noticing self-judgements	Very much surprised by it	Therapy	Very important
Less perfectionistic	Somewhat surprised by it	Therapy	Very important
Positive connections with others	Somewhat surprised by it	Therapy	Extremely important
Less critical of self	Somewhat surprised by it	Therapy	Very important
Understanding self in different states and finding a middle ground	Somewhat surprised by it	Therapy	Very important

Although there was no change in symptoms or insight following the implementation of CAT-specific tools, during Stuarts change interview, he reported that he had experienced a clear change when his SDR was applied to an enactment in therapy to challenge a target problem procedure. Following this session, Stuart’s symptoms improved.

Colo

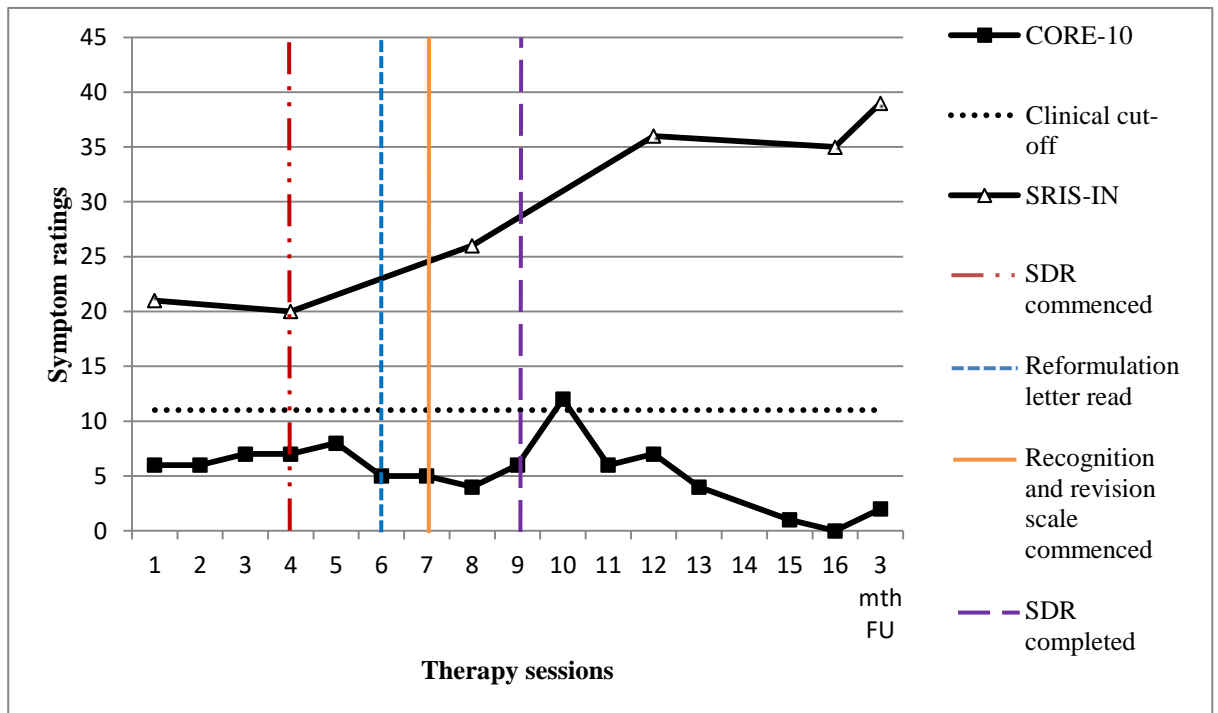


Figure 5: Visual display of Colo's scores across therapy on the CORE-10 and SRIS-IN with markers to indicate where CAT-specific tools were implemented

Colo made reliable change but this was not clinically significant as her scores on the CORE-10 were below clinical cut-off at the start of therapy. Colo attributed the peak in her CORE-10 scores to an anniversary of losing a loved one.

Visual analysis of Colo's scores on the SRIS-IN showed a cumulative increase of insight between session four and session twelve and as such, the increase of insight could not be linked to the implementation of a CAT-specific tool. Visual analysis could not distinguish the separate efficacy of tools on change. During the change interview Colo noted the impact of both written and diagrammatic reformulation tools. Colo stated that she often used the SDR to help her break from unhelpful patterns of criticism and that she had found the reading of the reformulation letter hard and was shocked that her therapist had been able to understand her so well, as she had thought she had remained distant. Colo added that this was an important moment as she had then felt more able to talk freely.

During the change interview (Elliott & Rodgers, 2008), Colo rated a high initial expectation of change. As Table 9 summarises, she stated three key changes, all of which she rated as high importance and stated were unlikely to have occurred without the help of therapy.

Table 9: Summary of Colo’s changes reported at the Change Interview post-therapy

Change	Expectancy of change	Change mechanism; therapy or out-of-therapy event	Importance of change
Put self-first	Somewhat expected it	Therapy	Very important
Less self-critical	Very much expected it	Therapy	Very important
Implementing boundaries with family	Somewhat expected it	Therapy	Extremely important

Colo’s symptom score remained consistent during the course of therapy and below clinical cut-off, with one exception, where her score raised one-point above clinical cut-off, which she attributed to an anniversary. Colo’s scores on the SRIS-IN made a consistent and gradual increase over the course of therapy and thus could not be attributed to a CAT-specific tool. However, Colo did attribute all her changes to be the result of therapy and noted the impact of diagrammatic and written reformulation tools.

Lana

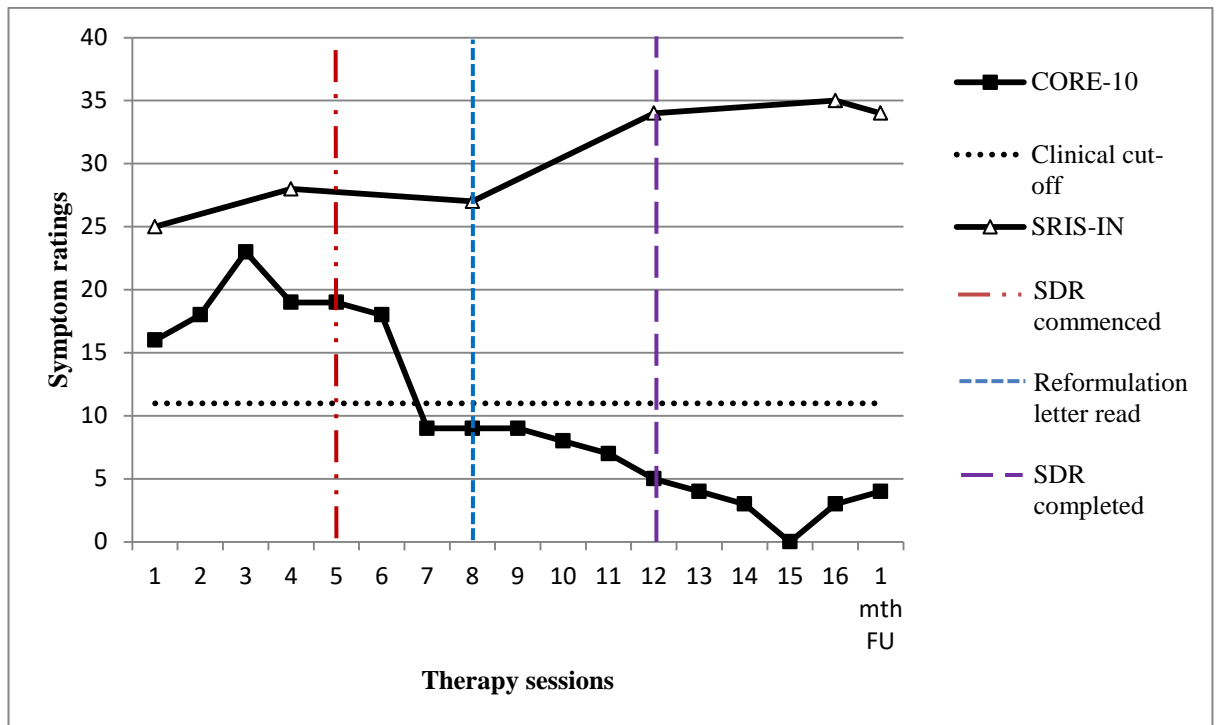


Figure 6: Visual display of Lana's scores across therapy on the CORE-10 and SRIS-IN with markers to indicate where CAT-specific tools were implemented

Lana made reliable and clinically significant change during the course of therapy. Visual analysis of Lana's scores on the CORE-10 showed a significant improvement in symptoms shortly after the session when mapping started. Lana explained that she had found the mapping useful and she had kept her SDR to refer back to. Although she stated having something written down on paper had helped her to become more aware of what was going on, she had not attributed the start of mapping to her symptom improvement, although was not against the possibility. A very gradual decline in symptoms can also be seen shortly after the reformulation letter was read in addition to an improvement in insight scores following the reading of the reformulation letter. Lana said that she had found the reading of the reformulation letter a very moving experience and cried when it was being read. She said that she had been surprised by how much her therapist had been listening and felt it was the first time someone had taken notice of her feelings. Lana had found the letter an accurate recollection of what had been going on, and reported that this had not only made her aware of her suffering but also that it was acceptable to have emotions.

Lana did note a couple of outside therapy events that might have also contributed to her change in symptoms. Firstly, she started on anti-depressant medication during her third week of therapy. Secondly, she left a highly stressful job on the same day she commenced therapy and while this had initially left her feeling more anxious about the future, she reflected on how this time to herself, had left her feeling rested and more in control.

In the change interview (Elliott & Rodgers, 2008), as table 10 summarises, Lana stated five changes she had reported during the course of therapy. Lana rated that she was ‘somewhat surprised’ by three out of the five changes, ‘very surprised’ and ‘neither expected nor was surprised’ by an additional two changes. She scored all her changes as extremely important and for all but one change, she perceived the mechanisms to be events occurring in therapy.

Table 10: Summary of Lana’s changes reported at the Change Interview post-therapy

Change	Expectancy of change	Change mechanism; therapy or out-of-therapy event	Importance of change
Slowed down	Somewhat surprised by it	Therapy	Extremely important
Increased awareness into triggers for anger	Somewhat surprised by it	Therapy	Extremely important
Permission to give time to self.	Very much surprised by it	Therapy	Extremely important
Accepting of feelings	Somewhat surprised by it	Therapy	Extremely important
Improved relations with mother	Neither expected or surprised by change	No way of telling	Extremely important

Visual analysis and Lana’s narrative of therapy point towards written and diagrammatic reformulation tools as important change processes during therapy. Although there were two notable extra-therapy events, Lana attributed all but one of her changes to events occurring in therapy.

Polly

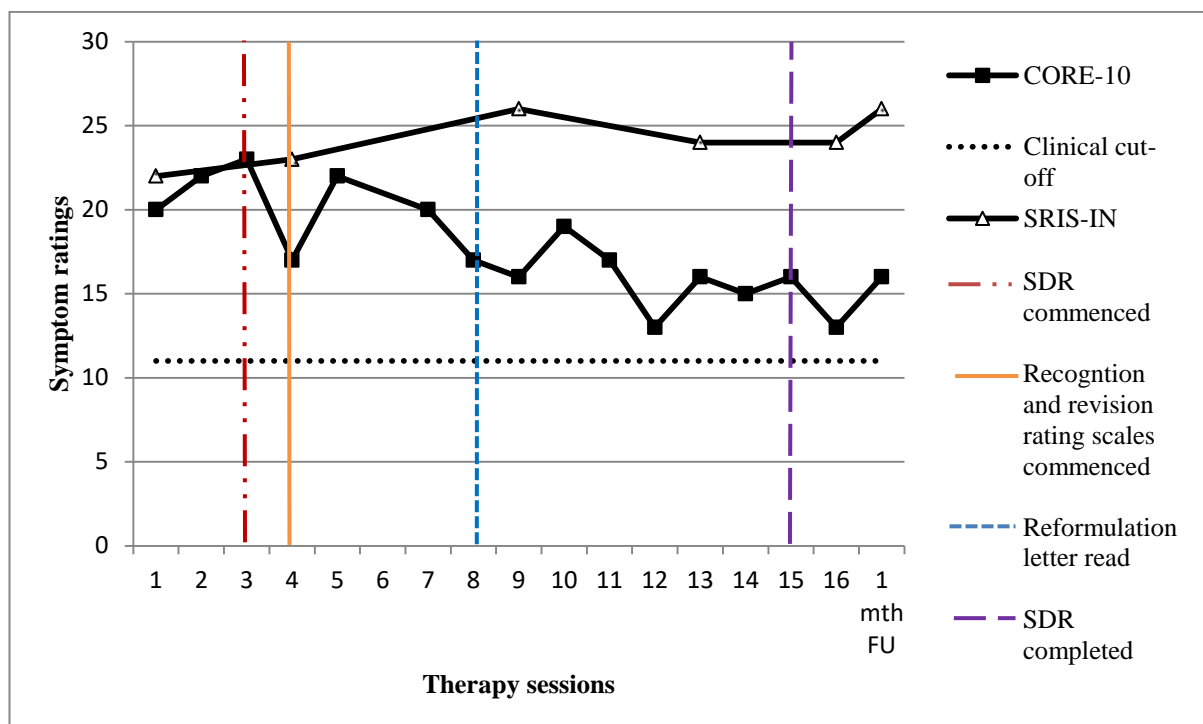


Figure 7: Visual display of Polly’s scores across therapy on the CORE-10 and SRIS-IN with markers to indicate where CAT-specific tools were implemented

Polly made reliable change over the course of therapy, but this was not clinically significant as her scores on the CORE-10 did not fall below clinical cut-off. Furthermore, at one-month follow-up, her symptom scores had risen. Visual analysis of Polly’s symptom scores on the CORE-10 show a reasonably stable pattern, with a slight and gradual decline. This picture was consistent with Polly’s narrative where she described ongoing health related conditions preventing her symptom improvement. Polly’s symptom scores reduced following both the session in which mapping started and the reformulation letter was read. However, due to the fluctuation of her scores it is not possible to conclude the true efficacy of CAT-specific tools. Although Polly stated that she found the reformulation letter helpful and often re-reads it, she also noted finding the mapping complicated and the hardest of the CAT-specific tools to understand.

Visual analysis of Polly’s SRIS-IN increased slightly until session nine. Although her insight scores were shown to increase after the session in which the reformulation letter was read, it is also possible that this increase resulted from Polly starting to monitor her target problem procedures on the recognition and revision rating scales.

In the change interview (Elliott & Rodgers, 2008), as table 11 summarises, Polly stated five changes she had reported during the course of therapy. Polly rated that she was ‘somewhat surprised’ by four out of the five changes and ‘very surprised’ by one of her changes. Polly

reported high importance on the change achieved and for all but one change, mechanisms were put down to therapy.

Table 11: Summary of Polly’s changes reported at the Change Interview post-therapy

Change	Expectancy of change	Change mechanism; therapy or out-of-therapy event	Importance of change
Increased awareness of ‘trying to please’	Somewhat surprised by it	Therapy	Very important
Beginning to look after self and not give into pressures from others	Somewhat surprised by it	Therapy	Very important
Greater awareness and understanding of probable causes for migraines	Somewhat surprised by it	Therapy	Extremely important
Little more confidence	Very much surprised by it	Therapy	Extremely important
Doing more for self in spite of worries	Somewhat surprised by it	No way of telling	Very important

While Polly’s symptoms were seen to improve following the implementation of written and diagrammatic reformulation tools, due to rapid fluctuations it is not possible to determine the efficacy of CAT-specific tools. Furthermore, Polly stated that she had found the SDR complicated and difficult to follow. Although Polly reported that symptom fluctuations were due to ongoing chronic pain, she did note that all but one of her changes were due to therapy.

