

**An investigation of content and therapeutic change: a
comparison of Cognitive Behaviour Therapy and
Interpersonal Therapy in the treatment of depression.**

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Abstract

Background

Different therapies have different theoretical backgrounds which makes their comparison difficult. Process research seeks to understand what the common mechanisms are at work which contribute to successful outcome. The current study sought to compare the content of two therapies (Cognitive Behaviour Therapy and Interpersonal Therapy) in the treatment of depression and measure any changes that participants reported.

Method

Taped therapy sessions of IPT and CBT were transcribed and a coding scheme measuring content of therapy was developed. Participants' accounts of therapeutic change were recorded between the two models of therapy across three time periods using a mixed design. The times periods were divided into: beginning, middle and end of therapy. Quantitative content analysis was used to measure frequency of occurrence of categories in therapy. Qualitative Content Analysis was used to compliment quantitative findings and to compare participants' accounts of change between the beginning and end of therapy.

Results

The results indicated that differences in content reflected the theoretical background of both therapies. The categories: affect expression, task activation and review, behavioural change and cognitive change, solution generation, discussion of the model, homework and

assumptions occurred significantly more in CBT compared to IPT. All other differences between the models were not significant.

Differences in content of therapy occurred between the beginning, middle and end of therapy. There was a reduction in symptoms of depression for participants in both groups as measured by the BDI but this reduction was not significant.

The discussion related the findings to the current literature and presented ideas for future research.

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It's over...or have I just begun....

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1.0 Introduction

1.1 General overview

This study considers three ideas: (1) are therapies different? Specifically, does their content differ, (2) do patients report changing throughout this process? And (3) does change relate to what they have been doing in therapy? To enable an equal comparison of content, it is essential that each therapy is treating a similar problem. It was decided to use two therapies which are similar in duration and both would treat depression: Cognitive Behavioural Therapy (CBT) and Interpersonal Therapy (IPT). Both have different theoretical backgrounds, different styles in terms of therapist interacting with patient, and different tasks during therapy.

This introductory chapter will offer an explanation of the terms used in this thesis: It will begin with a definition of psychotherapy, followed by a discussion of the context of therapy for depression. The next part of this chapter will explain the context of the current study and the therapies under investigation. The following section will discuss the evidence for these therapies and the process research which has critically looked at the evidence and tried to deconstruct what happens in therapy and how this contributes to outcome. Finally, the research aims of this study will be put forward.

1.2 What is psychotherapy

1.2.1 General definition

Psychotherapy is a term which encompasses all psychological therapies. It is a treatment delivered by talking to an individual with the aim of reducing their psychological distress. The treatment is delivered by the process of patient and therapist engaging collaboratively in a process of exploration and discovery which eventually should lead to change in the patient's lifestyle or outlook (Dryden, 2002). In the context of mental health, psychotherapy specifically aims to help patients cope with impairments in their psychological functioning which may have contributed to or maintained their mental health difficulties. Strupp (1978, cited in Bergin & Garfield, 1994) described psychotherapy as "an interpersonal process designed to bring about modifications of feelings, cognitions, attitudes and behaviour which have proved troublesome to the person seeking help from a trained professional." Therapies are conducted according to a model that guides the therapist's techniques and techniques are often adjusted depending on a model of psychopathology which in turn generates procedures for relieving distress (Roth & Fonagy, 2005).

1.2.2 Development of psychological therapy

Since the 1960s approximately four hundred psychological therapies have been developed to help people overcome psychological difficulties (Kazdin, 1986; McCullough, 2000; Bergin, 1994).

1.2.3 Types of psychotherapy

Clearly, given the development of over four hundred therapies, there is a broad diversity of interventions. In the main, they can be encompassed under the following categories: Psychodynamic psychotherapy, Behavioural and cognitive-behavioural psychotherapy¹, Interpersonal psychotherapy, Strategic or systemic psychotherapies, Group therapies and Counselling. Each orientation provides a model of human behaviour as well as a focus for intervention.

1.2.4 Format of therapy

Psychological treatment may be offered to individuals, families or groups. It may be offered for a fixed, short-term period, or it may be open-ended. The format differs in that therapy may be offered five times a week, once weekly, fortnightly or monthly. The setting may be in-patient, outpatient or community based. Generally, psychological therapies and psychodynamic psychotherapy are used in the National Health Service (NHS). Psychological psychotherapies differ from psychodynamic psychotherapy in that whilst they still place some emphasis on understanding the role of past relationships, they are generally more focussed on current difficulties. They tend to be short term, ranging from

¹ The terms CT and CBT are used interchangeably in the literature but refer to the same therapy. Historically cognitive therapy was named CT and recently evolved into cognitive behaviour therapy (CBT).

12-20 weekly/ fortnightly sessions, whilst psychodynamic psychotherapy ranges from six months to several years (in psychoanalytic psychotherapy) on a weekly or several times a week basis (Roth & Fonagy, 2005).

Therapies offered by the NHS generally encompass treatment for most psychological disorders. This study focuses on two different therapies in the treatment of depression: CBT and IPT. This chapter will now go on to explain what depression is before discussing how these therapeutic interventions aim to alleviate depression.

1.3 What is depression?

1.3.1 Definitions of depression

Depression is a clinically diagnosable condition. Symptoms typically include mood disturbance accompanied by sleep difficulties, change in appetite, retardation of thinking, attitudes of hopelessness, helplessness, pessimism and often suicidal tendencies (Klerman, DiMascio, Weissman, Prusoff & Paykel, 1974).

The diagnostic criteria for depression from the American Psychiatric Association's Diagnostic and Statistical Manual (American Psychiatric Association, 1994) requires at least two weeks duration of such symptoms plus evidence that their intensity and pervasiveness have impaired the individual's usual social role performance and personal activities.

Depression is further defined in terms of unipolar, bipolar and dysthymia (American Psychiatric Association, 1994). Unipolar depression, also known as Major Depressive Disorder (MDD) induces behavioural changes (e.g. reduced motivation), cognitive changes (e.g. low self esteem and negative memory biases) along with physical deficits (e.g. sleep, hunger and sexual functions). Diagnostic criteria for MDD (American Psychiatric Association, 1994) require that at least five acute symptoms persist over the same two week period. In contrast, dysthymia is a mild but chronic form of depression which may persist for several years. Various subtype features of MDD have been identified in addition to the major classifications: (a) melancholic features; (b) atypical features; (c) psychotic features and (d) depression with catatonic features. These subtypes can be associated with MDD or selectively associated with manic episodes in Bipolar Disorder (Checkley, 1998).

1.3.2 Prevalence of depression

It is estimated that 80 million people, or between 4-8% of the population experience depressive symptoms that meet the full criteria for a clinical diagnosis (e.g. Weissman & Boyd, 1983). Prevalence rates are difficult to measure because only a small percent of individuals experiencing mental health difficulties present to physicians or mental health professionals (Bebbington, Meltzer, Brugha, Farrell, Jenkins & Ceresa, 2000; Goldberg & Huxley, 1980). Two large scale community surveys provide data on the prevalence of psychiatric disorders in the United States: 1) The National Institute of Mental Health (NIMH) Epidemiologic Catchment Area (ECA) Program (Robins & Regier, 1991) and the National Comorbidity Survey (NCS) (Blazer, Kessler, McGonagle & Swartz, 1994). These

studies estimate a one year prevalence for major depressive disorder (MDD) between 5.4% and 8.9%.

The rate of depression has increased over the last 50 years and the age of initial onset is declining, with 15-24 years being most at risk (Kessler, McGonagle, Zhao, Nelson, Hughes & Eshleman, 1994). Studies over recent years have indicated that prevalence varies by gender and age, with estimates that prevalence in women is twice that of men and greater in younger adults (e.g. Fombonne, 1998). There are a number of postulated reasons for this, primarily: (1) It is suggested that both women and younger adults may be more willing to admit to difficulties (Roth & Fonagy, 2005), (2) men are more likely to suppress depression through substance abuse (Klerman & Weissman, 1989). There is evidence that prevalence in younger age groups is increasing aswell as overall prevalence (Burke, Burke, Rae & Regier, 1991; Fombonne, 1998; Klerman & Weissman, 1989).

1.3.3 Economic implication of depression

The publication of the London School of Economic's Depression report (Layard, 2006) highlighted depression as a social and economical priority estimated at costing the UK approximately £12 billion per year. The report, urges that psychological therapy should be made available to all people suffering from depression, chronic anxiety and schizophrenia due to its benefit in long-term outcomes. This was based on the guidelines from the National Institute for Health and Clinical Excellence (NICE, 2004). Layard (2006) stated a need for an extra 10000 therapists within the next seven years. It was suggested that 5000 of these should be "clinical psychologists" and another 5000 "psychological therapists"

could be trained from among the 60,000 nurses, social workers, occupational therapists and counsellors already working in mental health in the NHS. Such a service would pay for itself in the reduced expenditure on incapacity benefits from people being able to return to employment.

1.3.4 Treatment of depression

Traditionally, psychological disorders were treated with pharmacological interventions and evidence exists for the efficacy of pharmacotherapy in the treatment of depressive disorders (e.g. Paykel & Priest, 1992).

More recently, the development of psychological treatments has become more popular in treating depression and other psychological disorders (Parker & Fletcher, 2007). Patients are now asking for psychological therapies to help with the mental health difficulties (Parker & Fletcher, 2007). A number of factors have contributed to patient preferences for non-drug therapies; these include contraindications to pharmacotherapy, the nature of the presentation; particularly co-morbidity, failure to respond to medication and non compliance with antidepressants (Roth & Fonagy, 2005). With pressure on the economy and the emphasis on evidence-based practice, there is a need for interventions to be both cost effective and effective for patients (Roth & Fonagy, 2005).

1.4 Measuring effectiveness and efficacy of psychotherapy

In this climate of evidence-based practice, the effectiveness and efficacy of therapeutic interventions have undergone varying degrees of evaluation and comparison using

methodologies such as randomised controlled trials (RCTs) and Meta analyses. Cognitive behavioural therapy (CBT) and interpersonal therapy (IPT) are at the forefront of psychological treatment for depression. Their outcomes for depression have been evaluated as successful across many trials (e.g. Markowitz, 1994; Elkin, Shea, Watkins, Imber, Sotsky & Collins, 1989).

1.5 Cognitive behavioural therapy (CBT)

1.5.1 Theoretical basis

The roots of behavioural and cognitive behavioural interventions are in classical learning theory (conditioning and operant learning) (e.g. Thorndike, 1911; Skinner, 1938) and in social learning theory (Bandura, 1977). Cognitive behavioural therapy (CBT) was developed from cognitive psychology (Beck, 1974). Cognitive psychology, loosely defined, is the study of mental processes which intervene between stimulus and response and includes activities such as thinking, remembering and perceiving (Beck, 1963). In the 1970's, Aaron Beck applied the relevance of these processes to therapy. Beck's cognitive therapy (1963, 1974) is based on the assumption that depressed people commit frequent errors in logic or thinking that produce a negative view of the self, the world and the future, known as the cognitive triad. CBT seeks to provide new information processing skills through strategic intervention designed to identify errors in logic that produce maladaptive beliefs or cognitions, test the beliefs against reality and finally modify them if necessary. It is suggested that underlying these negative thoughts are beliefs and assumptions about oneself and others which are likely to have been learned and maintained through reinforcement and may contribute to depressive thoughts. This therapy is widely used

throughout the UK. CBT has been widely researched (e.g. Salkovskis, 1996; Clark & Fairburn, 1997).

1.5.2 Aims of CBT

The three main aims of CBT are: (1) to relieve symptoms and to resolve problems; (2) to help the client to acquire coping skills and (3) to help the client modify underlying cognitive structures in order to prevent relapse (Beck, 1974).

1.5.3 Stages of therapy

Cognitive therapy is a problem-focussed, short-term, time-limited therapy. In the first session the therapist helps the patient to clarify the problems and establish priorities (Dryden, 2002). The therapist, in collaboration with the client will define problems that are amenable to therapeutic intervention. Cognitive therapy can be seen as “collaborative empiricism” (Beck, 1979), defined as a shared learning exercise between therapist and client in which the client acquires and practices new coping skills. The aim is that these skills will help deal with and ameliorate both current and future problems. In theory, CBT consists of a progressive series of interventions that focus first on activating behaviour, then changing specific distortions in thinking, and finally identifying and modifying core depressive schemas (Dryden, 2002). A schema is a long held belief about the self, the world and others (Beck, 1963).

The final goal of therapy is the modification of maladaptive schema (Beck, 1979). This does not mean changing all of them, only those that are assumed to be causing problems.

According to cognitive therapy, beliefs which are rigid (do not change), global (relate to all situations) and self-referent predispose the individual to future emotional problems (Beck, Hollon & Young, 1985). The aim is to make these beliefs more flexible.

1.5.4 Techniques

In CBT, the therapist and patient work together to gather data to disconfirm core depressive beliefs. Specific techniques used in CBT for depression include interventions specifically focussed on target symptoms, for example, graded tasks are assigned to combat psychomotor retardation and pleasurable activities are scheduled to counter-act anhedonia (Beck, 1979). Each session of CBT should begin by setting an agenda. The therapist adopts an active stance and behaves in a teacher like manner by coaching the patient to recognise and later adjust maladaptive patterns of thinking and behaviour (Dryden, 2002). It is largely thought to have conceptual clarity and coherence as a model which translates accurately to practice (Jones & Pulos, 1993).

1.6 Interpersonal therapy (IPT)

1.6.1 Theoretical basis

According to Interpersonal Theory (Weissman & Markowitz, 1994), IPT is focussed upon the relationship between mood and interpersonal events. IPT is not concerned with the origin of depressive symptoms but uses their connection with interpersonal problems as a treatment focus. Interpersonal theory states that disturbing events and psychosocial stressors may precipitate depression whereas having confidantes and other intimate relationships may protect against depression (Klerman & Weissman, 1989). It is understood

that once a depressive episode arises, it impairs interpersonal functioning and depressed patients tend to withdraw socially. As depression compromises a person's mood, energy, enjoyment, cognitive functioning and expectations of each encounter they have with others, the individual functions less competently at work and in relationships (Klerman & Weissman, 1989). Interpersonal theory avoids etiological statements about causality, it argues that for clinical purposes causality does not matter. The salient therapeutic points are that the individual learns to link mood with interpersonal contacts and to recognise that by appropriately addressing interpersonal situations they may simultaneously improve both their relationships and their depressed state (Klerman & Weissman, 1989). IPT for depression is a focussed treatment for depressive symptoms, not aimed at character or personality change (Klerman, Weissman, Rousaville & Chevron, 1984). In principle, the interpersonal therapist adopts a hopeful, supportive, non-mutual and active stance. The target of intervention of IPT is face-to-face interaction with significant others (Klerman *et al*, 1984). The treatment focuses on elucidating patterns in interpersonal relations and linking recent interpersonal events to mood (Klerman *et al*, 1984; Weissman & Markowitz, 1994).

IPT is also a focussed, short-term, time-limited therapy that emphasises the current interpersonal relations of the depressed person. It primarily deals with (1) symptom function, (2) social and interpersonal relations and (3) personality and character problems (Klerman *et al*, 1984).

One of the key tenets of IPT is its endorsement of the “sick role”. This means defining the depression as an illness that the individual is suffering from, removing the concept of fault from the individual and legitimising their problems (Weissman & Markowitz 1994).

1.6.2 Aims of IPT

IPT aims to facilitate recovery of acute depression by: (1) relieving depressive symptoms and (2) helping the patient develop more effective strategies for dealing with interpersonal problems associated with the onset of symptoms (Klerman *et al*, 1984).

1.6.3 Stages of therapy

The strategies of IPT occur in 3 phases of treatment: During the first phase of treatment, which normally consists of 1-3 sessions, the therapist conducts a careful diagnostic interview and gathers pertinent psychiatric history. Particular attention is devoted to detailing the patient’s current close relationships and patterns of social functioning (Klerman *et al*, 1984). Any changes in interpersonal relationships proximal to the onset of depression are highlighted as a way of defining the treatment focus and establishing the context in which depressive symptoms will be understood (Weissman & Markowitz, 1994). The interpersonal therapist clearly links the patient’s depression to his or her current interpersonal relationships (Klerman *et al*, 1984). The therapist also explicitly discusses the diagnosis with the patient and explains what the treatment will entail (Klerman *et al*, 1984).

The middle phase of IPT for depression focuses on one of four interpersonal problem areas seen as the antecedent to depression: (1) Grief, following the death of a loved one; (2) Role disputes (conflicts with significant person in the patient's life); (3) Role transition (changed life situation) or (4) Interpersonal deficits (significant social skills' problems including starting and maintaining relationships) (Klerman *et al*, 1984).

The final phase, which is the termination phase includes discussing feelings about the termination, reviewing progress and discussing the remaining work still to be done (Klerman *et al*, 1984).

1.6.4 Techniques

The therapist and patient work within one of the identified problem areas. In the case of grief, the therapist facilitates the mourning process and helps the patient to discover new activities and relationships to compensate for the loss (Klerman & Weissman, 1993). In role disputes the therapist helps the patient explore the nature of the relationship and ways to resolve the conflict (Klerman & Weissman, 1993). If there are significant disputes that cannot be resolved, the possibility of ending the relationship is considered. With regard to role transition, the therapist acts as a guide in recognising the positive and negative aspects of the new role as well as the old role which has been abandoned (Klerman & Weissman, 1993). The final phase of IPT is aimed at recognising and consolidating treatment gains and discussing preventative measures for the future (Klerman & Weissman, 1993).

General therapeutic techniques include reassurance, clarification, improving communication (frequently by encouraging patients to tell others how they feel), testing perceptions and performance through interpersonal contact (similar to CBT) and decision analysis (helping patients to explore different possibilities and their consequences in interpersonal relations) (Weissman & Markowitz, 1994).

1.6.5. A summary of contrasts between CBT and IPT

As has been discussed previously, CBT and IPT are similar in many domains; in their aims of symptom reduction, in various therapeutic techniques such as collaboration and empathy offered, but they differ in their methods of formulation and consequently their therapeutic intervention. IPT focuses *solely* on identifying and linking interpersonal stressors or conflicts to mood symptoms and improving interpersonal functioning to reduce depressive symptoms. In this way it differs from CBT which encompasses a broader biopsychosocial formulation and can focus its' intervention on several of the etiological or maintaining factors.

CBT aims to reduce depressive symptoms by teaching patients the skills required to restructure their thinking patterns so that the world can be viewed in a less pessimistic light. For some CBT participants, acquiring and applying skills in cognitive restructuring and / or making a cognitive shift may be a relatively rapid occurrence, and may even lead to an improvement in symptoms. In contrast, IPT focuses on changing patterns of interpersonal functioning which is likely to be a more gradual iterative process and less under individual control than cognition (Stiles & Shapiro, 1994). Consequently, sudden gains in IPT

compared with CBT may reflect a temporary improvement in interpersonal relationships and mood, and have less impact on eventual outcome (Parker & Fletcher, 2007). Alternately, those who experience sudden gains in IPT may be those whose mood is more reactive to interpersonal interaction, for better or worse.

IPT operates by processing emotion and making adjustments to interpersonal interactions rather than using step by step methods to adapt cognitions as CBT does. Thus IPT is arguably more complex than CBT and sudden gains occurring in IPT may be more subject to reversal due to either complexity or interpersonal setbacks and have limited relationship to ultimate outcomes (Elkin *et al*, 1989).

Differential demand characteristics may be at work in these two therapies. In CBT, patients are praised for their ability to minimise negative affect, in both severity and duration, through the skilful use of cognitive restructuring (Stiles & Shapiro, 1994). In IPT, patients are asked to discuss and process affective experiences as they relate to interpersonal interactions more deeply than is done in CBT. Thus while CBT may prompt patients to downplay mood by focussing on cognitions surrounding affective changes, IPT emphasises mood fluctuations, particularly those that occur in relation to interpersonal stressors. This differing set of therapeutic expectations may promote different patterns of symptom identification and reporting between the two interventions (Paykel & Priest, 1992).

