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Client Attitudes
Towards Homework
In Cognitive Therapy

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ABSTRACT

This study examined client attitudes towards homework in cognitive therapy in relation to client diagnosis and symptom severity, and in relation to homework compliance. Participants attending a cognitive therapy outpatient facility completed two self-report attitude measures at each therapy session over a three-month period. The results showed a relationship between attitudes and symptom severity. Participants with depression exhibited more avoidance and less mastery and pleasure associated with homework completion, while participants with anxiety exhibited increased mastery and pleasure and decreased avoidance. Negative attitudes (avoidance, difficulties, and obstacles) were associated with non-compliance. Pleasure was significantly associated with quality of homework completion. In summary, there was a positive relationship between attitudes towards homework, compliance, and levels of symptom severity.
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Chapter 1: Cognitive Therapy: The Context For Homework

Introduction

Cognitive therapy began in the early 1960s with A. T. Beck’s research on depression (Dattilio & Freeman 1992; A.T. Beck, 1964). He found that depressed clients consistently exhibited a negative bias in their cognitive processing. From this he developed a cognitive model of depression, which was later extended to other emotional disorders, such as anxiety disorders (A. T. Beck, 1963; 1964; 1967).

The development of cognitive therapy was also influenced by a number of other early theories. These include Kelly’s (1955) model of personal constructs and beliefs in behavioral change, Arnold’s (1960) cognitive theories of emotion, and Lazarus’s (1966) work that linked the role of cognition with emotional and behavioral change. The theory of rational-emotive therapy (Ellis, 1962) was consistent with cognitive therapy theory in that individuals adopt patterns of cognition based on underlying assumptions. The manner with which this is dealt with therapeutically differs, however, with rational-emotive therapists persuading the client that dysfunctional thoughts are irrational, while cognitive therapists seek to test the validity of such cognitions using a collaborative approach. Other influences on cognitive therapy include Bandura’s (1977) social learning theory and cognitive modeling. This also coincided with a shift in behavior therapy towards a more cognitive approach (Dattilio & Freeman, 1992). Mahoney’s cognitive control of behavior (1974) and Meichenbaum’s cognitive behavior modification (1977) were also important influences on cognitive therapy.
Cognitive therapy is based on the theory that a person's feelings and behaviors are largely determined by how the person structures experiences (A. T. Beck & Weishaar, 1986). From this perspective a person's psychopathology is an exaggeration of a normal adaptive response (Dattilio & Freeman, 1992). For example, anxiety may be a useful warning response, which encourages a person to check out details of a situation, whereas excessive anxiety can cause a paralyzing inability to respond to a harmful situation. Cognitive therapy proposes that distortions in thought often maintain dysfunctional mood states. Changes in thoughts may bring about change in affect and in behavior. In this way thoughts are viewed as a key point of intervention in cognitive therapy (Dattilio & Padesky, 1990).

**Principles of Cognitive Therapy**

Cognitive therapy examines client problems in cognitive terms. The theory of cognitive therapy proposes that patterns of cognition help maintain emotions and behaviors. Clients are frequently screened at the beginning of therapy to obtain measures of functioning, including baseline measures of symptom severity. For example, a common baseline measure of depressive symptoms is the Beck Depression Inventory (BDI; A. T. Beck, Ward, Mendelson, Mock, & Erbaugh, 1961; A. T. Beck, Steer, & Garbin, 1988). Sometimes clients are assessed for how they might function in therapy. For example, the Suitability For Short-Term Cognitive Therapy Rating Scale (SSCT; Safran, Segal, Vallis, & Shaw 1990a) assesses among other things, accessibility of automatic thoughts, awareness and differentiation of emotions, compatibility with cognitive material, acceptance of personal responsibility, and alliance potential.
Therapy starts by addressing current issues in order to bring some immediate relief through reduction in symptom severity. While therapy is present-focused, it may also involve the examination of childhood experiences that have helped shape beliefs and thoughts, and how these may have made the client vulnerable to certain problems by linking into current precipitating factors (A. T. Beck & Emery, 1986). By identifying precipitating factors and client responses to them, clients are able to challenge and potentially change dysfunctional thought, emotional or behavioral patterns in their lives (J. S. Beck, 1995).

Cognitive therapy takes an educative approach (A. T. Beck & Emery, 1986), and teaches clients skills to enable them to resolve present and future problems. Clients learn to become more aware of negative thoughts and beliefs, to identify, evaluate, and respond to them. Therapy is focused and goal-oriented. A variety of techniques are used to change thinking, motivation and behavior, which are linked to the specific problem area and are tailored to clients' individual needs.

Cognitive therapy is based on a sound therapeutic alliance. This requires good therapist skills, and a collaborative approach between client and therapist involving active client participation in therapy. Part of the collaborative process in therapy includes setting the agenda for the therapy session, reviewing and setting homework. An agenda is set at the beginning of each session, which provides the structure for that session. Homework is central to therapy. It is a means of ensuring that the work of therapy is applied throughout the time between therapy sessions. It also gives clients a chance to apply what has been learned to everyday situations, as well as to the problem situation. The review of homework assigned from the previous session generally comes early in the session, and the
assignment of new homework comes towards the end of the session (J. S. Beck, 1995). Data, for example daily activity schedules, or other material the client has collected as part of homework, often provides the material to be dealt with in the main portion of the session.

Cognitive therapy is brief and time-limited, with generally fewer than 25 sessions. Often initial sessions are closer together with later sessions more spaced as the level of clients' adaptive skills increases. Periodic booster sessions are often used at the end of therapy to maintain gains and to prevent relapse of the presenting problem. (A. T. Beck & Emery, 1986; J. S. Beck, 1995).

**Role of Cognition**

Cognitive therapy proposes that an individual's previous experiences influence the formation of attitudes, rules and assumptions. These attitudes, rules and assumptions influence the thoughts that automatically arise in response to particular situations.

Cognition may be understood as a three-level structure comprising automatic thoughts, intermediate beliefs, and core beliefs (Padesky, & Mooney, 1990). These can be thought of as three concentric circles with the automatic thoughts being the outer, most visible and accessible level, followed by intermediate beliefs, with core beliefs being at the deepest level and not generally being part of an individual's conscious awareness. Automatic thoughts are unplanned and situation specific. They arise spontaneously in response to a situation, and may involve verbal or visual images or both.
Automatic thoughts are the most accessible to the client. Bringing automatic thoughts to immediate awareness is one of the first tasks of a client in cognitive therapy. Intermediate beliefs are rules, attitudes and assumptions, which guide a person’s life and organize how situations are perceived. Evidence about these intermediate beliefs can be gathered and examined to decide the extent to which they are true. This can be done in the therapy session, or assigned as homework. Core beliefs or schemas comprise the deepest level of cognition. Core beliefs are unconditional, inflexible and absolute beliefs of the self, the world, and of others (Padesky, & Mooney, 1990). They are usually formed in childhood and are not usually part of an individual’s awareness. Core beliefs may be assessed by noting an individual’s typical reactions to events or circumstances over the course of therapy, and can sometimes be recorded by the client as automatic thoughts on thought record sheets (J. S. Beck, 1995). A critical incident or activating event may trigger a person into activating past maladaptive beliefs, generating current maladaptive automatic thoughts, thereby determining the way an individual thinks, feels, and reacts to a current situation.

While thoughts are regarded as central to the way an individual’s world is structured, the cognitive therapy model can be conceptualized as an inter-related structure of environment, cognition, affect, physical response and behavior (Greenberger & Padesky, 1995). The environment includes the individual’s living situation, history and culture. Cognition includes thoughts, images, and memories. Emotions include moods and feelings. Behavior includes actions and what a person actually does in response to the other components of the model. Physical response includes any biological or physical sensation a person may experience. Change at any point of the model will impact on the entire situation.
Specific psychological problems are related to specific cognitive content. For example those with depressive disorders display a negative view of the self, the future and experience. Those with panic disorder show a catastrophic misinterpretation of bodily sensations and mental experiences. Those with obsessive-compulsive disorders sense a repeated warning or doubting about safety and use repetitive acts to ward off such a threat (A. T. Beck & Rush, as cited in Kaplan & Saddock, 1998).

Errors of cognition, also known as information processing errors, are common to most people to varying degrees, and are theorized to maintain dysfunctional states. One of the tasks of therapy is to identify and modify such errors of cognition. The following examples (A.T. Beck, Rush, Shaw, & Emery, 1979) are among the most common cognitive errors. **Over-generalizing** occurs when what is true in one case is attributed to other similar cases. The therapeutic intervention is to oppose the faulty logic of this way of thinking and establish greater discrimination of the similarities and differences of various situations. **Selective abstraction** occurs where an individual focuses only on negative life events. This may be examined by keeping a journal, which includes the good things and successes the client tended to forget. **Catastrophizing** occurs when an individual always thinks that the worst eventuality will happen and is challenged by calculating the probabilities of what might happen, and recording evidence of what did, and did not happen. **Dichotomous thinking** occurs when everything is seen as either one extreme or the other. This may be re-evaluated by using a continuum to chart the true impact of events.

Other cognitive errors include: **magnifying or minimizing**, or over-valuing the importance of a situation or certain information; **emotional reasoning**, or thinking something must be
true because it “feels” true; *using shoulds and musts (imperatives)* involving self-messages that things "should" or "should not" be a certain way; *personalizing (blaming)* or holding oneself responsible for something not in one’s personal control; *tunnel vision* or seeing only the negative aspects of a situation; and lastly *disqualifying or discounting the positive* by self-messages that positive experiences, deeds or qualities do not count.

(J. S. Beck, 1995).

**Summary**

Clients in cognitive therapy are urged to examine cognitions related to their problem. They learn to develop alternative and more helpful cognitions and behavioral responses. Much of the therapeutic work is done by checking hypotheses generated from the problem area, often as homework assignments.
Chapter 2: Cognitive Therapy: Research and Specific Uses

Introduction

There is a growing demand for therapies, which are brief, effective and therefore cost-efficient. For example, in New Zealand, university training of psychologists follows a predominantly scientist-practitioner model (Kazantzis & Deane, 1999), and cognitive behavioral approaches are widely used as a training model. Homework is an essential part of cognitive therapy, providing activities that support the therapy session and providing therapeutic practice for the time between sessions. It is also an integral part of the collaborative process between client and therapist. Homework is widely held responsible for the long-term maintenance of therapeutic gains (e.g., Kovacs, Rush, Beck, & Hollon, 1981).