Sylvie

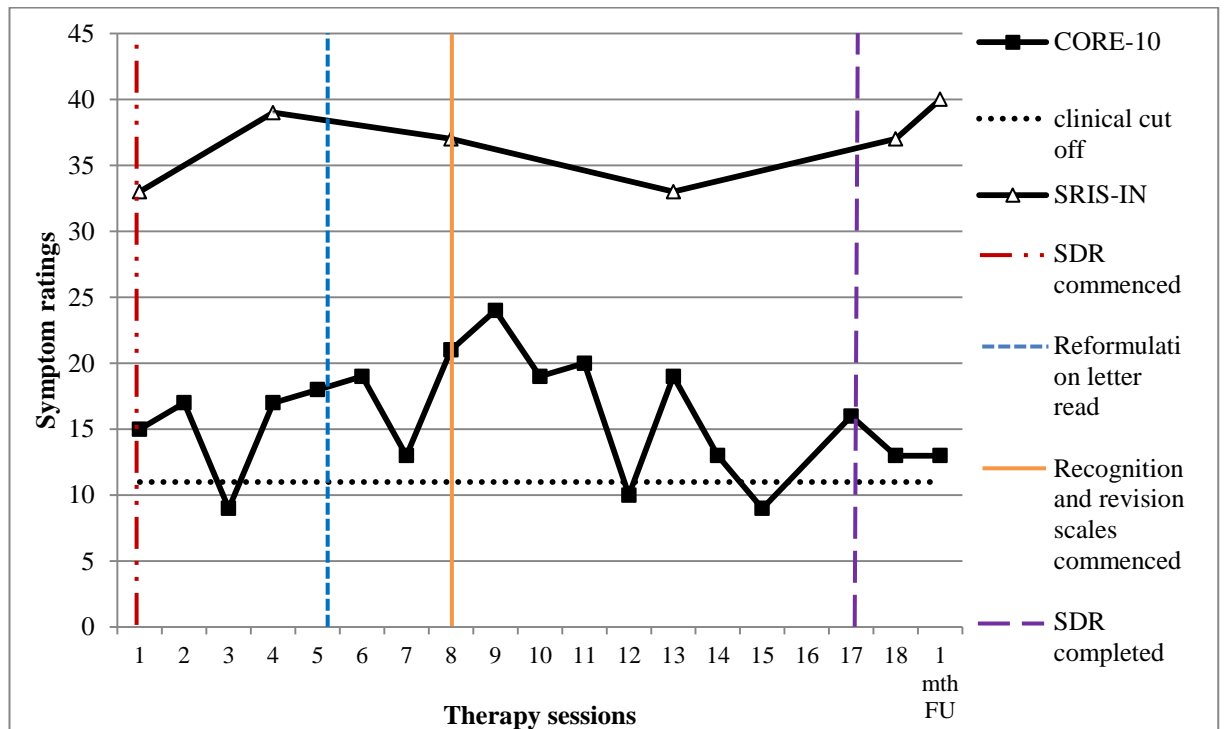


Figure 8: Visual display of Sylvie’s scores across therapy on the CORE-10 and SRIS-IN with markers to indicate where CAT-specific tools were implemented

Sylvie did not make reliable or clinically significant change during the course of therapy. Although visual analysis of Sylvie’s symptom scores on the CORE-10 did not reveal change in response to CAT-specific tools, Sylvie stated during the interview that she had found the reformulation letter helpful as it had led her to realise that someone had listened to her, which she did not feel she had experienced before. Sylvie also stated having found the SDR helpful when links were made between her states of mind and those of significant caregivers in session two and a reduction in symptoms can be seen following this session. Sylvie later said that she had only found the SDR helpful once it had been simplified to incorporate reciprocal roles of core pain that had been shut away since childhood. The simplified SDR was completed in session 16 and she described this as being a moment when the ‘light went on’, realising that she needed to pay more attention to herself.

Sylvie explained that during her time in therapy she had not felt stable and that the shifting scores depicted on her graph reflected her mood at that time. Sylvie described shifting between periods of exhaustion and hyperactivity which she attributed to being a side effect of her medication, and that it was not until session fourteen when she stopped taking her medication, that she felt clearer and more able to get a grasp of what was going on in therapy. Sylvie also described multiple events occurring outside of therapy that might have accounted for her not making significant change during the course of therapy, including health problems resulting in multiple and prolonged breaks during therapy.

Visual analysis shows that Sylvie’s SRIS-IN scores remained fairly consistent during the course of therapy, with a slight decline in insight following the presentation of the reformulation letter and a slight increase following session 16 when the simplified SDR was drawn.

In the change interview (Elliott & Rodgers, 2008), Sylvie rated a low initial expectation of change. As Table 12 summarizes, she stated three key changes, all of which she rated high importance and stated were unlikely to have occurred without the help of therapy.

Table 12: Summary of Sylvie’s changes reported at the Change Interview post-therapy

Change	Expectancy of change	Change mechanism; therapy or out-of-therapy event	Importance of change
More selective about where to apply energy preventing exhaustion	Very much surprised by it	Therapy	Extremely important
Less overwhelmed with worry	Very much surprised by it	Therapy	Extremely important
Realisation that past does not have to continue affecting the present	Very much surprised by it	Therapy	Extremely important

Visual analysis did not show the implementation of CAT-specific tools to effect change in symptoms or insight. Although Sylvie reported finding the SDR helpful, this appeared to only be at the level of reciprocal roles before procedures were added. Sylvie also reported feeling surprised by her therapist’s level of understanding following the presentation of the reformulation letter. She reported all her changes to be the result of events in therapy.

3.4. The Client’s Perspective

All participants enrolled in the study agreed to take part in a client change interview. Their therapeutic experiences discussed during the interview were analysed using template analysis and five core themes emerged. A distinction is made between themes that encapsulate ‘specific’ mechanisms of change (i.e. technical factors aligned to CAT) and those that capture ‘non-specific’ mechanisms (i.e. factors common across all therapeutic models). The aim of this

differentiation is to quantify those mechanisms brought about through CAT. Quotations of clients' accounts are used to support the themes that emerged. Transcription notation symbols were used as follows: (Bracketed text) - Clarification of dialogue, ... - Pause in speech.

3.4.1. Making links.

In all the interviews participants commented on the usefulness of either the reformulation letter or SDR, or both, in recognising patterns which serve to maintain their problems. Three participants noted the benefits of the SDR in providing a visual aid. The SDR map can be seen to have served an important function in helping clients gain greater awareness of their own cycles of thinking and behaviour.

I definitely think that's (referring to SDR) helped a lot because as much as people can go on about things and say things to you, it's when you can see it written down it makes you more aware of it, and you take that on because you've got something to go back to and refer to. (Lana)

Five participants, however, noted how confusing they had found the SDR, with one participant preferring the format of the written letter for processing and aiding reflection.

Um well certainly reading (therapists) letters helped me because she itemises, it's clear you see and straight forward, this (referring to SDR) I find just very confusing, I've tried to look at it and work it out but I find it a bit confusing really. (Polly)

Five participants referred to keeping their reformulation, either in a diagrammatic or written form, as tools to refer back to. This aided their understanding of what is happening in the present.

It's good having something to look back on, um ... like having both the letters that helps and also the diagrams, something to refer back to because how you feel one month can be totally different to a couple of months down the line, so it's good to look back on it and think 'oh yeah' maybe I was feeling that way at that time and I can relate to that now and maybe what's happening now is similar to then that's causing this so. (Sally)

Four participants conveyed ways in which CAT tools facilitated making connecting links to existing thinking and behavioural patterns. All four referred to the usefulness of noting the relationship between established patterns and how they were being re-enacted in the present.

Yes, it was very very, I think the letters are important to actually see a stranger being objective but still being kind, listening to you and putting it into black and white, for you then to look at which makes you consider your own behaviour and it's frightening and it's upsetting in many ways but then it can help you deal with it I suppose or reassess things or just, it's literally just taking stock, standing still, taking a breath again and going 'oh my god, I'm doing what she did', or 'I'm doing this because of what she did to me'. (Sylvie)

CAT appeared to help three participants understand how historic events had influenced their present behaviour in ways that could be self-destructive. Three participants discussed the value of having therapy whilst also experiencing current stresses. For one participant (Sally), it was useful to bring a current and long-standing relationship difficulty with her mother to discuss in therapy in order to better understand and apply her faulty patterns in a current context. Another participant (Stuart) noted how, if he had not had the time to discuss current difficulties, he would have been unlikely to remain in his job. The third participant (Sylvie) referred to challenging events in the present that allowed her to see whether she would fall into old patterns or if with new recognition, patterns could be broken.

I'm recognising it but I'm not necessarily revising, acting, the awareness is the most important thing, without awareness you can't work on it and that's going to take time and it only happens by the example of when the people, no I can't do that, me actually putting it into practice. So things have to come up in your life that you can apply this to. (Sylvie)

It can be said therefore, that this theme includes examples of CAT-specific tools acting as mechanisms of change.

3.4.2. Breaking the links in patterns.

Following on from recognition, all participants talked about things they were doing differently in order to 'exit' from patterns that were maintaining their problems. Five participants explicitly named one CAT tool they had found helpful in the facilitation of revision, i.e. using the SDR, 'exits' mapped out on the SDR, and recognition and revision scales.

Three participants (Sally, Sylvie and Colo) discussed how they have applied 'exits' mapped out in therapy. One participant said how she continues to try and notice her target problems and target problem procedures and do something to exit from them (Polly). Two participants discussed how they had used the SDR, for one (Colo), the map served as a useful reminder of patterns she wished not to enter into, for the other (Stuart), the map was used to illustrate a pattern the participant was currently entering into with his therapist. This will be discussed in more detail in the following theme (experiences that disconfirm beliefs). For the remaining participant (Lana) it is unclear whether CAT-specific tools were used to facilitate change, as her comments related to doing something differently following a discussion in therapy.

But the things like the 'exits' they did pop back into my head, I'm saying I didn't have time to sit and reassess and look at things, but they're there in my mind and when I catch myself starting to spiral again, worry and stress, I do remember things he said, things we discussed and try to apply it. (Sylvie)

There were certain things that she'd make us go away and think that, it's okay to think about yourself, and that always stuck with us. And I remember thinking that

for a few weeks after she said them words, It's not selfish to think about yourself now and again. (Lana)

All participants described changes that were internal (i.e. a change in the relationship they had with themselves), such as allowing imperfections, becoming aware of their feelings and accepting of them. Three participants (Stuart, Colo and Sylvie) also talked about how their internal change had enabled them to relate differently to themselves when noticing their own mistakes, lessening the risk of problems spiralling.

Some of the problems I came with sort of thing, they haven't necessarily just got better immediately. It's more of improvement of how I might relate to them sort of thing. (Stuart)

All the participants talked about taking action to do things differently, for all, this involved taking steps not to fall into old patterns of behaviour. For four participants (Sally, Colo, Lana and Polly) action involved explaining themselves to others and building a reciprocal understanding.

I always tend to solve problems for them (family). Now it's like you don't want my help or you don't want my ..., you ask my help but you don't want my opinions okay, don't take it but I'm not going to be that mad or to be sad for your problems. So it's when I say no its no, because I put boundaries, I put a barrier. (Colo)

That's the thing that happened, quite a bit with my husband really, and I had to make him aware that he was doing it (belittling her abilities), a lot of it with him is a sort of fun but it still hurts if someone say's something, they use to call me 'bear of little brain', as in Winnie the Poo, and whilst it's amusing in a way and I know sort of where it came from but it's still hurtful, cause I don't think I have a little brain really. (Polly)

The mechanisms of change at work in this theme are both specific and non-specific. All but one client described using the SDR or recognition and revision rating sheet to break the links with old problematic patterns of behaviour, demonstrating specific change mechanisms. Other comments relating to this theme however, were not explicitly attributed to specific CAT tools and it is not clear how the changes in behaviour came about.

3.4.3. Experiences that disconfirm beliefs.

This theme relates to experiences in therapy that brought about unforeseen change through working with material in the moment. Three participants (Sally, Stuart and Lana) made comments relating to this theme. All three commented on seeing things differently following their therapists interpretation of enactments being played out in the room. In Sally's case this involved the therapist explaining how her need for answers was making him feel, which in turn made her more aware of the pressure she puts on others. For Lana, the moment was when she told her therapist she felt as though she no longer needed to come to therapy and her therapist

questioned why she did not want to allow herself this time, a common pattern for Lana. For Stuart, it involved his therapist noticing an enactment that was pre-existing on his SDR and a discussion as to whether this was going on at that time. Stuart described this as a moment of insight, recognising that he was not feeling as criticised and judged by the therapist as he had expected.

She (therapist) sort of drew my attention to the fact that I was wary of being judged and then she said, 'do you feel you're being judged sort of thing?' and I said, 'I don't actually' and she was like 'how does that feel?' and it was like a real sort of moment of awareness sort of thing inside I was sort of resisting that to myself, I was like pushing, I could feel myself not wanting to sort of allow it to be okay and stuff but it were like waking up a bit. (Stuart)

These processes all point towards non-specific mechanisms of change. Two therapists however, were using existing patterns that were depicted on their clients SDR to help them identify possible enactments in therapy, thus highlighting this CAT-specific tool in the facilitation processes of transference and countertransference. One therapist used his own feelings to understand more about an interpersonal experience.

3.4.4. Working in partnership.

This theme refers to the experiences participants had with their therapists which were both comfortable and uncomfortable. All participants had experienced both conditions at certain times during their course of therapy. Accordingly, this theme will first set out experiences participants had that were comfortable and then explore those that were uncomfortable.

Comfort of therapy.

All participants commented that the therapeutic environment engendered openness and encouraged self-expression allowing feelings to be discussed. Four participants (Stuart, Lana, Colo and Sylvie) expressed surprise that they could be so open with their therapists and three (Polly, Lana and Sylvie) talked about the degree to which they were understood and accepted.

I wasn't expecting to be able to talk about thing, bring things up, and realising and getting to sort of the root of the problem in a sense. (Lana)

It was quite upsetting things being put in black and white like that (in the reformulation letter), um but it was useful when he (therapist) picked things out, he's very astute. I think I was upset as well because I think I'd realised that no-one had listened to me, no-one, I hadn't had that in my life, you know, it was like having a supportive relative that I'd never had. (Sylvie)

It could be said therefore, that the surprise participants felt, links closely with the previous theme, 'experiences that disconfirm beliefs' that their therapists reactions led to new experiences and a greater freedom to talk openly.

Two participants described their therapists as containing, one participant (Polly) said she had found it reassuring and calming to know she had someone to talk to each week. The other (Sylvie) commented on how her therapist had been skilled at keeping the session on track to enable greater production of work.

I think he has had an effect because you know, even stopping me from going off on tangents which I know I do anyway and focusing, his whole manner the way he has communicated with me I think has kind of settled me helped me get back to who I am in a way, I'm still not totally back there. (Sylvie)

Four participants (Sally, Lana, Polly and Sylvie) described time in therapy as space to talk about things that could not be spoken of elsewhere and how it provided permission for them to talk about themselves in a way they would otherwise not be able to.

In normal circumstances when you're out with your friends and or just, you know, you don't want to be talking about all the doom and gloom, you want to be upbeat, but um, I think bad things always come up in the back of your mind, it just gave me the time and the allowance to really process it, go through it all. (Sally)

I think it's so, I felt very lonely for years and I think when you've got complaints that are sort of psychological apart from physical, you don't find people to talk to about it and I think one of the big things when you see a counsellor like that is having someone you can trust and you can say absolutely anything to and it's treated with respect and sensitivity and (therapist) was really lovely, she's a lovely person as far as I can say, you know, in the therapy she was marvellous and it's just making me well up because it's just so important. (Polly)

The comfortable therapeutic environment discussed above was found to incorporate comments around specific mechanisms of change, such as the reformulation letter that provided clients with evidence that their therapist had listened and understood them and non-specific mechanisms of change linked more closely to therapeutic rapport.

Discomfort of therapy.

A sense of confusion was expressed by five participants in relation to the SDR. For Lana, the confusion was centred on an inability to come to a common understanding about a reciprocal role that could form the core for her SDR.

I wouldn't say I was frustrated by it (not agreeing on reciprocal roles), I just couldn't take it on board. I expect... I'm supposing maybe I had a different understanding of the words criticising or critical and I was looking and thinking, well does (therapist) think I am? Does (therapist) think that's what I'm possibly experiencing? (Lana)

For Polly, the SDR with multiple and connecting reciprocal roles was difficult to follow and make sense of.

I think it was the, it's just all these lines and little bits and pieces, one bit relating to another, I find it just spatially just difficult to take in, too busy, you know, I'd rather things had been written in a nice sort of list, do you know what I mean? I know for some people that probably would have been fine, you know, they would just progress around the arrows and it would be fine but I found it quite daunting.
(Polly)

Sally found the SDR particularly confusing when extra information was added too quickly, which led to a breakdown in understanding the focus for therapy. Two participants (Sylvie and Stuart), noting that although they had found the SDR useful they also described sometimes becoming lost and disconnected with the SDR.

I think also the way he drew it (the SDR just with RR), I'm quite linear and I related to that rather than cycles going all the way around. (Sylvie)

I mean, that broad idea (SDR) was really useful I think. But, I think I did get lost in that bit sometimes. I wasn't really connecting with it as much as I could have for whatever reason. But, broadly I think that was really useful. (Stuart)

Sylvie and Stuart also both spoke about their disconnection from the recognition and revision scales. Sylvie only used the scales twice during therapy and stated that she would not have found it productive to monitor her progress on a weekly basis as she had too many other things going on in her mind. Similarly, Stuart stated that he had found the sheets over complicated, to the extent that he became overwhelmed and stopped using them. Stuart commented that he might have been able to engage more with a simplified rating scale.

If it (recognition and revision rating sheet) were condensed down, made simpler, I think there is still quite a lot of different ones and stuff. So maybe that led me to sort of building it up too much and then not doing anything, whereas maybe if it was simplified I could really focus on a few little things rather than it getting ... over facing and just leaving and doing nothing. (Stuart).

Three participants (Stuart, Colo and Polly) commented on the difficulties they had in talking about painful memories from the past but acknowledged this discomfort was necessary to gain new understanding and facilitate change.

Well, just at first, as I say I wasn't quite sure that I understood what was happening somehow. There was a lot going on, I had to talk a lot about my past and some of it was painful and sort of seeing where we were going from that was a bit difficult at first. But eventually each week it produced valuable insights. (Polly)

The thing like talking about my past was difficult and painful but talking about that, it opened my eyes and I learnt how to deal with my life right now. (Colo)

One participant (Stuart) commented on how bringing difficult feelings to the fore had both positive and negative consequences. On one hand, he identified feeling more connected with his family but this brought with it uncomfortable feelings of anxiety.

I'm getting to feel like more vulnerable that if something bad did happen how bad would I feel and be more scared for them sort of thing. Um a bit more ... a bit more connected and stuff. I think that's just the flip side of caring more and being more connected. You open yourself up to more risks. (Stuart)

Sally was the only participant for whom the therapeutic relationship appeared to break down; this seemed in part to be due to a lack of common agenda and focus for therapy. This was exacerbated by the pressure of time constraints Sally felt leading up to the end of therapy.