1.7 Outcome studies of CBT and IPT

1.7.1 Methodology

The development of methodology to test treatments for effectiveness has led to an increase in awareness of the benefits of psychological therapy. Parker & Fletcher (2007) highlighted that in the 1960s and 1970s, antidepressant drugs were introduced and the placebo controlled trial became the key evaluative paradigm.

As testing methodology improves, it has become increasingly possible to measure and evaluate the effects of treatment. In addition to using randomised treatment assignment and independent blind clinical assessment of outcome, there has also been an important methodological advancement for psychotherapy clinical trials: namely, operationalised and assigned diagnostic criteria which helps with homogeneous patient groups (Lambert, 1994). Furthermore, operationalised and designed psychotherapy procedures help to compare goals and focus between therapies (Task Force on Promotion and Dissemination of Psychological Procedures, 1995). These advances help to allow for replication of studies.

Randomised controlled trials (RCTs) are considered the gold standard of testing methodologies for the demonstration that a treatment is effective (Roth & Fonagy, 2005). This applies not only to psychotherapy research, but to all evidence-based medicine in general (Task Force on Promotion and Dissemination of Psychological Procedures, 1995).

Psychotherapy research has shown that a variety of therapies are effective for people with emotional problems, however researchers have not yet reached the point of conclusively

determining which therapies people respond best to (Roth & Fonagy, 2005). Similar to treatment via medication, severity and chronicity are associated with poor outcome in the treatment of depression. (Dryden, 2002).

1.7.2 Outcome studies for CBT and IPT

1.7.2.1 General introduction

Tarrier (2002) highlighted that the evidence for the efficacy of CBT is considerable, whereas there is little evidence for the more traditional psychotherapies. Consequently, owing largely to the considerable evidence base, CBT has advanced as the treatment of choice. NICE (2004, pg 24) formalised guidelines based on the evidence base, stating “when considering individual psychological treatments, for moderate, severe and treatment resistant depression, the treatment of choice is CBT”.

The American Psychiatric Association (APA) in 2000 stated that “CBT and IPT have the best documented effectiveness in the literature for the specific treatment of major depressive disorders”. However, Parker & Fletcher (2007) question this assertion as they regard the limitations of the evidence base supporting IPT and CBT. They argue that the majority of psychotherapy outcome studies in depression focus on CBT, often have inadequate sample sizes, and lack pill placebo control (i.e. they give medication in the trial but they do not consider a placebo form of medication). They argue that this can affect the quality of studies. One study sought to rectify this: The Treatment of Depression Collaborative Research Program (TDCRP, 1995).

1.7.2.2 The Treatment of Depression Collaborative Research Program (TDCRP)

The National Institute of Mental Health (NIMH) sponsored the Treatment of Depression Collaborative Research Program (TDCRP, 1995): a methodologically sound, multisite clinical trial comparing different forms of brief outpatient treatment for depression. Patients were randomly assigned to one of four patient conditions: (1) IPT; (2) CBT; (3) Imipramine + clinical management; (4) Pill placebo + clinical management as a double blind control group.

Initially, few differences in effectiveness of the four treatments were found post treatment (Elkin *et al*, 1989) and at 18 month follow-up (Shea, Widiger & Klein, 1992), however further analysis revealed slight differences in effectiveness. The imipramine and clinical management and the IPT conditions were marginally superior to both CBT and placebo + clinical management in treatment of more severely depressed clients (Elkin *et al*, 1989). IPT had comparable efficacy to CT² and imipramine at 16 weeks. (Elkin *et al*, 1989). In short, the TDCRP replicated the well established finding of a lack of systematic differences in the effectiveness of brief treatments for psychological disorders (Miller & Berman, 1983; Smith, Glass & Miller, 1980; Stiles, Shapiro & Elliott, 1986). The results of this study highlight how different modalities produce similar outcomes, which raises the question, are the modalities really different? What are the common mechanisms at work?

The TDCRP study was incorporated into a meta analysis (US DHHHS, 1993). Outcome data from 28 carefully selected randomised controlled trials of group and individual therapy for major depressive disorder were defined in categorical “recovered, not recovered” terms. It was found that the efficacy of individual cognitive therapy (CT) (response rate = 50%), behavioural therapy (BT) (55%) and IPT (52%) in the treatment of acute episodes were not significantly different and compared favourably with pharmacotherapy (58%). They found that cognitive therapy is less effective in a group format (39%), BT is equally effective while IPT may be more beneficial if a significant other takes part.

In summary, the evidence appears to suggest that IPT and CBT help patients, although researchers remain unsure what the important and influential aspects are that contribute to the outcome, particularly when different therapies have similar outcome rates.

1.7.3 Outcome studies for IPT

IPT has been shown to reduce depressive symptoms in numerous clinical trials (e.g. DiMascio, Weissman, Prusoff, Neu, Zwilling & Klerman, 1979; Elkin *et al*, 1989; Mufson, Weissman, Moreau, & Garfinkel, 1999; Mufson & Dorta, 2004; Weissman, Prusoff, DiMascio, Neu, Goklaney & Klerman, 1979).

1.7.4 Outcome studies of IPT as a maintenance therapy of depression

There are few adequate follow up or maintenance treatment studies examining the role of psychotherapy in the prevention of relapse of depression. There is evidence from a well-designed 3 yr study of maintenance IPT (undertaken at monthly intervals) that IPT alone

may significantly delay the onset of relapse in those individuals not receiving antidepressant medication (Frank, Kupfer & Perel, 1990).

Early studies (e.g. Klerman *et al*, 1974; Weissman *et al*, 1979; DiMascio *et al*, 1979) demonstrated the efficacy of maintenance IPT compared with low contact treatment (defined as brief monthly visits for assessment). The researchers found that maintenance IPT compared with low contact visits significantly enhanced social and personal functioning for patients who did not relapse, but the effects of IPT on social functioning took 6-8 months to become apparent. Patients receiving IPT compared to low contact were significantly less socially impaired, particularly in work, with extended families and in their marriages (Weissman *et al*, 1979). This lends support for the mechanisms at work in IPT, specifically that the outcomes offered in these studies relate to interpersonal change, however, there may be other symptoms or changes that have occurred that simply are not measured in these studies.

1.7.5 Outcome studies of CBT as a maintenance therapy of depression

Blackburn, Jones & Lewin (1986) undertook a study of maintenance CT (approximately 5 sessions were given in the 6 months following acute treatment). At 2 yr follow up, the relapse rates in patients who had received pharmacotherapy (72%) was significantly higher than that in patients who had received CT either alone or in combination with drugs (22%). This would suggest a possible role for CT in preventing relapse.

A study by Evans *et al*, (1992, cited in Hollon *et al*, 1993) comprises a follow up of a cohort of patients treated in an RCT of CT and pharmacotherapy. The relapse rate in the CT group (20%) was non-significantly lower than that in the drug continuation treatment group (27%), but was less than half that of the group whose drug treatment was withdrawn when their depression remitted (50%).

A meta analysis by De Maat & Dekker (2006) found equal efficacy for psychotherapy over six months (including cognitive therapy) and anti depressant medication for depression in the short term. Psychotherapy was associated with lower relapse rates at follow up.

1.7.6 Studies on combination treatment

Combination treatment is defined as combining two modes of treatment, most frequently medication and therapy. Studies have indicated that combination treatment is the most effective, particularly at one year follow-up. (e.g. Weissman, Kasl & Klerman, 1976; Weissman & Klerman (1977). Weissman *et al*, (1979) stated that patients receiving combination treatment have greater improvement in symptoms, lower attrition and lower chance of symptomatic failure. They are also less likely to discontinue treatment before reaching the end.

Di Mascio *et al* (1979) stated that the overall rate of symptomatic improvement is similar to that of patients receiving IPT alone compared to tricyclics alone and both were better than non scheduled treatment, however the two regular treatments had a different impact on

symptoms. IPT impacted on improving mood, work performance and interests, suicidal ideation and guilt. Amitriptyline had an impact on vegetative signs and symptoms of depression: primarily sleep and appetite disturbance and somatic complaints.

Hollon *et al* (1993) found a non-significant trend for symptomatic improvement in those with more severe disorders in those receiving a combination of pharmacotherapy and CT as opposed to either treatment alone. Meta analytic data from 8 outcome studies (CT=5) suggest that neither CT, BT or IPT plus antidepressant are any more effective than pharmacotherapy alone (US DHHHS, 1993).

1.7.7 Summary

These findings concern outcome only, defined as an improvement in depressive symptoms, a reduction in depressive symptoms and length of time until relapse. It is interesting that although most therapies have different theoretical backgrounds, their outcomes in the literature are similar. This raises the question, do therapies differ? Are these differences in style or content?, and if so how do they differ? Now that psychological therapy has been proven effective, it is crucial to investigate what are the processes involved in psychological therapy, and what the mechanisms are by which people are helped to understand and eventually change what maintains or contributes to depressive symptoms. Understanding what promotes therapeutic change requires examining the treatment process in addition to outcome (Ablon & Jones, 1999).

1.8 Process studies

1.8.1 What are the components in successful therapy?

A key paper by Frank (1972) drew links between psychotherapy and “healing ingredients” across culture and time. He identified four non-specific therapy factors: (1) An emotionally charged, confiding therapeutic relationship, (2) A healing setting, (3) A rationale providing a plausible explanation for the symptoms and a logic for the recommended treatment procedure and (4) A treatment procedure believed by both patient and therapist to be restorative.

1.8.2 Outcome studies of the components of therapy

Jacobsen *et al* (1996) undertook a study to determine what components of CBT contributed to its efficacy, testing: (1) Behavioural activation, (2) Coping strategies for automatic thoughts and depressenogenic schemas and (3) Modification of core depressenogenic schemas. The authors found that outcome at termination and at follow up did not differentiate the three presumed prototypic components. The authors observed that dismantling of “ probably the most established psychological treatment in existence failed to demonstrate that the components of the treatment were responsible for the benefit”.

Imber, Pilkonis & Sotsky (1990) in another TDCRP analysis concluded that neither therapy showed clear and consistent effects on measures related to their theoretical origin, i.e. cognitions for CBT and social adjustment for IPT.

Ahn, Wampold, Maltzman, Chwalisz & Coleman (2001) found no support for specificity, i.e. that CBT will be better for those with irrational thoughts and IPT for those with maladaptive relations. Wampold (2001) suggested that common factors accounted for nine times more variability in outcome than specific ingredients. His meta analysis estimated that specific therapeutic effects accounted for only 8% of the variance. Sotsky *et al* (1991) found that depressed patients with fewer dysfunctional attitudes (the suggested theoretical lever for CBT) had a superior response to CBT. Ablon and Jones (2002) also looked at the TDCRP study and argued that both IPT and CBT when practiced strongly resembled the ideal prototype for CBT.

In summary, process research that compares one model with another fails to demonstrate significant differences between models (e.g Bergin & Garfield, 1994; Jacobsen *et al*, 1996). Wampold (2005) concluded that (1) psychotherapies intended to be therapeutic produce similar results, (2) there is no supporting evidence of the specific effects of the psychotherapy, (3) the evidence is consistent with improvement during psychotherapy more being a consequence of non-specific or common effects, for example, therapist factors and therapeutic alliance and (4) allegiance of the therapist to the treatment is strongly related to outcome and can shape differences between comparator treatments.

1.8.3 Examination of the evidence for specific therapeutic components

Several empirical studies offer evidence of the importance of therapeutic process. A significant body of literature indicates that the therapeutic alliance is a consistent predictor

of outcome (e.g. Alexander & Luborsky, 1986; Frieswyck *et al*, 1986; Hartley, 1985; Horvath & Greenberg, 1986; Marziali, 1991; Orlinsky & Howard, 1986.)

The therapeutic alliance is defined as the patient-therapist collaborative engagement in the therapy process. The literature states that it is a consistent predictor of patient improvement across a variety of psychotherapies in clinical problems (Constantino, Castonguay & Schut, 2002; DeRubeis *et al*. 2005).

Kim, Wampold & Bolt, (2006) who looked at the TDCRP stated that 8% of the variance was attributable to the therapist and 0% to the particular treatment that was delivered. This lends support for the idea that it is how therapy is conducted rather than what therapy is conducted (Wampold, 2005).

Lambert (1992, cited in Bergin & Garfield (1994) estimated that only 15% of improvement during psychotherapy was attributable to specific techniques. It is interesting to note that in contrast, it was concluded that 30% was attributable to the therapeutic relationship, 15% to expectancy effects and 40% to client variables and extra therapy factors.

1.9 Change in therapy

1.9.1 General introduction

Change may encompass a number of components. If we relate this to the therapies discussed, change may be behavioural, relating to behaviours that people have changed, for example, an individual who was not going outside is now going out for a walk once a day.

Another example of behavioural change is an individual who has now begun to take exercise or made a start on some work they had been avoiding. Change may be interpersonal, relating to how people relate to individuals in their lives. For example, an individual is now talking more to family members about their problems, or has begun to be more affectionate with their partner. Change may also be cognitive, relating to people's views about themselves or the world. An example of cognitive change would be an individual now recognises how negative their thinking is about work, and has begun to look for positives at work. Change may encompass many other components, some may be too subtle to note, some may be clear such as a reduction in depressive symptoms.

1.9.2 Change according to the cognitive model.

The cognitive model assumes that emotional and behavioural change is mediated by changes in beliefs and interpretations (Brewin, 1989). In therapy, this is achieved through systematic testing of these thoughts and beliefs. If incoming information is not consistent with our schema then we try to find ways of incorporating the new information into our existing belief systems, or we are faced with having to change the belief. For example, if a person's thoughts and underlying schema revolve around the belief that he or she is a failure, then being praised at work for something he or she did will naturally challenge this belief. Consequently, it is often a combination of external events combined with new awareness that helps to induce change (Teasdale & Barnard, 1993). Changes are likely to happen gradually and it is therefore difficult to pinpoint exactly when a change takes place. According to the cognitive model, change in therapy probably happens through a mixture of learning new coping strategies and modifying schemas (Brewin, 1989).

When looking to the mechanisms of change, it has been postulated that CBT promotes the control of negative affect through the use of intellect and rationality combined with rigorous encouragement, support and reassurance from the therapist (Woolley, Butler & Wampler, 2000). It is noted that patient resistance and negative affect are associated with negative outcome across treatments (e.g Roth & Fonagy, 2005).

1.9.3 Change according to the interpersonal model

The interpersonal model assumes that change or improvement in depression is mediated by increased ability to manage and influence interpersonal relationships and consequently mood (Klerman & Weissman, 1993). In therapy, this is achieved by underscoring the connection between coping well and improved mood (Weissman & Markowitz, 1994). For example, if there has been a recent event that has not gone well, for example an inability to assert oneself at work or express anger appropriately, both therapist and individual consider the options that are available to the individual to use in the future if a similar event occurs. Role-plays of alternative approaches to problems may be practiced in order to help the individual strengthen their social skills. Change usually occurs through a combination of success in the interpersonal situations that arise outside therapy and a consequential improvement in mood (Klerman & Weissman, 1993). It is thought that a combination of encouragement, empathy, support and understanding along with the practice of new acquired skills in interpersonal interactions help an individual to change their situation and improve their mood (e.g. Woolley *et al*, 2000).

1.9.4 When does change occur

When reviewing the literature, it appears that when there is an improvement in depressive symptoms this occurs early in therapy. Howard, Kopta, Krause & Orlinsky (1986) found that 60% of therapeutic gain accrues in the first 20-25 sessions. Furthermore, sudden gains have been found to occur across several treatment modalities (e.g. Andrusyna, Luborsky, Pham & Tang, 2006; Tang & De Rubeis, 1999; Tang, Luborsky & Andrusyna, 2002; Tang, DeRubeis, Beberman & Pham, 2005; Stiles, Leach, Barkham, Lucock, Iveson & Shapiro, 2003). This raises the question, at what stage in therapy is change mobilised? Is this simply a time factor or is this related to technique and stage of therapy? Ilardi & Craighead (1994) reported that most improvement occurred before formal cognitive structuring techniques in CBT, (arguably the cement of the cognitive model). Consequently, if change commonly occurs before specific techniques are delivered, it may be likely that it is not psychological mechanisms that mediate the change. The first few sessions of CBT tend to be characterised by forming a collaborative therapeutic alliance while a treatment rationale is formally presented (Beck, 1979). This may add support for the mechanisms of improvement being held either within the individual or in the forming relationship between the therapist and individual.

Tang & De Rubeis (2005) drawing from the theoretical underpinnings of CT, used the Patient Cognitive Change Scale (PCCS) (originally developed by Tang and De Rubeis, 1999) and found that CBT sudden gains were preceded by substantial cognitive changes in

the pre-gain sessions (the therapy session immediately preceding the sudden gain), particularly improvements in depressotypic cognitive style.

Tang and De Rubeis (2005) analysed many aspects of the pre-gain session and found that the pre-gain sessions and the control sessions did not differ significantly on the therapist's adherence to CBT techniques, therapeutic alliance, facilitative conditions, or therapist competence. However they did find that patients explicitly acknowledged many cognitive changes in the pre-gain sessions but very few cognitive changes in the control sessions. This suggests that in-session cognitive changes might have contributed in triggering CBT sudden gains.

1.9.5 Identification of change processes

Clinicians have identified the investigation of therapist and client behaviours that generate critical change events as the most pressing research necessary (e.g. Beutler, Engle, Mohr & Daldrup, 1991). It is thought that the therapist- client interaction is the context within which the content of therapy is embedded and which helps mediate or catalyse outcomes.

Identifying change events may be either inductive (based on observation) or deductive (based on theory), or a combination of the two. Inductive identification involves observation of therapy sessions to identify and build a description of change events. A deductive approach involves using theory to identify a change process and then testing the identified process to see if change occurs as predicted (Woolley *et al*, 2000). Process research is identified not by whether it is inductive or deductive, but by its focus on small

sequences of specific, reconstructible therapist and client change related interactive behaviours in therapy (Pinsoff, 1989).

A critical step in most process research involves identifying segments of therapeutic change called “change events”. Greenberg (1986) defines therapeutic change event as “an interactional sequence between client and therapist. It is a performance sequence that has a beginning, an end, and a particular structure that gives it meaning as an island of behaviour distinguishable from the surrounding behaviours in the ongoing psychotherapeutic process. It is intrinsically complex and composed of interconnected activities in a changing pattern, but it occurs within a continuous period of time and comes to some closure within the session.”

Change in therapy may be due to microinteractional sequences, events and episodes that have not been identified, but which are common across clinical models (Lambert (2002, cited in Bergin & Garfield, 1994).

Strict treatment protocols, necessary for replicable comparisons of global treatment models are generally not representative of the eclectic practice of therapy typical of most therapists (Gurman *et al*, 1986; Jacobson & Addis, 1993).

Process outcome research addresses the clinically critical concern of identifying the active ingredients or change mechanisms of successful therapy (Gurman, Kniskern & Pinsof, 1986; Jacobson & Addis, 1993).

1.9.6 Levels of process analysis

Greenberg (1986) delineates speech acts, episodes and relationships as three distinct levels of interaction process. An example of this is that a “therapist-client struggle” may be labelled “disagreement” at the speech act level, “resistance” at the episode level, or “weak therapeutic alliance” at the relationship level. The author argues that all process research needs to contextualise process variables within these process levels because change processes are seen as embedded in and varying according to specific clinical contexts and therefore cannot be studied in isolation.

Pinsoff (1989) hypothesised that to obtain clinically relevant results, process research must demonstrate both universality and reconstructivity which both facilitate a theoretical, clinical and research replication of observed interaction processes. Universality is the ability to capture common features of therapeutic process through language and measurement not tied to a particular theoretical model, while still capturing elements of process that may be unique to the model under study (Pinsoff, 1989). Houts, Cook & Shadish, (1986) & Wampler & Halverson (1993) recommend that while construct selection should be based on theory, measurement should be independent of theory.