Empirical support for cognitive therapy

Cognitive therapy has been found to be effective in outcome studies for unipolar depression, generalised anxiety disorder, panic disorder, bulimia, social phobia, and obsessive-compulsive disorder, with controlled studies now also examining cognitive therapy for personality disorders, psychosis, and post-traumatic stress disorder, among other disorders (Blackburn & Twaddle, 1996). An article by DeRubeis and Crits-Cristoph (1998) examining the research on psychological treatments for adult disorders, found that cognitive and behavioral approaches dominated the list of efficacious treatments, especially for anxiety disorders. To be listed as efficacious, treatments had to lead to a reduction or remission of the disorder at a higher rate than that expected over time with no treatment, or had to outperform an alternative active treatment.
Mood Disorders

Cognitive therapy was determined an efficacious treatment for mood disorders, with some studies showing cognitive therapy to have a superior outcome, some showing cognitive therapy equal in effectiveness to pharmacotherapy, and some studies showing a combination of cognitive therapy and medication as the most useful. One of the earliest controlled outcome studies was that of Rush, A. T. Beck, Kovacs, and Hollon (1977) who examined the comparative efficacy of cognitive therapy and imipramine. Since then, some studies on depression have found that cognitive therapy is at least as effective as antidepressant medication in outpatient treatment of depression, and in some cases, superior. For example, Dobson (1989) in a meta-analysis of 28 studies found that cognitive therapy clients on average had a better outcome than 70% of pharmacotherapy clients. Other studies for Major Depressive Disorder have found that cognitive therapy showed effects equal to those of pharmacotherapy (Hollon et al., 1992; Murphy, Simons, Wetzal & Lustman, 1984; Rush et al., 1977). Some studies have found a combination of cognitive therapy and pharmacotherapy more effective than either treatment alone for depressed outpatients, for example, Blackburn, Bishop, Glen, Whalley, and Christie, 1981; Hollon et al., 1992; Murphy et al., 1984). There is also evidence of superior post-treatment gains where cognitive therapy is available for depressed in-patients along with medication (Miller, Norman, & Keitner, 1989).

The distinction becomes more pronounced in favor of cognitive therapy when the percentage of recurrence of depression in comparison to the use of medication alone is examined. For example, Evans et al., (1992) found at 24 months post-treatment, clients on
tricyclic antidepressants who did not continue medication had a 50% recurrence of depression, while those who continued medication had a 32% recurrence rate. Those who had cognitive therapy had a 21% recurrence, with those having cognitive therapy and tricyclic antidepressants having the lowest recurrence rate at 15%. Blackburn, Eunson, and Bishop, (1986), in a 24-month post-treatment study, found a similar trend of results, with cognitive therapy showing even more favourably with a 78% recurrence of depression in the medication only group, with a drop to 23% recurrence in the cognitive therapy condition, and 21% in the cognitive therapy with medication group. Other studies which have also shown cognitive therapy to have a symptom relapse prevention effect include those of Evans et al., (1992); Kovacs et al., (1981); Simons, Murphy, Levine & Wetzel, (1986).

There continues to be some disagreement over the use of cognitive therapy with severely depressed clients. In a National Institute of Mental Health study, Elkin et al (1989), found that medication was significantly superior to placebo or clinical management, but that cognitive therapy was not significantly superior to the placebo and clinical management conditions. From this study it was suggested that medication should be used for severe depression, which in the Elkin et al., (1989) study was defined as 20 or more on the 17-item Hamilton Rating Scale for Depression (HRSD; Hamilton 1967). Other studies, however, have found no negative relationship between severity of depression and cognitive therapy, including McLean and Taylor (1992); Hollon et al, (1992); and Thase, Simons, Cahalance, McGreary, & Harden., (1991). A study by Persons, Burns & Perloff (1988) showed a much larger effect of homework compliance on outcome for clients with high initial BDI scores. Those with scores over 20 who were compliant gained on average a 77% reduction in BDI
scores, while those who did not do homework showed little improvement. A recent correlational study by Burns and Spangler (2000) found similar results. Burns and Spangler suggest that the effect of homework appears to be sufficiently great as to lead to nearly complete elimination of symptoms in clients with mild to moderate depression.

**Anxiety Disorders**

Cognitive therapy is an efficacious treatment for a range of anxiety disorders. Cognitive and behavioral treatments have been used for clients with Generalized Anxiety Disorder with a success rate of 59% at follow-up three to six months later (Butler, Cullington, Hibbert, Klimes, & Gelder, 1987; Butler, Fennel, Robson & Gelder, 1991; Power et al., 1990), making cognitive behavioral treatment with applied relaxation a specific treatment for this disorder (DeRubeis & Crits-Cristoph, 1998). A recent study by Durham et al., (1999) found cognitive therapy to be clearly superior to analytic psychotherapy for Generalized Anxiety Disorder, as well as cognitive therapy being associated with a significant reduction in medication use. Clients in the cognitive therapy condition were also more positive about their therapy with approximately two thirds in the intensive cognitive therapy condition achieving clinically significant improvements over a six-month period.

With Social Phobia, exposure therapy was an effective treatment with moderate success maintained at follow-up (Hope, Heimberg, & Bruch, 1995; Mattick, Peters, & Clarke, 1989; Turner, Beidel, & Jacob, 1994). There were mixed results with a meta-analysis by Feske and Chambless (1995) reporting that a combined approach of exposure with cognitive therapy was not superior to exposure, in contrast to Butler, Cullington, Munby,
Amies, & Gelder, (1984), which showed that exposure with cognitive therapy outperformed exposure alone.

Cognitive therapy has been found efficacious for Panic Disorder (A. T. Beck, 1988; Clark et al, 1994), with cognitive therapy superior to other treatments at post-treatment (J. G. Beck, Stanley, Baldwin, Deagle, & Averill, 1994; Klosko, Barlow, Tassinari, & Cerny, 1990; Williams & Falbo, 1996). At follow-up, Clark et al., (1994) reported 80% of clients were panic-free post-treatment with gains maintained at 15-month follow-up, with Ost and Westling (1995) reporting panic-free rates of 65% for applied relaxation, and 74% for cognitive therapy at post-treatment. Effects continued increasing, so that at one-year follow-up the result was 82% for applied relaxation and 89% for cognitive therapy. Gould, Otto, and Pollack (1995), in their meta-analysis of treatment outcome for Panic Disorder found that cognitive behavioral treatment was at least as effective as pharmacological treatments, with the advantages of lower rates of attrition than pharmacological treatment.

For Obsessive-Compulsive Disorder, exposure with response prevention therapy is effective (Foa, Steketee, Grayson, Turner & Latimer, 1986), with cognitive therapy showing even more effective results (A. T. Beck & Emery, 1986; Salkovskis, 1985). For Agoraphobia, exposure and systematic desensitization are effective treatments (Gelder et al., 1973; Chambless, Foa, Groves, & Goldstein, 1979; McDonald et al., 1979). For Post-Traumatic Stress Disorder systematic exposure to traumatic stimuli is effective (Cooper & Clum, 1989). With rape victims exposure (at 56%) was superior to supportive counseling (at 33%) (Foa, Rothbaum, Riggs, & Murdock, 1991).
Other Disorders

Cognitive therapy is widely used in the treatment of eating disorders including Bulimia Nervosa, Anorexia Nervosa, and Obesity. Most empirical support for cognitive therapy for eating disorders has been established for bulimia. For example, it was found that the use of cognitive therapy in the treatment of bulimia resulted in a substantial reduction in bulimic behaviors as well as a change in the cognitive distortions associated with bulimia (Lewandowski, Gebing, Antony, & O'Brien, 1997). Cognitive factors have been considered to maintain the condition (Fairburn, 1985; Fairburn & Cooper, 1989). Cognitive behavioral therapy is at least as effective as other therapies, with Craighead and Agras (1991) in an analysis of 10 studies of bulimia, finding a mean reduction in bulimic behavior of 79%.

Cognitive therapy is also widely used in the treatment of pain. Morley, Eccleston and Williams in examining pain excluding headache (1999) found that cognitive behavioral treatments resulted in clients experiencing less pain, showing less behavioral expression of pain, and showing increased levels of cognitive coping with their pain. In a study of headache clients, Bogaards and ter Kuile (1994) found that cognitive therapy, relaxation, or biofeedback alone or in combination with relaxation, were superior to placebo therapy or a no treatment condition. Cognitive behavioral therapy is an effective, time-limited treatment for anger problems (R. Beck & Fernandez, 1998).

Cognitive therapy is now being used in more 'difficult' areas of therapy. The area of personality disorders has been the recent focus of several studies with Vallis, Howes, and Standage (2000) suggesting that while there is evidence to suggest clients with personality
disorders do not benefit as much from cognitive therapy as those without personality disorders, a modified form of cognitive therapy may be useful for these clients. One study by Persons, Burns and Perloff (1988) found that clients with personality disorders were more likely than others to drop out of therapy early, possibly because of the interpersonal difficulties, which are central to personality disorders. Other studies have also found that cognitive therapy is less effective for clients who have difficulty accepting the rationale for cognitive therapy, have difficulty with homework exercises, and have difficulties with alliance (e.g. Fennell & Teasdale, 1987; Persons et al, 1988; Edelman, 1995). Vallis et al., (2000) also suggest that any clients with alliance difficulties would find any short-term therapy difficult. For clients with personality disorders there are conceptual models available for modifies treatment, including ways of dealing with interpersonal issues in therapy (e.g. Young, 1990; Linehan, 1993).