I'm coming here and complaining about things and he's (therapist) like waiting for there to be like something actually worth moving with. I didn't realise, like I didn't see what his path was, what his like direction was trying to get me, I can't even get my head around it still now. (Sally).

The confusion over CAT tools expressed by five participants can be seen as a specific barrier to change, whereas, disclosing information, although uncomfortable, was acknowledged as necessary and can therefore be seen as a non-specific mechanism of change. For one participant, the therapeutic relationship breakdown was a non-specific mechanism preventing change.

3.4 5. Real world influences.

All participants discussed factors outside therapy, either their personal attributes or environmental factors that they brought to therapy, which could be seen as extra therapy events. Three participants (Sally, Colo and Lana) discussed how their stable living environment was helpful in allowing them to reflect on therapy away from the sessions.

Living with my step mum and dad, cause I'm living in this really stable environment, so it's really helpful, there's no stress at home, there's no stress in the house so... (Sally)

The home environment was also mentioned by one participant (Lana) as giving her time to herself, leading to a more positive outlook.

So I've had the kids at school, husband at work, and I've had time. I've gone from one hundred miles an hour to putting the handbrake on, and lots of things going on so because I've had the time off not working there's loads of contributions to possibly maybe why I felt different. (Lana)

One participant (Sally) noted that having time to herself away from unhelpful influences was important, but she admitted not prioritising time for reflection and would only reflect when being asked to put into words her experiences on the corrective experience questionnaire and the goodbye letter.

It was not sticking to it during the week, like focusing on it and doing all the bits of paperwork and I'd always forget to bring this thing along (corrective experience questionnaire), so he'd make me do it here, so, um so I wouldn't think about it much between. I mean I know that it shows that I have, but it was usually those times when I was with that piece of paper that I was like thinking about it and putting words to it. (Sally)

On the other hand, Colo was motivated by outside influences and determined to change in order to improve her relationship with her husband.

I need to change because I'm going to lose the man that I love, I need to change, so that was the push. (Colo)

Stuart and Sylvie described chaotic lifestyles impacting on their ability to engage fully in therapy. Stuart explained that a busy home life meant that he was unable to complete the recognition and revision rating scale, although he did say that this was something he thought about outside therapy.

I suppose there were changes in my actual...just things happening in my life that made it meant I didn't put as much time sort of really doing those things in my own time. (Stuart)

Another participant (Lana) commented on the way her family affected her ability to talk openly about herself in therapy, as she had identified this as a negative trait.

I was scared to think about myself because I see them (parents) as selfish people and I thought thinking of myself would make me like them. (Lana)

The influence of family affecting the content of therapy was also commented on by Sylvie. She felt that although therapy had been useful, the work had felt incomplete, as she had not been able to discuss the bereavement of her mother. She noted how her sessions had been dominated by discussing her grandmother and the influence her grandmother had over her sessions, even though she was no longer alive.

Not giving time to talking about my mother and I felt even though now she's dead she's still not being treated properly the way that my grandma had dominated everything. That was the disappointment because that was very much at the front of my mind when I first saw (therapist). (Sylvie)

Two participants discussed experience of a chronic pain preventing them from making change. Sylvie described that her illness and prescribed medication had affected her presentation in therapy and ability to communicate and make sense of work undertaken.

It's the physical illness, it's hard to explain, when you say tired you don't just mean tired, you mean very ill, brain not working, pain all over feeling like you're gonna collapse, it's the physical energy that's been a problem. Talking to much which I think was aggravated by those drugs. (Sylvie)

Polly discussed the ways in which her chronic pain continues to prevent her from doing things that are important and that her efforts to do more can result in burnout and increased pain.

... if I get too tired then I crash with both things (activities/ chores and pain) and so it's finding this balance which is where the babysitting comes in and spoils it because, the day I have them I'm absolutely drained by night, the next day I'm not much good for anything else, so it's like wasting another day. I mean that sounds horrible, it's not wasting a day having them, I love having them, I love to see them, it's lovely to be part of their lives, it just has this, because of the way I am it has this effect of making me ill really. (Polly)

All comments within this theme pertain to non-specific factors which either promoted or prevented change. A stable living environment and time to reflect could both be considered non-specific mechanisms of change. On the other hand, a chaotic lifestyle, time constraints, negative family influences and chronic pain were all non-specific factors barriers to change.

CAT-specific mechanisms of change identified under the first theme 'making links', facilitated the first two core phases of CAT, reformulation (an account of the client's difficulties presented in a narrative and diagrammatic form) and recognition of problems and procedures that maintain them (self-monitoring). Both CAT-specific and non-specific mechanisms of change identified under the 'breaking the links in patterns' theme and 'experiences that disconfirm beliefs' theme, facilitated the third core phase of CAT, revision (the creation of new and more adaptive methods to 'exit' from harmful reciprocal roles and the procedures that maintain them). The final two themes 'working in partnership' and 'real world influences' both promoted and prevented change. Whereas the comfort elements of the 'working in partnership' theme were all non-specific mechanisms of change, the discomfort element included both CAT-specific and non-specific factors that prevented change. Only non-specific factors arose from the 'real world influences' theme.

CHAPTER FOUR: DISCUSSION

4.1. Summary of Findings

This study set out to understand the mechanisms of change in CAT, through exploring the links between CAT-specific tools and their impact on insight and symptom change. It also aimed to explore whether participants attributed change to CAT-specific tools.

Clinically significant change on the CORE-10 over the course of therapy was only found for two participants, although scores reduced for all participants, with four participants making reliable change. Quantitative data did not show immediate reliable or clinically significant reductions in symptoms following the implementation of CAT-specific tools, with the exception of two participants (Sally and Lana). Sally's scores on the CORE-10 did show an immediate clinically significant improvement following the session in which the reformulation letter was read. Lana's scores on the CORE-10 showed a sudden gain shortly after the implementation of the SDR.

Graphing of the SRIS-IN data illustrated increased insight for all participants over the course of therapy. However, as the SRIS-IN was only completed every fourth session, it was not possible to determine the immediate impact of CAT-specific tools on insight. Visual analysis of the data did not reveal a marked difference in slope or step in sessions following the implementation of diagrammatic or written reformulation tools for three participants (Sally, Stuart and Polly), although for the remaining three participants, insight scores did rise after the diagrammatic reformulation (Colo and Sylvie) and after the reformulation letter (Colo and Lana).

In contrast, qualitative analysis produced clearer indications of change following the implementation of CAT-specific tools. The client change interviews suggest that the tools did impact on changes made in therapy. Specifically, two tools that disconfirmed negative beliefs were identified in the interviews: participants hearing the reformulation letter being read to them and the usefulness of the SDR in assisting therapists to challenge enactments being played out during sessions.

4.2. Explanation of the Findings

4.2.1. Research aim one: assess clients' responsiveness to the delivery of CAT-specific tools.

The quantitative data in the current study did not find a significant relationship between CAT-specific tools and symptom change. This finding can be explained in a number of ways. Whilst the tools might have assisted participants to identify unhelpful patterns, they did not help to revise them. Consequently, the CORE-10 might have been tapping into the wrong construct, symptom reduction, as opposed to increased ability to recognise patterns that maintain difficulties. However, while the measure of insight might have been a better measure of recognition, the SRIS-IN was only administered every fourth session and consequently it was

not possible to pinpoint the relationship between CAT-specific tools and recognition. Other research investigating the links between insight and outcomes in therapy has been mixed. Llewelyn et al., (1988) did not find a significant correlation between insight and outcome and suggested this may have been due to errors in measurement resulting from participant's being unable to identify significant events during therapy.

4.2.2. Research aims two and three: explore the effect of CAT on insight / gain an understanding of client experiences of change and how much they ascribe change to CAT-specific tools.

The qualitative data indicated that participants ascribed their experiences of change to CAT-specific tools. This was evidenced when the reformulation letter was presented as participants discussed their surprise at the new experience of their therapist having listened to and understood them in a compassionate way. Elliott (1984) described insight as an often surprising revelation. According to Fonagy (1999) it is moments such as these, when clients find themselves able to better understand the thoughts of their therapist and the relationship they have with them, that are crucial moments of change. Furthermore, the reformulation letter appeared to have facilitated openness, as the experience of being heard and understood negated participants' initial reluctance to disclose. Thus, a better understanding of their therapist and greater willingness to disclose, which were facilitated by presenting the reformulation letter, appeared to result in a new emotional experience or insight for participants.

The participants' positive descriptions of the reformulation tools may have been facilitated by a successful therapeutic relationship. Kellett (2004) hypothesised that a good therapeutic relationship is necessary before CAT-specific tools can be effective. Furthermore, Gilbert (2005) states that the experience of a therapeutic relationship that is warm and compassionate is needed to bring about new insight. In support of this hypothesis, Radcliffe's (2014) study investigating the therapy process for clients who did not experience change, revealed that seven of the eight clients interviewed did not feel able to bring core issues to the sessions, indicating that the therapeutic relationship had not been adequately established.

It is not always possible, however, to clearly identify the effects of CAT-specific tools on the therapeutic relationship and its subsequent effect on insight because other processes within the relationship can obscure this dynamic. For example, Messer (2013) highlighted three important process in bringing about insight: using transference interpretations, therapists' attention to clients' affect, and a focus on the therapeutic relationship. However, he concluded that, as both transference interpretations and the expression of affect take place within the therapeutic relationship, they cannot be separated from it, thereby making it difficult to pinpoint the precise mechanisms at work. On the other hand, Kellett (2007) suggested that another CAT-specific tool, the SDR, can be used to improve the therapeutic relationship by assisting in the management of countertransference. In his single case study, the client was difficult to manage because of her overly flirtatious interactions with the therapist resulting from a lack of

sexual boundaries in childhood. The therapist was able to use the SDR to address the countertransference taking place during therapy to resist being pulled into a passive victim role. This in turn aided the development of the therapeutic relationship, and through transference interpretations, the client was able to gain greater insight into her patterns of behaviour.

4.2.3. Non-therapy explanations for change.

There was a two-fold approach to understanding external processes involved in change. Firstly, therapists were asked to record any non-therapy explanations for change from participants' in-session narratives. Secondly, participants were asked to indicate whether therapists' comments about non-therapy explanations should be considered possible explanations for change. Participants were also asked if there were any non-therapy explanations for change that had not been mentioned by their therapists.

The hermeneutic single case efficacy design (HSCED) used in this study attempted to consider events occurring outside of the therapy context that could account for the observed or reported changes. The first type of event that was recorded involved asking participants to decide whether they thought their reported changes were the result of therapy or events occurring outside of therapy. Overall, there was strong support for the therapy efficacy hypothesis. Three participants reported that all their changes were due to therapy (Stuart, Colo and Sylvie), two felt that all but one of their changes were a result of therapy (Lana and Polly). One participant, however, (Sally) attributed all but one of her changes to be the result of events occurring outside of therapy.

For Sally, extra therapy events, such as the 'festival season' and 'enjoying time with friends' were consistent with an improvement in symptom score. Lana experienced an improvement in symptom score when she started taking anti-depressant medication from session three onwards, where there was a clear drop in her symptom score. In contrast, Sylvie stopped taking medication at session fourteen and described improved symptoms, stating that she felt that her 'head was clearer' as a result; however, visual analysis of her symptom score did not reflect this change. In addition to the effect of taking medication, Lana also left a stressful job on the same day that she started therapy, giving her time to relax and take control but which also resulted in increased anxiety about the future. Polly and Sylvie described long standing chronic pain that impinged on psychological functioning. Their ongoing health problems could account for the finding that neither of these participants made clinically significant change during the course of therapy. Given that no baseline was established for symptom scores, it was not possible to quantify the effects of these events on symptom change.

In summary, participant data suggests that while non-therapy factors may have played a role in the facilitation and prevention of change, for five of the six participants, positive changes observed appeared to be the result of therapy.

4.3. Relating Findings to the Wider Literature

Previous quantitative research has not found sudden gains at key therapeutic junctures (Evans & Parry, 1996; Kellett, 2007; Shine & Westacott, 2010). Quantitative results in the current study similarly did not reveal gains directly after the implementation of CAT-specific tools. Other quantitative research, however, which used repeated measures throughout the course of CAT to investigate processes of change demonstrated positive change after the implementation of reformulation tools (Kellett, 2005; Kellett & Hardy, 2014; Yeates et al., 2008).

The qualitative findings of the current study similarly found that CAT-specific tools did influence changes made. Other studies using qualitative analysis have also found positive links between CAT-specific tools and processes of change (Bennett, 1994; Evans & Parry, 1996; Kellett, 2005; Kellett & Hardy, 2014; Rayner et al., 2011; Shine & Westacott, 2010; Yeates et al., 2008). Furthermore, two studies found contradictory findings between their quantitative and qualitative results, in line with the current study (Evans & Parry, 1996; Shine & Westacott, 2010).

4.3.1. Evidence that the theoretical underpinnings of CAT are the mechanisms of change.

The findings of this research support the theoretical basis for mechanisms of change in CAT put forward by three of the four theories explored in this report, namely developmental psychology (DP), object relations theory (ORT) and cognitive and behavioural science. However, it may be the case that other non-CAT related theories are responsible for observed changes but investigation of this is beyond the scope of this report.

DP and ORT are particularly useful in explaining the potential impact of the reformulation letter. For example, several participants identified that the accuracy and chronological format of the letter, which gave a historical account of their lives, was helpful and appeared to provide a scaffold for new understanding. From a DP theoretical perspective, the reformulation letter could therefore be seen as bringing about cognitive insight through enabling feelings towards others to be described in a common language, aiding the development of self-reflection and recognition of unhelpful patterns. However, the impact of the letter can also be explained in ORT terms. The felt sense of being listened to (sometimes for the first time) and being emotionally moved by the experience (emotional insight) is linked to the process of individuals learning to relate to others in a new way that breaks unhelpful internalised expectations of reciprocation. These two processes of change mean that the letter can be seen to have caused both cognitive insight, brought about by the use of a common language in the letter, and an emotional insight, resulting from the corrective emotional experience of hearing the letter.

ORT and DP are both helpful in explaining the operation of the SDR tool in the current study. The SDR was identified by most participants as helpful. However, five participants

noted that the SDR was too complex and confused them, suggesting that a simplified form may be more helpful. According to Ryle and Kerr (2002), diagrams are a useful basis for monitoring faulty procedures, with simpler SDRs being most helpful because they can be memorised, particularly if they are colour coded. Furthermore, from the DP perspective, the SDR is used to scaffold clients' understanding of unhelpful patterns and their ability to monitor these. For example, participants identified that the SDR was used as a prompt or tool that could be continually revisited in order to aid successful strategies for revision. The SDR in the current study helped conceptualise and address transference and countertransference processes being enacted during therapy, both of which are features of ORT, thereby providing opportunities for these to be brought into awareness and revised. This was evidenced for one participant (Stuart) when a central problematic role procedure was applied by the therapist to what was happening during a session. By noticing an enactment drawn on the SDR, the therapist was able to resist being pulled into responding in the way the client expected (i.e. being judged). Accordingly, the SDR also provided a scaffold for the therapist in addressing transference in therapy. In this example, the identification of feelings in the room of being judged, enabled them to be challenged and subsequently improved the therapeutic relationship.

Cognitive and behavioural science and DP underpin the recognition and revision rating scales. The recognition measure is underpinned by cognitive science, in that TPPs are written on the scales in the 'first person' using a common language, which aids the development of self-reflection and recognition of unhelpful patterns. Additionally, the scales are informed by DP, in that they provide a scaffold for work outside of therapy. The revision measure is underpinned by behavioural science as it is used to monitor the success of 'exits' from TPPs, which are practiced between sessions.

One interesting finding in the current study concerns the recognition and revision rating scales in terms of what this tool revealed about sudden gains in therapy. The literature indicates that sudden gains happen more quickly in behavioural activation compared to CBT due to the early implementation of change tools (Hopko, Robertson, & Carvalho, 2009; Hunnicutt-Ferguson, Hoxha, & Gollan, 2012; Masterson et al., 2014). On this basis, the expectation in the current study was that sudden gains would occur later in CAT, after the implementation of CAT-specific tools and particularly after revision work began. However, while the majority of participants made gains at various points during therapy, due to fluctuations in their scores, only one participant (Lana) met the sudden gain criteria, which occurred shortly after the introduction of the SDR. At this stage, the SDR would likely only include the procedural loop and core reciprocal roles (cognitive aspects) and not 'exits' (behavioural aspects). This finding is surprising given the evidence for gains occurring after behavioural activation. A possible explanation for the sudden gain arising from a cognitive tool is that the process of recognition within CAT may be more important than has been recognised in the literature. Recognition is important because the development of 'exits' by the client will be limited without it. For

example, Sally expressed her discomfort in not understanding the direction of therapy. Her lack of understanding and recognition of unhelpful patterns appeared to prevent clearly defined directions for therapy and, due to her inability to define 'exits' for revision, she was not able to use the recognition and revision scales. This suggests that recognition is a necessary process in identifying appropriate 'exits' for revision and is a precursor to the use of recognition and revision scales and therefore symptom change.