Reconstructivity refers to measurement and description with sufficient clarity to allow clinicians and researchers to reconstruct an accurate picture of therapist-couple interactions that lead to the observed effects/ outcomes (Pinsoff, 1989). Reconstructivity can be based on detailed theoretical explication or meticulous observational description.

The authors put forward 2 process research methodologies:

Grounded theory (Glaser & Strauss, 1967)

Change Events Analysis (Strauss & Corbin, 1990)

1.9.7 Advantages and disadvantages of grounded theory

This methodology is useful when little is known about the phenomena under investigation (Glaser & Strauss, 1967). It captures the subtleties and allows a fresh, creative look with as few preconceptions as possible (Glaser & Strauss, 1967). The method is very labour intensive and draws heavily on conceptual skills of investigator (Woolley *et al*, 2000). Investigator biases need to be explicitly acknowledged and potential effects on theory building specified (Glaser & Strauss, 1967). There is difficulty in reporting results in a succinct manner because so much depends on transcribed examples. The approach can only be used on small samples. Finally, it is only appropriate for theory building, not for theory testing (Glaser & Strauss, 1967).

1.9.8 Change events analysis

Change events are chosen through directly observing the processes of therapy for situations that appear to bring about change (Greenberg, 1986; Rice & Greenberg, 1984). Both therapist and client behaviours are required to be coded. The identification of the change event, theory and coding are grounded in the “raw data”. Rigorous quantitative analysis can be performed and clinical and research replicability and resconstructivity are high (Strauss &

Corbin 1990). However, the method is labour intensive which makes it difficult with large samples. The information comes from the perspective of the observer (Strauss & Corbin, 1990).

1.9.9 Psychotherapy Process Q set (PQS)

PQS is a pan theoretical instrument designed to describe the process of psychotherapy, it captures patients' thoughts, behaviours and feelings, as well as interactive aspects of therapy process.

A study by Ablon and Jones (1999) examined the TDCRP therapies using a Psychotherapy Process Q Set (PQS); a comprehensive 100 item instrument designed to describe overall process of therapy. Item by item analysis of Q sets of individual therapy hours is used to describe precisely the nature of both specific and non-specific factors in brief therapy. It describes what happened in each session of the TDCRP and uses an hour of therapy as the unit of observation.

The results of Ablon and Jones (1999) study indicated that consistent with techniques prescribed by Interpersonal therapy, discussion centred on patients' immediate social context, (current relationships with important people in one's life) rather than childhood or developmental issues. IPT therapists' frequently clarified, restated or rephrased the patients' communication and identified recurrent themes in the patients' experience or conduct. These techniques were used most likely to encourage self-reflection about one's

role in interpersonal relationships. The results suggest that IPT represents a kind of “common factor” treatment with an emphasis on empathy, support and non-judgemental acceptance from the therapist.

Furthermore the authors found that discussion in CBT centred on cognitive themes and the patients’ current life situation. The therapists adopted an active and didactic stance and frequently provided explicit advice. The results replicated previous findings but Ablon and Jones (1999) found that the cognitive behavioural therapists also provided strong support, encouragement and approval in an effort to control negative affect.

When process in IPT and CBT were compared, a number of differences emerged on the individual q-item level; particularly in the areas of therapist stance, activity and technique. Both CBT and IPT shared an emphasis on similar themes of current relationships and self-image, therapists were very supportive, and patients were highly accepting, compliant and agreeable. The authors suggest this is a possible explanation for the absence of differential treatment outcomes in the TDCRP.

Authors also tested the extent to which the process ratings were merely early outcome ratings by comparing q ratings from session 4 and 12 only. They found that four of the 100 items of the q set significantly distinguished between the sessions early in treatment and the sessions later in treatment. Thus the process of the therapies changed very little over the course of the treatments.

The authors concluded that therapist techniques as measured by the PQS were not correlated with patient change, however they note that null correlations do not mean that a process component is inert (Stiles & Shapiro, 1994). The study of therapeutic alliance in the TDCRP also found that therapist contribution was not significantly associated with outcome, although low reliability and variability of therapist factor scores may have contributed to the nonfinding (Krupnick *et al*, 1996).

Results continue to suggest that specific techniques are not capable of independently predicting outcome in group designs in the way that patient characteristics are (Jones *et al*, 1992). Patient characteristics and therapist techniques occur as part of a complex interaction with the patient and their effect is determined by this context, in other words, specific interventions do not have fixed meaning independent of context and cannot be assumed to contribute discretely and uniquely to outcome, so this makes it difficult to identify the effects of particular kinds of intervention particularly in group designs that average effects across patient- therapist pairs.

1.10 Rationale for current study

This research is interested in how therapies differ in content, in focus of work, and if change occurs for the patient. The therapies chosen to be investigated had to be sufficiently different in orientation but of similar time frame to make the measurement of work done or change occurring comparable. CBT and IPT were chosen to be investigated as they met these criteria. It was also decided that the therapies should be treating a comparable problem or disorder to allow for comparison. Both therapies had been used to treat

depression so it was decided to compare both therapies, of similar duration and treating similar problems.

The current study used a resource of taped therapy sessions from a previous study carried out in 1999 investigating the outcome of brief structured psychotherapies for neurotic disorders in the National Health Service.

1.11 Details of previous study (1999)

1.11.1 Background to study

Data were gathered as part of a randomised controlled trial in 1999 comparing brief structured psychotherapies for neurotic disorders in Primary Care. The trial compared IPT and CBT and treatment as usual as an evaluation of the effectiveness of these interventions. The therapy sessions were recorded onto audiotapes for purposes of adherence to therapy and as a future teaching/ research resource.

1.11.2 Participants

Participants were recruited by direct referral from a mixture of rural and city centre GP practices. In total, two hundred and eighty eight participants were recruited. Participants were firstly assessed by research psychologists to establish diagnostic status and severity of symptoms. Participants were either diagnosed with Major Depressive Disorder or an Anxiety Disorder. Forty-two participants did not attend the assessment appointment, 70 did not meet inclusion criteria and 19 were withdrawn, either by withdrawing themselves or by their GP following allocation. One hundred and fifty seven were allocated a place in the

study. Participants were randomly allocated to one of three treatment groups: sixty-five underwent CBT; sixty-four underwent IPT; and twenty-eight received routine GP care known as “treatment as usual” (TAU).

1.11.3 Therapists

Sixteen therapists took part in the study; 9 provided CBT; 7 provided IPT. No therapist conducted both forms of therapy. The therapists included 4 clinical psychologists, 5 research psychologists, 3 psychiatrists, 1 nurse therapist and 4 community psychiatric nurses. All therapists were trained to an acceptable level on accredited training courses and were supervised by experienced clinicians during the investigation to ensure adequate and equivalent provision of psychotherapy.

1.11.4 Procedure

Following the initial assessment participants were randomly assigned to one of five treatment options: 1) early intervention CBT, 2) late intervention CBT, 3) early intervention IPT, 4) late intervention IPT and 5) routine GP care (treatment as usual (TAU)). All psychotherapy intervention groups were offered a minimum of 12 sessions. For those diagnosed with an anxiety disorder, further sessions were optional. At the end of sessions, participants were offered 3 follow up sessions over a six-month period. All therapy sessions were tape recorded for research and teaching purposes and to assess for therapeutic reliability.

To measure the effectiveness of the therapeutic intervention, assessment measures were completed at four stages during the investigation. Measures were completed at baseline (referral date), at the start of therapy, at the end of therapy and at a one-month follow up session.

1.11.5 Outcome measures

The outcomes of the therapies were measured according to symptom reduction, maintenance of change, subsequent use of health service and social and work functioning.

1.11.6 Initial results and conclusions

Outcome data are currently being analysed by the research team.

1.12 Purpose of current investigation

The main purpose of investigation was to find out:

1. What happens in therapy, specifically, what is the content of discussion between patient and therapist in therapy
2. Is the content different according to the type of therapy
3. Does content differ between beginning, middle and end of therapy
4. If there are any reported changes between the beginning, middle and end of therapy
5. If these changes are related to or adhere to their therapeutic model

1.13 Experimental hypotheses

These hypotheses were generated following the extensive literature reviewed in this section.

1. The content of therapy in IPT will have a more interpersonal focus, namely discussion surrounding significant relationships in the participant's life than CBT.
2. The content of therapy in CBT will focus more on thoughts, assumptions and core beliefs than in IPT.
3. There will be more expression of emotion/affect in IPT than CBT.
4. There will be more focus on formulation in CBT rather than IPT.
5. There will be more emphasis on setting tasks and homework in CBT than IPT.
6. There will be more therapist discussion of solutions in CBT rather than IPT.
7. If change occurs, there will be more emotional change and change in interpersonal relating in IPT than CBT.
8. If change occurs there will be more change in cognitive and behavioural aspects in CBT than IPT.

2. Methodology

2.1 Background to current study

The current study used a resource of taped therapy sessions from a previous study carried out in 1999 (as detailed in section 1.11 of the introduction) investigating the outcome of brief structured psychotherapies (IPT and CBT) for neurotic disorders in the National Health Service.

2.2 Design

Content of therapy and participants' accounts of therapeutic change were measured between two models of therapy across three time periods using a mixed design. The study combined quantitative and qualitative methodology.

2.2.1 Quantitative content analysis

Quantitative content analysis was used to measure frequency of occurrence of categories in therapy. Neuendorf (2002, cited in Schutt 2008) offers a definition of content analysis: "Content analysis is a summarizing, quantitative analysis of messages that relies on the scientific method (including attention to objectivity-intersubjectivity, a priori design, reliability, validity, generalizability, replicability, and hypothesis testing) and is not limited as to the types of variables that may be measured or the context in which the messages are created or presented".

2.2.2 Qualitative content analysis

Qualitative Content Analysis was used to develop a coding scheme to measure categories of content throughout therapy. Qualitative content analysis takes effect at the place where quantitative presentation reaches its limits. Qualitative content analysis has been defined as: “a research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns” (Hsieh and Shannon, 2005).

2.2.3 Content analysis

It was decided that content analysis would best fit this research question. Content analysis deals with communication content as the primary subject of investigation. It aims to make qualitative data quantifiable. This approach would facilitate a statistical comparison between CBT and IPT on components of content. As a research method content analysis endeavours to fit the scientific paradigm of social research. For example, all the decisions on variables, categories, their measurement and coding rules are made before the content is analysed. In this respect the approach differs from a purely qualitative approach such as grounded theory in which the researcher generates categories to fit the data (Bryman & Burgess, 1994). There is an emphasis on the reliability of the process as will be described in more detail in section 2.7.2. It follows the recommendations of Krippendorff, (1980) that the investigation is hypothesis driven and the aim is for findings to be representative and generalisable. “Content analysis is a research technique for making replicable and valid inferences from data to their context” (Krippendorff, 1980, p 12). The approach simultaneously facilitates handling of some of the intricacies and subtleties of the

therapeutic process, by ascribing a quantitative component to what are essentially the qualitative, narrative aspects of communication.

2.3 Participants

As discussed in the Introduction, participants were selected from a previous study comparing outcomes for depression between CBT and IPT. Selection criteria were based on audibility and completed therapy tapes. Six participants were included in this study, three underwent IPT and three underwent CBT. Each participant completed therapy which totalled between eleven and fourteen sessions. All participants had a diagnosis of depression.

Participant	Type of therapy	Sex of participant	Sex of therapist
1	IPT	F	M
2	IPT	M	M
3	IPT	F	M
4	CBT	M	M
5	CBT	M	F
6	CBT	F	F

Table 1: Distribution of patients according to therapy.

Participant	Type of therapy	Early therapy	Middle	End	Total sessions
1	IPT	1-4 (4)	5-10 (6)	11-14 (4)	14
2	IPT	1-4 (4)	5-9 (5)	10-13 (4)	13
3	IPT	1-4 (4)	5-10(5) [1]	11-14 (4)	13
					Total= 40
1	CBT	1-4 (4)	5-9 (5)	10-13 (4)	13
2	CBT	1-3 (3)	4-7 (4)	9-11(3)[2]	11
3	CBT	1-4 (4)	5-9 (5)	10-13 (4)	13
					Total= 37

Table 2: Distribution of sessions for each participant.

Notes to Table:

[1]: session 6 missing.

[2]: session 8 missing.

2.4 Materials

A Sony portable cassette recorder TCM-40DV was used to listen to each taped therapy session, which was subsequently transcribed into a word document using a laptop. A database was created using Microsoft Excel (2000) to record demographic information

identifying tapes that had been analysed. The statistical package SPSS for windows version 13.0 (SPSS Inc., 2007-2008) was used for analysis of the data.

2.5 Outcome measures

Of the outcome measures used in the original study, scores from the Beck Depression Inventory (BDI-II, 1961) (see appendix 1) were used as measures of depression in the current study. The BDI-II was selected as it is widely used and recognised measure of depression.

2.6 Beck Depression Inventory BDI-II (appendix 1)

The Beck Depression Inventory is a 21- question multiple choice questionnaire that is widely used for measuring the severity of depression. It is composed of items relating to symptoms of depression, such as hopelessness, irritability, feelings of being punished as well as physical symptoms such as fatigue, weight loss, and lack of interest in sex. The original version (Beck, Ward, Mendelson et al., 1961) was revised to coincide with the updated Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) criteria for depression (American Psychiatric Association, 1994). In the BDI-II participants are asked to rate how they have been feeling over the last two weeks. Each of the 21 questions on the BDI-II are scored on a value of 0 to 3. The questionnaire score provides a measure of the degree of severity of depression: 0–13 = minimal depression; 14 -19 = mild depression; 20-28 = moderate depression; and 29-63 = severe depression. The BDI-II has good internal

consistency, with a Cronbach's alpha coefficient of 0.85 (Ambrosini, Metz, Bianchi, Rabinovich & Undie, 1991).

2.7 Procedure

2.7.1 Pilot Study

Taped therapy sessions of CBT and IPT were identified to be included in the sample. Tapes were included in this study if they were of good enough sound quality to hear accurately and the sessions were complete (i.e. not interrupted half way through). Each participant had to have a majority of tapes complete and audible to be included in this study.

The purpose of the pilot study was to develop the content categories. Using the principles of content analysis, two complete sets of IPT taped therapy sessions were listened to for audibility and completeness. This totalled 24 sessions of hour-long therapy. On completion of this process the tapes were re-listened to, beginning with the first IPT participant and each of the twelve sessions (approximately one hour each) were transcribed. On completion of the transcription process for the first participant, totalling 12 sessions of therapy transcribed, the first session of therapy was reviewed and a preliminary coding of content was developed.

2.7.2 Development of the coding scheme

2.7.2.1 Initial coding

At the start of the study, the first participants' sessions represented the beginning of the process of understanding the therapy sessions and there were no pre-existing themes. A method of explorative coding or "initial coding" was used for the first stage of analysis. Initial coding is a means of giving a descriptive label or name to segments of narrative to summarise their possible meanings. This involved line-by-line or sentence-by-sentence descriptors. This led to each segment of text having a descriptive label of meaning. Sections of the audio tapes were listened to again during coding to allow the researcher to remain "close" to the data.

2.7.2.2 Focussed coding

The second stage of analysis was focussed coding which is more interpretive than initial coding. Transcripts were re-read (and sections re-listened to) taking into account the initial codes. Initial codes were grouped into possible or preliminary themes. For example, the initial codes of "talking more about problems" and "breaking problems down", were grouped together under a preliminary theme labelled "problem discussion". These preliminary themes informed the code used to listen and code subsequent participants. The narratives of subsequent participants provided further potential or more detailed descriptions of a theme.

The study began with the IPT taped sessions, and hence the coding evolved with a predominantly IPT content focus. In direct recognition of this, as the CBT sessions were

listened to, new categories and themes were added into the existing developing theme structure. The existing themes and new emerging themes were then carried into subsequent participants' coding.

2.7.2.3 Coding scheme details

A description of the coding scheme and an explanation of the categories is in Appendix 2.

The final coding scheme categories are as follows:

1. Problem discussion

Self generated problem

Therapist generated problem

2. Discussion of self

Self statements

Therapist generated self statements

3. Discussion of Significant others

Partner

Parents

Friends

Therapist generated statements of discussion of

Partner

Parents

Friends

4. Affect expression

Participant generated

Therapist generated

5. Formulation

6. Task activation and review

7. Change

Behavioural change

Cognitive change

Interpersonal change

Emotional change

8. Solution generation

Patient generated solution

Therapist generated solution

9. Discussion of model

10. CBT focused tasks

Homework

Discussion of thoughts

Assumptions

Core beliefs

2.8 Main study

2.8.1 Transcription

Therapy sessions were transcribed for three participants undergoing IPT (totalling forty one sessions transcribed) and the first CBT participant (thirteen sessions). Identification of data

to be transcribed was time consuming and required repeated listening, pausing to type and rewinding tapes. The approximate transcription time for an hour of therapy was some four hours. This encompassed approximately four hundred hours to transcribe the three IPT participants. Consequently a decision was made that for the final two CBT participants only coding-relevant items of script were transcribed, not complete sessions. For those scripts that were only item transcribed, the tapes were listened to and when an item was related to the coding scheme, the discussion was transcribed.

2.8.2 Coding Stage 1

The initial stage of coding involved listening to and transcribing 3 sets of IPT therapy and 3 sets of CBT therapy. The transcriptions for each session were read to identify categories of discussion, to the structure detailed in Section (2.5.2.3). Each time a reference was made to one of the categories, that section of tape was re-listened to and if the section could be defined as being related to a category, the relevant text was transferred into a word document under the title of the relevant category. This resulted in word documents devoted to each category, with lines of script entered underneath the category title. Beside each line of script was a number relating to the session the script came from. This process was repeated until a total of three IPT therapy sessions and three CBT therapy sessions had been listened to and coded into categories. An early example of coding from CBT participant 1 is in appendix 3.

2.8.3 Unit of data collection

A unit of coding was defined as a “section” of speech that was relevant to a category. This did not mean that each sentence related to the category was a separate item of coding, particularly during turn taking, when the therapist and participant may mention this up to six or seven times, but simply that section was rated as one item of data collection. This section was entered into the database under the relevant section. If several categories are mentioned within a section, the predominant theme being discussed was identified and data coded accordingly. However, often other themes would be considered as important and consequently these were additionally coded under the relevant categories.

This procedure was used for all sessions analysed. Completed coding forms displayed the category titles and paragraphs of text inserted beneath the corresponding category. Beside each section of text, the participant number and session number from which the comment came was placed in brackets. The transcriptions were divided into beginning, middle and end of therapy according to the divisions calculated in table two. This enabled a comparison of the discussions throughout the progress of therapy.

2.8.4 Coding stage 2: Quantitative Data Analysis; frequency counts

The frequency of each of the twenty eight categories being discussed by each patient was counted. This was done by counting each section as one occurrence relevant to a category. The frequency of occurrences were totalled according to patient, therapy and session. This allowed for statistical comparison of the results by therapy and session.

2.8.5 Coding stage 3: Measure change

Change is broken down into four components: (1) behavioural change, (2) cognitive change, (3) interpersonal change and (4) emotional change.

Change was measured by counting the frequency that someone mentioned a change in either of the four categories. To do this, the presenting problems were investigated from the beginning of each therapy and compared to the participant's statements of problems/change at the end of therapy. Change was understood as any movement in a previously stated problem. It was decided that a purer analysis of what changed for participants would be reflected in the participants' statements, therefore, participants' statements were measured throughout therapy and for purposes of analysis, only the statements from the end of therapy were used.

2.9 Analysis of reliability

Two trainee clinical psychologists were given a copy of the coding scheme and transcriptions prior to listening to two sessions from two different participants (one from CBT and one from IPT). When the rater had made a decision on coding a section of text according to the coding scheme, they placed the corresponding code number beside the text. Percentage of agreement between the researcher and the rater was calculated and will be presented in the results section.

2.10 Ethical issues

Ethical approval was sought and passed from a research ethics subcommittee for psychiatry and clinical psychology for the original study and informed consent was obtained to use this data for future research and/or training purposes (see appendix 4).