Summary

Cognitive therapy is an effective treatment for many disorders with an established record for the effective treatment of mood and anxiety disorders. These disorders dominate client diagnoses at the Waitemata Health Cognitive Therapy Centre, from which the sample was drawn for the present study. The participants in the present study had among them the following disorders (primary and secondary diagnoses): Major Depressive Disorder, both single episode and recurrent, with post-natal onset; Dysthymia; Bipolar Disorder (unspecified); Panic Disorder; Panic Disorder with Agoraphobia; Anxiety Disorder (unspecified); Generalized Anxiety Disorder; and Social Phobia.
Chapter 3: Homework and Cognitive Therapy

Introduction

The use of homework to disconfirm patterns of dysfunctional thoughts and behaviors and to develop more functional responses is central to cognitive therapy (Neimeyer & Feixas, 1990). While the ideas of A. T. Beck et al., (1979) on the benefits, uses and administration of homework are still valid and relevant, there is now an increasing amount of research and refinement of these concepts to support ideas previously based on clinical observation and behavioral theory.

Definition

Homework constitutes activities that contribute towards therapy, which are completed by clients outside the therapy session (Kazantzis, 2000a). These activities support the therapy session and provide therapeutic practice for the time between sessions. Homework is an integral part of the collaborative process between client and therapist, adding value to the therapeutic relationship through the discussion involved in its assignment and review. Homework is a means of disconfirming negative thoughts and beliefs and shifting the focus of therapy from subjective, abstract ideas, to something real, substantial and detailed (A. T. Beck et al., 1979). It is also widely held to be responsible for the long-term maintenance of therapeutic gains (e.g. Kovacs et al., 1981). Homework may cover a range of activities from observation, reading material related to therapy, monitoring thoughts and activities and recording them, to physically doing things or interacting with others.
Homework Terminology

Doing homework has the effect of extending therapy into daily practice between sessions, hence the commonly used alternative wording between session tasks (e.g., Neimeyer & Feixas, 1990), or between session practice (e.g., Barlow, O’Brien, & Last 1984), for homework. Other less frequently used names for homework include extratherapy assignments (Kornblith, Rehm, O’Hara, & Lamparski, 1983), show that I can tasks (STIC: Ronan & Deane, 1998), in vivo behavioral practice assignments (Ingram & Salzberg, 1990), self-help assignments (Burns, 1989), and home-based practice (Schmidt & Woolaway-Bickel, 2000). Whisman (1999) suggests that the choice of word used may influence the client’s perception of homework, and for some with unpleasant past academic experiences the word homework may be aversive, while for others, the word homework may be clear and the work easily implemented.

An increasing emphasis is now placed on the systematic administration of homework. This involves specific details of the homework task including a written ‘prescription’ which the client takes away, and includes the therapist keeping regular checks and noting levels of homework compliance (Levy & Shelton, 1990; Shelton & Levy, 1981; Kazantzis & Deane, 1999). Compliance, or performance refers to the degree of homework completion, and comprises quality of homework completion and quantity of homework completion. The effect of homework depends on the degree of homework compliance attained by the client.
Practical Support for Homework

Client Factors

Homework allows the client to put skills learned in session into daily practice and enables the client to work towards stated goals without the therapist being present. Homework provides the opportunity for the client to monitor thoughts, feelings, and behaviors and experiment with these. This may involve testing thoughts and beliefs or modifying ways of thinking and behaving. It also provides the opportunity to practice new cognitive and behavioral skills learned in session (J. S. Beck, 1995).

Successful homework completion is associated with feelings of increased self-efficacy as the client is able to take part in activities that are likely to enhance successful treatment outcome. Increasing self-efficacy is matched by a decreased sense of helplessness and increased motivation (Bandura, 1977). By increasing clients' activity levels through homework, a more positive affect is developed, especially as clients develop skills that can be generalized to other areas of their lives. Clients also gain skills for modifying any future dysfunctional cognitions (Primakoff, Epstein, & Covi, 1986). It is thought that regular and consistent completion of homework throughout therapy helps the client maintain gains made in therapy after the end of therapy, as clients have had practice in self-monitoring new skills and behaviors (A T. Beck et al., 1979). The underlying concept of homework assignments is that cognitive and behavioural changes in everyday life need to occur before the underlying belief structures of the client can be altered (Persons, 1989). There is also the assumption that homework compliance leads to a better outcome for the client (Detweiler & Whisman, 1999).
Therapist Factors

Homework can also be used to gather information about the client, for example, by using activity schedules. The information from the activity schedule serves to review the client’s week, to provide information for the current therapy session, and to provide a focus for the session, thereby avoiding any side issues (A. T. Beck et al., 1979). Homework is also useful for problem areas that cannot readily be dealt with in session, such as sexual dysfunction (Holzworth-Munroe, Jacobson, DeKlyen, & Whisman, 1989). Homework provides effective and efficient use of therapy, as clients are themselves responsible for a lot of the work of therapy, much of which can be done as homework, making more efficient use of therapist time. For example, clients undergoing relaxation and exposure techniques, once they are sure of the task, are able to do their own relaxation and graded exposure under the guidance of the therapist, but not in the therapist’s time.

Theoretical Support for Homework

Generality

Much of the theoretical support for homework in therapy comes from the behavioral principle of generality. According to this principle, a trained behavior transfers from the training situation to the natural environment. Generality applies when this training then leads to a new behavior, which has not been specifically trained for, or when the trained behavior is maintained over time in the natural environment (Martin & Pear, 1999). Three important principles are needed for the therapeutic change to be effective. The change in behavior must show stimulus generalization from the training environment to the natural environment. The change in behavior should also be able to show, at least some of the time,
response generalization to new behaviors. Lastly, therapeutic change must also show maintenance over time in the natural environment (Martin & Pear, 1999).

In cognitive therapy, homework is the vehicle for generalization. Skills learned in therapy sessions can be generalized to specific goal areas of a client’s daily living, and then can generalize further to new areas, and the skills are then also available for use in future situations. Having available skills learned in therapy, allows the client to respond to a variety of situations with a range of more adaptive behaviors.

Compensatory skills model of change

The compensatory skills model of change in cognitive therapy extends this concept with the change from generalization being matched by a change in positive affect and cognitions (Persons, 1993). A client in therapy learns skills to reduce negative symptoms by realigning negative automatic thoughts. Through homework practice these negative thoughts are replaced by more functional automatic thoughts and consequent behaviors. For example, a person who previously felt uncomfortable around ‘authority figures’ may, through therapeutic change, feel more confident and less anxious around such people. Consequently the person may feel and act more positively and in interactions with people deemed to be ‘in authority’, achieve successful outcomes.

Empirical Support for Homework

What disorders is homework used for?

In a survey of 500 studies involving homework from 1973 to 1980, homework was used, for example, for anxiety, non-assertiveness, depression, insomnia, obsessions and
compulsions, obesity, physical illness and rehabilitation, sexual dysfunction, stuttering, social skills, and smoking (Shelton & Levy 1981). This list has grown to encompass a diverse range of clinical conditions. Increasingly refined manuals are now being developed for specific conditions, including homework specific to that condition, for example, childhood problems (Ronan & Deane, 1998), Generalized Anxiety Disorder (Barlow, Esler & Vitali, 1998), Post-Traumatic Stress Disorder (Vaughan & Tarrier, 1992), and Social Phobia (Marks, 1995). There are now also practitioner guides available, offering the clinician a variety of ready-made assignments and advice for a range of presenting problems, for example Shelton and Levy (1981), and Schulthesis, 1998).

Cognitive therapy is now used for an increasing number of disorders, including those not previously thought treatable with cognitive therapy, such as severe depression, bipolar disorder, and personality disorders. As treatment becomes available for disorders, so too, do forms of homework suited to the particular diagnosis. Modified forms of cognitive therapy are increasingly found of value to these clients, for example clients with delusions or hallucinations are noted to have difficulty with written tasks, but it has been suggested that those with less severe symptoms can carry out behavioral and practical tasks and report verbally on them (Nelson, 1997). While personality disorders are difficult to treat with any form of short-term psychotherapy because of alliance potential difficulties and difficulties with client security operations (Vallis et al., 2000), there are now available published conceptual manuals for treating personality disorders which address these issues (Linehan, 1993; Rothstein & Vallis, 1991).
Increasingly cognitive therapy is being used for more severe cases of anxiety and depression. There have now been several studies suggesting that severely depressed clients are able to complete homework as well as those with mild symptoms, both in quality and quantity of completion (Edelman & Chambless, 1995; Startup & Edmonds, 1994). This is important when taken with the earlier study of Persons et al. (1988), which showed a mean reduction in BDI scores of 16.6 points for clients who regularly did homework, and only 2.4 points for those who did not. Burns and Spangler (2000), also note homework compliance as being strongly correlated with reduction in depression scores.

As homework is central to cognitive therapy, homework is increasingly used both in the general sense of daily records of thoughts and activities to more specific homework activities designed to meet the specific needs of specific individuals with specific conditions. For example Conoley, Padula, Payton, & Daniels (1994) in examining types of homework, found that to increase the effectiveness of homework, homework assignments should be matched to the presenting problem. The greater the match the greater the likelihood was that clients completed homework. Homework assignments may serve different needs for different client groups (Leucht & Tan, 1996). Based on the work of Fennel and Teasdale (1987) they give as an example that for clients with depressive symptoms, cognitive therapy is useful for some in helping clarify their situation and that this in itself may combat feelings of hopelessness, while for others, skills-building to deal with problems may be what is needed.
Who uses homework in therapy?

There is increasing interest in the role of homework in cognitive therapy. According to one analysis of outcome studies, 68% of psychotherapists surveyed from 1973 to 1980 reported using homework (Shelton & Levy, 1981). A more recent study showed 98% of 221 New Zealand practicing psychologists surveyed, reporting using homework assignments as part of a treatment package (Kazantzis & Deane, 1999).

Do clients do their homework?

Clearly therapists assign homework, but for homework to be effective there has to be compliance. This is a growing area of research and involves issues such as systematic administration of homework as a means of enhancing compliance. A problem with compliance research is the degree of control extended over clients, that is, it is difficult to monitor what clients do all of the time. Startup and Edmonds (1994) made the observation of “dismantling” methodology (Kazdin, 1980), (where a control group is given a treatment package, and the treatment group is given the same package plus homework), that while it is possible to accurately control whether or not therapists give homework, it is not possible to control whether or not clients do it. Kornblith, Rehm, O’Hara, and Lamparski (1983) experienced this difficulty. They designed a study in which homework setting was manipulated with the result that inclusion of homework in therapy had no greater effect than the treatment without the homework condition. However, it was later found that some clients in the control condition formulated and implemented their own homework, while the average rate of compliance in the homework condition was only 55%.
Compliance is also enhanced by matching difficulty levels to client abilities. Setting homework with a relatively low level of difficulty, while still encouraging clients to move beyond their current abilities is advocated (Leucht & Tan, 1996). The Conoley et al., (1994) study found a negative correlation between homework compliance and the level of difficulty of homework. Utilizing clients’ strengths, for example fitting homework to suit the activities at which clients are competent, or using sensory modalities which fit the client, increased the likelihood of homework completion.