There is evidence that CAT-specific tools do bring about change and that this occurs through the mechanisms within the theoretical concepts that underpin CAT. However, other processes may also be involved in bringing about change, such as the therapeutic relationship. The findings of the current study appear to also support the tripartite model of the relationship in psychotherapy (see figure 1), which emphasizes the importance of therapists being trustworthy, understanding and experts, in order to bring about change through three common pathways (Wampold & Budge, 2012). The first pathway is defined as the 'real relationship' in which, a sense of belonging and social connection can be seen to positively affect the client's wellbeing. In the current study the reading of the reformulation letter fostered a positive therapist-client connectedness in five out of the six dyads, illustrating how the tool builds the social relatedness of the model's first pathway. The second pathway relies on providing explanations to clients about their presenting difficulties and interventions that might bring about positive change. This can inspire hope and as a result clients are motivated to take therapeutic action. The SDR illustrates problematic patterns and reframes these as treatable through the use of 'exits', thus initiating the perspective shift described in the second pathway. The third and final pathway pertains to clients' engagement in therapeutic activities that involve doing something helpful. In the current study this could be seen as the extent to which clients implemented the 'exits' depicted on their SDR. The recognition and revision scales enabled participants to record their own revision which therapists could later review for realistic self-evaluation. Interestingly, Sally, who felt a lack of common understanding with her therapist reported change to have resulted from events occurring outside of therapy rather than being due to the therapy itself. This supports the idea put forward in this model that understanding is crucial before pathways to change can occur.

In summary, CAT-specific tools can be seen to utilise CAT-specific mechanisms by both theoretical concepts which lay the foundations for change and common factors such as those laid out in the tripartite model of the relationship in psychotherapy (Wampold & Budge, 2012). Accordingly, the findings show evidence for both specific mechanisms of change operating through CAT-specific tools, whilst respecting that common pathways could be operating simultaneously.

4.4. Critique of the Methodology

4.4.1. Therapist sample.

The sample comprised of five qualified CAT practitioners, with varying years of experience, and one practitioner who was undertaking training. Enlisting therapists with differing levels of experience has the advantage of reflecting the varied levels of experience typically found in mental health service providers.

4.4.2. Client sample.

The sample comprised of clients seen in adult mental health services. Recruitment was not limited according to diagnostic population which is considered a strength given the wide range of psychological difficulties CAT was designed to serve (Ryle et al., 2014). Although more females (n=5) than males (n=1) took part in the study, it is worth noting that, in England, mental health problems are more common among women than men (McManus, Bebbington, Jenkins, & Brugha, 2016) and prevalence rates for anxiety disorders are almost twice as high in women than men (Martin-Merino, Ruigomez, Wallander, Johansson, & GarciaRodriguez, 2009). It is possible that therapists may have recruited clients thought to be most likely to engage in therapy. Of the participants recruited, one dropped out of therapy (and the study) and one failed to complete the measures, preventing their data from being used. The remaining participants engaged well enough in therapy to complete measures for a full data set and agreed to be interviewed by the researcher. This is relatively surprising given that 20% of clients have been estimated to drop out of therapy prematurely (Swift & Greenberg, 2012). The participating clients in this study may therefore be considered more enthusiastic than general clients entering therapy, furthermore, all were found to have improved, which is unusual given that not all clients do improve in therapy. However, it should be noted that only four participants made reliable change with only two of these falling below clinical cut-off at the end of therapy. While the rates of non-response to therapy vary in the literature, official statistics state that between 40-50% of clients report recovery (Layard et al., 2012). Therefore, some caution should be taken when generalising the findings.

4.4.3. Differences in the delivery of the study protocol.

There was some variability in the application of the CAT protocol which made it difficult to pin down which specific components were followed by symptomatic improvement or gains. Having said this, these findings might demonstrate clinical judgment in maximising the effectiveness of therapy by delivering components for the right person at the right time, in the right circumstances. For example, participants understanding of the SDR may have been affected by the therapist introducing it too early or too late. However, this tailoring might also be seen as ‘therapist drift’ and it is interesting to consider whether therapists are able to pick up the signals of which symptoms of which problems need which interventions. There was also variability in the use of the recognition and revision rating scales, both in terms of who used

them and how they used them. These findings suggest that there is lack of agreement about exactly how CAT should be used in practice which makes the use of a fidelity measure difficult.

One of the major advantages of single case methodologies is that they enable use of ideographic measures which are developed to measure specific problem behaviours of individual clients (Morley, 1994). Within the current study the aim was to do this through the use of the recognition and revision scales, which are a standard process measure built into CAT. Unfortunately, only half of the therapists used the recognition and revision scales and it was therefore difficult to determine an accurate process of change in participant's target problem procedures. As not all measures were completed as expected, it would have been beneficial to have offered therapists greater support through the process as well as some training in how to deliver the protocol of the study.

It became apparent through discussions with CAT practitioners at local special interest groups that the CAT recognition and revision scales are not always used and are not always scored methodically as an outcome measure. Such adherence is often not possible in routine clinical practice due to large caseloads and time constraints. A possible reason for one participant's non-completion of the recognition and revision scales was that the therapist, who was in training, used a more complex version of the scale. The participant reported that the scale was too complicated and its use was discontinued. The reason for the two remaining cases of non-completion, which involved CAT-qualified therapists, may have been their heavy caseloads and time constraints.

4.4.4. Treatment fidelity.

The present study was not able to assess whether therapists had delivered CAT to an appropriate level of competence. A measure of competence in CAT (CCAT) has been established as a fidelity measure (Bennett & Parry, 2004), however, it requires analysis of video recorded therapy sessions, which the researcher believed might have deterred therapists and clients from taking part. Furthermore, as analysis has to be carried out by experts, considerable time and resource commitment would be required to establish fidelity. Consequently, an accurate representation of CAT practiced may not have taken place, although it may be argued that the benefits of using a naturalistic approach outweigh the costs (Kühnlein, 1999).

It is possible the process of completing the CEQ every fourth session may have facilitated additional reflection in participants, leading to greater recognition of their problematic procedures. Aiding more thoughtful reflection in this way, could have interfered with the fidelity of CAT, however, is unlikely to have been enough to skew the results.

It is also difficult to determine the level of participant's adherence to therapy. One participant (Sylvie), for example, did not attend a number of sessions resulting in breaks during therapy, suggesting a lack of engagement.

4.5. Strengths and Limitations of the Study

Elliott (2010) argues for the importance of using mixed methodology in psychotherapy change process research in order for particular strengths to be utilised and to outweigh any weaknesses of each method. This study used a combination of both quantitative and qualitative methods and the strengths and limitations of each are discussed below.

4.5.1. Strengths of quantitative process research.

Quantitative process research is a commonly used and accepted method (Elliott, 2010), although many studies fail to show a link between mechanisms and associated outcomes. This may be due to a failure in adequately measuring symptom change and potential mechanisms of change during treatment (Kazdin, 2007). One disadvantage of outcome based studies is the time distance between the processes measured and therapy outcome (Elliott, 2010). By collecting repeated measures, including symptom change, over the course of therapy, and marking key therapeutic sessions and extra therapy events, the current study was able to draw causal inferences.

Careful case tracking enabled individual therapists' behaviours to be monitored separately, including their differing approaches to the delivery of CAT. There may be benefits in having therapists behave slightly differently as this can highlight the impact of therapist practice on the efficacy of CAT-specific tools. For example, different findings might have occurred for those who completed and did not complete the recognition and revision scales, however, in the current study there were no clear differences between those who used the scales and those who did not.

4.5.2. Limitations of quantitative process research.

It is possible to view the contrast between results in the current study from quantitative, outcome measures and the qualitative, client interviews as a limitation. Evans and Parry (1996) found a similar contrast between quantitative and qualitative results and gave two possible explanation that could be applied to the current study. First, they postulated that whereas clients were able to be more honest in quantitative written questionnaires, they may have given what they thought was the 'correct' answer during interviews, creating inconsistency in the data collected. The second reason put forward was the narrow timescale in which the impact of the reformulation session was assessed, i.e. between the start of therapy and session four. This suggests that a more cumulative process might be at play because a longer timescale is involved in the development of collaboration between the therapist and client.

One problem that arose in this study was that two participants (Stuart and Colo) fell below clinical cut-off on a standard measure of symptom impairment before therapy commenced. This rendered it impossible for the measures to demonstrate clinically significant change in their cases. It was also not possible to establish a stable baseline for any of the participants before therapy began. Without systematic data about participants' temporal baseline it was not possible to statistically assess the rate of change. However, while pre-treatment

measurement was not available, participants were able to provide a retrospective account about the duration of their difficulties prior to therapy. All participants reported long-standing difficulties, although Stuart did recall that he was ‘doing the best he’d done in a long time’ prior to commencing therapy.

Another limitation of the current study was that the SRIS-IN has no standardised psychometric norms and, as a result, it was not possible to create a clinical cut-off score to determine clinically significant change. Without this, it is not possible to determine what participants’ scores on the SRIS-IN meant in relation to levels of metacognition, including insight. However, it was important to ensure a measure with well-established validity was used (Morley, in press). The SRIS has well established convergent validity, where a relationship between different measures of insight can be established. For example, the SRIS-IN positively correlates measures of self-regulation and cognitive flexibility, and negatively correlates measures of anxiety, depression and stress (Grant et al., 2002). The SRIS-IN could also be said to have good face validity, as the scores appeared to match participants’ narratives during interviews.

Although the SRIS-IN did not pick up on cognitive and emotional insight in the way that was expected, participants did discuss these changes in insight, suggesting that an alternative measure of insight should be used, such as a measure of mentalisation. Mentalisation has been defined as an “imaginative mental activity, namely, perceiving and interpreting human behavior in terms of intentional mental states (e.g., needs, desires, feelings, beliefs, goals, and reasons)” (Fonagy, Gergely, & Target, 2007 p.288). The depth and quality of mentalisation shapes and influences conceptualisations, which in turn influence communication and relationships in crucial ways that could converge to produce favourable outcomes. Furthermore, given that CAT is a relational model, it might have been useful to use a measure of mentalisation with a definition of insight that relates to processes of understanding the mental states of self and others.

Another limitation was that it was not possible to accurately assess the effect of CAT-specific tools on insight because of the infrequency of measurement. Future research into the impact of CAT-specific tools should therefore use a measure of insight during every session.

It was also difficult in the current study to pinpoint which CAT-specific tool was the main contributor of measured change in symptom reduction and insight. This is due to the fact that most CAT-specific tools span a number of sessions during therapy. An example is that the presentation of the reformulation letter may not mark a key moment in therapy because it has a cumulative development. Furthermore, it has also been recognised that the development of the SDR does not take place in a single session.

4.5.3. Strengths of qualitative research.

Qualitative methods enable the client to articulate their perceptions of therapy, which supports the increasingly popular movement within mental health services to value service

users' involvement (Kemp, 2010). Conducting post therapy interviews enabled participants to express their perceptions of the effects of therapy that had not been immediately apparent according to the quantitative findings (Elliott, 2010). The current study also asked therapists to note down any extra therapy events that they predicted might have had an influence on change. These thoughts were discussed with participating clients during their change interview in order to provide an opportunity for them to indicate which events they thought had been important in bringing about change. This multiple perspective, which brings to light evidence for factors other than therapy impacting on symptom change, is a crucial component of HSCED (Elliott, 2002). During the change interviews, participants were shown a graph, illustrating their scores on the CORE-10 and SRIS-IN over the course of therapy. This graph also depicted when CAT-specific tools were introduced. The graphs were used to prompt recall, with the intention that this would steer participants' discussions on the process of CAT, rather than generalisations of the therapy as a whole. An effort to remain non-directive in interviews by providing cues for recall, in addition to ensuring non-therapeutic processes were acknowledged as potential influences on change are considered strengths of the study.

4.5.4. Limitations of qualitative process research.

It became apparent during initial analysis of the corrective experience questions (CEQ), that there had been problems with completing the measures as intended. While participants appeared to understand the first question about change that had taken place during therapy, two participants provided only very short answers that lacked detail. Data collected for the second question, regarding participants' interpretations of how change had come about, highlighted a possible misinterpretation of the question, with participants either failing to answer the question, or providing comments about therapy in general without mention of specific moments or events. On occasions, when key events were mentioned, answers lacked detail, making it impossible to draw links between moments that may have produced change. As a result formal analysis of the CEQ was not completed.

This error in measurement has been found in previous research. Heatherington et al., (2012) found mixed results in client responses to the two questions. While some clients offered elaborate and deeply personal responses about changes they thought had occurred, others lacked depth and only offered general statements about skills learnt. However, in Heatherington's study clients were able to verbalize what they believed had brought about change. It is unclear why participants in the current study were unable to provide sufficient answers to account for how change had occurred. This may have been because they did not have a clear sense themselves of the reasons for change, or they had not given themselves time to reflect on their answers. Given the level of detail participants provided in their change interviews, the latter is more likely to be true. It is possible therefore, that if the participating therapists in the current study had been asked to give more direction to their clients in answering the questions, more accurate answers may have been given.

The decision to make interviews an option rather than a requirement for the study could have created a biased sample, with participating clients who felt more positive about their therapy being more likely to agree to be interviewed. However, in asking participants at the start of therapy to take part in the interview it is hoped that this risk was reduced.

Qualitative analysis is by nature subjective and participant's opinions about the usefulness of different aspects of CAT may not have been accurate, affecting the reliability of the data collected. Although, collecting the opinions of participants and gaining an understanding of their perceptions is widely recognised as important, it is possible that participants may be mistaken in feeling a therapeutic intervention has been helpful. Furthermore, it is argued that not all clients are able to recognise or verbally express subtle processes responsible for change (Elliott, 2010). It is possible participant bias coupled with small sample sizes may have resulted in overly individualised evaluations and therefore caution needs to be taken when generalising findings. The researcher's biases may also have impacted on the development of themes although it is hoped that by implementing quality checks at various stages of analysis greater validity was achieved.

4.6. Clinical Implications of Findings

As discussed above, the reformulation letter was found to be an invaluable tool in bolstering the therapeutic relationship which could provide participants with a new relational experience resulting in emotional insight. By using common language the letter was also found to support participants in acquiring cognitive insight. In as much as the letter can be seen to bring about insight, which is arguably an important mechanism of change, it should be viewed as a clinically valuable tool.

Although process research for the efficacy of CAT-specific tools is growing, there is often discrepancy between the outcomes of quantitative and qualitative findings. One explanation for such discrepancy is that there may not be an immediate direct effect of CAT-specific tools on change. For example, in the current study, although visual analysis implied no particular impact of the SDR, Stuart described how it had allowed him to see and break his problem procedure around perceiving others and himself to be judgmental. However, it was not until he was able to relate the SDR to the present that he could recognise a positive change in affect. Clearly for Stuart the SDR was a useful tool that brought about change, however, this moment could not be seen on his graphic representation of change, as the effect of the SDR was not immediate. This example demonstrates the misleading nature of relying solely on visual analysis.

From the narrative accounts collected during the CCI it became clear that it was the *meaning* of the SDR experience that affected whether the diagrammatic reformulation process was important in bringing about change. Sally and Polly both described the SDR sessions as being overwhelming, with more information being added before they had been given the chance to understand and work it through. Conversely, Stuart discussed a moment when the SDR was

usefully used to challenge a belief he had held for a long time. These examples provide two very different experiences of mapping problematic procedures in sessions that might help explain the fluctuating scores during therapy for some participants. Both events point to the process of mapping being an important part of therapy, but for Sally and Polly the process had been very difficult, leaving them feeling confused and out of their depth, whereas for Stuart, the SDR had taken him down a useful route of insight. These findings point towards a clinical implication, that is, when therapists are working with clients, it is essential they have regular conversations to check understanding, work slowly, and use their clients own language.

It has been suggested that recognition needs to take place before clients can effectively identify ‘exits’ for revision. For example, one participant Sally, who reported having no clear direction for therapy, was subsequently unable to define helpful ‘exits’ for revision. As a result of this, the recognition and revision scales can be seen to be effective only after recognition has taken place.

In summary, it is not the process of reformulation itself that is important but rather the meaning to the individual and the context of the relationship and how it leaves the client feeling. Similarly, the findings suggest that implementation of recognition and revision scales should only occur following a clear shift in recognition, even if this means not developing ‘exits’ until much later in therapy.

4.7. Future Directions for Research

The current study has brought to light possible explanations for the discrepancy between quantitative and qualitative findings highlighted here and within the wider process literature for CAT. If CAT-specific tools are considered mediating factors, showing a statistical relationship between therapy and outcome, their corresponding mechanisms (steps or processes that account for change) need further refinement to reduce the attenuation between process and outcome. The current study revealed that it is not possible to identify a discrete marker for the SDR as it is constantly revised beyond the reformulation period. Therefore, in order to more accurately uncover how corrective experiences may have occurred in the context of the SDR, it would have been useful to ask therapists to differentiate separate stages of the SDR’s development, i.e. when the reformulation (stage) was completed, when ‘exits’ were added or when more helpful reciprocal roles and procedures were discussed and added. However, it is recognised that these are not standardised procedures and there will inevitably be discrepancies between how different practitioners apply the model in practice. Therefore, without a qualitative account of the work completed, it is possible that results will be misconstrued. As such, a qualitative component within the methodology is extremely valuable.