3.0 Results

3.1 Aims

The aim of this study is to measure content and change in therapy. There are three broad hypotheses:

1. Content: there will be a difference in emphasis of content between therapies.
2. There will be an effect of time, as therapy progresses, the content of therapy will change.
3. If change occurs, this will be reflected in the therapeutic model that has been used.

These hypotheses are further divided to allow for quantitative comparison. This section offers the quantitative results followed by the qualitative results. Firstly the results of the inter-rater reliability will be presented.

3.2 Inter-rater reliability of coding scheme

The inter-rater reliability (% agreement) of separate categories in the coding scheme is presented in the table below.

	Category of coding scheme	Inter-rater reliability (% agreement)
1	Self generated problem discussion	79
2	Therapist generated problem discussion	77
3	Self statements	88
4	Therapist generated Self statements	73
5	Discussion of partner	90
6	Discussion of parents	87
7	Discussion of friends	89
8	Therapist generated Discussion of partner	76
9	Therapist generated Discussion of parents	79
10	Therapist generated Discussion of friends	82
11	Self generated affect expression	69
12	Therapist generated affect expression	66
13	Formulation	62
14	Task activation and review	78
15	Behavioural change	69
16	Cognitive change	77
17	Interpersonal change	88
18	Emotional change	65
19	Patient generated solution	89
20	Therapist generated solution	78
21	Discussion of model	82
22	CBT focussed tasks: homework	75
23	Discussion of thoughts	75
24	Assumptions	66
25	Core beliefs	83

Table 3: Inter-rater reliability of categories.

Overall percent agreement for the coding scheme was 75%.

3.3 Quantitative data analysis

Data was entered into a database in raw form. Variables representing the various categories of the coding scheme were computed for content analysis. The variables were examined for departures from normality before data analysis commenced. This was to ensure that data fulfilled the recommendations for the use of parametric statistics (Greene & D'Oliveira,

1982). Data was presumed to be within the acceptable limits for use of parametric statistics if skewness fell within the range of – 2.00 and + 2.00.

3.3.1 Descriptive variables of sample

3.3.1.1 Age

Age data was unavailable for the six participants. This was due to a fault in the original database from 1999.

3.3.1.2 Sex

The following table shows the sex distribution of the sample with the therapy groups.

Participant	Type of therapy	Sex of participant	Sex of therapist
1	IPT	F	M
2	IPT	M	M
3	IPT	F	M
4	CBT	M	M
5	CBT	M	F
6	CBT	F	F

Table 4: Shows the sex of patients distributed according to therapy groups.

3.3.1.3 Session distribution

The following table shows the total amount of sessions investigated according to each therapy and the distribution of early, middle and end of therapy sessions.

Participant	Type of therapy	Early therapy	Middle	End	Total sessions
1	IPT	1-4 (4)	5-10 (6)	11-14 (4)	14
2	IPT	1-4 (4)	5-9 (5)	10-13 (4)	13
3	IPT	1-4 (4)	5-10(5) [1]	11-14 (4)	13
					Total= 40
1	CBT	1-4 (4)	5-9 (5)	10-13 (4)	13
2	CBT	1-3 (3)	4-7 (4)	9-11(3)[2]	11
3	CBT	1-4 (4)	5-9 (5)	10-13 (4)	13
					Total= 37

Table 5: Distribution of sessions for each participant.

3.3.1.4 Total occurrence of categories measured within the investigation

Figures 1a and 1b below show the total occurrence of categories throughout the therapy.

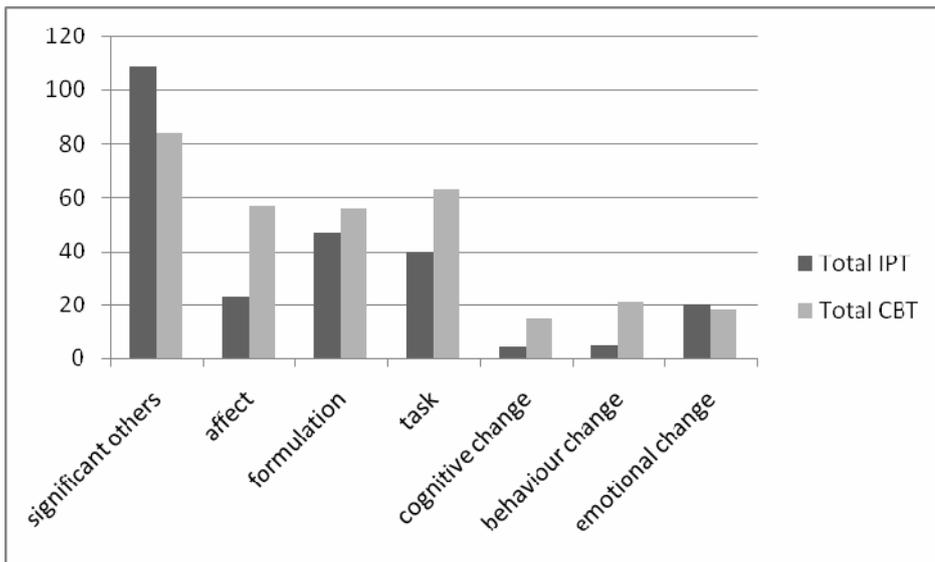


Figure 1a: Total occurrence of categories measured.

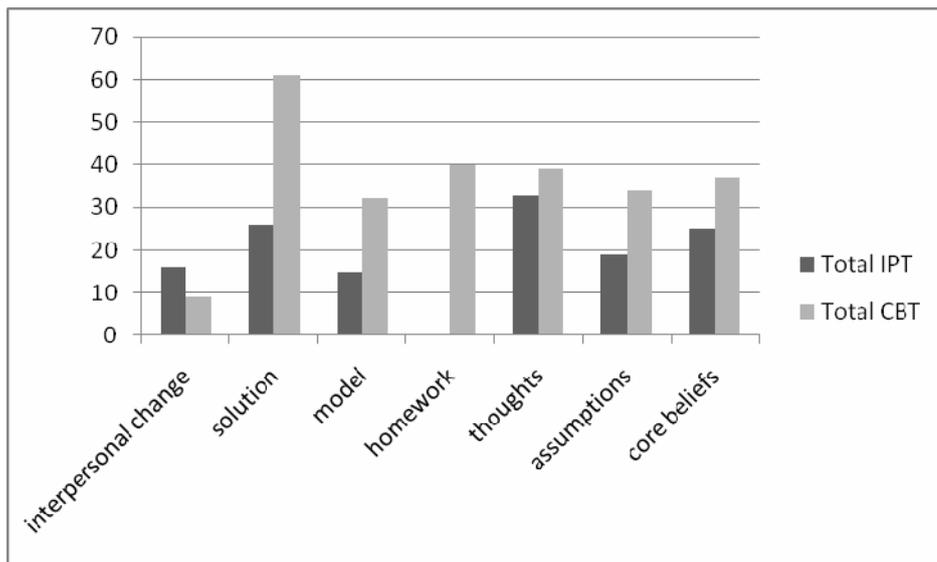


Figure 1b: Total occurrence of categories measured (continued)

The highest occurrence of a category measured throughout the course of therapy was discussion of significant others in both the IPT and CBT groups. The lowest occurring categories were interpersonal change and cognitive change. These results will be further investigated in section 3.3.4.

3.3.2 Outcome measure: BDI

Outcome was measured according to level of depression measured by change in BDI score between the beginning and end of therapy. Change in depression score was computed for all six participants (CBT N=3; IPT N= 3).

An initial comparison of CBT showed that in the end of therapy, there was a reduction in the mean BDI score from the beginning of therapy (19.66) to 8.33 a mean reduction of 11.33.

In IPT, there was a reduction from the mean BDI score at the beginning of therapy (30) to 24, a mean reduction of 6.0. in sum, there was a greater overall reduction in BDI scores for those who underwent CBT compared to IPT but this change was not significant.

3.3.3 Statistical Comparison of CBT and IPT

3.3.3.1 Hypothesis 1 - Discussion of significant others

The first hypothesis predicted that the content of therapy in IPT will have more of an interpersonal focus, namely discussion surrounding significant relationships in the participant’s life will occur more often in IPT compared to CBT.

Therapy type	Session	Mean	Std. Deviation	N
IPT	beginning	23.33	2.309	3
	middle	6.67	5.508	3
	end	6.33	5.508	3
	Total	12.11	9.347	9
CBT	beginning	9.33	4.041	3
	middle	9.00	5.196	3
	end	9.67	5.033	3
	Total	9.33	4.153	9
Total	beginning	16.33	8.214	6
	middle	7.83	4.956	6
	end	8.00	5.060	6
	Total	10.72	7.160	18

Table 6: Descriptive Statistics of mean occurrence of “discussion of significant others”.

Descriptive statistics indicate that there was a higher occurrence of discussion of significant others in IPT compared to CBT. IPT has the highest occurrence of discussion of significant others occurring an average of 23.33 times in the beginning sessions. This reduces dramatically to an even occurrence of 6.67 throughout the middle sessions and 6.33 throughout the end sessions. CBT has an even distribution of occurrence of discussion of significant others averaging 9 occurrences throughout beginning, middle and end of therapy.

The graph below further illustrates the descriptive statistics.

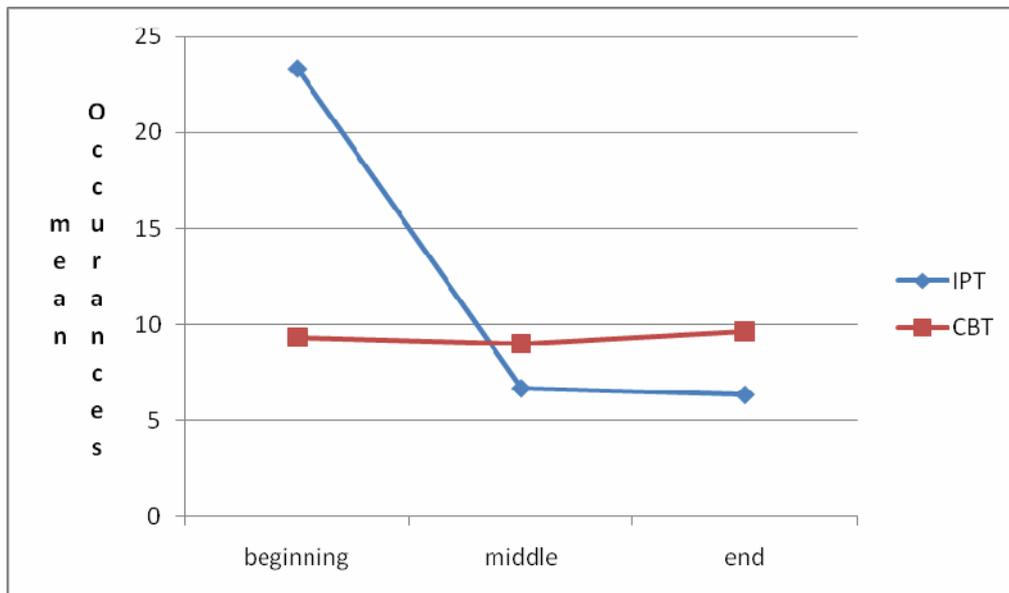


Figure 2: A comparison of mean occurrences of discussion of significant others between therapy types over session time.

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Type	34.722	1	34.722	1.547	.237
Session	283.444	2	141.722	6.314	.013
Type * session	284.111	2	142.056	6.329	.013
Error	269.333	12	22.444		
Total	2941.000	18			
Corrected Total	871.611	17			

Table 7: ANOVA analysis of discussion of significant others

ANOVA indicated that there was no main effect of therapy. Discussion of significant others differed significantly between time $F(2, 12) = 6.31, p < .05$, with significantly more discussion of significant others occurring in the beginning sessions of IPT compared to CBT. There was a significant interaction between therapy and time $F(2, 12) = 6.33, p < .05$, indicating that both therapies had different occurrences of discussion of significant others, with IPT having a significantly higher occurrence rate at the beginning of therapy compared to middle and end sessions, and compared to CBT. The small numbers involved make it impossible to do any further statistical breakdown of these effects.

3.3.3.2 Hypothesis 2 - Discussion of thoughts, assumptions and core beliefs

3.3.3.2.1 Hypothesis 2.1 - Discussion of thoughts

Hypothesis 2.1 states that there will be more discussion of “thoughts” within the CBT group because of the emphasis on this in this therapy compared with IPT.

Therapy Type	Session	Mean	Std. Deviation	N
IPT	beginning	3.33	2.082	3
	middle	4.33	2.517	3
	end	3.33	.577	3
	Total	3.67	1.732	9
CBT	beginning	3.67	2.887	3
	middle	5.00	2.646	3
	end	4.33	3.215	3
	Total	4.33	2.598	9
Total	Beginning	3.50	2.258	6
	Middle	4.67	2.338	6
	End	3.83	2.137	6
	Total	4.00	2.169	18

Table 8: Descriptive Statistics of mean occurrence of “discussion of thoughts”.

Descriptive results indicate that there is more discussion of thoughts in CBT than in IPT. In the beginning sessions of CBT, there is an average of 3.67 discussions, which increases to 5 throughout the middle sessions and decreases to 4.33 average occurrences throughout the end sessions. IPT has an average occurrence of 3.33 in the beginning sessions, which increases to 4.33 occurrences in the middle sessions and decreases in the end sessions to the same occurrence as in the beginning sessions (3.33).

The following graph (figure 3) will illustrate the descriptive statistics.

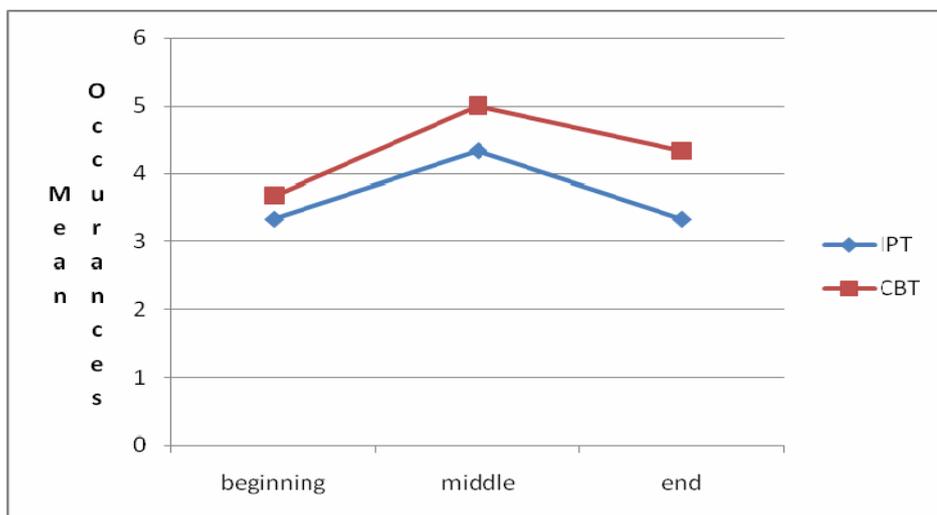


Figure 3: A comparison of mean occurrences of discussion of thoughts between therapy types over session time.

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Type	2.000	1	2.000	.327	.578
Session	4.333	2	2.167	.355	.709
type * session	.333	2	.167	.027	.973
Error	73.333	12	6.111		
Total	368.000	18			
Corrected Total	80.000	17			

Table 9: ANOVA analysis of thoughts

ANOVA indicated that there was no significant difference in discussion of thoughts between therapy, time or an interaction.

3.3.3.2.2 Hypothesis 2.2 - Discussion of assumptions

The hypothesis states that there will be more discussion of “assumptions” in CBT compared to IPT.

Type	Session	Mean	Std. Deviation	N
IPT	beginning	1.67	1.155	3
	Middle	2.67	1.528	3
	End	2.00	.000	3
	Total	2.11	1.054	9
CBT	beginning	1.67	2.887	3
	Middle	4.67	1.528	3
	End	5.00	1.000	3
	Total	3.78	2.333	9
Total	beginning	1.67	1.966	6
	Middle	3.67	1.751	6
	End	3.50	1.761	6
	Total	2.94	1.955	18

Table 10: Descriptive Statistics of mean occurrence of “assumptions”.

Descriptive results indicate that CBT has a higher occurrence of discussion of assumptions than in IPT. CBT begins with an average of 1.67 occurrences in the beginning sessions, which increases to 4.67 occurrences in the middle sessions and increases slightly to 5 occurrences in the end sessions. IPT has an average of 1.67 occurrences which is the same as CBT beginning sessions. This increases to 2.67 occurrences in the middle sessions and decreases slightly to 2 occurrences in the end sessions.

The following graph (figure 4) illustrates the descriptive statistics.

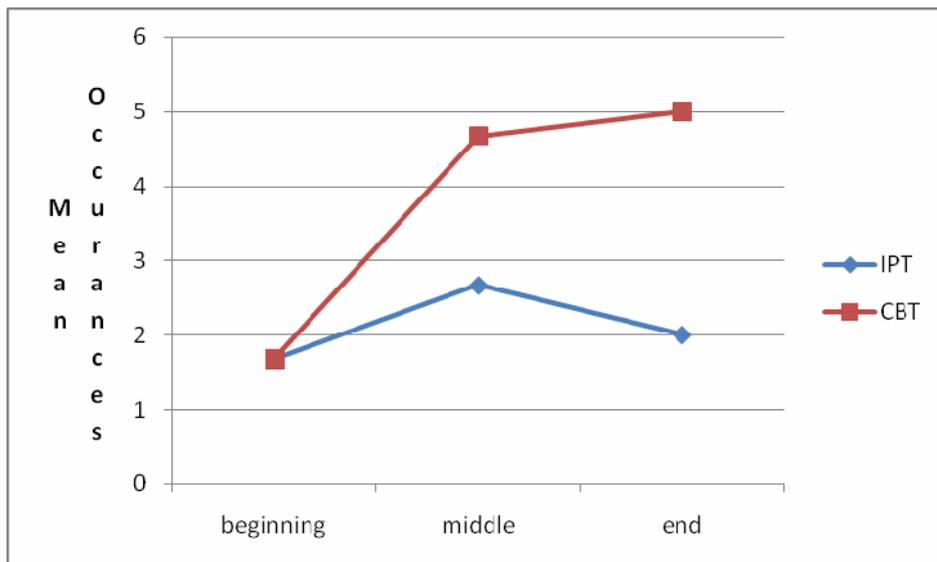


Figure 4: A comparison of mean occurrences of assumptions between therapy types over session time.

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Type	12.500	1	12.500	4.891	.047
Session	14.778	2	7.389	2.891	.094
type * session	7.000	2	3.500	1.370	.291
Error	30.667	12	2.556		
Total	221.000	18			
Corrected Total	64.944	17			

Table 11: ANOVA analysis of assumptions

ANOVA indicated that there was significantly more discussion of assumptions in CBT compared to IPT, $F(1,12) = 4.89$, $p < .05$. There was no significant difference between time and no interaction.

3.3.3.2.3 Hypothesis 2.3 - Core beliefs

The hypothesis states that there will be more discussion of core beliefs in CBT compared to IPT because of the influence of this within CBT.

Therapy Type	Session	Mean	Std. Deviation	N
IPT	beginning	2.67	2.887	3
	middle	3.67	2.082	3
	end	2.00	3.464	3
	Total	2.78	2.587	9
CBT	beginning	2.67	2.517	3
	middle	4.33	2.309	3
	end	5.33	.577	3
	Total	4.11	2.088	9
Total	beginning	2.67	2.422	6
	middle	4.00	2.000	6
	end	3.67	2.875	6
	Total	3.44	2.382	18

Table 12: Descriptive statistics of mean occurrence of “core beliefs”.

Descriptive statistics indicate that discussion of core beliefs occurs more in CBT than IPT. IPT has an average occurrence of 2.67 in the beginning sessions which increases to 3.67 in the middle sessions and decreases to 2 throughout the end sessions. CBT has an average occurrence of 2.67 occurrences in the beginning sessions. This is identical to IPT. The average occurrence increases to 4.33 in the middle sessions and increases again in the end sessions to 5.33.