Getting clients into the homework habit early in therapy is also important. There is some evidence to support the idea that success in homework assignments given early in therapy is positively related to therapy outcome (Startup & Edmonds, 1994; Fennell & Teasdale, 1987). Early sessions were chosen in the Startup and Edmonds (1994) study, so as not to confound results with positive results from the benefits of therapy as therapy progressed. The results suggested that it may be therapeutically useful to get clients early into the habit of homework as an additional focus on the task at hand, and to enhance feelings of self-efficacy. Motivation to do homework has been linked to enjoyment, in that if a person is intrinsically motivated to do an activity, the person does it for the reward or enjoyment it provides. Wankel (1993), in a study involving individuals in exercise routines found enjoyment can be enhanced when clients set specific goals, when they perceive themselves to have choices, control, and some flexibility over the goal, when they can involve family and friends in the activity and when that activity is both challenging and rewarding.
Is homework compliance associated with outcome? Does homework add to therapy?

Two further aspects which follow on from compliance are whether homework compliance is associated with outcome, and whether homework adds anything to therapy (Kazantzis, 2000b). A number of researchers have found that clients who comply with homework assignments show enhanced progress in therapy (e.g. Neimeyer & Feixas, 1990). The Neimeyer and Feixas study of clients with depression, using a dismantling methodology, showed that clients in the homework condition showed a significant reduction in depressive symptoms over the course of therapy. However, at six-month follow-up there were no differences in both groups. The suggestion from Neimeyer and Feixas was that long-term gains require successful consolidation of skills learned in therapy. Persons et al., (1988), in a study of depressed clients found that clients who did homework showed three times as much symptom reduction as those who did no homework.

While there have been many studies involving homework with a recent search showing 719 studies from 1980 to 1999 (Kazantzis, 2000), very few have involved quantitative studies and results have been very mixed. For example, some studies have shown that homework produces improvement in symptoms as opposed to homework without the treatment condition (Harmon, Nelson, & Haye, 1980; Kazdin & Mascitelli, 1982). Kazantzis (2000b) used a statistical aggregation of findings of quantitative studies on homework and found that homework assignments produce positive effects on therapy \((r = 0.36)\) and that homework compliance is associated with therapy outcome \((r = 0.22)\), showing that clients had a better chance of improving in therapy if they did complete their homework. A study by Burns and Nolen-Hoeksema (1991), found that homework compliance made an additive and independent contribution to the recovery rates of clients with mood disorders.
Kazantzis (2000b) suggests that significant effects have not been reliably obtained from some studies, possibly because of a lack of design sensitivity, which has reduced the probability of detecting an effect.

**Administration of Homework**

**Matching homework to the problem**

Homework tasks are specific to the particular diagnosis and the individual's presenting problems. For example, it may be desirable for a severely depressed client to do some housework as part of a basic self-care package, while a client with obsessive-compulsive symptoms who spends much of the day cleaning and tidying, may be encouraged to do less housework. For behaviorally-based problems, Shelton and Levy (1981) list four broad types of intervention: giving the client new information, having the client alter his or her physical environment, changing the existing reinforcement, and having the client learn a new skill or extinguish an old one. Thus an obese woman may be given reading material about obesity, she may be told to eat only at the kitchen table and not in front of the television, she may put aside money saved from buying junk food towards new clothing or other desired non-food items, and may learn, for example if frustration was a cause of eating, to get out of the house and walk around the block or some other distracting behavior instead of eating, until more adaptive means of dealing with the frustration are learned.

**Stages of homework**

Homework may vary according to the stage of therapy. Early homework is likely to involve filling out pretreatment questionnaires. This is relatively non-anxiety-provoking for the client and can help the therapist gain essential background information on which to build
therapy. Defining therapy goals may also be an early homework task. Other early assignments may include reading educational material, viewing videos, or other similar material. This may have the effect of enhancing early compliance. For example by providing some of these activities pretreatment, the therapist may be viewed as caring and organized, the client may enter therapy with enhanced positive expectations of therapy, and the client may have some knowledge of cognitive therapy and what to expect. Such early assignments also provide training in doing homework, and provide the expectation that homework completion is part of therapy (Shelton & Levy, 1981). Early compliance with homework has been shown to be predictive of outcome in cognitive therapy for depression at termination (Startup & Edmonds, 1994).

Monitoring thoughts and behaviors is a common form of homework assignment in early therapy, often gaining complexity as therapy progresses. For example a simple ABC sheet (antecedent, behavior, and consequences) helps a client monitor the reality of sequences of behaviors and also provides material for subsequent therapy sessions and future homework. Such records will often form part of a standardized approach to particular diagnoses. For example, a depressed person may record negative automatic thoughts, which at a later stage of therapy may include alternative thoughts and consequent mood changes. Activity schedules are also common for depressed persons for homework as a means of motivating them from inaction into action. A person with an eating disorder may record mood and thoughts before eating, what was actually eaten, and thoughts and mood after eating.

Later stages of homework tend to include increasingly closer approximations of the desired goal. A spider phobic person may start with homework assignments based on relaxation
and gradual exposure, such as looking at books on spiders, to later visualizing spiders in a relaxation setting. Later the person may view real spiders and may actually handle them if this is a desired goal. Later stages of homework may focus on consolidating gains made in therapy, and at the end of therapy, may center on relapse prevention measures (J. S. Beck, 1995).

The therapeutic relationship

One of the first essentials of homework administration is a strong therapeutic relationship. Goldstein (1975) described this as a process of developing liking, respect, and trust. Being perceived as someone likeable (warm and friendly) credible (an expert professional) and similar to the client, are also relationship-enhancing qualities (Shelton & Levy, 1981). A strong therapeutic relationship ensures the increased likelihood of relevant material being obtained from the client, and the client’s willingness to help set and follow through with therapeutic goals. Ideally both therapist and client work together in a collaborative approach to formulate homework tasks. The client’s willingness to participate in homework is essential, as homework assignments can be seen as steps towards, or approximations of the therapeutic goals, and thus a crucial part towards attaining those goals (Shelton & Levy, 1981).

Ways to enhance compliance

Systematic administration of homework has been suggested as a way of increasing clients’ motivation to engage and comply with homework activities (Shelton & Levy, 1981). When clients do not know how to complete a homework task, or do not believe homework will help, or if there are factors in clients’ lives, which make compliance difficult, or do not
support compliance, then clients are more likely to be non-compliant with homework tasks (Shelton & Levy, 1990). Shelton & Levy (1981) further suggest that non-compliance may occur from the therapist setting unrealistic goals, a mismatch between the difficulty of the assignment and the client’s ability to do the homework, a lack of commitment from the client, a lack of positive reinforcement in the client’s environment, and a lack of familiarity with the expectation of doing homework. That is, the client may not be aware of his or her therapeutic responsibility to be actively involved in therapy, and may take, instead, a passive role. These factors need to be clarified with the client to maximize compliance. Persons (1989), suggests a concern with perfectionism, which may make homework goals seem unattainable, a fear of failure, and the need to please others, may be obstacles to doing homework. Edelman and Chambless (1995) suggest comorbid personality disorders, initial symptom severity, and fears or uncertainty at the commencement of treatment may be reasons for not doing homework.

Steps can be taken to enhance compliance in self-report homework. The client should be motivated to comply. One way of doing this is to frame the homework task as an experiment, or way of testing issues or finding out something new about the client. Results may then be used in therapy to modify the client’s intermediate beliefs and underlying assumptions. Recording procedures should be easy and if necessary the client should be taught how to use these. The client should be able to discriminate the behavior to be recorded. Recording should be done as close as possible to the behavior and the amount of recording should start at a low level and increase as necessary. Activities monitored should be checked and feedback given to the client (Shelton & Levy, 1981).
For successful homework completion, it is suggested that homework assignments be tailormade for the individual and be within the individual’s ability to complete (J. S. Beck, 1995). Homework should be set collaboratively, with the client’s input and agreement on the task. The therapist should provide a rationale for the homework, and where possible begin the homework in session, for example, with role-play or rehearsal. The therapist should help the client set up systems for remembering to do the homework and anticipate and deal with any potential problems that may arise in the execution of homework (e.g. A. T. Beck et al., 1979; Burns et al., 1985; Kanfer, 1980; Levy & Carter, 1976). If there is a possibility of a negative outcome, this too can be anticipated and prepared for in advance (J. S. Beck, 1995). Ideally tasks are fully described, giving such details time, place, duration, and frequency, and both client and therapist have a written record of the task or tasks.

A study by Conoley et al., (1994) found three factors which supported homework compliance. The task should use the client’s strengths, match the client’s presentation of the problem, and be at a low level of difficulty. Level of difficulty was based on the time the homework required, the amount of anxiety inherent in the task, and the resources available to the client to complete the homework. Matching the client’s presentation of the problem and the task, involved active collaboration in identifying the problem, how well the matching of the task was explained to the client, and the clarity with which this was done. Matching homework to the client’s strengths was based on whether the client had previously verbalized a history of success with a particular behavior, or a knowledge or interest in the behavior, or a belief that the client could be successful with the behavior. This study was based on earlier research by Conoley, Conoley, Ivey and Scheel (1991) who
posited the model that acceptability of therapy recommendations is based on the client's perception of the match between the problem and the recommendation, what the client believed about the recommendation, and the relationship between client and therapist. According to this model, compliance with the recommendation was affected by the acceptability of the recommendation and the client's ability to carry out the recommendation. Recommendation maintenance was achieved through carrying out the recommendation, with this having a tolerable level of disruption to the client, and with this creating a sufficient level of change for the client (Conoley et al., 1994).