While this study set out to assess the relationship between CAT-specific tools and their impact on insight and symptom change, the finding that participants felt understood and heard after hearing the reformulation letter pointed towards new insight arising from a context that uses a CAT-specific tool within a positive therapeutic relationship. This finding suggests a

possible under sampling of the therapeutic relationship that could be incorporated into future research. However, it should be noted that Shine and Westacott (2010), studied the effect of the working alliance on clients' perspectives on change, with quantitative data finding no significant impact of the reformulation tool on the therapeutic relationship. However, similar to the current study, Shine and Westacott (2010) did identify qualitative themes that pointed towards the reformulation process resulting in a positive therapeutic relationship.

The way that participating clients experienced the reformulation process within CAT is a very interesting observation because it highlights the importance of being heard and understood in the therapeutic process. This experience can therefore be conceptualised as a non-specific mechanism of change, i.e. a positive therapeutic relationship. It would therefore be interesting to compare the experience of formulation across different therapies, such as Behavioural Activation and CBT, with the aim of assessing their impact on clients and whether the same mechanism (the therapeutic relationship) is equally important in those models. There is some research evidence that demonstrates that being understood is important within CBT formulation (Redhead, Johnstone, & Nightingale, 2015).

4.8. Conclusion

The findings from quantitative analysis do not show strong evidence for the efficacy of CAT-specific tools, with only two participants showing a reduction in symptoms following their implementation. However, these findings may be misleading both because of the cumulative effect of CAT-specific tools and the inability to pin-point the implementation of these tools to a single session. Qualitative analysis, however, revealed that CAT-specific tools did make a difference but that positive change occurred only in the context of a good therapeutic relationship. Furthermore, there was evidence to suggest that how and when the tools were used was important. For example, the SDR was found to be particularly effective when used to draw attention to enactments being played out during a session. Evidence also pointed to the importance of recognition before the successful implementation of 'exits' and monitoring. Overall, the tools appeared to bring about a sense of connection and common understanding that enabled participating clients to express themselves and engage with feelings that had been silenced. A gradual process of acceptance and integration of different aspects of the self may suggest greater emotional insight, an important mechanism of change possibly brought about by the theoretical concepts underpinning CAT, which would not be captured in a single moment of therapy. However, other non-specific factors such as the therapeutic relationship were also found to be important and appeared to operate through and be strengthened by the use of CAT-specific tools.

REFERENCES

- Barkham, M., Bewick, B., Mullin, T., Gilbody, S., Connell, J., Cahill, J., ... Evans, C. (2013). The CORE-10: a short measure of psychological distress for routine use in the psychological therapies. *Counselling and Psychotherapy Research, 13*(1), 3–13.
- Beck, A. T. (1967). *Depression: Clinical, Experimental, and Theoretical Aspects*. New York: Harper & Row.
- Beck, A. T. (1970). Cognitive therapy: nature and relation to behavior therapy. *Behavior Therapy, 1*(2), 184–200.
- Beck, A. T. (1976). *Cognitive Therapy and the Emotional Disorders*. New York: International University Press.
- Beck, A. T., Rush, A. J., Shaw, B. F., & Emery, G. (1979). *Cognitive Therapy of Depression*. New York: Guilford Press.
- Beck, J. S. (1995). Introduction. In *Cognitive Therapy: Basics and Beyond*. (pp. 1–12). New York: The Guilford Press.
- Bennett, D. (1994). Readiness to change - the impact of reformulation: a case example of cognitive analytic therapy. *International Journal of Short-Term Psychotherapy, 9*(2-3), 83–91.
- Bennett, D., & Parry, G. (2004). A measure of psychotherapeutic competence derived from Cognitive Analytic Therapy. *Psychotherapy Research, 14*(2), 176–192.
- Berman, J. S., Miller, C., & Masserman, P. J. (1985). Cognitive therapy versus systematic desensitization: is one treatment superior? *Psychological Bulletin, 97*(3), 451–461.
- Beutler, L. E. (2009). Making science matter in clinical practice: redefining psychotherapy. *Clinical Science Practice, 16*(3), 301–317.
- Bird, B. (1990). Notes on transference: universal phenomenon and hardest part of analysis. In A. H. Esman (Ed.), *Essential papers on transference* (pp. 331–361). New York: New York University Press.
- Bouton, M. E., Mineka, S., & Barlow, D. H. (2001). A modern learning theory perspective on the etiology of panic disorder. *Psychological Review, 108*(1), 4–32.

- Brockman, B., Poynton, A., Ryle, A., & Watson, J. P. (1987). Effectiveness of time-limited therapy carried out by trainees: comparison of two methods. *British Journal of Psychiatry*, *151*(5), 602–610.
- Calvert, R., & Kellett, S. (2014). Cognitive analytic therapy: a review of the outcome evidence base for treatment. *Psychology and Psychotherapy: Theory, Research and Practice*, *87*(3), 253–277.
- Castonguay, L. G., & Beutler, L. E. (2006). *Principles of Therapeutic Change that Work: Integrating Relationship, Treatment, Client, and Therapist Factors*. New York: Oxford University Press.
- Castonguay, L. G., Nelson, D. L., Boswell, J. F., Nordberg, S. S., McAleavey, A. A., Newman, M. G., & Borkovec, T. D. (2012). Corrective experiences in cognitive behavior and interpersonal-emotional processing therapies: a qualitative analysis of a single case. In *Transformation in Psychotherapy: Corrective Experiences Across Cognitive Behavioral, Humanistic, and Psychodynamic Approaches* (pp. 245–279). Washington, DC: American Psychological Association.
- Connell, J., & Barkham, M. (2007). CORE-10 User Manual, Version 1.1. CORE System Trust & CORE Information Management System Ltd.
- Denman, C. (2001). Cognitive-analytic therapy. *Advances in Psychiatric Treatment*, *7*(4), 243–256.
- DeYoung, P. A. (2003). Relational therapy and its contexts. In *Relational Psychotherapy: A Primer* (pp. 11–43). New York: Brunner-Routledge.
- Downs, S. H., & Black, N. (1998). The feasibility of creating a checklist for the assessment of the methodological quality both of randomised and non-randomised studies of health care interventions. *Journal of Epidemiology and Community Health*, *52*, 377–384.
- Duncan, B. L., & Miller, S. D. (2006). Treatment manuals do not improve outcomes. In *J. C. Norcross, L. E. Beutler, & R. F. Levant (Eds.), Evidence-Based Practices in Mental Health: Debate and Dialogue on the Fundamental Questions*. (pp. 140–149). Washington, DC: American Psychological Association.
- Elliott, R. (1984). A discovery-oriented approach to significant events in psychotherapy: interpersonal process recall and comprehensive process analysis. In L. N. Rice & L. S. Greenberg (Eds.), *Patterns of Change* (pp. 249–286). New York: Guilford Press.

- Elliott, R. (2002). Hermeneutic single-case efficacy design. *Psychotherapy Research*, 12(1), 1–21.
- Elliott, R. (2010). Psychotherapy change process research: realizing the promise. *Psychotherapy Research*, 20(2), 123–135.
- Elliott, R., Fischer, C. T., & Rennie, D. L. (1999). Evolving guidelines for publication of qualitative research studies in psychology and related fields. *The British Journal of Clinical Psychology*, 38(3), 215–229.
- Elliott, R., & James, E. (1989). Varieties of client experience in psychotherapy: an analysis of the literature. *Clinical Psychology Review*, 9(4), 443–467.
- Elliott, R., & Rodgers, B. (2008). Client Change Interview Schedule (v5). Retrieved from <http://www.drbrianrodgers.com/research/client-change-interview>
- Elliott, R., Shapiro, D. A., Firth-Cozens, J., Stiles, W. B., Hardy, G. E., Llewelyn, S. P., & Margison, F. R. (1994). Comprehensive process analysis of insight events in cognitive-behavioral and psychodynamic-interpersonal psychotherapies. *Journal of Counseling Psychology*, 41(4), 449–463.
- Evans, J., & Parry, G. (1996). The impact of reformulation in cognitive analytic therapy with difficult to help clients. *Clinical Psychology and Psychotherapy*, 3(2), 109–117.
- Fonagy, P. (1999). The process of change and the change of processes: what can change in a ‘good’ analysis? Presented at the Keynote address to the spring meeting of the Division 39 of the American Psychological Association., New York. Retrieved from <http://mentalizacion.com.ar/images/notas/The%20process%20of%20change%20and%20the%20change%20of%20processes.htm>
- Fonagy, P., Gergely, G., & Target, M. (2007). The parent-infant dyad and the construction of the subjective self. *Journal of Child Psychology and Psychiatry*, 48(3–4), 288–328.
- Gerhardt, S. (2015). Trying not to feel: the links between early emotional regulation and the immune system. In *Why love matters* (Second edition, pp. 113–133). London: Routledge.
- Gibbons, M. B. C., Crits-Christoph, P., Barber, J. P., Stirman, S. W., Gallop, R., Goldstein, L. A., ... Ring-Kurtz, S. (2009). Unique and common mechanisms of change across cognitive and dynamic psychotherapies. *Journal of Consulting and Clinical Psychology*, 77(5), 801–813.

- Gilbert, P. (2005). Compassion and cruelty: a biopsychosocial approach. In P. Gilbert (Ed.), *Compassion: Conceptualisations, Research and Use in Psychotherapy*. (pp. 9–74). Hove, UK: Routledge.
- Gilbert, P. (2010). *Compassion Focused Therapy*. London: Routledge.
- Goldfried, M. R. (2012). The Corrective Experience: a core principle for therapeutic change. In L. G. Castonguay & C. E. Hill (Eds.), *Transformation in Psychotherapy: Corrective Experiences Across Cognitive Behavioral, Humanistic, and Psychodynamic Approaches* (pp. 13–29). Washington, DC: American Psychological Association.
- Gomez, L. (1997). *An Introduction to Object Relations*. London: Free Association Books Ltd.
- Grant, A. M., Franklin, J., & Langford, P. (2002). The self-reflection and insight scale: a new measure of private self-consciousness. *Social Behavior and Personality: An International Journal*, 30(8), 821–835.
- Grissom, R. J. (1996). The magical number .7 + .2: meta-meta-analysis of the probability of superior outcome in comparisons involving therapy, placebo, and control. *Journal of Consulting and Clinical Psychology*, 64, 973–982.
- Hayes-Skelton, S. A., Calloway, A., Roemer, L., & Orsillo, S. M. (2015). Decentering as a potential common mechanism across two therapies for generalized anxiety disorder. *Journal of Consulting and Clinical Psychology*, 83(2), 395–404.
- Heatherington, L., Constantino, M. J., Angus, L., Friedlander, M., & Messer, S. (2012). Clients' perspectives on corrective experiences in psychotherapy. In *Transformation in Psychotherapy: Corrective Experiences Across Cognitive Behavioral, Humanistic, and Psychodynamic Approaches* (pp. 161–190). Washington, DC: American Psychological Association.
- Hopko, D. R., Robertson, S. M., & Carvalho, J. P. (2009). Sudden gains in depressed cancer patients treated with behavioral activation therapy. *Behavior Therapy*, 40(4), 346–356.
- Hunnicuttt-Ferguson, K., Hoxha, D., & Gollan, J. (2012). Exploring sudden gains in behavioural activation therapy for major depressive disorder. *Behaviour Research and Therapy*, 50(3), 223–230.
- ICATA. (2014). CAT Tools. Retrieved 29 August 2015, from <http://internationalcat.org/cat-tools/>

- Jacobson, N. S., & Truax, P. (1991). Clinical significance: a statistical approach to defining meaningful change in psychotherapy research. *Journal of Consulting and Clinical Psychology, 59*(1), 12–19.
- Johansson, P., Høglend, P., Ulberg, R., Amlo, S., Marble, A., Bøgwald, K.-P., ... Heyerdahl, O. (2010). The mediating role of insight for long-term improvements in psychodynamic therapy. *Journal of Consulting and Clinical Psychology, 78*(3), 438–448.
- Kanter, J. W., Manos, R. C., Bowe, W. M., Baruch, D. E., Busch, A. M., & Rusch, L. C. (2010). What is behavioral activation? A review of the empirical literature. *Clinical Psychology Review, 30*(6), 608–620.
- Kazdin, A. E. (2007). Mediators and mechanisms of change in psychotherapy research. *Annual Review of Clinical Psychology, 3*(1), 1–27.
- Kellett, S. (2004). Process issues in conducting cognitive analytic therapy (CAT) with dissociative identity disorder. *Reformulation: Theory & Practice in Cognitive Analytic Therapy, Autumn*(23), 11–16.
- Kellett, S. (2005). The treatment of dissociative identity disorder with cognitive analytic therapy: experimental evidence of sudden gains. *Journal of Trauma & Dissociation, 6*(3), 55–81.
- Kellett, S. (2007). A time series evaluation of the treatment of histrionic personality disorder with cognitive analytic therapy. *Psychology and Psychotherapy: Theory, Research and Practice, 80*(3), 389–405.
- Kellett, S., & Hardy, G. (2014). Treatment of paranoid personality disorder with cognitive analytic therapy: a mixed methods single case experimental design. *Clinical Psychology & Psychotherapy, 21*(5), 452–464.
- Kelly, G. (1955). *The Psychology of Personal Constructs*. New York: Norton.
- Kemp, P. (2010). Creative involvement of service users in the classroom. In J. Weinstein, *Mental Health, Service User Involvement and Recovery*. (pp. 171–185). London: Jessica Kingsley Publishers.
- King, N. (1999). Template analysis. In *Qualitative Methods and Analysis in Organisational Research*. (pp. 118–134). London, UK: Sage publications.
- Kraemer, H. C., & Wilson, G. T. (2002). Mediators and moderators of treatment effects in randomized clinical trials. *Archives of General Psychiatry, 59*(10), 877–883.
- Kühnlein, I. (1999). Psychotherapy as a process of transformation: analysis of post-therapeutic autobiographic narrations. *Psychotherapy Research, 9*(3), 274–288.

- Layard, R., Banerjee, S., Bell, S., Clark, D., Fielding, S., Knapp, M., ... Scott, S. V. (2012). *How Mental Illness Loses Out in the NHS*. London, UK: The Centre for Economic Performance. Retrieved from <http://eprints.lse.ac.uk/44572/>
- Leighton, T. (1995). A cognitive analytic understanding of 'twelve step' treatment. *New Directions in the Study of Alcohol Group*, 20, 31–41.
- Leiman, M. (1994). Projective identification as early joint action sequences: a Vygotskian addendum to the procedural sequence object relations model. *British Journal of Medical Psychology*, 67(2), 97–106.
- Llewelyn, S. P., Elliott, R., Shapiro, D. A., Hardy, G., & Firth-Cozens, J. (1988). Client perceptions of significant events in prescriptive and exploratory periods of individual therapy. *British Journal of Clinical Psychology*, 27(2), 105–114.
- London, P. (1964). *The Modes and Morals of Psychotherapy*. New York: Holt, Rinehart, and Winston.
- Luborsky, L. (1984). *Principles of Psychoanalytic Psychotherapy: A Manual for Supportive-Expressive Treatment*. New York: Basic Books.
- Luborsky, L., Bachrach, H., Graff, H., Pulver, S., & Christoph, P. (1979). Preconditions and consequences of transference interpretations: a clinical-quantitative investigation. *Journal of Nervous and Mental Disease*, 167(7), 391–401.
- Luborsky, L., Rosenthal, R., Diguier, L., Andrusyna, T. P., Berman, J. S., Levitt, J. T., ... Krause, E. D. (2002). The dodo bird verdict is alive and well - mostly. *Clinical Psychology: Science and Practice*, 9(1), 2–12.
- Luborsky, L., Singer, B., & Luborsky, L. (1975). Comparative studies of psychotherapies: is it true that 'Everyone has won and all must have prizes'? *Archives of General Psychiatry*, 32(8), 995–1008.
- Mace, C., Beeken, S., & Embleton, J. (2006). Beginning therapy: clinical outcomes in brief treatments by psychiatric trainees. *The Psychiatrist*, 30(1), 7–10.
- Marková, I. S. (2005). *Insight in Psychiatry*. UK: Cambridge University Press.
- Marriott, M., & Kellett, S. (2009). Evaluating a cognitive analytic therapy service; practice-based outcomes and comparisons with person-centred and cognitive-behavioural therapies. *Psychology and Psychotherapy: Theory, Research and Practice*, 82(1), 57–72.
- Martin-Merino, E., Ruigomez, A., Wallander, M., Johansson, S., & GarciaRodriguez, L. (2009). Prevalence, incidence, morbidity and treatment patterns in a cohort of patients diagnosed with anxiety in UK primary care. *Family Practice*, 27(1), 9–16.