The following graph (figure 5) further illustrates the descriptive statistics.

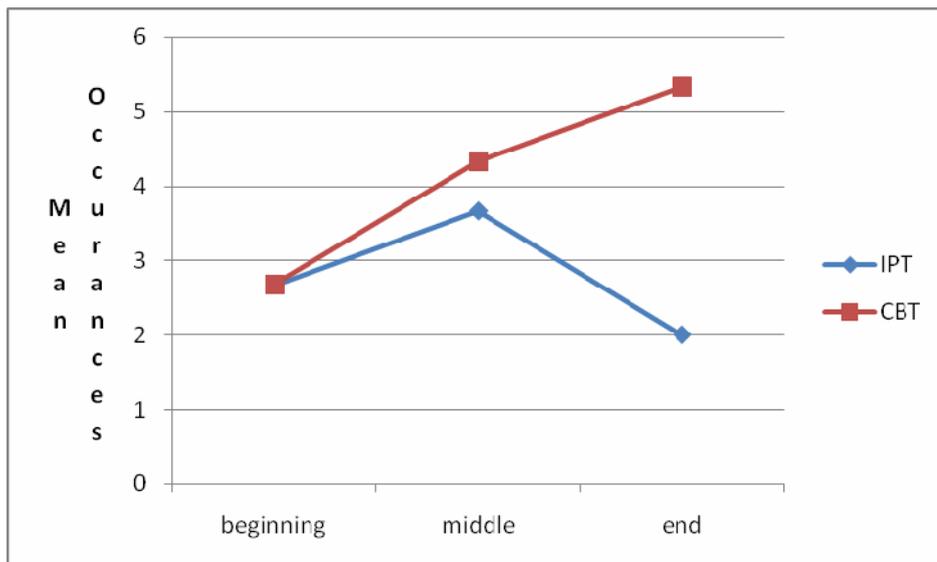


Figure 5: A comparison of mean occurrences of core beliefs between therapy types over session time.

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Type	8.000	1	8.000	1.309	.275
Session	5.778	2	2.889	.473	.634
type * session	9.333	2	4.667	.764	.487
Error	73.333	12	6.111		
Total	310.000	18			
Corrected Total	96.444	17			

Table 13: ANOVA analysis of core beliefs

ANOVA indicated that there was no significant difference in discussion of core beliefs between therapy, time, nor an interaction.

3.3.3.3 Hypothesis 3 - Affect expression

The third hypothesis predicted that affect expression would be higher in IPT than CBT because of its influence on affect whereas CBT has a cognitive influence.

Therapy Type	Session	Mean	Std. Deviation	N
IPT	beginning	2.67	2.082	3
	middle	2.67	1.528	3
	end	2.33	1.528	3
	Total	2.56	1.509	9
CBT	beginning	8.00	3.464	3
	middle	4.33	.577	3
	end	6.67	.577	3
	Total	6.33	2.398	9
Total	beginning	5.33	3.882	6
	middle	3.50	1.378	6
	end	4.50	2.588	6
	Total	4.44	2.749	18

Table 14: Descriptive statistics of mean occurrence of “affect expression”.

Descriptive results indicate that affect expression occurred more in CBT than in IPT. CBT has an average occurrence of 8.00 occurrences throughout the beginning sessions. This decreases to 4.33 throughout the middle sessions and increases to 6.67 in the end sessions. IPT has an average of 2.67 occurrences in the beginning and middle sessions and decreases slightly in the end sessions to 2.33.

The following graph (figure 6) further illustrates the descriptive statistics.

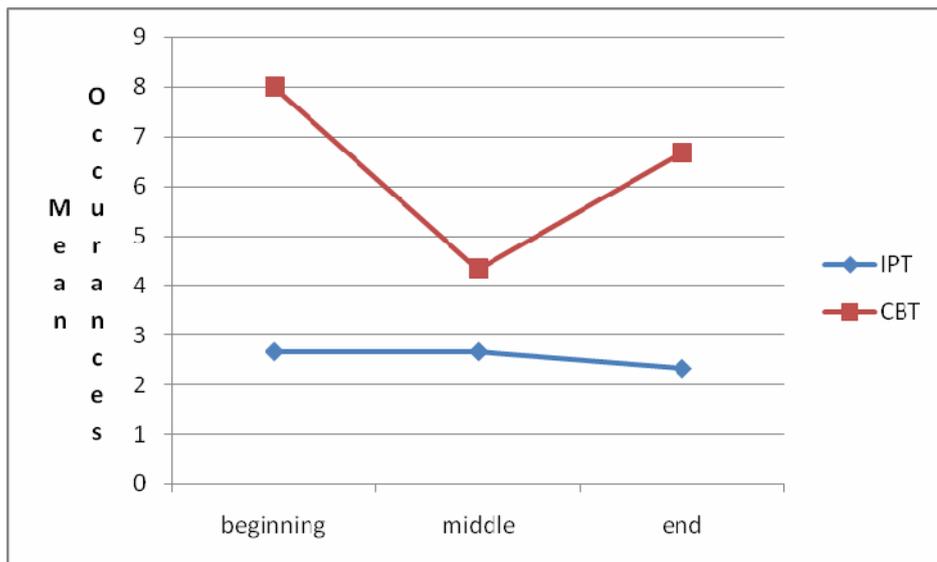


Figure 6: A comparison of mean occurrences of affect expression between therapy types over session time.

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Type	64.222	1	64.222	17.785	.001
Session	10.111	2	5.056	1.400	.284
type * session	10.778	2	5.389	1.492	.264
Error	43.333	12	3.611		
Total	484.000	18			
Corrected Total	128.444	17			

Table 15: ANOVA analysis of affect expression

ANOVA indicated that there was significantly more affect expression in CBT compared to IPT $F(1,12) = 17.79, p < .01$. There was no effect of time nor an interaction.

3.3.3.4 Hypothesis 4 - Formulation

The fourth hypothesis predicted that Formulation of problems would occur more in CBT compared to IPT.

Therapy type	Session	Mean	Std. Deviation	N
IPT	beginning	4.33	2.517	3
	middle	6.00	2.000	3
	end	5.33	3.215	3
	Total	5.22	2.386	9
CBT	beginning	6.00	2.000	3
	middle	6.67	2.082	3
	end	6.00	1.732	3
	Total	6.22	1.716	9
Total	beginning	5.17	2.229	6
	middle	6.33	1.862	6
	end	5.67	2.338	6
	Total	5.72	2.081	18

Table 16: Descriptive statistics of mean occurrence of “formulation of problems”.

Descriptive results indicated that there was a similar distribution of formulation across both therapies. IPT has an average of 4.33 occurrences in the beginning sessions which increases to 6.00 through the middle sessions and decreases to 5.33 in the end sessions. CBT has an average of 6.00 occurrences in the beginning sessions which increases to 6.67 in the middle sessions and decreases to 6.00 throughout the end sessions.

The following graph (figure 7) further illustrates the descriptive statistics.

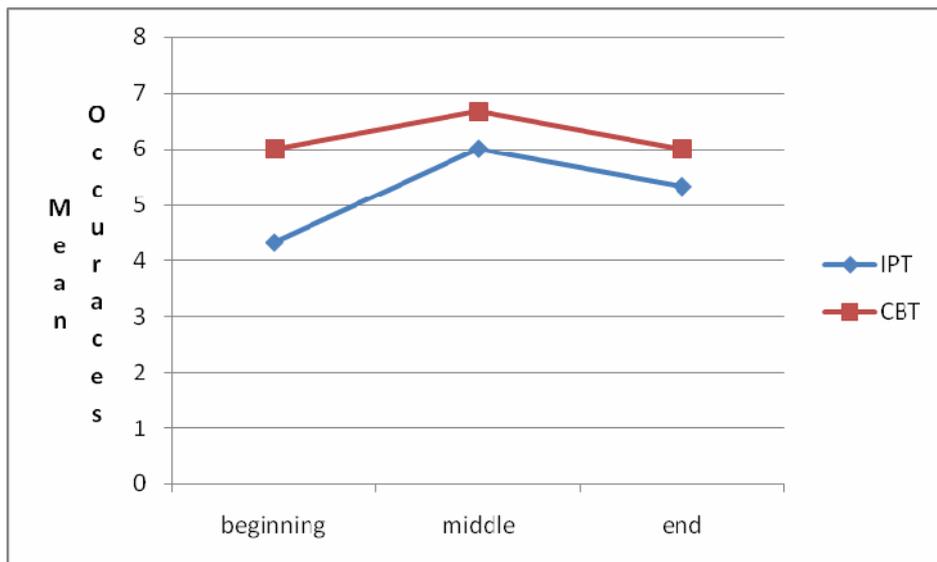


Figure 7: A comparison of mean occurrences of formulation of problems between therapy types over session time.

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Type	4.500	1	4.500	.844	.376
Session	4.111	2	2.056	.385	.688
type * session	1.000	2	.500	.094	.911
Error	64.000	12	5.333		
Total	663.000	18			
Corrected Total	73.611	17			

Table 17: ANOVA analysis of formulation of problems

ANOVA indicated that there was no significant difference in formulation between therapy, time and no interaction.

3.3.3.5 Hypothesis 5 - Task activation and review and homework

3.3.3.5.1 Hypothesis 5.1 - Task activation and review

The fifth hypothesis predicted that there will be more task activation and review in CBT compared to IPT.

Therapy Type	Session	Mean	Std. Deviation	N
IPT	Beginning	1.67	2.887	3
	Middle	7.33	1.528	3
	End	4.33	.577	3
	Total	4.44	2.963	9
CBT	beginning	4.00	4.000	3
	middle	9.33	1.528	3
	end	7.67	1.528	3
	Total	7.00	3.279	9
Total	beginning	2.83	3.371	6
	middle	8.33	1.751	6
	end	6.00	2.098	6
	Total	5.72	3.304	18

Table 18: Descriptive Statistics of mean occurrence of “task activation and review”.

The descriptive results indicate that CBT and IPT differ across time in occurrence of task activation and review discussions. Both therapies have the least discussion in the beginning sessions with IPT showing the least occurrence (average 1.67), CBT (average 4.00). Occurrence increases in both therapies throughout the middle sessions IPT (7.33) and CBT showing the highest occurrence (9.33). Both therapies similarly decrease at the end of therapy IPT (4.3) and CBT (7.7).

The following graph (figure 8) further illustrates the descriptive statistics.

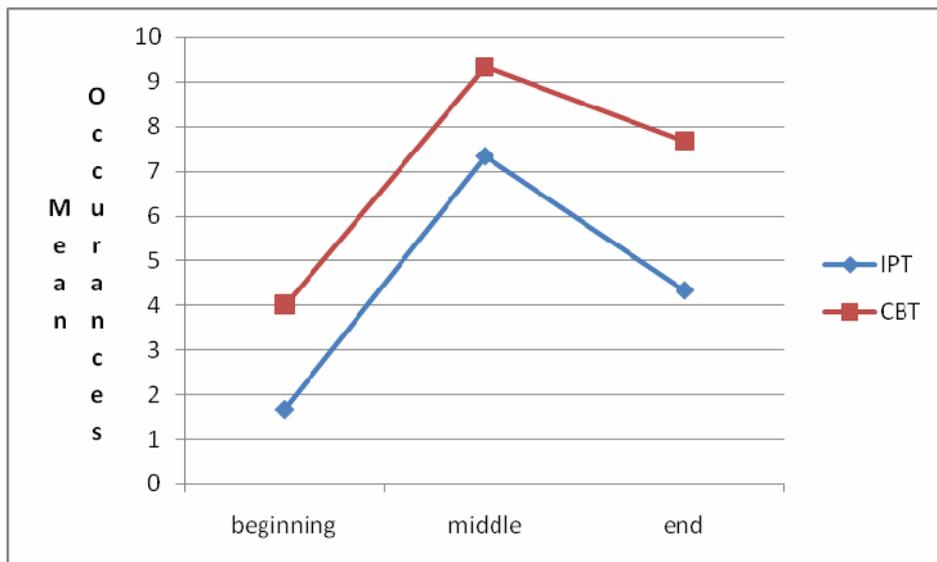


Figure 8: A comparison of mean occurrences of task activation and review between therapy types over session time.

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Type	29.389	1	29.389	5.568	.036
Session	91.444	2	45.722	8.663	.005
Type * session	1.444	2	.722	.137	.873
Error	63.333	12	5.278		
Total	775.000	18			
Corrected Total	185.611	17			

Table 19: ANOVA analysis of task activation and review

ANOVA indicated that there was significantly more discussion in task activation and review in CBT compared to IPT $F(1,12) = 5.57, p < .05$. There was a significant difference in occurrence of task activation and review between time $F(2,12) = 8.66, p = 0.005$.

Specifically, the occurrence differed significantly between the beginning, middle and end sessions.

3.3.3.5.2 Hypothesis 5.2 – Homework

The hypothesis states that there will be more discussion of homework in CBT compared to IPT because of the focus within the CBT model of setting homework.

Therapy Type	Session	Mean	Std. Deviation	N
IPT	beginning	.00	.000	3
	middle	.00	.000	3
	end	.00	.000	3
	Total	.00	.000	9
CBT	beginning	5.00	1.000	3
	middle	4.00	1.000	3
	end	4.33	.577	3
	Total	4.44	.882	9
Total	beginning	2.50	2.811	6
	middle	2.00	2.280	6
	end	2.17	2.401	6
	Total	2.22	2.365	18

Table 20: Descriptive statistics of mean occurrence of “homework”.

Descriptive statistics indicate that there was no discussion of homework in IPT at any stage in therapy. CBT had an average occurrence of 5 discussions throughout the beginning of therapy, which decreased to 4 in the middle sessions and increased to 4.33 in the end sessions.

The following graph (figure 9) illustrates the descriptive statistics.

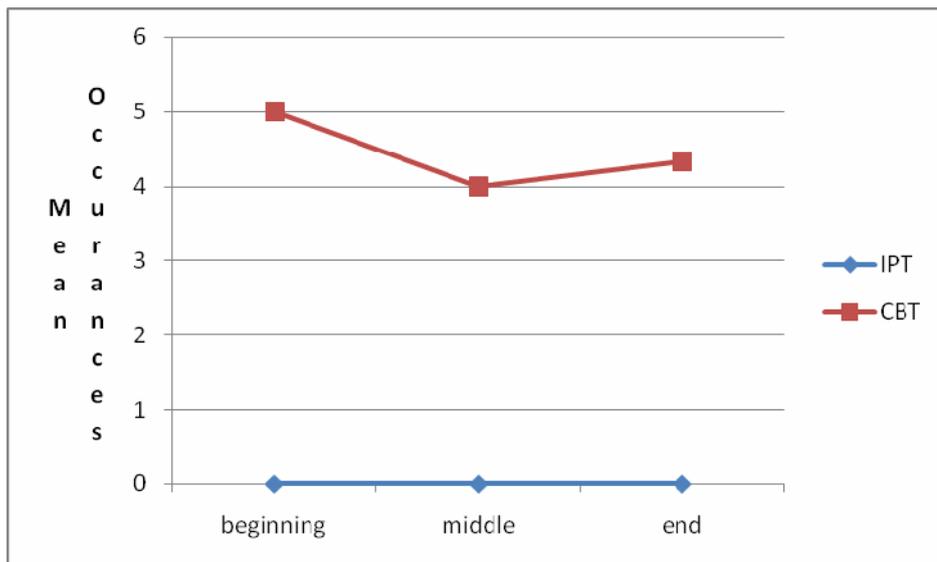


Figure 9: A comparison of mean occurrences of homework between therapy types over session time.

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
type	88.889	1	88.889	228.571	.000
session	.778	2	.389	1.000	.397
type * session	.778	2	.389	1.000	.397
Error	4.667	12	.389		
Total	184.000	18			
Corrected Total	95.111	17			

Table 21: ANOVA analysis of homework

ANOVA indicated that there was significantly more discussion of homework in CBT compared to IPT, $F(1,12)=228.57$, $p<.001$. There was no significant difference between time and no interaction.

3.3.3.6 Hypothesis 6 - Solution generation

The hypothesis states that the occurrence of solution generation will be higher in CBT than in IPT because of the focus on patient generating solutions in CBT.

Therapy Type	Session	Mean	Std. Deviation	N
IPT	beginning	1.33	1.155	3
	middle	4.00	1.732	3
	end	3.33	.577	3
	Total	2.89	1.616	9
CBT	beginning	5.33	3.055	3
	middle	7.33	2.517	3
	end	7.67	.577	3
	Total	6.78	2.279	9
Total	beginning	3.33	3.011	6
	middle	5.67	2.658	6
	end	5.50	2.429	6
	Total	4.83	2.771	18

Table 22: Descriptive statistics of mean occurrence of “solution generation”.

Descriptive results indicate that solution discussion occurs more in CBT than in IPT. CBT has an average occurrence of 5.33 in the beginning sessions which increases to 7.33 in the middle sessions and increases again to 7.67 in the end sessions. IPT has a significantly lower occurrence in sessions, with an average of 1.33 in the beginning sessions, which increases to 4 in the middle sessions and decreases again to 3.33 in the end sessions.

The following graph (figure 10) further illustrates the descriptive statistics.

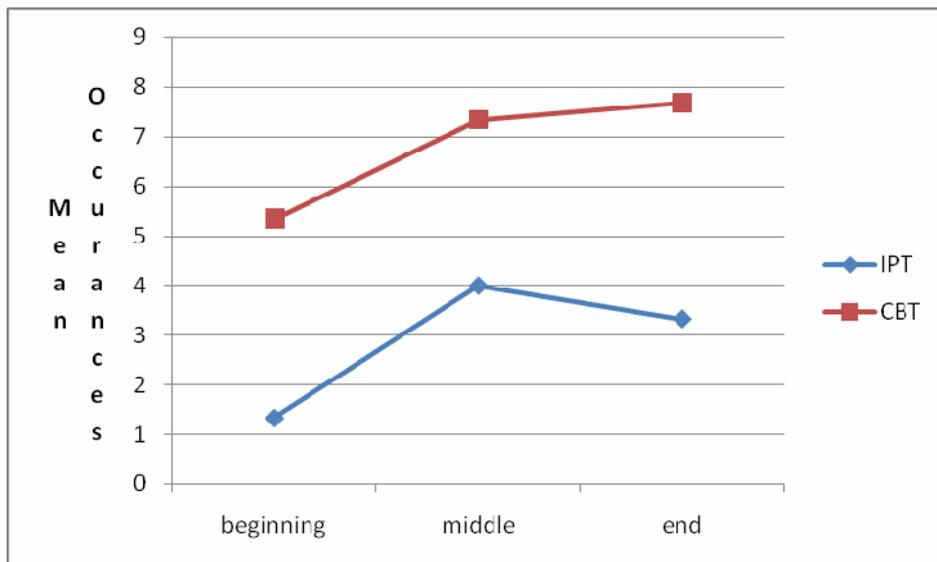


Figure 10: A comparison of mean occurrences of solution generation between therapy types over session time.

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Type	68.056	1	68.056	19.758	.001
Session	20.333	2	10.167	2.952	.091
Type * session	.778	2	.389	.113	.894
Error	41.333	12	3.444		
Total	551.000	18			
Corrected Total	130.500	17			

Table 23: ANOVA analysis of solution generation

ANOVA indicated that there was significantly more discussion of solution generation in CBT compared to IPT, $F(1,12) = 19.76$, $p=.001$. there was no significant difference between time and no interaction.

3.3.3.7 Hypothesis 7- Change in Therapy

3.3.3.7.1 Hypothesis 7.1- Emotional change

The hypothesis states that there will be more emotional change in IPT compared with CBT because of its focus on emotions relative to CBT.