J. S. Beck (1995) has suggested the following client personality problems associated with homework avoidance: the avoidant client who avoids challenging homework and homework that would evoke dysphoria; the anxious and overwhelmed client, who may avoid homework if too many tasks are given; the dependent client, who does not do homework as it is therapeutically beneficial, and mental health would mean ending the relationship with the therapist; and the overly compliant client, who agrees to homework in session, but fails to complete it. The therapist may need to be mindful of these characteristics when assigning homework.

Structure of the therapy session

In the first part of the therapy session the therapist reviews homework from the previous session, reinforcing successes and discussing problems. In the second part of the therapy session, among the other agenda items, preparation for the next session's homework begins. The therapist engages in compliance enhancement strategies to increase the likelihood that these assignments will be completed. It is important to assure the client that he or she is
able to carry out the assignment. The therapist may need to teach the homework task with instructions, modeling, guided rehearsal, and corrective and reinforcing feedback. At the end of the session there is a review of the homework assignment for the next session. The assignment is handed out in written form and a commitment is gained from the client to carry out the assignment (Shelton & Levy, 1981).

Summary

Homework is usually set towards the end of each session. It is reviewed at the beginning of the next session. Reviewing homework reinforces gains made, or provides an opportunity to discover how the task did not go as planned. Homework provides material for further therapy and further homework tasks. The concept of systematic administration of homework is an area of increasing interest, as now that it is known that doing homework adds to therapy and doing homework is related to therapeutic outcome (Kazantzis, 2000b) there is increasing emphasis on the detail of how to get clients to do their homework, and on which aspects of homework are most beneficial. The present study, in examining client attitudes towards homework, fits into this broad area of discovering what is likely to enhance homework compliance.
Chapter 4: Research Aims

Introduction

The present study had two main aims. The first aim was to examine the extent to which client symptomatology affected clients' attitudes towards homework. The second aim was to examine client attitudes towards homework in relation to homework assignment compliance (quality and quantity of completion). A self-report questionnaire, the Attitudes Towards Homework Scale, was designed to obtain some preliminary information on client attitudes towards homework assignments. A self-report measure used in previous homework research, the Homework Performance Measure (Kazantzis & Deane, 1998), was modified and used to measure homework compliance.

Hypotheses

For the purposes of this study attitudes were defined as ways of thinking or behaving towards someone or something (Cowie, 1989), in this case homework. Attitudes lie on a continuum from negative to positive. Both measures used in this study have a Likert-type response scale, which matches this continuum. Attitudes may be influenced by internal and external factors. These include the individual's environment, culture, history, and context of thinking and behaving. It also includes the individual's cognitions, emotions, behavior, and physical reactions (Padesky & Mooney, 1990). The individual's present situation is informed by the individual's history and environment. All of these factors impact on the individual's attitudes or responses to specific situations. Thus attitudes are central to an individual's response system.
Other factors were also expected to affect attitudes and responses in a clinical population as a function of the symptoms of the disorder, and the severity of those symptoms. High levels of symptom severity are often associated with reduction in functional ability. For example, lack of motivation, lack of energy, inability to focus, and/or reduced ability to interact with other people, are some features of Major Depressive Disorder (Kaplan & Saddock, 1998). It was expected that the more symptom distress experienced by the client, the greater would be the perceived difficulty in homework completion. Clients with severe pre-treatment symptoms were expected to have negative attitudes towards homework. Clients with different presenting disorders were expected to differ in their attitudes towards homework. For example, a severely depressed client may have difficulty finding the energy to do homework. A client with obsessive-compulsive symptoms, however, may do excessive homework to alleviate anxiety. It was therefore expected that client attitudes towards homework would vary as a function of the presenting problem, and that there would be a positive relationship between negative attitudes towards homework and high levels of pre-treatment symptom severity (Hypothesis 1).

All behavior is maintained by its consequences. From the behavioral principle of positive reinforcement, it was expected that if homework were viewed positively and had positive consequences, or possibly if it were viewed negatively but had positive consequences, then more homework would be done (Martin & Pear, 1991). Clients may enjoy homework tasks, possibly from a sense of mastery, or pleasure, or both. Such clients would be expected to show increased quantity and quality of homework completion.
It is also possible for clients to do anxiety-provoking or otherwise unpleasant homework, because the consequences of doing the homework are positive and give a sense of mastery. For example, a ritual bound person who manages not to perform the ritual, may experience extreme anxiety in not performing the ritual. This is likely to be followed by relief that first, formerly held catastrophic beliefs are not valid, and second, that long-term symptom relief is now possible. From this comes an increased sense of mastery. It was expected that there would be a positive relationship between high ratings of mastery and pleasure and performance, or of either mastery or pleasure separately, and performance. An inverse relationship was expected, however, between high ratings of difficulty and obstacles, and performance. In this study it was expected that clients who had more positive attitudes towards homework on the mastery and pleasure sub-scales, would be more likely to have greater quantity and quality of homework completion (Hypothesis 2).

Summary

The hypotheses for the present study are: hypothesis 1, that a positive relationship between negative attitudes towards homework and high levels of pre-treatment symptom severity is expected; and that attitudes towards homework may vary as a function of the presenting diagnosis; and hypothesis 2, that clients who have a more positive attitude towards homework are more likely to have greater homework compliance and greater quality of homework completion than those clients with a less positive attitude towards homework.
Chapter 5: Measuring Attitudes Towards Homework

Introduction

The present study was concerned with two main questions. The first was: “To what extent does client symptomatology affect attitudes towards homework?” The second question was: “What is the relationship between client attitudes towards homework and their level of homework performance?”

Literature on attitudes towards homework

A literature search revealed little information available on attitudes towards homework. Much of the information available comes from compliance studies in medical research. For example, in a self-report study of causes of illness, patients who believed that their illness was medically based were more likely to be compliant with treatment than patients who believed in a non-medical cause for their illness (Foulks, Persons, & Merkel, 1986). Other studies involving attitudes and mental health included three studies on panic disorder. Katerndahl (1999) examining clients with panic disorder, researched the role personality disorders played in comorbidity and treatment response in mental disorders and suggested that patients with panic disorder had certain personality characteristics associated with phobic avoidance. Alnaes and Torgersen (1990) found that patients with panic disorder had increased sensitivity, compliance, and insecurity. Hoffart and Hedley (1997) found greater levels of somatization and hypochondriasis associated with panic disorder.

Other studies are more closely related to cognitive therapy. March (1997) proposed a model of internal cohabitation as a theory to explain patterns of resistance towards homework.
While a client may agree that a homework task is reasonable and that it would be beneficial to do it, the client later changes his or her mind. This theory looks at some issues of avoidance. One method found to enhance homework compliance comes from Fennel and Teasdale (1987) in a study of depressed clients. They found that clients who gave a positive response to a pamphlet explaining a cognitive model of depression, showed faster change and greater long term benefits than clients who did not respond positively. Persons, Burns, Perloff, and Miranda, (1993) found that dysfunctional attitudes and symptoms of depression and anxiety as reported by clients have more validity and usefulness than a DSM Axis I diagnosis (DSM-IV, American Psychiatric Association, 1994). There have, however, been few attempts to gauge such attitudes.

One measure which involves attitudes, however, is the Mastery Scale (Pearlin, Lieberman, Menaghan, & Mullan, 1981), where mastery is defined as the extent to which clients regard their life-chances as being under their own control in contrast to being fatalistically ruled. Mastery is also thought to be one of the internal resources that protect individuals from the effects of social strain, along with low self-denigration and high self-esteem (Pearlin et al., 1981). The Mastery Scale is a seven-item self-report measure with a four-point agree/disagree format. It comprises items about having control over things that happen, being able to solve problems, being able to change important things, not feeling helpless about problems, not feeling pushed around, feeling that there is some degree of personal control over future events, and a feeling of being able to achieve most things one really wants to do. Scores range from 7 (low mastery), to 28 (high mastery).
The Possible Reasons For Not Doing Self-Help Assignments Scale (Burns & A. T. Beck, in A. T. Beck et al., 1979) was developed to explore reasons why some clients habitually did not do homework. It is a 15-item, self-report, true/false measure comprising a list of reasons clients had given for not completing homework during the course of therapy. In a detailed introductory paragraph the importance and reasons for doing homework are explained, as well as the fact that some clients express reluctance to do homework, or a desire to put off doing homework. The suggestion is that clients complete the form and discuss their results with their therapist. Items involve broad areas of difficulty and avoidance, while others involve issues relating to the client’s perception of the therapeutic relationship. The final question allows for a longer open-ended response under ‘other reasons’.

Present Measures

As no existing measure assessed client attitudes towards homework a new measure was developed. This involved an examination of the theory of cognitive and behavioral therapy to find areas that might involve attitudes towards homework. The Mastery Scale and the Possible Reasons For Not Doing Self-Help Assignments Scale also provided useful areas of exploration for the present study. The Attitudes Towards Homework Scale was devised for this study to examine client attitudes towards homework. A modified version of an existing scale, the Homework Performance Measure (Kazantzis & Deane, 1998) was used to examine homework performance. These two, separate, self-report measurements were administered to participants at the beginning of each therapy session.
Practical Considerations

There were six practical considerations for this study. First, the attitudes measure was designed to be brief, to increase the likelihood of client participation and completion. Clients were expected to complete the measure at the beginning of each therapy session about the homework from the preceding session. Second, data collection was limited to a short time frame to meet academic requirements. Clients were included in the study for whatever sessions they attended over this time frame. The measure had to be suitable for both beginning clients and those who had had many therapy sessions.

A third practical consideration was that the measure was to be filled in by clients who had completed or not completed homework assignments, to whatever degree. While compliance was also measured as a consequence of attitudes towards homework, the primary focus was on attitudes. That is, attitudes were not dependent on homework completion. Fourth, the measure was to be completed by clients whatever their diagnosis. While it was expected that clients with particular diagnoses might have similar type attitudes towards homework, items were worded as neutrally as possible to avoid targeting a particular diagnosis.