- Marzillier, J., & Butler, G. (1995). CAT in relation to cognitive therapy. In *Cognitive Analytic Therapy: Developments in Theory and Practice*. (pp. 121–138). West Sussex: John Wiley & Sons Ltd.
- Masterson, C., Ekers, D., Gilbody, S., Richards, D., Toner-Clewes, B., & McMillan, D. (2014). Sudden gains in behavioural activation for depression. *Behaviour Research and Therapy*, *60*, 34–38.
- McManus, F., Bebbington, P., Jenkins, R., & Brugha, T. (Eds.). (2016). *Mental Health and Wellbeing in England: Adult Psychiatric Morbidity Survey 2014*. Leeds: NHS Digital. Retrieved from <http://content.digital.nhs.uk/catalogue/PUB21748/apms-2014-full-rpt.pdf>
- McManus, F., Van Doorn, K., & Yiend, J. (2012). Examining the effects of thought records and behavioral experiments in instigating belief change. *Journal of Behavior Therapy and Experimental Psychiatry*, *43*(1), 540–547.
- Messer, S. B. (2013). Three mechanisms of change in psychodynamic therapy: insight, affect, and alliance. *Psychotherapy*, *50*(3), 408–412.
- Morley, S. (in press). *Quantitative Case Methods in Clinical Psychology: An Introduction to Single-Case Research*. Oxford: Routledge.
- Morley, S. (1994). Single-case methodology in psychological therapy. In S. J. E. Lindsay & G. E. Powell (Eds.), *The Handbook of Clinical Adult Psychology*. (2nd edition, pp. 821–843). London, UK: Routledge.
- Morley, S., & Keefe, F. J. (2007). Getting a handle on process and change in CBT for chronic pain. *Pain*, *127*(3), 197–198.
- Moro, L., Avdibegović, E., & Moro, I. N. (2012). Insight in psychotherapy. *Psychiatria Danubina*, *24*(3), 354–360.
- Murphy, R., Cooper, Z., Hollon, S. D., & Fairburn, C. G. (2009). How do psychological treatments work? Investigating mediators of change. *Behaviour Research and Therapy*, *47*(1), 1–5.
- Norcross, J. C., & Wampold, B. E. (2011). What works for whom: tailoring psychotherapy to the person. *Journal of Clinical Psychology*, *67*(2), 127–132.
- Ogden, T. (1983). The concept of internal object relations. *International Journal of Psychoanalysis*, *64*(2), 227–241.
- Parry, G., Roth, A., & Fonagy, P. (2005). Psychotherapy research, health policy, and service provision. In A. Roth & P. Fonagy, *What Works For Whom? A Critical Review of Psychotherapy Research*. New York: The Guilford Press.

- Radcliffe, K. (2014). *An Interpretative Phenomenological Analysis of Clients' Experience of Non-Response to Psychological Therapy*. UK: University of Leeds.
- Rayner, K., Thompson, A. R., & Walsh, S. (2011). Clients' experience of the process of change in cognitive analytic therapy. *Psychology and Psychotherapy: Theory, Research and Practice*, *84*(3), 299–313.
- Redhead, S., Johnstone, L., & Nightingale, J. (2015). Clients experiences of formulation in cognitive behaviour therapy. *Psychology and Psychotherapy: Theory, Research and Practice*, *88*(4), 453–467.
- Riley, A. R., & Gaynor, S. T. (2014). Identifying mechanisms of change utilizing single-participant methodology to better understand behavior therapy for child depression. *Behavior Modification*, *38*(5), 636–664.
- Rosen, G. M., & Davison, G. C. (2003). Psychology should list empirically supported principles of change (ESPs) and not credential trademarked therapies or other treatment packages. *Behavior Modification*, *27*(3), 300–312.
- Rosenzweig, S. (1936). Some implicit common factors in diverse methods of psychotherapy. *American Journal of Orthopsychiatry*, *6*(3), 412–415.
- Ryle, A. (1975). *Frames and Cages*. London: Sussex University Press.
- Ryle, A. (1978). A common language for the psychotherapies. *British Journal of Psychiatry*, *132*(6), 585–594.
- Ryle, A. (1979). The focus in brief interpretive psychotherapy: dilemmas, traps and snags as target problems. *British Journal of Psychiatry*, *134*(1), 46–54.
- Ryle, A. (1982). *Psychotherapy: A Cognitive Integration of Theory and Practice*. London: Academic Press.
- Ryle, A. (1985). Cognitive theory, object relations and the self. *British Journal of Medical Psychology*, *58*(1), 1–7.
- Ryle, A. (1990). *Cognitive-Analytic Therapy: Active Participation in Change. A New Integration of Brief Psychotherapy*. Chichester, England: John Wiley & Sons Ltd.
- Ryle, A. (1997). The structure and development of borderline personality disorder: a proposed model. *British Journal of Psychiatry*, *170*(1), 82–87.
- Ryle, A., Kellett, S., Hepple, J., & Calvert, R. (2014). Cognitive analytic therapy at 30. *Advances in Psychiatric Treatment*, *20*(4), 258–268.
- Ryle, A., & Kerr, I. B. (2002). *Introducing Cognitive Analytic Therapy: Principles and Practice*. England: John Wiley & Sons Ltd.

- Ryle, A., & Lunghi, M. (1970). The dyad grid: a modification of repertory grid technique. *The British Journal of Psychiatry*, *117*(538), 323–327.
- Salkovskis, P. M. (1995). Demonstrating specific effects in cognitive and behavioural therapy. In M. Aveline & D. A. Shapiro (Eds.), *Research Foundations for Psychotherapy Practice* (pp. 191–228). Chichester, UK: Wiley.
- Scott, J. (1998). Cognitive therapy. In H. Freeman (Ed.), *Century of Psychiatry* (pp. 61–72). London: Mosby Wolfe Medical Communications.
- Shapiro, D. A., & Shapiro, D. (1982). Meta-analysis of comparative therapy outcome studies: a replication and refinement. *Psychiatric Bulletin*, *92*(3), 581–604.
- Shine, L., & Westacott, M. (2010). Reformulation in cognitive analytic therapy: effects on the working alliance and the client’s perspective on change. *Psychology and Psychotherapy*, *83*(2), 161–177.
- Smith, P. K., Cowie, H., & Blades, M. (2003). *Understanding Children’s Development* (4th ed.). UK: Blackwell Publishing.
- Stevens, A., & Price, J. (1996). *Evolutionary Psychiatry, a New Beginning*. London: Routledge.
- Strupp, H. H., & Binder, J. L. (1984). *Psychotherapy in a New Key: A Guide to Time-Limited Dynamic Psychotherapy*. New York: Basic Books.
- Swift, J. K., & Greenberg, R. P. (2012). Premature discontinuation in adult psychotherapy: a meta-analysis. *Journal of Consulting and Clinical Psychology*, *80*(4), 547–559.
- Tang, T. Z., & DeRubeis, R. J. (1999). Sudden gains and critical sessions in cognitive-behavioral therapy for depression. *Journal of Consulting and Clinical Psychology*, *67*(6), 894–904.
- Wampold, B. E. (2001). *The Great Psychotherapy Debate: Models, Methods, and Findings*. Hillsdale, NJ: Erlbaum.
- Wampold, B. E., & Budge, S. L. (2012). The 2011 Leona Tyler Award Address: The relationship—and its relationship to the common and specific factors of psychotherapy. *The Counseling Psychologist*, *40*(4), 601–623.
- Wampold, B. E., Mondin, G. W., Moody, M., Stich, F., Benson, K., & Ahn, H. (1997). A meta-analysis of outcome studies comparing bona fide psychotherapies: Empirically, ‘all must have prizes.’ *Psychological Bulletin*, *122*(3), 203–215.
- Winnicott, D. W. (1953). Transitional objects and transitional phenomena: a study of the first not-me possession. *International Journal of Psychoanalysis*, *24*, 89–97.

- Winnicott, D. W. (1955). The depressive position in normal emotional development. *British Journal of Medical Psychology*, 28(2–3), 89–100.
- Wolpe, J. (1958). *Psychotherapy by Reciprocal Inhibition*. Stanford, CA: Stanford University Press.
- Yeates, G., Hamill, M., Sutton, L., Psaila, K., Gracey, F., Mohamed, S., & O'Dell, J. (2008). Dysexecutive problems and interpersonal relating following frontal brain injury: reformulation and compensation in cognitive analytic therapy (CAT). *Neuro-Psychoanalysis*, 10(1), 43–58.

APPENDICIES

Appendix A: Therapy Activity Sheet

Therapist Activity Sheet

THERAPIST NAME:

DATE OF SESSION:

SESSION DURATION:

CLIENTS CHOSEN PSEUDONYM:

OR TICK IF NOT ATTENDED OR NOTE OF ANY MISSED APPOINTMENTS IF

SESSION IS BEING MADE UP:

Session number:	Please tick	Non-specific treatment factors & extra therapy events <i>Please use the space below to detail any event outside therapy that might have an effect on the clients symptom scores or behavioural change</i>
Give Psychotherapy File		
Set diary keeping of TPs		
Receive Psychotherapy File back		
Check diary monitoring of TPs		
Review Psychotherapy File and agree list of TPs		
Read out Reformulation letter and TP/TPP list		
Monitoring of TPPs		
Set up rating sheets of TP/TPPs		
Review patients week relative to TP/TPPs		
Check diary monitoring of TPPs		
Discuss meaning of ending		
Rate TP/TPPs on week-by-week rating sheet		
Mapping with client		
Discuss Sequential Diagrammatic Reformulation (SDR)		
SDR available for reference		
Read Goodbye Letters		
General review of change		
Set Follow-up date		
Rate TP/TPPs, evaluate change & assess for further help		

Appendix B: CAT Recognition and Revision Visual Analogy Scale



Association for Cognitive Analytic Therapy

To be completed every session. So as to remember to do this, please remove and place behind your next session index marker.

CAT Rating Sheet: Target Problem Procedure

Clients chosen pseudonym: _____ **Therapist Name:** _____ **Date of First Consultation:::** _____

Target Problem Procedure

		4	5	6	7	8	9	10	11	12	13	14	15	16
RECOGNITION Rate how skilled you are at seeing the pattern	More													
	Same													
	Less													
REVISION Rate how far you are able to stop the pattern and/ or replace it with a better way	More													
	Same													
	Less													

Alternatives/ Exits to the pattern worth trying and working on:



Association for Cognitive Analytic Therapy Ltd
 PO Box 6793, Dorchester, DT1 9DL, United Kingdom
admin@acat.me.uk | www.acat.me.uk | 0844 800 9496

Appendix C: Insight Sub-scale of the Self Reflection and Insight Scale (SRIS-IN)

Please read the following questions and circle the response that indicates the degree to which you agree or disagree with each of the statements. Try to be accurate, but work quite quickly. Do not spend too much time on any question.


THERE ARE NO “WRONG” OR “RIGHT” ANSWERS – ONLY YOUR OWN PERSONAL PERSPECTIVE.

BE SURE TO ANSWER EVERY QUESTION

ONLY CIRCLE ONE ANSER FOR EACH QUESTION

I am usually aware of my thoughts	(I)	Disagree Strongly 1	Disagree 2	Disagree Slightly 3	Agree Slightly 4	Agree 5	Agree Strongly 6
I'm often confused about the way that I really feel about things (R)	(R)	Disagree Strongly 1	Disagree 2	Disagree Slightly 3	Agree Slightly 4	Agree 5	Agree Strongly 6
I usually have a very clear idea about why I've behaved in a certain way	(I)	Disagree Strongly 1	Disagree 2	Disagree Slightly 3	Agree Slightly 4	Agree 5	Agree Strongly 6
I'm often aware that I'm having a feeling, but I often don't quite know what it is (R)	(I)	Disagree Strongly 1	Disagree 2	Disagree Slightly 3	Agree Slightly 4	Agree 5	Agree Strongly 6
My behaviour often puzzles me (R)	(I)	Disagree Strongly 1	Disagree 2	Disagree Slightly 3	Agree Slightly 4	Agree 5	Agree Strongly 6
Thinking about my thoughts makes me more confused (R)	(I)	Disagree Strongly 1	Disagree 2	Disagree Slightly 3	Agree Slightly 4	Agree 5	Agree Strongly 6
Often I find it difficult to make sense of the way I feel about things (R)	(I)	Disagree Strongly 1	Disagree 2	Disagree Slightly 3	Agree Slightly 4	Agree 5	Agree Strongly 6
I usually know why I feel the way I do	(I)	Disagree Strongly 1	Disagree 2	Disagree Slightly 3	Agree Slightly 4	Agree 5	Agree Strongly 6

Appendix D: Clinical Outcome in Routine Evaluation (CORE-10)

 <p>CORE - 10</p>	Site ID <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	Age <input type="text"/> <input type="text"/>	Male <input type="checkbox"/>
	Client ID	Therapist ID numbers only (1) <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> numbers only (2) <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	Stage Completed	Female <input type="checkbox"/>
	Sub codes	Date form given	S Screening R Referral A Assessment F First Therapy Session P Pre-therapy (unspecified) D During Therapy L Last Therapy Session X Follow up 1 Y Follow up 2	Stage <input type="text"/>
	D D M M Y Y Y Y	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	Episode <input type="text"/>

IMPORTANT – PLEASE READ THIS FIRST

This form has 10 statements about how you have been OVER THE LAST WEEK.
 Please read each statement and think how often you felt that way last week.
 Then tick the box which is closest to this.
Please use a dark pen (not pencil) and tick clearly within the boxes.

Over the last week	Not at all	Only Occasionally	Sometimes	Often	Most or all the time
1 I have felt tense, anxious or nervous	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
2 I have felt I have someone to turn to for support when needed	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0
3 I have felt able to cope when things go wrong	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0
4 Talking to people has felt too much for me	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
5 I have felt panic or terror	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
6 I made plans to end my life	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
7 I have had difficulty getting to sleep or staying asleep	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
8 I have felt despairing or helpless	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
9 I have felt unhappy	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
10 Unwanted images or memories have been distressing me	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Total (Clinical Score*)	<input type="text"/>				

* **Procedure:** Add together the item scores, then divide by the number of questions completed to get the mean score, then multiply by 10 to get the Clinical Score. If fewer than nine items completed, score should only be used very cautiously.

Quick method for the CORE-10 (if all items completed): Add together the item scores to get the Clinical Score.

THANK YOU FOR YOUR TIME IN COMPLETING THIS QUESTIONNAIRE

Appendix E: Modified Client Change Interview Protocol

The interview covers

- The client's assessment of change since therapy began
- Attributions about change
- Worsening and unfulfilled wants
- Helpful aspect of therapy - and unhelpful ones
- Their perception of measures

1. What changes, if any, have you noticed in yourself since therapy started?

- For example, are you *doing, feeling, or thinking* differently from the way you did before?
- What *specific ideas*, if any, have you got from therapy, including ideas about yourself or other people?
- Have any changes been brought to your attention by other people?

Note them here - then insert in the change list - then rate them.

CHANGE LIST

Change	Change was: 1-expected 3-neither 5-surprised	Without therapy: 1-unlikely 3-neither 5-likely	Importance: 1-not at all 2-slightly 3-moderately 4-very 5-extremely
1.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
2.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
3.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
4.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
6.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5

CHANGE SCALES

Expected vs Surprised: For each change, please rate how much you *expected* it vs. were *surprised* by it? (Use this rating scale)

- (1) Very much expected it
- (2) Somewhat expected it
- (3) Neither expected nor surprised by the change
- (4) Somewhat surprised by it
- (5) Very much surprised by it

Likely without therapy For each change, please rate how *likely* you think it would have been if you *hadn't* been in therapy? (Use this rating scale)

- (1) Very unlikely without therapy (clearly would not have happened)
- (2) Somewhat unlikely without therapy (probably would not have happened)
- (3) Neither likely nor unlikely (no way of telling)
- (4) Somewhat likely without therapy (probably would have happened)
- (5) Very likely without therapy (clearly would have happened anyway)

Importance or significance How important or significant to you personally do you consider this change to be? (Use this rating scale)

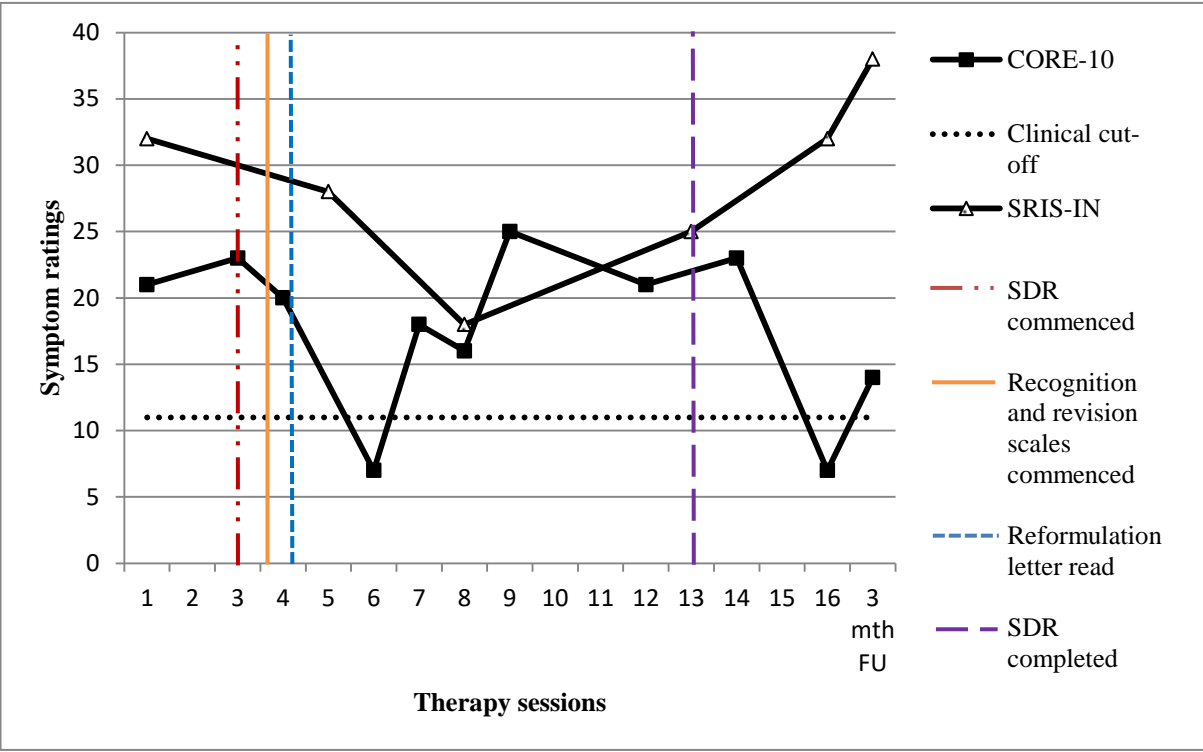
- (1) Not at all important
- (2) Slightly important
- (3) Moderately important
- (4) Very important
- (5) Extremely important

2. Has anything changed for the worse for you since therapy started?

3. Is there anything that you wanted to change that hasn't since therapy started?

4. In general, what do you think has caused these various changes you described? In other words, what do you think might have brought them about? (Including things both outside of therapy and in therapy)

Example of participants own graphic representation of change on the CORE-10 and SRIS-IN shown to participants



5. Do you have any recollection of what happened here?

6. Do you know why it got better after that?

7. Introduce what the therapist recalled - Which of these would be most important?

Non-specific treatment factors & extra therapy events:

Context elaboration

RESOURCES

8. What personal strengths do you think have helped you make use of therapy to deal with your problems? (What you're good at, personal qualities)

9. What things in your current life situation have helped you make use of therapy to deal with your problems? (Family, job, relationship, living arrangements)

LIMITATIONS

10. What things about you do you think have made it harder for you to use therapy to deal with your problems? (Things about you as a person)

11. What things in your life situation have made it harder for you to use therapy to deal with your problems? (Family, job, relationship, living arrangements)

HELPFUL ASPECTS

12. Can you sum up what has been helpful about your therapy? Please give examples (For example, general aspects or specific events)

PROBLEM ASPECTS

13. What kinds of things about the therapy have been hindering, unhelpful, negative or disappointing for you? (For example, general aspects. specific events)

14. Were there things in the therapy which were difficult or painful but still OK or perhaps helpful? What were they?

15. Has anything been missing from your therapy? (What would make/have made your therapy more effective or helpful?)

16. Suggestions Do you have any suggestions for me, regarding the research or the therapy?

17. Do you have anything else that you want to tell me?

THE MEASURES

18. In general, do you think that your recognition and revision ratings mean the same thing now that they did before therapy? If not, how has their meaning changed? (Sometimes clients change how they use the scales, did that happen for you?)