Therapy Type	Session	Mean	Std. Deviation	N
IPT	Beginning	2.00	1.000	3
	Middle	3.33	2.517	3
	End	1.33	.577	3
	Total	2.22	1.641	9
CBT	beginning	1.33	.577	3
	Middle	2.67	2.082	3
	End	2.00	1.000	3
	Total	2.00	1.323	9
Total	beginning	1.67	.816	6
	Middle	3.00	2.098	6
	End	1.67	.816	6
	Total	2.11	1.451	18

Table 24: Descriptive statistics of mean occurrence of “emotional change”.

The descriptive statistics indicate that there is a higher occurrence of emotional change in IPT compared to CBT. In IPT there is an average occurrence of 2 in the beginning sessions which increases to 3.33 in the middle sessions and reduces to 1.33 throughout the end sessions. In CBT, the pattern across time is similar, where the number of occurrences increases from the beginning (1.330) to the middle sessions (2.67) and decreases throughout the end sessions (2.0).

The following graph (figure 10) further illustrates the descriptive statistics.

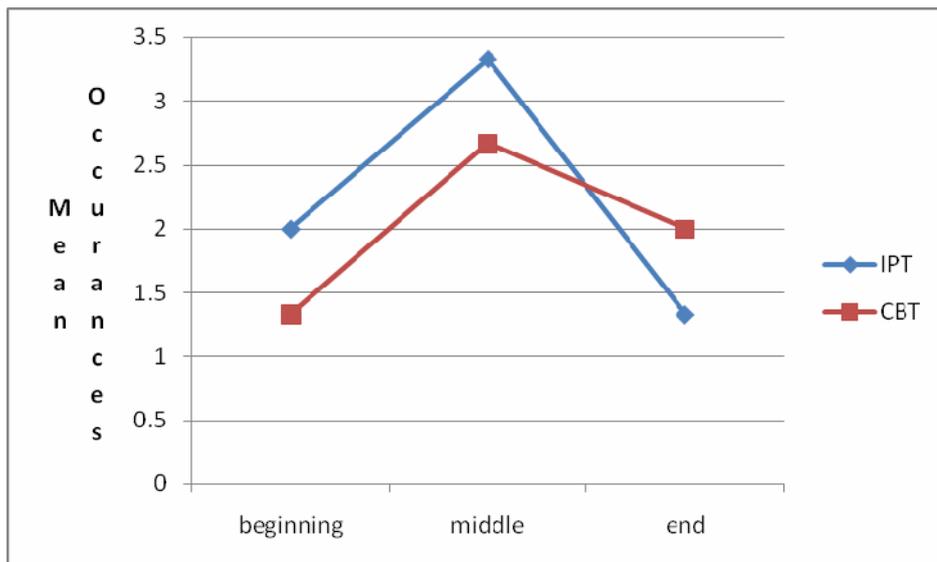


Figure 10: A comparison of mean occurrences of emotional change between therapy types over session time.

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Type	.222	1	.222	.100	.757
Session	7.111	2	3.556	1.600	.242
type * session	1.778	2	.889	.400	.679
Error	26.667	12	2.222		
Total	116.000	18			
Corrected Total	35.778	17			

Table 25: ANOVA analysis of emotional change

ANOVA indicates that there is no significant difference in emotional change between therapy, time, nor an interaction.

3.3.3.7.2 Hypothesis 7.2 - Interpersonal change

The hypothesis states that there will be more interpersonal change in IPT than in CBT because of IPT's focus on interpersonal problems.

Therapy Type	Session	Mean	Std. Deviation	N
IPT	beginning	.00	.000	3
	Middle	1.67	1.155	3
	End	3.67	2.082	3
	Total	1.78	1.986	9
CBT	beginning	.67	.577	3
	Middle	.67	1.155	3
	End	1.67	2.082	3
	Total	1.00	1.323	9
Total	beginning	.33	.516	6
	middle	1.17	1.169	6
	End	2.67	2.160	6
	Total	1.39	1.685	18

Table 26: Descriptive statistics of mean occurrence of “interpersonal change”.

Descriptive statistics indicate that IPT has a slightly higher occurrence of interpersonal change than CBT. IPT has the lowest occurrence in the beginning sessions (.00) which increases to 1.67 in middle sessions and increases further to 3.67 at the end of therapy, which is the highest occurrence between both therapies. CBT, in contrast, has an average of .67 occurrences in both the beginning and middle sessions which increases to 1.67 occurrences in the end sessions.

The following graph (figure 11) further illustrates the descriptive statistics.

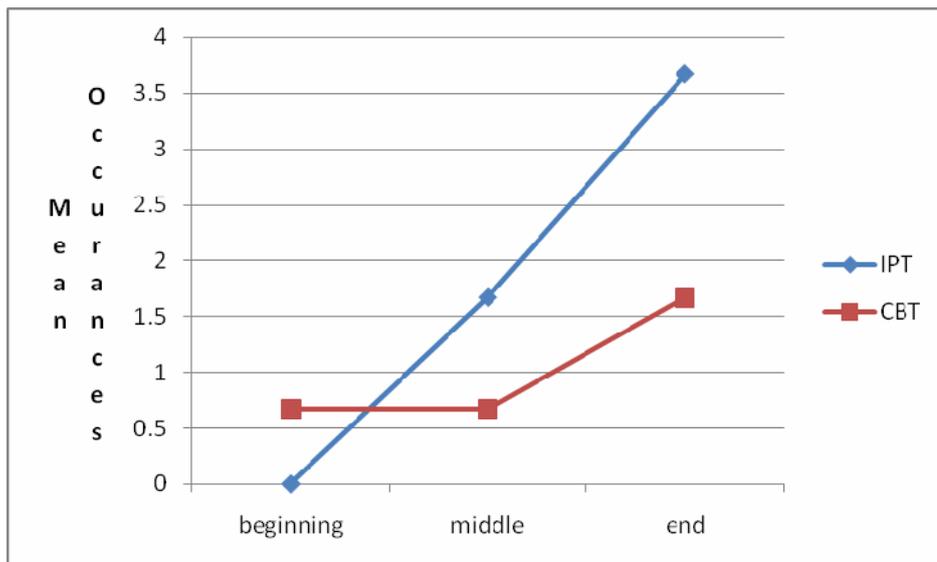


Figure 11: A comparison of mean occurrences of interpersonal change between therapy types over session time.

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
type	2.722	1	2.722	1.400	.260
session	16.778	2	8.389	4.314	.039
type * session	5.444	2	2.722	1.400	.284
Error	23.333	12	1.944		
Total	83.000	18			
Corrected Total	48.278	17			

Table 27: ANOVA analysis of interpersonal change

ANOVA indicated that there was no significant difference in interpersonal change between therapy, but a significant difference between time $F(2,12) = 4.31, p < .05$, specifically that IPT had significant differences in occurrences between the beginning, middle and end of therapy. There was no effect of interaction.

3.3.3.8 Hypothesis 8 - Cognitive and behaviour change

3.3.3.8.1 Hypothesis 8.1 – Cognitive change

The hypothesis states that there will be more cognitive change in CBT than in IPT because of the influence of this in therapy.

Therapy Type	Session	Mean	Std. Deviation	N
IPT	beginning	.00	.000	3
	middle	1.00	1.000	3
	end	.33	.577	3
	Total	.44	.726	9
CBT	beginning	1.00	1.732	3
	middle	2.00	1.000	3
	end	2.00	1.000	3
	Total	1.67	1.225	9
Total	beginning	.50	1.225	6
	middle	1.50	1.049	6
	end	1.17	1.169	6
	Total	1.06	1.162	18

Table 28: Descriptive statistics of mean occurrence of “cognitive change”.

Descriptive statistics indicate that there is a higher occurrence of cognitive change in CBT compared to IPT. IPT has no occurrence in the beginning sessions, an occurrence of an average of one in middle sessions and this reduces to .33 occurrences in the later stages of therapy. CBT has an occurrence of 1 in the beginning sessions which increases to 2 in the middle and end sessions.

The following graph (figure 12) further illustrates the descriptive statistics.

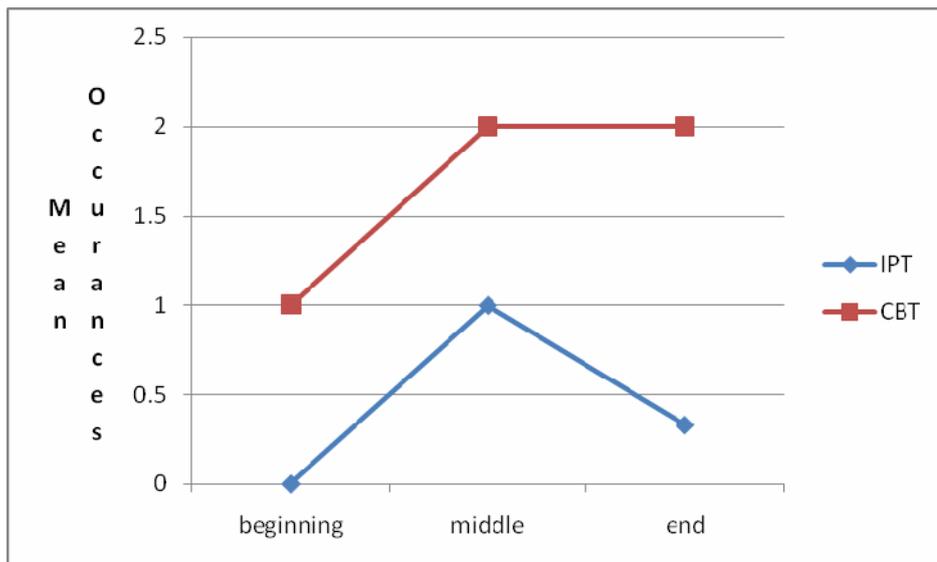


Figure 12: A comparison of mean occurrences of cognitive change between therapy types over session time.

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
type	6.722	1	6.722	6.368	.027
session	3.111	2	1.556	1.474	.268
type * session	.444	2	.222	.211	.813
Error	12.667	12	1.056		
Total	43.000	18			
Corrected Total	22.944	17			

Table 29: ANOVA analysis of cognitive change

ANOVA indicated that there was significantly more cognitive change in CBT compared to IPT $F(1,12) = 6.37, p < .05$. There was no significant difference between time and no interaction.

3.3.3.8.2 Hypothesis 8.2 – Behavioural change

The hypothesis states that there will be more behavioural change in CBT compared to IPT

Therapy Type	Session	Mean	Std. Deviation	N
IPT	beginning	.00	.000	3
	middle	.67	1.155	3
	End	1.00	1.000	3
	Total	.56	.882	9
CBT	beginning	1.33	1.155	3
	middle	3.33	.577	3
	End	2.33	1.155	3
	Total	2.33	1.225	9
Total	beginning	.67	1.033	6
	middle	2.00	1.673	6
	End	1.67	1.211	6
	Total	1.44	1.381	18

Table 30: Descriptive statistics of mean occurrence of “behavioral change”.

The descriptive statistics indicate that IPT had the lowest occurrence of behavioral change, particularly in the beginning (.00) and middle sessions (.67). This increased slightly towards the end of therapy (1.0). CBT had slightly more occurrence of behavioral change with an average of 1.3 occurrences in the beginning of therapy, 3.3 in the middle stages of therapy and decreasing slightly to 2.3 occurrences throughout the end of therapy.

The following graph (figure 13) further illustrates the descriptive statistics.

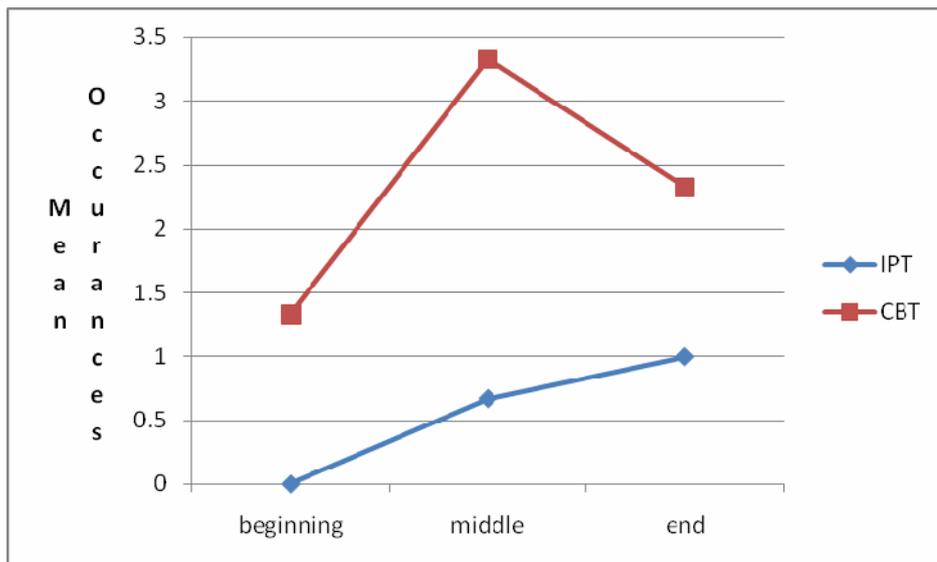


Figure 13: A comparison of mean occurrences of behavioral change between therapy types over session time.

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Type	14.222	1	14.222	16.000	.002
Session	5.778	2	2.889	3.250	.074
type * session	1.778	2	.889	1.000	.397
Error	10.667	12	.889		
Total	70.000	18			
Corrected Total	32.444	17			

Table 31: ANOVA analysis of behavioral change

ANOVA indicated that there was significantly more occurrence of behavioural change in CBT compared to IPT $F(1,12) = 16, p < .05$. There was no significant difference between time nor an interaction.

3.3.3.9 Summary of ANOVA results of statistical significance

Below is a summary table of the statistical results.

Hypothesis		Type	Session	type * Session
1	Problem discussion	0.063	0.966	0.834
2	Discussion of self	0.003*	0.652	0.407
3	Significant others	0.237	0.013*	0.013*
4	Affect expression	0.001*	0.284	0.264
5	Formulation of problems	0.376	0.688	0.911
6	Task activation and review	0.036*	0.005*	0.873
7	Behavioural change	0.002*	0.074	0.397
8	Cognitive change	0.027*	0.268	0.813
9	Interpersonal change	0.26	0.039*	0.284
10	Emotional change	0.757	0.242	0.679
11	Solution generation	0.001*	0.091	0.894
12	Discussion of model	0.014*	0.167	0.327
13	CBT focus task - homework	0*	0.397	0.397
14	CBT focus task - thoughts	0.578	0.709	0.973
15	Assumptions	0.047*	0.094	0.291
16	Core beliefs	0.275	0.634	0.487

* These results are significant at the .05 significance level.

Table 32: Summary of ANOVA results of statistical significance

3.4 Qualitative exploration of results

The following section will qualitatively explore statements of change in therapy.

The research question asks are the changes reported by participants qualitatively different?

Furthermore, do changes adhere to the corresponding therapeutic model that the participant

has been working with? For example, does change reported in those who underwent CBT reflect changes in thinking and behaviours? In contrast, does change reported from those who underwent IPT reflect interpersonal changes and consequent improvements in mood? Change is broken down into four components, behavioural change, cognitive change, interpersonal change and emotional change.

Change was measured quantitatively by counting the frequency that someone mentioned a change in either of the four components. To measure change qualitatively, the presenting problems were investigated from the beginning of each therapy and compared to the participant's statements of problems/ change at the end of therapy. Change was understood as any movement in a previously stated problem. It was decided that a purer analysis of what changed for participants would be reflected in the participants' statements, therefore, the following statements were taken from the end of therapy sessions.

3.4.1 Cognitive change

As hypothesised, cognitive change occurred more in CBT than in IPT. However, cognitive change did occur for participants undergoing IPT. Furthermore it appeared that similar mechanisms were at work across both therapies. Specifically, although cognitive principles are not made explicit in IPT, participants seem to report a similar cognitive change process to those in CBT. Here are some examples from participant's statements:

CBT 1 session 11

Therapist: “how did you get on we were looking at this belief about you being a failure, did you manage to try the challenging?”

Participant: “Well I have been trying this challenging thoughts and I find it incredibly difficult to distinguish between thoughts and feelings, so I think I’m just trying to change my relationship with some of the negative thoughts, trying to think of them as separate from me, I suppose.”

Therapist: “That’s a key process, to see the thoughts as separate from yourself, remember thoughts can just pop in at any time, its paying attention to them that makes the difference.”

CBT3 session 10

Therapist: “so we were looking at these thought diaries, I wonder if we could start looking at this today?”

Participant: “yes, well I’ve been thinking about it, and I think when I have those thoughts at work, when they creep in,,, I just tell myself they aren’t necessarily true about me, that I’m a failure or rubbish at my job, that doesn’t really mean that I as a person am a failure.”

Therapist: “it’s a difficult concept for people to take on board, but often when one does, it can really change perspective on things.”

Participant: “yeh, I mean I wouldn’t say I am completely converted or anything, I still want to believe that, I mean it comes more naturally to believe that, but I’m trying to challenge it.”

IPT 1 session 13

Therapist: “So, you were telling me last week that a few things were different for you, tell me a little bit more about that.”

Participant: “well, I’ve been surprised actually, what’s been really helpful is, em, I’ve tried not to feel guilty about my depression, I’ve tried to think of it like an illness, a flu or a cancer”.

Therapist: “that sounds like a big change for you, you kept blaming yourself and punishing yourself, removing that guilt is bound to create a real freedom for you.”

Participant: “yes, I kept thinking I was the one controlling it and it was my fault, and maybe that was partly it, but really why have I been so hard on myself?”

IPT 3 session 14

Therapist: “So... what have you been noticing over the course of therapy? Do you think anything has improved for you?”

Participant: “Oh yeh, quite a few things actually, there is some change in me, I have the confidence to try now, I got round to changing those cupboards, been meaning to do that for ages.”

Therapist: “it sounds like the difference is the confidence, and that has enabled you to do things you have been avoiding for a long time?”

Participant: “yeh, I don’t think I would have recognised it as a confidence issue, but now it feels that that has to come before anything. “

Comment

These examples of statements indicate a cognitive change. For IPT participant 1, it appears that guilt has been the cognitive/affective mechanism that she has tried to change. She reflects on her attempts to alter how she feels about her depression as an illness, which has an external influence, and consequently is outwith her control, rather than an internal state that she has been responsible for creating and consequently is to blame for. With IPT participant 3, confidence seems to be the mediator for change, it seems to have induced an ability to take action which has previously been avoided. For CBT participant 1, who has stated that he has been working in a cognitive way, by challenging thoughts, there seems to have been some difficulty in differentiating thoughts and feelings, consequently, the patient, in what could be argued a similar way to IPT 1 has tried to change their relationship to the thoughts, again trying to see them as an external process, which is not intrinsic to him and therefore, although he does not say this, it could be argued, that he is reducing the burden of being responsible for the trait that is unhelpful to him, namely negative thinking, and in the case of IPT 1 the unhelpful trait is guilt.

It is interesting that although IPT does not explicitly target thoughts, there seem to have been similar cognitive mechanisms at work here. Specifically, there seems to have been some recognition and re-appraisal of thoughts across participants in both therapies.

3.4.2 Behavioural change

The hypothesis predicted that if behavioural change occurred, it would occur more in CBT than in IPT. In line with the hypothesis, behavioural change did occur more in CBT than in

IPT, however some behavioural change was reported in IPT. When looking to the explanations of participants, it seems that the same mechanisms seem to have been working across both therapies, whereby all participants in CBT and IPT report similar behaviour change. Examples illustrating this include:

IPT1 session 12

Therapist: “so, how have things been over the last week?”

Participant: “Well the major thing is I got some work done on my PhD, I haven’t done that for months, but I just applied what you said, I just did a ten minute stint in the morning, and found that I could work for longer,, so I managed half an hour.”

Therapist: “How does it feel to have made a start?”

Participant: “it feels good actually, yeh, much better.”

IPT 3 session 11

Therapist: “it sounds like you feel a bit more uplifted, you seem to have more energy.”

Participant: “yes, I’m getting more housework done, I have more energy, that feels so much better you know?”

CBT 1 session 12

Therapist: “what do you think has made the most difference?”