A fifth practical consideration was that the measure was to be completed by clients who had been assigned any type of homework. It is not unusual for clients to be assigned multiple homework tasks in any given therapy session. Homework may also vary in type and degree of difficulty from early therapy to later stages of therapy. The measure had to examine responses in general towards homework, rather than examining responses to
specific tasks. Finally, aspects of the therapeutic relationship, homework relevance, and different types of homework assigned were not part of this study as these topics were addressed elsewhere within the broader homework study.

Measure 1: Attitudes Towards Homework Scale

Initially a large collection of items was gathered following a search of attitude measures and research on homework in cognitive therapy. These items were narrowed down to 18 items deemed to adequately cover the domain under investigation. Following the basic behavioral principles of reinforcement, it was expected that if homework were a positive activity it would be done, so the domain of benefits to the client was explored. Questions were discussed such as: “Do clients enjoy doing their homework?”, “Is there some reward for them for doing their homework?”, “Do they feel good about themselves for having done their homework?”, “Does doing homework add something beneficial to their lives?”. Stated somewhat simplistically, it might be expected that clients enter therapy expecting to benefit from it. As the rationale for doing homework is explained early in therapy, and the benefits of doing homework are made clear, it might be expected that all clients would do homework and yet clearly that is not the case.

The next domain under exploration, then, was why clients did not do homework. Some of the questions discussed here involved: “Did the clients know what to do for homework?”, “Did the task seem beyond their capabilities?”, “Were there practical difficulties that made homework difficult?”, or did it involve that very human attribute of not wanting to do something even though it ultimately might be of benefit. These were the types of questions asked, as it was thought that these areas might affect how a person thought, felt and
behaved towards homework tasks. That is, that these domains might affect a person's attitudes towards homework.

It was ensured that items asked one question only, and that all items within each subset tapped different aspects of that set as a means of increasing internal consistency. Items were also checked for ease of reading, clarity, face and content validity (Streiner & Norman, 1998). The final 18 items were then evenly split into nine positively worded and nine negatively worded items. Negatively worded items are less sound psychometrically and have lower validity co-efficients than positively worded ones (Holden, Fekken, & Jackson, 1985). For example, they are more difficult to understand than positively worded items and raise the possibility that respondents may give an answer opposite to that intended. The even split was maintained, however, to avoid the potentially more likely error of response bias (Streiner & Norman, 1998).

The instructions for completion of the form were brief and asked three things. Clients were asked to mark the selected box with a tick. Clients were asked to complete all questions. Clients were asked for their response to homework from last the session. As this was an important point it was set in bold type, and was also noted under the title so that the title read “Attitudes Towards Homework” and in smaller type “from last session” (see Appendix B).

**Response Scale and Subscales**

The Attitudes Towards Homework Scale comprises an 18-item self-report scale with a five point Likert-type response weighting (Likert, 1952). A number of research studies have
shown using reliability co-efficients that reliability drops as fewer categories are used (Streiner & Norman, 1998). Research evidence suggests that most people are unable to discriminate much beyond seven levels at a time. While having a seven-point scale would maximize the precision of the response, it would also involve a substantial increase in time spent filling in forms for respondents. The loss of reliability from a 7-point to a 5-point scale is 12 percent, dropping to 35 percent for two categories (Streiner & Norman, 1998). The choice of a 5-item scale provided the best balance of maximizing the precision of the measure while reducing the time spent filling in forms for the respondents. The five-point scale was also used rather than a forced choice format as it allowed for degrees of response, as attitudes and behaviors tend to exist on a continuum (Streiner & Norman, 1998). For example, a Likert-type response was also used by A. T. Beck, when assessing mastery and pleasure as a means of inducing clients to recognize small changes and partial successes in therapy (A. T. Beck et al., 1979).

The items in the measure were constructed to survey client attitudes towards homework in a broad sense. After gathering a large collection of items related to the domains to be covered and collecting a large sample of items, the subscales were finalized as: mastery, and pleasure; comprehension; and difficulty, obstacles, and avoidance. Experiences of mastery and pleasure were considered positive features, while difficulties, obstacles, and avoidance were considered negative features of doing homework. Comprehension could either enhance or detract from the experience of doing homework, depending on the degree of comprehension.
Mastery and pleasure items were generated from cognitive therapy theory on mastery and pleasure. Mastery refers to a sense of accomplishment when performing a specific task and feeling in control of one's life. Pleasure refers to pleasant feelings associated with an activity, or a sense of self-satisfaction. Mastery does not need to relate to completion or magnitude of a task, and mastery and pleasure may be independent of each other. That is, mastery without pleasure is a step forward and even mild levels of pleasure are clinically important in establishing a sense of optimism and boosting morale (A. T. Beck et al., 1979). Items related to mastery included: "I feel a sense of achievement at having attempted the homework", and "I am more in control of my problems from having attempted the homework". Items assessing pleasure included: "I feel good about having attempted the homework", and "I enjoyed doing the homework".

Comprehension items involved understanding the content (what), the method (how), and the reason (why) of the homework assignment. Items related to homework comprehension included: "I understood what I had to do for homework", I understood how to do the homework", and "I understood why I was asked to do the homework".

Difficulty relates to how onerous the homework task was for the client. Difficulty as used here has a global meaning rather than asking for specific details of difficulty. Paradoxically being specific about precise areas of difficulty would be a task in therapy for making a homework task manageable, which was previously too onerous for the client. Items related to homework difficulty included: "The homework was too difficult for me", and "There was too much homework for me to do".

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Obstacles examines practical difficulties for the client, including practical reasons why homework might not have been done. There are many potential obstacles to doing homework and this selection of items attempted to cover a wide range of them.

Items related to homework obstacles included: “My life is too stressful for homework right now”, “I had no trouble remembering to do the homework”, “I didn’t have an opportunity to do the homework”, “Unexpected events made it difficult for me to do the homework”, and “It was hard to find the energy to do the homework”.

Avoidance items were selected as representing some of the issues in the Possible Reasons for Not Doing Self-Help Assignments Scale (A. T. Beck et al., 1979). Items related to avoidance of homework included: “I don’t like doing homework unless I can get it right”, “I felt worse when thinking about the things I had to do for homework”, “It was easy for me to find time for the homework”, and “I had trouble getting started on the homework”.

Measure 2: Homework Performance Measure

A measure of compliance was included in the present study as the effect of homework depends on compliance. Compliance as used here comprises quantity and quality of completion as separate variables. There are specific features of homework performance, which enhance maximum therapeutic benefit. Quantity of completion is an important factor (Primakoff, Epstein & Covi, 1986; Shelton & Levy, 1981), as is the quality of the homework done (Primakoff et al., 1986; Schmidt & Woolaway-Bickel, 2000). Homework difficulty is also important, as the assignments should be within the ability of the client to perform, yet be sufficiently challenging to increase client skills and confidence in their ability to move beyond the present level of functioning (A. T. Beck et al., 1979; J. S. Beck,
As early as 1986, Primakoff et al. had noted that research had not examined quality as opposed to quantity of homework completion. Quality of compliance is increasingly being examined as a factor related to outcome. For example Schmidt and Woolaway-Bickel (2000) found both quality and quantity of homework completion were positively correlated with outcome, but that quality of completion was the better predictor of positive outcome.

The original measure (Kazantzis & Deane, 1998), asked clients to rate compliance, quality and difficulty, on each homework activity separately. The original measure was modified to ask clients to rate homework compliance, quality, and difficulty globally. There were two reasons for modifying the original measure. First, the extended protocol for use with the original measure was not being used by therapists in the present study. For example, therapists in a previous study asked clients to rate their homework performance on each of 1 to 3 homework assignments administered on a prescription form for clients to take away as a reminder. The prescription form then served to guide clients’ rating performance for each task separately. Second, the measure was modified to match the attitudes measure, which also asks clients for a global assessment.

The modified homework performance measure was also designed to be brief to facilitate the likelihood of completion of the form. Clients were asked to complete the measure before each session regarding the homework from the previous session. Compliance was assessed by the item: “How much homework did you do?”. Quality was assessed by the item: “How well did you do the homework?”. Difficulty was assessed by the item: “How difficult was the homework?” (Kazantzis & Deane, 1998, see Appendix C).
Summary

The present study used two measures to assess client attitudes towards homework: The Attitudes Towards Homework Scale, devised for this study, and a modified version of the Homework Performance Measure (Kazantzis & Deane, 1998). Both were brief, self-report measures. Both were to be filled out by clients at the beginning of each therapy session about clients’ experience of homework from the previous therapy session.
Chapter 6: Method

Introduction

This study examined client attitudes towards homework in cognitive therapy within a broader research program on homework conducted at the Waitemata Health Cognitive Therapy Centre. The research program was designed by Nikolaos Kazantzis at the School of Psychology, Massey University, Albany, in conjunction with Paul Merrick and other staff at the Cognitive Therapy Centre. The center is a Waitemata Health clinical facility, accepting referrals from general practitioners, Waitemata Health agencies, and a variety of other community groups. Clients referred to the center have a range of psychological problems. The center essentially accepts for treatment all adult clients, excluding those with psychoses, organic brain disorders, and substance abuse. Data for this study was collected over a three-month period from August to October, 2000.