20. Were any of these measures difficult for you to complete? Can you tell me why?

21. Any other comments you would like to make?

Appendix F: Recruitment Flyer

Qualified Cognitive Analytic Therapy (CAT) therapists or those in training wanted for involvement in a Case Series looking at how CAT techniques impact on insight and symptom change.

DO YOU MEET THE FOLLOWING CRITERIA:

- Work in an NHS adult psychological therapy service
- Offer individual 16 or 24 sessions of CAT
- Interested in developing the evidence base for CAT

AIMS / OBJECTIVES

Therapies are developed on the basis of theoretical mechanisms of change and are implemented before the change processes involved are understood. The case series focusses on tracking the points at which CAT tools (mediators) facilitate symptom change (or not), in addition to considering insight as a mechanism that produces change in therapy. The proposed study seeks to:

- I. assess clients' responsiveness to the delivery of CAT-specific tools on symptoms.
- II. explore the effect of CAT on insight
- III. gain an understanding of client experience of change

PROCEDURE AND MEASURES:

I am to recruit 6 therapist/client dyads who have gathered a complete set of measures over the course of providing/receiving one-to-one CAT.

Table 1. Frequency of measures taken during assessment, treatment and follow-up

Measure	Session no.																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	FU	
Therapist Activity Sheet	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Recognition and revision scale				*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Corrective Experiences Questionnaire				*				*				*					*	*
Insight Sub-scale	*			*				*				*					*	*
CORE-10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

Note: FU refers to 3 month follow-up. This table depicts measures to be administered over a 16 session CAT.

Following the therapy, clients may be asked to complete a change interview with the researcher about their experiences of therapy. This decision will rest on whether six completed data sets are obtained.

If you meet these criteria and are interested or would like further information please contact the Chief Investigator, Rebecca Tyrer, umrat@leeds.ac.uk

Appendix G: Therapist Information Sheet

Leeds Institute of Health Sciences

FACULTY OF MEDICINE AND HEALTH



UNIVERSITY OF LEEDS

Processes of change in Cognitive Analytic Therapy

Researcher: Rebecca Tyrer

Email: umrat@leeds.ac.uk

Telephone: (0) 113 343 0815

Supervisor: Ciara Masterson

Email: C.Masterson@leeds.ac.uk

You are invited to take part in an explorative study designed to investigate tools used in Cognitive Analytic Therapy (CAT) and their impact on client insight and symptom change, conducted by Rebecca Tyrer, a Psychologist in Clinical Training. Before agreeing to take part, please read this information sheet to understand the purpose of the study and what your role will involve.

What is the purpose of this research?

This study into the processes of change in CAT intends to track changes in how much clients understand their problems (insight) and the changes they make in therapy (e.g. feelings that improve) to see if particular changes relate to particular phases of therapy.

Why have I been asked to take part?

You have been asked to take part as you work in adult psychological therapy services and have either undertaken the accredited practitioner training with the Association for Cognitive Analytic Therapy (ACAT) or are currently enrolled on the course.

What will be required if I take part?

- I. If you decide to take part you will be asked to sign the consent form.
- II. Identify one or more clients from your case load who you intend to work with using the CAT approach and help recruit them into the study. This will involve handing out an information sheet at their first visit and asking them to sign a consent form at their second visit. At the end of therapy we would ask that you check that your client is still happy for their data to be used in this study.
- III. You will also be asked to complete a short record form (Therapist Activity Sheet) after each session in order to indicate which therapeutic techniques were used and also any events outside therapy that might explain any change in client’s symptoms.
- IV. Ensure participating client(s) complete the measures tabled below:

Measure	Session no.																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	F U
Therapist Activity Sheet	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Recognition and revision rating scale				*	*	*	*	*	*	*	*	*	*	*	*	*	*
Corrective Experiences Questionnaire				*				*				*				*	*
Insight Sub-scale	*			*				*				*				*	*
CORE-10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

Note: FU refers to 1 to 3 month follow-up. This table depicts measures to be administered over a 16 session CAT

- Recognition and revision rating scale as per CAT protocol (i.e. completed weekly once list of TPs and TPPs have been agreed.
- Two open ended questions designed to assess corrective experiences every fourth session and at 1 to 3 month follow-up.
- Insight subscale consisting of eight items from the SRIS every fourth session and at first and follow-up session.
- CORE-10 at the beginning of every session

- V. At the end of therapy, the researcher will contact you to arrange access for collecting the measures and to glean information for a pen portrait.
- VI. We will also be asking participating therapists to provide information for a brief description of themselves such as gender, profession and years qualified.
- VII. As the study progresses we may make a decision to interview clients who have completed therapy regarding their experiences of the changes they have made. If this happens we may ask you to discuss this with your client(s) regarding their permission for us to contact them.

Where will data be stored?

The measures will remain in the client's personal file, at the NHS premises where you work. It should be noted that while therapists may have collected routine assessment measures and will be asked to administer questionnaires in the first session (before informed consent) this data will not be used for the study unless informed consent is given. Once all measures taken as part of therapy have been collected, including any measures taken during the initial assessment appointment, the researcher will photocopy measure data and take away for analyses. While data collection will not occur while therapy is still ongoing the researcher will want to collect data at the end of therapy before 3 month follow-up. No measure will require patient identifiable information; a pseudonym which clients are invited to choose on their consent form will be used to enable the researcher to match up client data to the therapy record sheet in order for clients to remain anonymised. If interviews are conducted, clients will have given their permission for their name and contact details to be given to the researcher. Interviews will be audio recorded and deleted after transcription. Transcripts will be stored on a password protected, encrypted device. Quotations from interview transcripts will not be used in a final write up of this study without first omitting identifying details. Clients' are entitled to ask their therapist not to discuss specific aspects of their background and problems with the researcher when information for a pen portrait is sought.

What if there is a problem?

While it is unlikely that taking part in this study will cause problems it has been acknowledged that participation may feel exposing and may be stressful. Therefore, if you are concerned about any aspect of the study or have any questions, you can either contact myself, Rebecca Tyrer directly, or my academic supervisor, Ciara Masterson.

Participation in this study is entirely voluntary and you or your client(s) are free to withdraw at any time without giving a reason. Participants may withdraw consent during data collection (i.e. by stopping completing the measures) or at the end of therapy when you will be asked to check that your client is still happy for their data to be used in the study. You or your client(s) are also free to withdraw your data without providing a reason up until the point of analysis (the date of the 3 month follow-up appointment).

What are the potential risks of the study?

While therapy can in itself be a distressing experience, there is also a small risk of clients becoming distressed when completing outcome measures. Monitoring progress through use of measures is common practice in psychotherapy services and therapists are qualified to appropriately support clients should they become distressed. However, if a therapist thought that the measure completion was too distressing for the client data collection would stop.

What are the potential benefits of the study?

It is hoped this research will help further our understanding of the mechanisms of change that take place during Cognitive Analytic Therapy and it is hoped that by improving our understanding of these processes, practice in the future might be developed. In asking both therapist and clients to reflect more deeply on the process of therapy there may be some benefits to the therapy itself (e.g. increased understanding of the problem).

What will happen to the results of the study?

The data will be used for research purposes and presented in a written report to form a Doctorate in Clinical Psychology thesis. It is hoped a paper can later be written up for publication and a presentation be made to local CAT Special Interest Groups. If you and your client struggle (or are unable) to collect a full data set, your data will not be used.

Who has reviewed the study?

This study has been granted NHS ethical approval. In addition Research and Development (R&D) for your trust are aware of the study and have given their approval.

What happens next?

If you're interested in taking part or would like any more information please contact me using the details above.

Thank you for considering participation.



Process of change in Cognitive Analytic Therapy

Researcher: Rebecca Tyrer

Email: umrat@leeds.ac.uk

Telephone: (0) 113 343 0815

Supervisor: Ciara Masterson

Email: C.Masterson@leeds.ac.uk

You are invited to take part in a study conducted by Rebecca Tyrer, a Psychologist in Clinical Training, to understand more about what factors in therapy bring about change. Your therapist has agreed to help recruit people who they believe would benefit from a mode of therapy called Cognitive Analytic Therapy (CAT). Before making a decision about whether you would like to take part in this study please read this information carefully.

What is the purpose of this research?

This study aims to identify how this type of therapy leads to changes in people's mood and behaviour. The study will also explore the effect of insight on bringing about change.

Why have I been asked to take part?

If your therapist has given you this information sheet they are planning to work with you using Cognitive Analytic Therapy - an approach that has been found to be effective. We hope that by looking in detail at individual experiences of the therapy, it will help us understand which are the most important and useful parts, aiding therapists in the future.

What will be required if I take part?

- I. If you decide to take part you will be asked to sign a consent form.
- II. You will be asked to complete a number of measures, which may have been collected as part of the therapy, some of which you will need to do every session and some just a few times:
 - Recognition and revision rating scale as per CAT protocol.
 - Corrective Experience Questionnaire - two open ended questions designed to assess which experiences you regard as most helpful every fourth session and at 1 to 3 month follow-up (estimated time 10 minutes)
 - Insight subscale of the Self-Reflection and Insight Scale (SRIS) every fourth session and in the first session and follow-up session (estimated time 2 minutes)
 - Clinical Outcome in Routine Evaluation-10 (CORE-10) is 10 item measure designed to assess symptoms of depression, anxiety, trauma, physical problems, and risk and will be administered at the beginning of every session (estimated time 2 minutes)
- III. It is possible that we may wish to interview some people at the end of therapy about their experiences of therapy. If you indicate on your consent form that you are happy for your therapist to discuss this opportunity at the end of therapy your therapist may discuss this with you; it will be your choice to decide whether to take part in this.

Will the researcher have access to other personal information?

Your therapist will be completing a short record form after each session to say which parts of the therapy have been covered in that session. Your therapist may also briefly note down any events outside therapy that might explain a change in how you feel. At the end of your therapy, I will phone your therapist to ask for some background information and some details about the difficulties that brought you to therapy. Your therapist will not give any information to the researcher that would be identifiable, and you are free to ask your therapist not to discuss specific aspects of your background and problems.

Do I have to take part?

No - participation is completely voluntary and if you decide not to take part, this will not affect your treatment in any way. If you decide to take part, you will be asked to sign a consent form which will be held by the research team at the University of Leeds, but this will not prevent you from withdrawing at a later date if you change your mind. Your consent form will be locked away in a separate filing cabinet from your completed questionnaires which will be collected and held by the research team at the end of therapy if you are still happy for the data collected to be used in the study. You may also withdraw consent during data collection by stopping completing the measures and are free to withdraw your data without providing a reason up until the point of analysis, (the date of your 3-month follow-up appointment).

Where will data be stored?

The measures will remain in your personal file, within the NHS premises. Once all measures taken as part of therapy have been collected, including any measures taken during the initial assessment appointment, the researcher will take the measure data away for analyses. Your therapist will only allow the researcher to see and take away the measures, which will have no identifiable information. The information taken away for analysis will be anonymous. You will be asked to give a 'pseudonym' (pretend name) on the consent form which will be used in the write up of the results. If interviews are conducted, you will have given your permission for your name and contact details to be given to the researcher. Interviews will be audio recorded and deleted after transcription. Transcripts and measure data will be stored on a password protected university of Leeds computer. During interviews if you disclose information that suggests you could be at risk of causing harm to yourself or others, the researcher has a responsibility to take appropriate action in the same way as your therapist.

What if there is a problem?

While it is unlikely that taking part in this study will cause problems, if you are concerned about any aspect or have any questions, please contact the researchers named above.

What will happen to the results of the study?

The data will be used for research purposes and presented in a written report to form a Doctorate in Clinical Psychology thesis. Feedback will be given to therapists and it is hoped a paper can later be written up for publication. If you and your therapist struggle (or are unable) to collect a full data set, your data will not be used.

What happens next?

At your next appointment your therapist will ask whether or not you wish to take part in this study and ask you to sign a consent form. Please do not hesitate to contact me in the meantime if you have any further questions.

Thank you for considering participation.

Appendix J: Participant Consent Form

Leeds Institute of Health Sciences

FACULTY OF MEDICINE AND HEALTH



UNIVERSITY OF LEEDS

Process of change in Cognitive Analytic Therapy

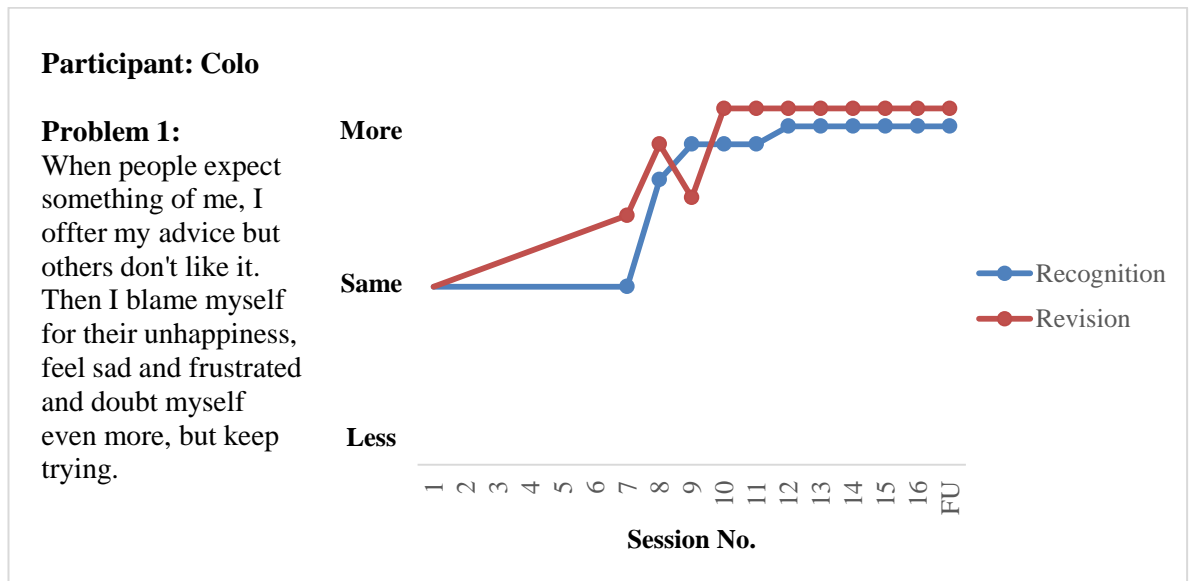
- 1. I confirm that I have read and understood the information sheet and have had the opportunity to ask any questions and had these answered satisfactorily.
- 2. I give permission for the researcher to have access to my responses provided on the recognition and revision rating scale, Corrective Experiences Questionnaire, insight subscale of the Self-Reflection and Insight Scale, and CORE-10.
- 3. I am aware that my therapist will complete an activity sheet after each session outlining the work we carried out and will provide information for a pen portrait to the researcher - some background information and some details about the difficulties that brought me to therapy.
- 4. I give permission for my therapist to discuss the option of attending an interview with the researcher at the end of therapy to discuss my experiences.
- 5. I understand that all information will be treated anonymously and will be stored in my personal file within NHS premises. At the end of therapy, data will be collected by the researcher. No information that can be traced back to me will leave the Trust.
- 6. I understand my participation is entirely voluntary and I am entitled to withdraw at any time without prejudice.
- 7. I have understood the above information and I agree to take part in the study.