Participant: Well I found that getting up and going for a run and then doing work, that is a real winning combination you know! I just, I ahhh, found that getting the pleasure made the work better, I could sit and do it and I did, what a turn around.“

CBT 3 session 11

Therapist: “so you have managed to begin doing some work?”

Participant: “I’ve been getting up and getting a bit of work done and that feels ok now, I mean just a little bit but...yeh, that’s something I guess”.

Comment:

The examples of behavioural change indicate that returning to action has led to an improvement in mood. In the case of IPT 3, the participant has been doing more housework which has led to an improvement in physical energy and consequently, an improvement in her mood. The CBT 3 participant has been able to do some of her university work, and when she realises that this is a small improvement, this has led to an improvement in mood. In summary, participants in both therapies have found an improvement in mood from tackling some work they have been avoiding. However, it is worthwhile noting that this may not be the direct mechanism of change in mood, it may simply be the most tangible. Furthermore, this may help to prove the hypothesis that any change will be relevant to the therapeutic model, as behavioural change is more likely to occur in CBT compared to IPT because of its’ explicit reference in the model, compared to IPT where behavioural change is arguably directed towards interpersonal interactions.

3.4.3 Interpersonal change

The hypothesis predicted that interpersonal change would occur more in IPT compared to CBT. This hypothesis was not proven. It is interesting that although interpersonal change was not significantly higher in IPT compared to CBT, two participants from IPT report that this was the single most important part of the therapy, whereas in CBT, participants seemed to talk about interpersonal change as a bi-product of what their therapy centred upon. Here are some examples from participant's statements:

IPT 1 session 13

Therapist: I think the real difficulty is still with your parents, but in particular your father.”

Participant: “I'm changing how I relate to my parents, I'm trying not to feel scared into saying and doing things when my father calls me but I just see now how it's the relationship with them that's the problem, if I can improve that I think it will really help me, it really wasn't to do with my PhD”.

IPT 3 session 14

Therapist: “it sounds like things have been improving at home”

Participant: “yes, I think the main thing is that we are making time together as a couple vs time as a family, you know we have been planning a couple of nights away together, and then planning days with the kids, and it seems to keep everyone happy.”

Therapist: “Its amazing how these simple yet fundamental things can make such a difference.”

Participant: “I guess I didn’t see it before, or, well I thought it just wasn’t even approachable with my husband, it really took some courage for me to change these things.”

CBT 3 session 12

Therapist: it sounds like every time you feel better its because (boyfriend) isn’t around, but then when he comes back on the scene, it really disrupts things for you.”

Patient: yes, I know, I have been really weak and given in, but this time I decided when we should meet and I sat down and told him that this was stopping now, that I was in control of it and I feel much better now, I really think this has made a difference in my head, because I told him, and I don’t want to go back there again.”

Comment

Interpersonal change seems to occur more frequently (although this was not found to be significant in the quantitative results) and arguably be a focus within IPT which supports the hypothesis that change will occur relevant to the therapeutic model being used.

3.4.4 Emotional change

Quantitative results indicated that there was more emotional change in IPT compared to CBT but this difference was not significant. This does not strongly support the hypothesis that change occurring will be reflected in the type of therapeutic model being used, as both therapies report emotional change. Here are some examples from participant’s statements:

IPT 1 session13

Therapist: “last week we were discussing this idea of guilt that you felt and how that seems to have been changing a little.”

Participant: “I just don’t feel as guilty for being here and not being with my parents, that has really been the problem, not the PhD, the relationship with my parents.”

IPT 3 session 13

Therapist: “how would you describe your mood at the moment?”

Participant: “things are just much better, I feel happier, I have more confidence and it’s just great. I had been feeling really resentful of (husband) and now I feel closer to him ”.

CBT 1 session 11

Therapist: “tell me how you got on with scheduling in work and play as it were?”

Participant: “That has been one of the best things, instead of all pleasure is incidental, which it always has been, suddenly to plan pleasure that’s enormous, you’ve no idea what a revelation that is to feel good and allow myself to enjoy it!”

CBT 3 session 12

Therapist: “it does sound like there is some improvement in your mood.”

Participant: “Yeh, I feel so much better now I have got through this patch, I’m just feeling a bit stronger, and with a bit more perseverance I’m sure I can feel better.”

Comment

All participants report an improvement in mood, which would explain why both therapies have emotional change, however, it is interesting to see what type of emotional change is occurring, apart from improvement in mood. With this in mind, it can be seen from IPT participant 1's statement that guilt is the emotion that has changed, and for IPT 3, the emotion "resentment" has now changed. These statements reveal more insight into emotions that the participants had been experiencing, whereas CBT participant 1 links his improvement in mood to activity scheduling of pleasurable activities, and CBT participant 3 simply reports an improvement in mood. There may be an element of deeper emotional change occurring/ beginning to occur within the IPT model, rather than a "simple" transition in CBT from depressed to improved mood. In addition, it may not be surprising that both therapies incur similar levels of emotional change, when this may be expected from therapy in general, it may actually be the mechanisms of any emotional changes that differ.

4. Discussion

4.1 Introduction

The main purpose of this study was to compare two different types of therapy, cognitive Behaviour Therapy (CBT) and Interpersonal Psychotherapy on components of content and change. A quantitative approach was used to facilitate comparison of the two therapies and this was complimented by a qualitative approach to illustrate findings on change in more detail. Aims and hypotheses were generated to structure the investigation and this discussion will relate results of the study to these aims and hypotheses, and to the literature described in the introduction. Following this, limitations of the study will be discussed and areas of future research.

4.2 Discussion of hypotheses

Hypothesis 1

The content of therapy in IPT will have more of an interpersonal focus, namely discussion surrounding significant relationships in the participant's life will occur more often in IPT compared to CBT.

The hypothesis was not supported. Discussion of significant others occurred more in IPT but this was not significant. There was a main effect of time; IPT had a significantly higher occurrence in the beginning sessions, which dramatically decreased through middle and end of therapy sessions. CBT had an even occurrence through the 3 time stages. It is perhaps unsurprising that the majority of discussion of significant others would occur in the

beginning sessions as this is known in both therapies as the problem stage working towards a shared understanding of the problems and eventually a shared formulation from which therapy can work (Dryden, 2002). A potential reason that the difference between the two therapies was not significant is that for one of the CBT participants, discussion in every session centred around her current relationship and this may have increased the mean for the CBT participants.

Hypothesis 2

The second hypothesis predicted that content of therapy in CBT will focus more on thoughts, assumptions and core beliefs than in IPT. This hypothesis was broken down into 3 separate hypotheses:

Hypothesis 2.1

The hypothesis that thoughts would occur more in CBT compared to IPT was not supported. It appears from looking at the results that thoughts did occur more in CBT than in IPT but this was not significant. There was no effect of time, both therapies displayed a similar pattern, which had the lowest occurrence in the beginning sessions, highest occurrence in the middle sessions and then decreased in the end sessions. This indicates that the activation phase for discussing thoughts occurs mostly in the middle sessions which is in line with the CBT model (Beck, 1974). It is interesting that although specific work on thoughts does not feature in the IPT model, there was a similar level of occurrence found in this study. A reason for this may be that the IPT therapist carrying out the therapy was also trained in cognitive behaviour therapy and despite best efforts to remain pure to

the IPT model, attention may have been paid to those principles throughout the therapy. The researcher aimed to pay attention to overlapping of themes throughout the therapy, and it was the researcher's opinion that there was no dilution of concepts. A more plausible explanation is that two of the three IPT participants seemed to be psychologically minded and "aware" of concepts such as thinking and the effects of this upon their behaviours and feelings. IPT participant 1 in particular had made reference to reading a CBT manual throughout previous therapy, and consequently drew references herself to these issues and related them to her own situation. This may help explain some of the occurrence of discussion of thoughts throughout IPT. Another explanation lies in the fact that our thoughts are often made explicit as we talk, and as this study measured the occurrence of thoughts, not how much the therapist brought this into the therapeutic model, simple occurrence may have masked therapeutic intent to discuss these themes.

Hypothesis 2.2

The hypothesis that there would be more discussion of assumptions in CBT compared to IPT was supported. Although not significant, there was a different pattern of occurrence between both therapies. In CBT, there was an increase in occurrence from beginning to middle sessions and a further increase in the end sessions. In IPT, most discussion occurred in the middle sessions that then decreased in the end sessions, but this difference was not significant. Again given that IPT does not focus on "assumptions" it is surprising that there was an occurrence of assumptions within the IPT model, however, upon investigating the data, it appears that in IPT, and perhaps in therapy in general, participants discuss freely their assumptions, which the therapist then chooses, depending on the therapeutic model to

draw on and discuss further. In CBT, most assumptions are explained by the therapist who encourages the participant to generate more assumptions purposefully throughout the sessions. This work is more likely to take place later in therapy because it is made explicit as a later stage in the CBT model (Beck, 1974).

Hypothesis 2.3

The hypothesis that core beliefs would occur more in CBT compared to IPT was not supported. It is likely that the small numbers involved in this study may have contributed to the lack of statistical significance. There was no main effect of time, both therapies had the same occurrence in beginning sessions, both therapies increased in the middle sessions and in the end, CBT occurrences increased whereas IPT occurrence decreased. Again, it is interesting that there is an occurrence of discussion of core beliefs in IPT when this model does not make reference to these terms, however, it appears that participants in IPT mentioned core beliefs as a product of discussion of the self, whereas in CBT core beliefs were explicitly brought out by the therapist and focussed upon throughout the end of therapy as the final stage of CBT, which again is congruent with the model (Beck, 1974).

Hypothesis 3

The third hypothesis stated that there will be more affect expression in IPT than CBT. This hypothesis was based on the explicit emphasis of emotion within the interpersonal model (Weissman & Markowitz, 1994), compared to CBT which arguably rewards the suppression of negative affect (Stiles & Shapiro, 1994). This hypothesis was not supported. Contrary to the hypothesis there was significantly more affect expression in CBT compared

to IPT. An explanation for this may be that the researcher found that the participants undergoing CBT were particularly expressive of their emotions throughout the therapy, compared to the IPT participants, who were not so expressive of emotions, even when encouraged. There was no main effect of time, however the pattern of affect expression is interesting because it supports the researcher's opinion that the participants who underwent IPT had a lower level of affect expression; in CBT, the highest occurrence is in the beginning sessions, lowest in the middle sessions and increases at the end of therapy. In comparison, there is a significantly lower and even occurrence of affect expression throughout IPT.

Hypothesis 4

The hypothesis stated that there will be more focus on formulation in CBT compared to IPT due to its explicit emphasis throughout the course of therapy (Paykel & Priest, 1992), whereas IPT seems to focus on formulation in the beginning sessions (Weissman & Markowitz, 1994). The hypothesis was not supported, there was more formulation in CBT compared to IPT but this was not significant. This lack of significance may be due to insufficient participants. There was no main effect of time. Occurrence was highest in both therapies in the middle sessions, which would seem logical as formulation follows the beginning sessions which focus on assessment of the problems (Weissman & Markowitz, 1994). It was also the researcher's opinion that the IPT therapist did focus a lot of work on formulation, thereby decreasing the potential difference in occurrence between the two therapies.

Hypothesis 5

The hypothesis stated that there will be more emphasis on setting tasks and homework in CBT than IPT. This hypothesis was divided into two hypotheses:

Hypothesis 5.1

The hypothesis stated that there will be more emphasis on setting tasks in CBT compared to IPT. This hypothesis was supported, there was significantly more occurrence of task activation and review in CBT compared to IPT. There was also a main effect of time, both therapies had a similar pattern where the lowest occurrence was found in the beginning sessions, highest in the middle sessions and dropped in the end sessions. This supports the therapeutic pace/ timing of the models, that task activation will happen after the assessment phase, will continue through the middle phase of therapy and decrease at the end, when the focus is upon reviewing therapy (Jacobsen *et al*, 1996).

Hypothesis 5.2

The hypothesis stated that there will be more occurrence of homework in CBT compared to IPT. This hypothesis was supported. Indeed, there was no occurrence of homework in IPT. There was no effect of time. It was interesting that the highest occurrence of homework in CBT was in the beginning sessions, which decreased in middle sessions and increased again in the end sessions. This may reflect the behavioural activation phase in the beginning of CBT, which moves to thought and assumption formulation and understanding in the middle sessions, and then moves the participant to work on these as homework in the later sessions (Beck, 1974).

Hypothesis 6

This hypothesis stated that there will be more discussion of solutions in CBT than in IPT because CBT places more emphasis on collaboratively generating ways of testing beliefs and solving problems (Parker & Fletcher, 2007). This hypothesis was supported. There was no main effect of time, but the highest occurrence of solution generation in CBT occurred in the end sessions of therapy, whereas in IPT, the highest occurrence was in the middle sessions. A possible explanation that the highest occurrence of discussion of solutions in CBT is in the end sessions is that perhaps in CBT, at the end of therapy, there is more of an emphasis on reviewing therapy and patients discuss how they will move on and work on problems in the future. This also occurs in IPT, but perhaps there is not such an explicit reference to discussing the solution in too much detail. A possible explanation for the highest occurrence of discussion of solution being in the middle sessions in IPT is that during the activation phase, this is another focus of work, to identify and talk about solutions before engaging in work related to them.

Hypothesis 7

The hypothesis stated that if change occurs, there will be more emotional change and change in interpersonal relating in IPT than CBT. This hypothesis was divided:

Hypothesis 7.1

The hypothesis stated that there will be more emotional change in IPT compared to CBT because of the influence in IPT of expressing emotion and change being mediated through

this. This hypothesis was not supported. There was more discussion of emotional change in IPT compared to CBT but this difference was not significant. The main effect of time was not significant. The pattern of occurrence was interesting because in IPT, occurrence was higher in the beginning and middle stages of therapy compared to CBT but this difference was not significant. CBT had marginally more change reported in end sessions compared to IPT although this difference was not significant. Perhaps a larger number of participants would help achieve statistical significance. A possible explanation for emotional change occurring early in IPT is that the model encourages emotional expression and understanding from the beginning, compared to CBT which sets behavioural activation as one of the early tasks, pushing emotional issues to later in therapy. Furthermore, simply working on emotions does not ensure that change will be brought about in emotions. It is perhaps worthwhile considering that therapy in general would hope to achieve emotional change, particularly an improvement in depressive symptoms, therefore it may be worthwhile considering that despite the focus of therapy, emotional change/ improvement may be equally occurring across all therapies if successful.

Hypothesis 7.2

The hypothesis stated that interpersonal change would occur more in IPT because of the interpersonal focus of work compared to CBT. This hypothesis was not supported. IPT did have a higher occurrence of interpersonal change compared to CBT in the middle and end sessions, but this was not significant. There was a main effect of time, specifically, both therapies had different patterns of occurrence over the time stages; in IPT occurrences increased dramatically from no change in beginning sessions, to higher levels of change

compared to CBT in the middle and end sessions. CBT had a constant lower pattern of change in beginning and middle sessions, which increased in the end sessions. It is possible that a larger number of participants would help achieve statistical significance. An explanation for the lack of significant interpersonal change in IPT is that for one IPT participant, no change was achieved and this may have reduced the mean occurrence for IPT. Another consideration is that simply working on interpersonal difficulties does not automatically change them.

Hypothesis 8

The hypothesis stated that if change occurs there will be more cognitive and behavioural change in CBT than in IPT. This hypothesis was divided:

Hypothesis 8.1

The hypothesis stated that there will be more behavioural change in CBT compared to IPT because of CBT's emphasis on behavioural activation and tasks. This hypothesis was supported. There was no main effect of time, however, the pattern of occurrence was interesting; both therapies had lowest occurrence in beginning sessions. In CBT, occurrence was highest in the middle sessions and decreased in the end sessions. This indicates an adherence to the model when perhaps behavioural activation occurred in early and middle sessions, allowing for change in the middle sessions. The decrease in behavioural change in end sessions may be due to the focus of cognitive tasks in later sessions. In IPT behavioural change increased throughout the time stages, with the highest occurrence in the end sessions. Perhaps more participants would have increased statistical

significance for a difference between the therapies. Again, simple behavioural activation does not mean change will occur.

Hypothesis 8.2

The hypothesis stated that occurrence of cognitive change would occur more in CBT than in IPT because of the emphasis on cognitive work within the CBT model. This hypothesis was supported. There was no main effect of time, however the pattern of interaction is interesting as both therapies had a low occurrence of change in the beginning, where IPT reported no change and both therapies had an increase in occurrence in the middle sessions. The occurrence of cognitive change in IPT decreased in the end sessions whereas CBT increased occurrence. This may be explained by the emphasis on cognitive work between the middle and end sessions in CBT (Beck, 1974).

A further finding from the descriptive statistics was that the highest occurring category throughout the therapy was discussion of significant others across both IPT and CBT. This finding is interesting because it would be expected from IPT which has a large focus on interpersonal relationships, however, the finding in CBT is interesting because it may be more likely that discussion of topics specifically related to CBT such as thoughts, homework or tasks would occur more in therapy rather than discussion of significant others. This may have been an artefact of the patients who underwent CBT, but the researcher recalls that only one of the CBT participants was engaged in discussing her romantic relationship throughout the course of therapy, which may not skew the overall data. Perhaps a more likely explanation is that significant others, namely relationships are

an important part of therapy that in CBT may not be explicitly recognised or focussed upon. It may be that therapists perhaps rely on techniques and often underestimate the power of an individual's outside world. IPT may be addressing this appropriately, with its interpersonal focus, and perhaps CBT needs to adopt more of an interpersonal focus instead of its' current intrapersonal focus. Perhaps the data, and consequently participants are telling us something about what they want to look at in therapy.

4.3 Limitations of the study

There are a number of limitations in the study which will be discussed.

This study used content analysis. A major goal of the scientific method underpinning content analysis is to investigate hypotheses, aiming to avoid the bias and subjectivity of the researcher. This differentiates it from qualitative methods of analysis, where the subjective position of the researcher is acknowledged as part of the investigation (Neuendorf, 2002). In this study, the researcher was not blind to the therapy session being coded at a particular time and as a therapist, their understanding of the process and content of therapy will have influenced the coding. A measure of inter rater reliability was used to limit the extent to which the bias of the researcher would influence the data analysis but ideally a researcher blind to the purpose of coding would be preferable.

It is important to note that all participants' therapy was transcribed, apart from CBT participants 2 and 3. In their cases, only items that were relevant to the existing coding scheme were transcribed. This may have reduced the wealth of material available from a

full transcription and consequently affected the measure of categories, leading perhaps to an underestimation of occurrence.

The method of coding may also have led to an underestimation of occurrences. A unit of coding was defined as each section of speech that was relevant to one item of coding. This did not mean that each sentence related to the item was a separate item of coding, particularly during turn taking, when the therapist and participant may mention this up to six or seven times, but simply that section was rated as one item. This may have led to a gross underestimation of frequencies throughout the study. This would be counterbalanced by the fact that this rule applied to all coding throughout the study.

Finally, the coding scheme was developed predominantly from the IPT participants' transcripts. Although themes were added from subsequent CBT participants, it is likely that the coding scheme has a predominant influence from interpersonal therapy.

4.4 Areas for future research

This study would have benefited from investigating the follow up therapy sessions carried out a number of months post therapy to further understand change that occurred and change that endured. This is an important clinical consideration; both CBT and IPT are short term therapies, arguably any change that occurs may not last. Shea *et al* (1992) questioned if changes in brief therapy are brought about by means of a positive dependent attachment to the therapist, it is unclear whether such changes are capable of enduring after termination. For example, changes in mental representations may be lost when the therapist in whom the

desired qualities are invested is no longer present. They further proposed that gains made in brief treatment by means of modelling; skill acquisition and reinforcement also require substantial practice before becoming enduring and adaptive traits. Indeed it has been shown that treatment gains from IPT and CBT in the TDCRP were not maintained at follow up.