Ethical Approval

No 2000/137 Homework Study: Auckland Ethics Committee
No HEC 98/87: Massey University Ethics Committee

Sample

The present sample comprised 18 adult participants in various stages of cognitive therapy at the Waitemata Health Cognitive Therapy Centre. As shown in Table 1, the present sample comprised 12 females and 6 males, with an average age of 36 years, ranging from 27 to 48 years. Of these, 15 were New Zealand European and 3 were non-New Zealand European. Eight participants were single, and 8 were married. One was separated, and 1 was divorced.
Twelve participants were referred through mental health agencies, with 6 referred by their general practitioners.
<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
</tr>
<tr>
<td>Age</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>35.77</td>
</tr>
<tr>
<td>Mdn</td>
<td>34.50</td>
</tr>
<tr>
<td>Minimum</td>
<td>27.00</td>
</tr>
<tr>
<td>Maximum</td>
<td>48.00</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>6</td>
</tr>
<tr>
<td>Female</td>
<td>12</td>
</tr>
<tr>
<td>Referral Source</td>
<td></td>
</tr>
<tr>
<td>Community Mental Health Centres</td>
<td>12</td>
</tr>
<tr>
<td>General Practitioners</td>
<td>6</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>8</td>
</tr>
<tr>
<td>Separated</td>
<td>1</td>
</tr>
<tr>
<td>Divorced</td>
<td>1</td>
</tr>
<tr>
<td>Married</td>
<td>8</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
</tr>
<tr>
<td>NZ European</td>
<td>15</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
</tr>
<tr>
<td>Primary Diagnosis</td>
<td></td>
</tr>
<tr>
<td>Mood disorder</td>
<td>9</td>
</tr>
<tr>
<td>Anxiety disorder</td>
<td>9</td>
</tr>
</tbody>
</table>

Note: Varying n due to missing data
As shown in Table 2, participants were grouped by primary diagnosis. Diagnoses were split into mood disorders \( (n = 9) \) and anxiety disorders \( (n = 8) \) with one participant added to this group with hypochondriasis, which, while a somatoform disorder has fear-based symptoms. A secondary diagnosis for this client also indicated anxiety symptoms. As might be expected in such a clinical sample, there was a degree of comorbidity with two of the mood disorder participants also having a secondary diagnosis of anxiety symptoms and three of the anxiety disorder participants also having a secondary diagnosis of mood disorder symptoms.
<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
</tr>
<tr>
<td><strong>Mood Disorders</strong></td>
<td></td>
</tr>
<tr>
<td>Major Depressive Disorder</td>
<td>7</td>
</tr>
<tr>
<td>~ with post-natal onset</td>
<td>1</td>
</tr>
<tr>
<td>Bipolar Disorder (unspecified)</td>
<td>1</td>
</tr>
<tr>
<td><strong>Anxiety Disorders</strong></td>
<td></td>
</tr>
<tr>
<td>Panic Disorder with Agoraphobia</td>
<td>2</td>
</tr>
<tr>
<td>Generalised Anxiety Disorder</td>
<td>2</td>
</tr>
<tr>
<td>Anxiety disorder (unspecified)</td>
<td>2</td>
</tr>
<tr>
<td>Panic Disorder</td>
<td>1</td>
</tr>
<tr>
<td>Social Phobia</td>
<td>1</td>
</tr>
<tr>
<td><strong>Somatoform Disorders</strong></td>
<td></td>
</tr>
<tr>
<td>Hypochondriasis</td>
<td>1</td>
</tr>
</tbody>
</table>

The most frequent diagnosis for mood disorder in the sample was Major Depressive Disorder, with 1 participant with post-natal onset, but essentially the same features as Major Depressive Disorder. One participant was in a depressive phase of Bipolar Mood.
Disorder. The anxiety disorder group was much more diverse. Three subjects had a secondary diagnosis of Dysthymia. In a clinical population, Dysthymia precedes major depressive disorder in 15 to 25 percent of cases (DSM-IV, 1994) indicating a considerable overlap of symptoms in the two groups.

**Intake assessment**

Prior to the commencement of therapy, participants had a screening interview where a diagnosis was made, and completed an intake assessment, which comprised a battery of measures designed to be sensitive to changes in cognitive therapy. The following measures for depression, anxiety and cognitive functioning were used: the Beck Depression Inventory (BDI; A. T. Beck et al., 1961); the Hamilton Rating Scale for Depression (HRSD; Hamilton, 1960); the State-Trait Anxiety Inventory - state version (STAI-Y-1; Spielberger, Gorsuch, Lashene, Vagg, & Jacobs, 1983); the Beck Hopelessness Scale (BHS; A. T. Beck, Weissman, Lester, & Trexler, 1974); the Dysfunctional Attitudes Scale (DAS; A. T. Beck, 1976; Weissman, & A. T. Beck, 1978); the Automatic Thoughts Questionnaire (ATQ, Hollon & Kendall, 1980); and the Suitability for Short Term Cognitive Therapy Rating Scale (SSCT; Safran et al., 1990a; Safran, Segal, Shaw, & Vallis. 1990b)). Details of participants’ pre-treatment scores on these tests are shown in table 3.
Table 3 - Pre-Treatment Symptom Severity Scores

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>M</th>
<th>Mdn</th>
<th>SD</th>
<th>range</th>
<th>minimum</th>
<th>maximum</th>
</tr>
</thead>
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<td>Beck</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depression Inventory</td>
<td>17</td>
<td>24.76</td>
<td>26.00</td>
<td>12.86</td>
<td></td>
<td>7</td>
<td>51</td>
</tr>
<tr>
<td>State-Trait Anxiety Inventory</td>
<td>15</td>
<td>46.13</td>
<td>43.00</td>
<td>13.83</td>
<td>26</td>
<td>73</td>
<td></td>
</tr>
<tr>
<td>Automatic Thoughts Questionnaire</td>
<td>16</td>
<td>76.93</td>
<td>66.50</td>
<td>31.40</td>
<td>39</td>
<td>132</td>
<td></td>
</tr>
<tr>
<td>Dysfunctional Attitudes Scale</td>
<td>9</td>
<td>116.00</td>
<td>96.00</td>
<td>55.81</td>
<td>15</td>
<td>198</td>
<td></td>
</tr>
<tr>
<td>Beck</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hopelessness Scale</td>
<td>11</td>
<td>10.09</td>
<td>11.00</td>
<td>5.61</td>
<td>2</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>Hamilton</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rating Scale for Depression</td>
<td>14</td>
<td>12.78</td>
<td>12.00</td>
<td>5.42</td>
<td>3</td>
<td>22</td>
<td></td>
</tr>
</tbody>
</table>

Note. Varying n due to missing data
In the present study, particular attention was given to the BDI and the STAI-Y-1. These measures were used for the symptom severity analysis of hypotheses 1 and 2, as client primary diagnoses involved predominantly mood and anxiety disorders. The BDI is a measure of symptom severity of depression, while the STAI-Y-1 is a measure of current (state) symptoms of anxiety. Details of the other measures are also included, as they provided part of the intake assessment upon which diagnoses were based, these diagnoses further providing the split into the two groupings used to examine hypotheses 1 and 2. For a variety of reasons, not all participants completed all the pre-treatment screening measures (see n values on Table 3).

**Beck Depression Inventory**

In the intake assessment clients were administered the BDI-IA. For the purposes of this study the scores were converted to the BDI-II rating scale based on an equipercentile equating method (see A. T. Beck, Steer & Brown, 1996, p.26).
The BDI is a unidimensional 21-item self-report instrument for assessing the severity of affective, cognitive, motivational, psychomotor and vegetative components of depression (Oei & Shuttlewood, 1997). The original measure was developed in 1961 (A. T. Beck, et al., 1961) and was replaced by the BDI-IA (A. T. Beck et al., 1979). The original BDI was based on clinical observations and symptom descriptions reported by psychiatric clients. The BDI-II is a substantial revision of the measure. It was developed to better match the criteria for depressive disorders in the American Psychiatric Association’s Diagnostic and Statistical Manual of Mental Disorders – Fourth Edition (DSM-IV, 1994).

The BDI is used for adults and adolescents over 13 years of age (A. T. Beck et al., 1996). Items are rated on a 4-point scale and total scores range from 0 to 63. In the BDI-IA clients report how they have felt in the previous week including the day of assessment. For the
BDI-II the time frame is extended to match the *DSM-IV* time criteria for major depression of two weeks, including the day of assessment (Brantley et al., 2000). In both versions higher scores indicate greater levels of depression. For clinical screening purposes for major depression, scores are: 0 to 13 (minimal depression), 14 to 19 (mild depression), 20 to 28 (moderate depression), and 29 to 63 (severe depression), (A. T. Beck et al., 1996). An important distinction is that the BDI reflects the degree of depression and not the diagnosis of depression (A. T. Beck et al., 1996). The BDI was never intended to be a diagnostic screening device even though it is now widely used in this way. That is, the BDI measures a depression syndrome rather than the presence of a depressive disorder and does not include a full coverage of criteria listed for depressive disorders in the *DSM-IV* (Brantley et al., 2000).

The BDI is one of the most frequently used measures to assess depression and has strong psychometric properties. It has high indices of reliability across clinical and non-clinical populations (A. T. Beck et al., 1988). The BDI also correlates highly with other well-established measures of depression including the HRSD, the Zung Self-rating Depression scale (Zung, 1965) and clinical ratings of depth of depression (Brantley et al., 2000). The BDI has the added advantage of a positive relationship with the BHS showing the convergent validity of the BDI. The BDI also correlates more strongly with the HRSD than with the Hamilton Rating Scale for Anxiety (HRSA; Hamilton, 1967) showing the discriminant validity of the BDI (Brantley et al., 2000). This is important because of the high degree of comorbidity of depression and anxiety disorders.
Normative data for the BDI-II were obtained from samples from four different psychiatric outpatient clinics and one college student group (A. T. Beck et al., 1996).

The participants in the current study produced a mean BDI score of 24.76 ($Mdn = 26$, $SD = 12.6$). This is slightly higher than the normative data for the BDI, where the normative outpatient sample produced a mean BDI score of 22.45 ($SD = 12.75$), but are still within the same grouping of scores for moderate depression of 20 to 28. The normative sample of college students produced a mean BDI score of 12.56 ($SD = 9.93$), (A. T. Beck et al., 1996).

**State-Trait Anxiety Inventory (STAI Form Y-1)**

The State-Trait Anxiety Inventory is a measure of anxiety, which differentiates between state anxiety and trait anxiety (Spielberger et al., 1983). State anxiety is defined as a palpable reaction or process happening at a given time and at a given level of intensity, whereas trait anxiety is defined as a relatively stable individual difference in anxiety-proneness (Spielberger et al., 1983). In the pretreatment assessment, participants in the present study were assessed on the state anxiety scale (STAI Form Y-1), and not on the trait anxiety scale (STAI Form Y-2). The state scale comprises 20 self-report statements that ask how the individual feels right now at the time of form completion. Each STAI item has a weighted score of 1 to 4 with higher scores indicating higher levels of anxiety for anxiety-present items. For anxiety absent items (state items 1, 2, 5, 8, 10, 11, 15, 16, 19, and 20) the scores are reversed. Scores for both state and trait anxiety can range from 20 to 80 (Spielberger et al., 1983). There have been substantial revisions to the STAI since 1979 to provide clearer discrimination between anxiety and depression, and to replace items found to be psychometrically weak for younger, and less educated clients, and lower
socioeconomic groupings. An added improvement was the more even balance of anxiety present and anxiety absent items (Spielberger et al., 1983).