My chosen pseudonym is

.....
THERAPIST NAME SIGNATURE DATE

.....
RESEARCHER'S NAME SIGNATURE DATE

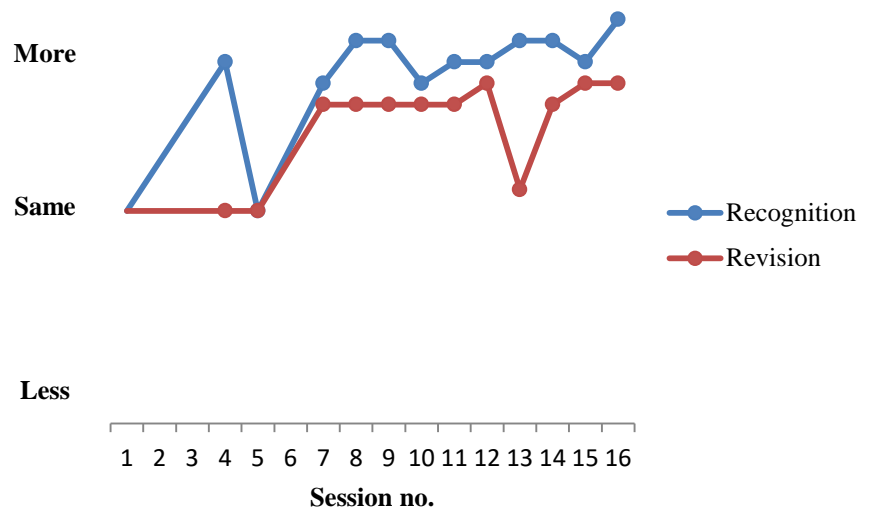
Appendix K: Recognition and Revision Scale Findings



Participant: Polly

Problem 1:

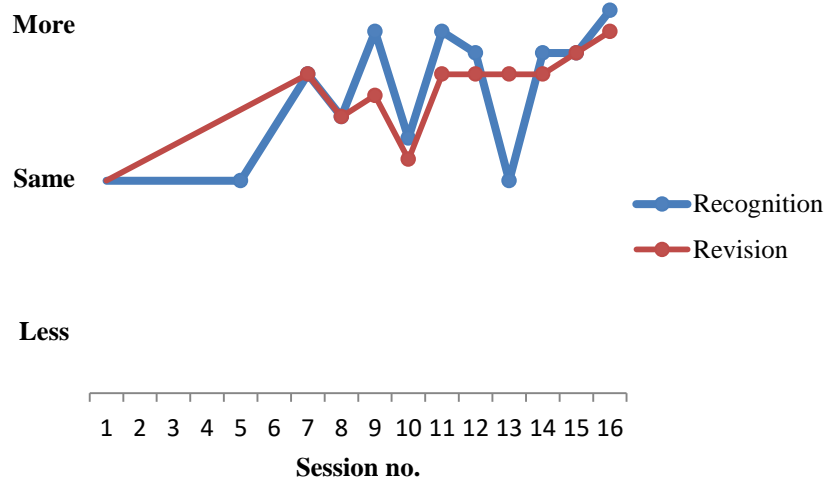
'Trying to please' trap. Bubble - feels as if either safe and no conflict or I can be a person in my own right, but risk being disapproved of.



Participant: Polly

Problem 2:

Understanding my anxiety: feeling pressured I tend to give in (underneath feel resentful) then often feel ill (migraine, M.E) as if body is saying that I can't.



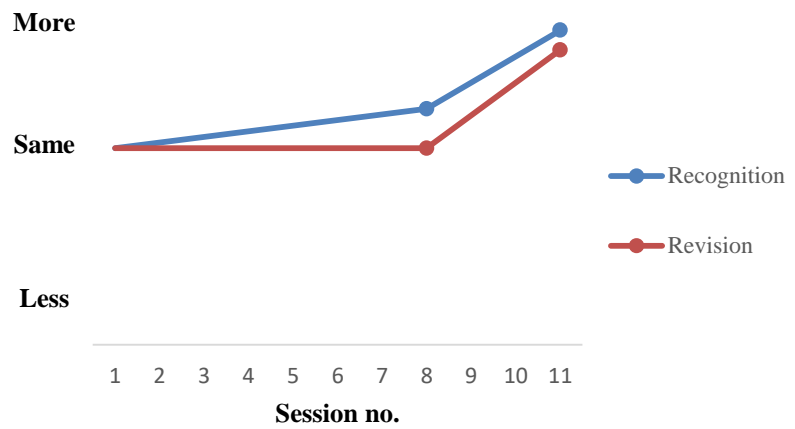
Participant: Sylvie

Problem 1:

Keep active to stop thinking/ feeling

Exit:

Practice 'mindfulness', physical breathing exercises, awakens of the moment. An 'exit' is to watch T.V. without doing something else at the same time.



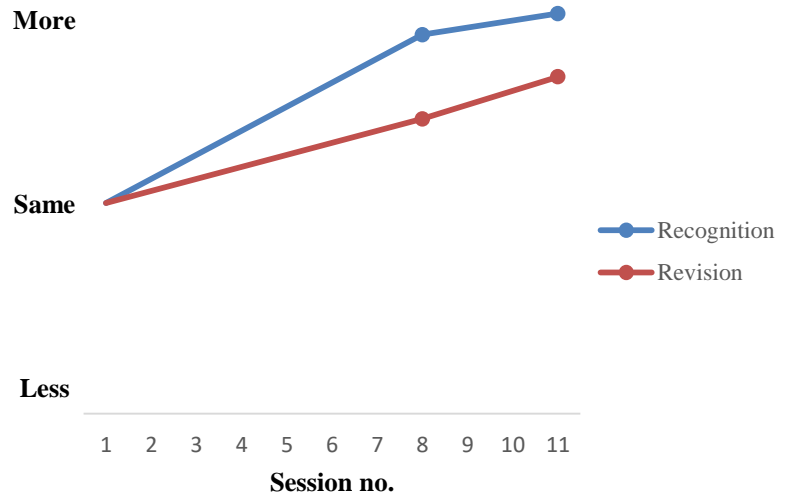
Participant: Sylvie

Problem 2:

Deprived or guilty dilemma

Exit:

Allowing myself hope of better things and change trying to be kinder to myself and be more reasonable about things. Plus to be nice to myself without guilt.



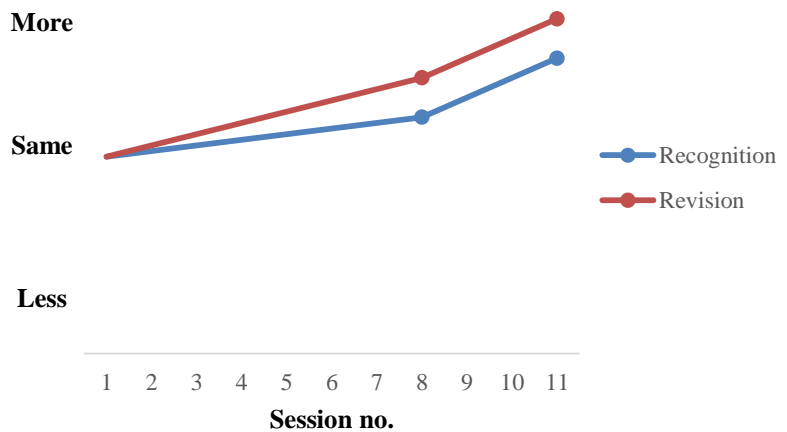
Participant: Sylvie

Problem 3:

Expect the worst snag / nothing goes right for me.

Exit:

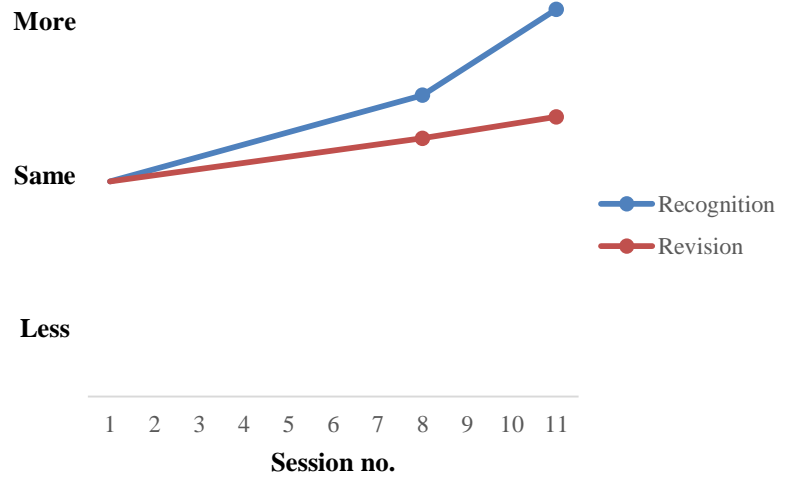
Stop creating problems unless a problem presents itself - calm down and think about it - 'go with it', let things happen at their natural pace.



Participant: Sylvie

Problem 4:
'Boom and bust'

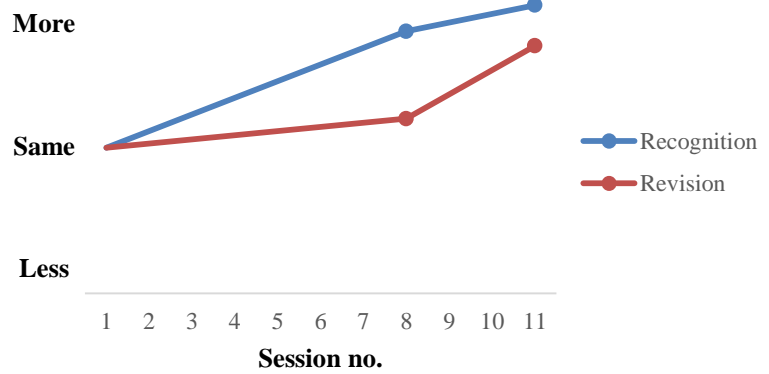
Exit:
Leave it for another day.



Participant: Sylvie

Problem 5:
Sorting everything out.

Exit:
Pull back/ think about it before acting.



Appendix L: Final coding template indicating which participants contributed to each theme

Theme	Sub-theme	Participant					
		Sally	Stuart	Colo	Lana	Polly	Sylvie
Making Links		X	X	X	X	X	X
	Visual Aid (SDR)	X			X		X
	CAT tools for processing and aiding reflection	X	X	X	X	X	X
	Tools for keeping	X		X	X	X	X
	Awareness of patterns being re-enacted		X		X	X	X
	Using real life situations	X	X				X
	Understanding the development of patterns	X	X				X
Breaking the Links in Patterns		X	X	X	X	X	X
	CAT tools for the facilitation of revision	X	X	X		X	X
	Internal change	X	X	X	X	X	X
	Recognising mistakes without allowing them to continue spiralling		X	X			X
	Not falling into old patterns	X	X	X	X	X	X
	Building reciprocal understanding	X		X	X	X	
Experiences that Disconfirm Beliefs		X	X		X		
	Unforeseen change	X	X		X		
	Attention to enactments being play out in the room	X	X		X		
	New insight affected feelings		X		X		
Working in Partnership (Comfort)		X	X	X	X	X	X
	Therapeutic environment engenders openness	X	X	X	X	X	X
	Surprised to feel able to talk		X	X	X		X
	Feelings heard, listened to and understood				X	X	X
	Therapist containment					X	X
	Permission to talk about self and process	X			X	X	X
Working in Partnership (Discomfort)		X	X	X	X	X	X
	Confusion over CAT tools (SDR)	X	X		X	X	X
	Therapeutic relationship breakdown	X					
	Lost and disconnected with tools		X				X

	Having to disclose information (but still helpful)		X	X			X
	Fear of opening up		X				
Real World Influences		X	X	X	X	X	X
	Stable living environment	X		X	X		
	Determination and motivation			X			X
	Chaotic lifestyles		X				X
	Family affecting the content of therapy				X		X
	Chronic pain getting in the way of therapy					X	X

Appendix M: NHS Favourable Ethical Opinion Letter



Health Research Authority

London - City & East Research Ethics Committee

Bristol Research Ethics Committee Centre

Whitefriars

Level 3, Block B

Lewins Mead

Bristol

BS1 2NT

Telephone: 01173421386

07 March 2016

Ms Rebecca Tyrer
Psychologist in Clinical Training
Leeds Teaching Hospitals NHS Trust
Leeds Institute of Health Sciences,
Charles Thackrah Building, University of Leeds
101 Clarendon Road, Leeds,
LS2 9LJ

Dear Ms Tyrer

Study title: An examination of specific techniques of CAT and their impact on insight and symptom change.
REC reference: 16/LO/0417
IRAS project ID: 193807

Thank you for your letter of 06 March 2016, responding to the Proportionate Review Sub-Committee's request for changes to the documentation for the above study.

The revised documentation has been reviewed and approved by the sub-committee.

We plan to publish your research summary wording for the above study on the HRA website, together with your contact details. Publication will be no earlier than three months from the date of this favourable opinion letter. The expectation is that this information will be published for all studies that receive an ethical opinion but should you wish to provide a substitute contact point, wish to make a request to defer, or require further information, please contact the REC Manager Mr Rajat Khullar, nrescommittee.london-cityandeast@nhs.net. Under very limited circumstances (e.g. for student research which has received an unfavourable opinion), it may be possible to grant an exemption to the publication of the study.

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.

Conditions of the favourable opinion

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

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

Management permission should be sought from all NHS organisations involved in the study in accordance with NHS research governance arrangements. Each NHS organisation must confirm through the signing of agreements and/or other documents that it has given permission for the research to proceed (except where explicitly specified otherwise).

Guidance on applying for HRA Approval (England)/ NHS permission for research is available in the Integrated Research Application System, www.hra.nhs.uk 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 management permissions from host organisations.

Registration of Clinical Trials

All clinical trials (defined as the first four categories on the IRAS filter page) must be registered on a publically accessible database. This should be before the first participant is recruited but no later than 6 weeks after recruitment of the first participant.

There is no requirement to separately notify the REC but you should do so at the earliest opportunity e.g. when submitting an amendment. We will audit the registration details as part of the annual progress reporting process.

To ensure transparency in research, we strongly recommend that all research is registered but for non-clinical trials this is not currently mandatory.

If a sponsor wishes to request a deferral for study registration within the required timeframe, they should contact hra.studyregistration@nhs.net. The expectation is that all clinical trials will be registered, however, in exceptional circumstances non registration may be permissible with prior agreement from the HRA. Guidance on where to register is provided on the HRA website.

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).

Ethical review of research sites

The favourable opinion applies to all NHS sites taking part in the study, subject to management permission being obtained from the NHS/HSC R&D office prior to the start of the study (see "Conditions of the favourable opinion" above).

Approved documents

The documents reviewed and approved by the Committee are:

<i>Document</i>	<i>Version</i>	<i>Date</i>
Covering letter on headed paper	Version 1	
Covering letter on headed paper [Cover Letter: Response to provisional opinion letter]	Version 1	06 March 2016
Evidence of Sponsor insurance or indemnity (non NHS Sponsors only) [Indemnity Certificate]	Version 1	09 February 2016
Interview schedules or topic guides for participants [Client Change Interview]	Version 1	01 February 2016
Letters of invitation to participant [Invitation Letter]	Version 1	01 February 2016
Non-validated questionnaire [CAT Rating Sheet]	Version 1	01 February 2016
Non-validated questionnaire [Therapist Activity Sheet]	Version 1	01 February 2016
Participant consent form [Therapist Consent Form]	Version 1	01 February 2016
Participant consent form [Participant Consent Form]	Version 2	29 February 2016
Participant consent form [Interview Participant Consent Form]	Version 1	29 February 2016
Participant information sheet (PIS) [V2 Therapist Information Sheet]	Version 2	29 February 2016
Participant information sheet (PIS) [Participant Information Sheet]	Version 2	29 February 2016
REC Application Form [REC_Form_15022016]		15 February 2016
Research protocol or project proposal [Research Protocol]	Version 1	01 February 2016
Summary CV for Chief Investigator (CI) [Rebecca Tyrer's CV]	Version 1	01 February 2016
Summary CV for supervisor (student research) [Ciara Masterson's CV]	Version 1	01 February 2016
Validated questionnaire [Clinical Outcomes in Routine Evaluation]	Version 1	
Validated questionnaire [Corrective Experiences Questionnaire]	Version 1	01 February 2016
Validated questionnaire [Self Reflection and Insight Scale]	Version 1	01 February 2016
Validated questionnaire [Insight Subscale of the SRIS]	Version 1	01 February 2016

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 HRA 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 HRA website:
<http://www.hra.nhs.uk/about-the-hra/governance/quality-assurance>

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/>

16/LO/0417

Please quote this number on all correspondence

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

Yours sincerely



pp Dr John Keen
Chair

Email: nrescommittee.london-cityandeast@nhs.net

Enclosures: *"After ethical review – guidance for researchers"*

Copy to: *Ms Lubena Mirza, South West Yorkshire Partnership NHS Foundation Trust*