It may be if we look to measuring outcomes more rigorously, it may help to determine if longer term treatment is necessary to allow more opportunity for mental representation to become fully internalised or for more adaptive behaviours to be practiced. As the literature suggests, the ingredients of change identified are conceptualised in terms of the therapeutic alliance, positive dependent transference, or mental representation, and one might be left asking what the role of specific therapist techniques is in helping the patient to improve. (e.g Jones *et al*, 1992). Clearly more work is needed to unfold the processes involved during therapy.

It would be interesting to investigate the process of therapy and themes arising as a qualitative study, perhaps using Grounded Theory (Glaser & Strauss, 1967). This would lead to a fuller understanding of the content and process of therapy. It would also be of interest to interview patients at various stages following therapy to ask them their views about the process of therapy and what helps or leads to change. Surely this would reflect a truly collaborative process as defined in therapy.

Finally, it is perhaps essential that we as therapists continue to use outcome measures as a means of monitoring outcomes for patients following therapy. Following the literature

discussed in the introduction it is perhaps essential that we do not rely on simple symptom measures, such as the BDI-II, but instead look to more informative ways of measuring what has helped the patient with particular reference to process issues such as the patient's experience of the therapeutic alliance, empathy and support.

4.5 Conclusions

This study investigated and compared the content of interpersonal therapy and cognitive behavioural therapy in the treatment for depression. The quantitative aim was to compare the frequency of occurrence of categories between the therapies. The qualitative component aimed to provide more detail about the changes that participants reported. The results indicated that differences in content reflected the theoretical background of the therapy, however there were a number of interesting findings, specifically that there were occurrences of categories that were predicted not to occur in IPT for example discussion of thoughts, assumptions and core beliefs.

The categories that occurred significantly more in CBT compared to IPT were: affect expression, task activation and review, behavioural change and cognitive change, solution generation, discussion of the model, homework and assumptions. All of these categories were hypothesised to occur more in CBT compared to IPT apart from affect expression.

All other differences between the models were not significant, for example, formulation as predicted did occur more in CBT compared to IPT but this difference was not significant. Interpersonal change and emotional change as hypothesised did occur more in IPT but

again this difference was not significant. Finally, thoughts and core beliefs did occur more in CBT as predicted but this difference was not significant. Differences in content occurred between the beginning, middle and end of therapy. There was a reduction in symptoms of depression as measured by the BDI but this reduction was not significant. This research highlights the need for further comparison of therapies to improve our understanding of the content of therapy *as it is delivered*, rather than stated in the text books. This valuable knowledge can help us to continue to investigate the possible components responsible for change in therapy.

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Appendix 1: Beck Depression Inventory

Appendix 2: Coding Scheme

1a Self generated problem

This refers to any item that the participant refers to as an issue or problem in their life that was causing them difficulty. This could be related to relationships, physical health, work, home, mood, but must be self generated.

1b Therapist generated problem

This refers to any item that the therapist refers to as an issue or problem in the participant's life that therapist identifies as contributing to or causing the participant difficulty. This could be related to relationships, physical health, work, home, mood, but is solely generated by the therapist.

2a Self statements

This refers to any statement the participant makes regarding themselves. This usually refers to their own character or behaviour or thoughts. An example of a self statement is "I have no confidence, no get up and go". This is an example of a self statement, but also in the context of a discussion of problems is related to a self generated problem. Consequently this would be coded twice if it could not easily be coded as one main theme.

2b Therapist generated self statements

This refers to a statement the therapist makes regarding the participant's character, behaviour or thoughts. An example of a therapist generated self statement is "You have no confidence, no get up and go". This example relates to the patient's low self esteem and lack of motivation.

3a Significant other (romantic/ family/friends)

This refers to a statement the participant makes regarding people they are close to or have relationships with in their personal lives. This could be a romantic relationship with a boyfriend or girlfriend, the relationship with their family members such as a mother, father or siblings. Finally this statement could be related to any relationship with friends. An example of a statement related to significant others is “I have quite a close relationship with my mother but not my father.”

3b Therapist generated significant other

This refers to a statement the therapist makes regarding the people the participant is close to or has a relationship with in their personal lives. This could be a romantic relationship with a boyfriend or girlfriend, the relationship with their family members such as a mother, father or siblings. Finally this statement could be related to any relationship with friends.

4a Affect expression

This refers to any statement the participant makes regarding their mood. This may be related to how they feel at present, how they have felt in the last week since the appointment or how certain events have stimulated their mood. This may have a positive or negative slant. An example of affect expression is “I feel quite down this week” or “when my husband says those things to me it makes me really angry.”

4b Therapist generated affect expression

This refers to any statement the therapist makes regarding the mood the participant is experiencing at present, how they have felt in the last week since the appointment or how certain events have stimulated their mood. This may have a positive or negative slant. An example of therapist generated affect expression is “It appears that you feel happier when you do some of your work.”

5 Formulation of problems

This refers to the therapist’s attempt to understand and explain the possible precipitating, predisposing and maintaining factors involved in the patient’s problem/s.

6a. Task Activation

This refers to discussion and implementation of a task. For example, in CBT, the patient might agree with the therapist to tackle his/her fear of social situations by beginning to write down a list of places or situations he/she avoids. Most of these tasks will be discussed during the session, but completed outside therapy hours.

6b Task Review

This involves discussion of the task that will have been agreed during the previous session. The patient may have intended to carry out the task but not completed it, or may have carried out the task. The therapist encourages the patient to review reasons for both.

The following five categories have a “change” influence. By their nature they encompass categories that were added during the latter phases of therapy.

7 Behavioural change

This refers to any statement either the therapist or participant makes regarding a behavioural change. An example of behavioural change is “I have been doing more work recently” or “I have been going out with friends more” or “I have made it to the gym on two occasions over the last week”.

8 Cognitive change

This refers to any statement the therapist or participant makes regarding a cognitive change. An example of cognitive change is “I try to think of the positives” or “ I have tried not to interpret everything I find difficult as me being a failure”.

9. Interpersonal change

This refers to any statement made by the therapist or patient regarding an interpersonal change. An example of this may be a change in how someone related to someone, for example, a patient who has always found it difficult to talk to her husband about her feelings, but as part of therapy has begun to do this over the last few weeks and has found it a positive experience and now feels emotionally closer to her husband. The interpersonal change is in how the person relates to another.

10. Emotional change

This refers to any statement the participant makes regarding a change in their feelings. An example of emotional change is evident when a patient who has been feeling depressed throughout therapy now comes to therapy saying his/ her mood has improved. Emotional change may also refer to a change in how he/she feels as a result of something else, for example, the previous example discussed interpersonal change , which subsequently led the patient to feel emotionally a lot closer to her husband. This is also an example of emotional change.

11 Solution generation

This refers to any statement the participant or therapist makes related to how their mood or situation could be improved. An example of solution generation is “I know I would feel better if I could do some exercise” or “If my partner would listen to me I would feel a whole lot better”. An example of therapist generated solution is ““It appears that you feel much better when you go to the gym, can you see any time this week where you would be able to fit that in?”

12 Discussion of model

This refers to any discussion the therapist has regarding the therapeutic model. For example, in CBT, this may include discussing with the patient at an early stage how their problems fit in with the concepts of thoughts, feelings and behaviours. This means any reference or discussion throughout the therapy explicitly linked to the therapeutic model. This is relevant to both CBT and IPT.

13 Homework

This refers to any work, further thinking or tasks that the therapist and patient agree for the patient to work on outwith the therapy sessions. This is similar to task activation and review, but includes any type of task, whether cognitive or behavioural or interpersonal.

*task activation differs in that it has more of a behavioural slant: for example to go out and take some exercise before the next sessions, versus writing down a list of all the difficulties that the patient is experiencing.

14 Thoughts

This refers to any discussion between the patient and therapist regarding the nature of their thoughts or style of thinking. For example, a patient who says “I just can’t stop thinking what a loser I am, I really let my family down.” This would be coded as a discussion of thoughts by the patient. A further example to explain this subcategory would be if the therapist was to say “your thinking seems to be particularly negative”. It is not enough to say a single statement to code this category, there has to be an exchange regarding this matter to ensure coding.

15 Assumptions

This refers to any discussion between the patient and therapist regarding the nature of assumptions as defined by the cognitive model. An example of this may be the patient stating “If I don’t get this homework done then you’ll think I’m really lazy”. An example of discussion of assumptions by the therapist is “it appears that you are bound up in the assumption that I will think you are lazy if you don’t complete the homework we have set,

but you are assuming that will be my reaction, perhaps I won't think that". Once again it is not enough to say a single statement to code this category. There has to be an exchange regarding this matter to ensure coding.

16 Core Beliefs

This refers to any discussion between the patient and therapist regarding the patient's core beliefs. An example of this may be the patient stating "I'm stupid", "I'm worthless" or "I'm unlovable".

Appendix 3: Example of Transcript and Initial Coding

Session 1

Therapist: So today essentially is getting to know a bit about your problems and a bit about you as a person. So, I will just begin, can you tell me what you would see as the main problems, and tell me a little bit about them?

Patient: well, organising my life, knowing what I wanted, emm.....another bracket, sleep, bad sleep, depression, which I've had off and on since I was a child, lack of energy....(**problem discussion**) the times when, em , the times when I'm organised, if you asked me what kind of person I was, on the whole I'd say not very organised, (**self statement**) except in the things that I teach, for interest, when I'm climbing or responsible for people, I'm pretty well organised, I'm good at being reasonably decisive for other people but not for myself, and I'm too precise....for instance, if you ask me to look at this form, instead of being general about it, actually I cant fit into any of these categories exactly, I think most of the time I find life pretty uphill and I feel tired, I lack energy really,

Therapist: I'll just reflect back the kind of things, so, you would say the problems have been something to do with organising your life, knowing what you want,

Patient: Yes

Therapist : And this indecisiveness on your part about your life, but you find you can be decisive about other people's lives.....So, em.. actually, it will be the whole fabric of organising your life that is a problem?

Patient: The other problem is being depressed on and off, for a long time, lacking energy, sleep and life is like climbing (**problem discussion**) up a hill....the depression has always been present since childhood.

Therapist: What about the sense of not knowing what to do in life, or difficulty organising it...being responsible for your own self, is that also a problem?

Patient :I find it very difficult to say no to people, friends tell me that and so,

Therapist: I mean getting back, this issue of not knowing what you want, feeling indecisive is that life long?

Patient : Yes,

Therapist: Also having difficulty saying no, is that.....

Patient : Yes

Instead of saying right I have to do this and this I will say ok, its useful if people ask me to do things its purposeful....

Because i don't have a permanent job, it is part time,. Then it gives me some worthwhileness

Therapist: Ok, so do you think not saying no is kind of linked to I'm only working part time so the rest of the time to fill to give a sense of purpose, its convenient to say yes?

Patient: I suppose so, yes...

Therapist: Does it create difficulties?

Patient: It creates difficulties in trying to do so many things in a short time, ...(problem discussion)

So for instance woke up this morning, my friend asked could we meet tomorrow, instead of saying no it's not convenient, I said ok,

Pause

I sometimes think that I need to be much more pragmatic and organised, and If I was more assertive, and more confident, then life would be easier (**solution generation**)...I have had times when I've had that for a short time, and that self confidence,

Therapist: Are there any links to when this time comes?

Patient: When I'm responsible for people....

I know when I had to make decisions for my parents.... particularly when they were in hospital...and getting things done and having to get all the paper work sorted out etc, I was probably more forceful.....Probably if I had a better sense of my maturity. (some **solution generation**)

Therapist: So without those roles

Patient: I have never been able to answer the question, what do you want to do in life?

Therapist: I think its an important question

Patient: I can make all these decisions for other people, and be fairly confident, it's a paradox...

Therapist: Do you think any particular things get in the way of knowing what you want to do?

Patient : I think Its something that should come naturally

Probably if you are brought up to have choices, you learn to make decisions and learn to have that ability....,

I went to school when I was twelve and I don't think I have learned how to make decisions at all

Therapist: Whats got in the way?

Patient: Its very easy to blame other people I suppose

Therapist: I think its quite difficult actually

Patient: In crude terms as a child I didn't learn to develop self confidence that is needed to make decisions.

Therapist: Is that a sense that you were put down by teachers , parents and peers?

Patient: well, being highly educated as well makes a huge difference

Therapist (summarising and reflecting back understanding): if I just try to summarise, it Sounds like the probs are, I'm not trying to piece the whole jig saw together, you describe the problem as going back a long way, I'm just kind of trying to put some kind of, not boundary on it, but just trying to get that its a problem with self confidence that goes back a long time, still around today, but periodically there has been more confidence around, and decision-making has been easier, and you also said depression has been around a long time. What I would say, Cognitive therapy is a very here and now therapy (*introducing model*)....it's not looking for what caused it, Or what factors have contributed over the years....the problem is here, we can hopefully affect the here and now and the future, its possible to shape or reshape things, so,really the focus is on here and now

pause

Its also collaborative, not about me having wild theories in my head which I don't share with you, what I think... gets reflected back to you and I would hope that enables you to

reflect back to me, that might help keep us focussed on the tasks with depression and decision-making. So, how does that sound to you?

Patient: I've been in psychotherapy for so long...there comes a stage where life's gotta go on, sometimes think a really constructive, to have goals and aim for them, that has been lacking in the past...*(patient has had previous therapy)*

Therapist: That's the framework we have

Its not looking back to find a key to unlock, its about looking at now working on now problems. Trying to fix them in the now and future, the past doesn't go away, there will be reference to that....might make sense of why we are stuck....

We are also looking at thoughts, behaviour, emotional and environment, it may be that we cant do a lot about these factors completely, cognitive therapy would say that your thoughts and your behaviour are things that can actually be examined, we can record them and look for patterns to see if we can affect change in them.

That's the theory

We will expand on this next week, is that ok?

Patient: that sounds grand, fine, thank you, so next week at?

Session stops

Session 2

Therapist: Now we will set out an agenda, (**agenda setting**) things that would be valuable to tackle, then we reflect at the end have we got through it, what have we to do, tasks from there, agenda should be collaboratively arranged.

Patient: I would like to know more about the structure of the cognitive therapy. For instance specific tasks,

Therapist: so I will put that on the agenda, the way cog therapy looks at probs and deals with that.

Patient: I don't know what I should be bringing along or what is appropriate, so that would help

Therapist: Are there any specific issues that you feel that are important.... or even reflections...

Patient:The most disturbing thing is the nightmares I have been having, but I had a knee operation and they gave me painkillers.

Therapist: Ok, I think we need to make targets, goals, aims...what would yours be?

Patient: (goals) To be more positive...and therefore to have, instead of reflecting and understanding why...I get Depressed or cant make decisions, because I think you know intellectually for want of a better word I know why, so I would say learning to be more positive, theoretically that's easy, when I've tried to be like that, a fake or a cheat, I'd be more confident. **(solution generation).**

Therapist: So in essence, what you would like to become is to feel more optimistic, more confident, and stop reflecting and stop understanding why decisions are made, to get on with things,

Patient:I'm not saying don't reflect, but getting a balance between reflecting and understanding and learning to relax, one of the things I've noticed is I put obstacles in the way,

If I sit down and don't try it comes, but if I have to do it is difficult

Therapist: If I relax and don't put obstacles in my way I seem to make progress.

So we might want to be more clearer, you want to stop reflecting and understanding the whys, to learn to get on with things without feeling a fake or a cheat, a more pragmatic approach to learn to relax and get the balance right.

Is that fair enough?

Patient: I feel like an onion, like you peel a layer off and another layer off and I'm trying to get down to the core, and in fact the awful thing is that I feel like all the layers have been peeled away, and I'm left with nothing...**(self statements)**

Therapist: I think over the next sessions we can try and define those things more clearly...and to see which of these are priorities, cos there is quite a lot, we might need to

see which is the most realistic and achievable, I think another issue is to try and connect more information, on a gradual basis, I think we will be quite pushed for time
I think all the aims you've stated seem to fit with a description of your problems, they seem to be getting, the aims seem to be getting away from those problems,

Patient: Do you mean I'm distracting?

Therapist: No I think you define your problems and these are looking for shifts away from your problems,,,,,rather than wanting to stay with them

I think your aims are very realistic, there is scope to work on them, the cognitive approach is a pragmatic approach, it looks at the here and now, what can we do with what we've got, how we can change things, its collaborative, there Is no hidden agenda, we want to pragmatically crack this, we are looking outwards, we will focus on your thinking pattern, but it may be, the cognitive model of problems is that there is a bias in the way people think, that bias affects your view of the outside world, if you are feeling very depressed you have a very negative bias, you collect negative information, you are poor at finding good information, your thoughts develop a negative bias, part of that may be more about leading to more introspection. The negative thoughts may lead you to be more introverted...more self-absorbed (**discussion of model**)

Patient: As you say that, someone at climbing, it was quite enlightening for me because he was incredibly negative, this could be me, I thought that's how I must sound to people. There is information to be gathered, you decide that how you might be viewed, whets your thought on how you might be viewed in that case.

It has the effect that I must do something to change,

Therapist : how does it make you feel, that thought, that I wear people down in the same way..., that I wear people down (**beginning thought-feeling discussion**)

Patient: Its almost as if people are a mirror for me....An example would be that since I last saw you....One of the neighbours from downstairs rang and asked if I would sign something, and an elderly couple...and they were saying how we seem to be wearing each

other out, the lady wasn't very courteous...she said it was just nice to talk to someone, and I thought right, that's the second hang of mirror I've had in recent weeks....

Therapist: So your initial thought is this man was talking to him about climbing...and you thought I must be viewed in that way...then that triggered another thought...which was ' i must wear people down'

Lets just follow the thought pattern that you have

If we have too much information, we must focus down, lets look at that thought,

What happens with that thought, are there other thoughts, feelings, physical sensations, is there any change in what you do....

Patient :What follows from this is

'I must change the way I am, the way I view things' and that in fact when I am positive, its good...as simple as that (he chuckles)

in a way it's a very simple solution, but maintaining it is very difficult

therapist extracting patients thoughts//views and linking them to patients feelings

Therapist: How do these different thoughts make you feel?

Patient: 'I must be viewed that way

I must wear people down

I must change

Therapist: What emotion does that lead to?

Patient: Ammm...Discomfort, I feel wet, I feel people have to carry me

That another thought maybe,

'People have to carry me'

clients probs with task (thought differentiation)

I find it very difficult to differentiate between thought and emotion...

Therapist: Ok that one of the tasks, one of the very first tasks, to try and make that distinction, it's quite difficult for us to control our emotional state completely...to change it, it's perhaps easier to draw, there are links between thought behaviour and environment, it's hard to change disappointment for a different emotion, but the thoughts

Psychoeducation re the model

If 'people have to carry me', people view me that way'

Those thoughts are completely true, partly true or not at all, but they lead to an emotion...and they can quite quickly lead to it,

Patient: so the question is what emotion is

Therapist: well the aims are to feel more positive, more confident, that's just feeling negative or underconfident, or pessimistic are the negative emotions, it's quite difficult to shift those negative states over a long period of time,

client reveals underlying assumption

patient: to change yes...because **I have this underlying fear, I think that I can't change, or to change is somehow superficial...**that you will look differently but underneath you will still be the same...to get rid of that ghost would be amazing...any good change is not genuine

therapist: you described a thought

'i'm fated to be bad', that's a thought...what the emotional consequence of that thought

patient: I suppose it's *despair*, if someone said that to me, my reaction would be 'actually you're not'

therapist: so the actual thing is that, I'm fated to be bad, to you seems like a true thought,

Analogy to explain rationale of thought challenging

that's one of the difficulties about thoughts, we have a lot of thoughts we have very little control over our thoughts, if I asked you not to think about a pink elephant, I wonder how easy it would be for you to not have any thoughts about a pink elephant,

patient: Well its interesting....its quite easy for me not to, because I've got into that I learnt to control my thoughts very well

therapist: So you completely eradicated any thoughts about a pink elephant...

Laughter\

Patient: No

Therapist: Right!, its impossible to control your thoughts completely
There is great difficulty completely controlling your thoughts

Patient: I do hesitate there

Appendix 4: Ethics Form