The STAI is widely used in research and in clinical practice. The state version is used to measure transitory anxiety, for example with dental or medical treatments, job applications, and exams, and in psychotherapy and behavior modification programs. The state measure has been found to be a sensitive indicator of change in transitory anxiety as experienced by clients in psychotherapy settings (Spielberger et al., 1983). The trait scale has been widely used in assessing clinical anxiety in medical, surgical, psychiatric and psychosomatic clients, and also for screening purposes where high levels of anxiety might be a safety issue, for example, in military recruitment. A potential problem with the STAI is that it correlates highly with self-report measures of depression, suggesting some problems with discriminant validity (A. T. Beck et al., 1988).

The STAI-Y-1 measure used in pretreatment assessment in the present study has been normed on working adults, college student, high school students, and military recruits (Spielberger et al., 1983). Participants in the present study produced a mean score of 46.13 ($\text{Mdn} = 43.10$, $SD = 13.84$). As might be expected, this is somewhat higher than the normative scores. The normative data for working adults produced mean scores for males of 35.72, and for females of 36.20; the normative data for college students produced mean scores for males of 36.47, and 38.74 for females. The normative data for the military recruit grouping produced mean scores for males of 44.05, and 47.01 for females. The military recruit population was assessed shortly after starting a stressful training program. (Spielberger et al., 1983).
Hamilton Rating Scale for Depression

The Hamilton Rating Scale for Depression was originally designed to provide a quantitative assessment of symptom severity for clients diagnosed with depression (Hamilton, 1960). While the BDI focuses more on the cognitive features of depression, the HRSD focuses more on the physical features of depression and anxiety (Cleary & Guy, 1977). The HRSD is designed to be administered by a trained clinician using a semi-structured clinical interview. Using a time frame of the previous week, each symptom is considered for severity and frequency. Ratings are based on any change from the client's 'usual self' due to depression (Kobak & Reynolds, 1999). The HRSD consists of 21 items, each measuring a depressive symptom, although usually only 17 of these are used because of the uncommon nature of the remaining four items, such as 'depersonalisation'.

The 17 items are rated on either a 5-point scale (0 to 4) with 0 (absent), 1 (doubtful), 2 (mild to moderate), 3 (moderate to severe), with 4 generally reserved for extreme symptoms; or as a 3-point scale (0 to 2). This 3-point scale is used where quantification is difficult or impossible. Items are rated on this scale as 0 (absent), 1 (possible or mild), and 2 (definite), (Kobak & Reynolds, 1999). There have been problems with inter-rater reliability, but an interview guide providing standardized instructions for administration has been shown to reduce this problem. The general population mean for the 17-item HRSD is 6.25 (SD 4.24) (Grundy, Lambert, & Grundy, 1996). Participants in the present study produced a mean score of 12.78 (SD = 5.42), which, as might be expected, is higher than the normative data.
Beck Hopelessness Scale

The Beck Hopelessness Scale is a 20-item self-rating scale, which measures the extent of negative attitudes about the future (i.e., pessimism) as perceived by adolescents and adults. Hopelessness as a psychological construct is measured by individuals' beliefs that nothing will work out well, that they will not succeed whatever they do, that they will not achieve their goals, and that their problems will not be solved. (A. T. Beck & Steer, 1993).

The BHS comprises 20 true/false general statements of how the future is viewed. Of these 11 are keyed as true and 9 are keyed as false. The scores are totaled with a possible range of 0 to 20. Scores are rated as 0 to 3 (minimal hopelessness), 4 to 8 (mild hopelessness), 9 to 14 (moderate hopelessness), and 15 to 20 (severe hopelessness). The general population mean is 4.45 (Greene, 1981). The BHS correlates highly with level of depression and predicts suicidal intent more accurately than depression measures (Wetzel, Margulies, Davis & Karam, 1980; Kovacs, A. T. Beck, & Weissman, 1975). It is recommended for use with clients aged 17 or older until more information is available on psychometric properties for younger adults (A. T. Beck & Steer, 1993).

Psychometric studies of the properties of the BHS have used psychiatrically diagnosed and normal populations. Much of the data has not been based, however, on samples that meet criteria for formal diagnosis (according to the DSM). Rather most of the studies have been directed towards the measure's use as an indicator of suicidal behaviors. It is used especially as an indirect indicator of suicide risk both for depressed individuals and for those with a history of suicide attempts. Moderate and high levels of hopelessness in depressed clients are seen as indicative of some degree of active suicidal desire (Nekanda-
Trepka, Bishop, & Blackburn, 1983). A study by Beck, Steer, Kovacs, and Garrison (1985) found a 90% predictive rate of eventual suicide at a cut-off rate of 9 or above in a 5 to 10 year follow up of 165 patients who had been hospitalized with suicidal ideation. Participants in the present study provided a mean score of 10.09 (SD = 5.61), which again, as might be expected is considerably higher than the normative general population data at 4.45.

**Dysfunctional Attitude Scale**

The Dysfunctional Attitude Scale is a 40-item self-report scale, which measures dysfunctional attitudes characteristic of individuals cognitively vulnerable to depression (Olinger, Kniper & Shaw, 1987). It was originally a 100-item scale (A. T. Beck, 1976), and was later revised into two 40-item forms (Weissman & A. T. Beck, 1978). Using a 7-point scale, subjects indicate their degree of agreement or disagreement with the scale items. The range of possible scores is 40 to 280 with higher scores indicating a greater degree of dysfunctional attitudes. Items for the DAS were developed from the experience of Weissman and A. T. Beck, of depressed clients’ beliefs. It measures beliefs held, but not necessarily thought, by individuals who are depressed and assesses attitudes underlying spontaneous thoughts rather than assessing automatic thoughts directly.

The DAS has high internal reliability and high test-retest reliability (Dobson & Breiter, 1983). Depressed individuals score higher on the DAS than non-depressed controls showing good construct validity (Kuiper, Olinger, & MacDonald, 1985); Weissman & A. T. Beck, 1978). The DAS has also been found to predict the reoccurrence of depression and vulnerability to depression. For example, in a study Wise and Barnes (1986) examined
two normal samples of college students who had high DAS scores. Those students who were also exposed to negative life events in the past year were more depressed than were the students with high DAS scores who had not been exposed to negative life events. High DAS scores and negative life event scores exert main effects in predicting depression (Abramson, Metalsky, & Alloy, 1989). Only half \((n = 9)\) of the participants in the present study completed the DAS and these 9 produced a mean score of 116.00, but with a large standard deviation of 55.8.

**Automatic Thoughts Questionnaire (ATQ-30)**

The ATQ is a 30-item, self-rating questionnaire designed to measure the frequency of negative automatic thoughts associated with depression (Hollon & Kendall, 1980). Four facets of depression are examined: personal maladjustment and desire for change; negative self-concept and negative expectations; low self-esteem; and helplessness. Clients are asked to estimate the frequency of their experience of certain negative automatic thoughts that they might have had over the previous week.

The initial items for the ATQ were constructed and cross-validated using a sample of undergraduate students as subjects. Non-depressed students were asked to list their thoughts at times when they did feel depressed. A different group of students was administered a depression measure and students were asked to endorse any of the thought items which were true of their own thoughts. Those thoughts endorsed by students who also scored high levels of depression formed the basis for the ATQ items.
The ATQ is rated on a 1 to 5 point scale, with all items scored positively so that high scores indicate depression. Scores range from 30 (little or no depression) to 150 (severe depression). Normative data for the ATQ give a mean score of 79.6 ($SD = 22.3$) for depressed individuals and 48.6 ($SD = 10.9$) for non-depressed individuals (Hollon & Kendall, 1980) The ATQ is useful in relating cognitive content to behavioral and affective processes. It may also be used to assess change in cognitions associated with therapeutic change or experimental manipulation (Hollon & Kendall, 1980). The scale has high internal validity and shows a strong correlation with depression severity (Dobson & Breiter, 1983). Participants in the present study produced a mean ATQ score of 76.93 ($SD = 31.40$), which is extremely close to the normative student data of depressed students at 79.6 ($SD = 22.3$), but higher than the non-depressed means of 48.6 ($SD = 10.9$).

**Suitability for Short-Term Cognitive Therapy Rating Scale**

The Suitability for Short-term Cognitive Therapy Rating Scale indicates the potential match of the client with cognitive therapy. The SSCT follows a semi-structured clinical interview focusing on 10 client processes, some associated with short-term therapy and some specifically with cognitive therapy. These include accessibility of automatic thoughts, awareness and differentiation of emotions, acceptance of personal responsibility, compatibility with cognitive rationale, alliance potential, alliance potential out of session, chronicity of problems, security operations (whether the client might in any way sabotage therapy), focality, and lastly the level of optimism/ pessimism regarding therapy.

Each item is rated on a 5-point Likert-type scale, with a possible range of 10 to 50, with higher scores indicating greater suitability for cognitive therapy. An interview guide
suggests specific questions to help clarify client responses. Pretreatment suitability has been shown to significantly predict outcome for short-term cognitive therapy for anxiety disordered and depressed clients (Safran et al., 1990a, b, 1993). Normative data is not available as such, although a recent study by Vallis et al., (2000) with a sample of depressed and anxious clients produced a mean score of 33.64 (SD = 5.44) with a range of 19 to 43.5. The 14 participants who completed the SSCT in the present study produced a mean score of 35.5 with a range of 29 to 41, which is very close to the result obtained by Vallis et al., (2000).

**Procedure**

This study comprises part of a broader research project, which involves examining a number of cognitive therapy components. The wording and format of the Attitudes Towards Homework Scale was designed to be similar in format and style to the broader research project as a means of increasing client comprehension, and the likelihood of client participation and measure completion. Individual therapists obtained client consent for participation in the study. Participants were asked to attend therapy sessions early to allow enough time to complete the measures. Participants were also aware that their individual responses would not be revealed to their therapist, and that all their responses would remain confidential and anonymous and would not affect the service provided by the Cognitive Therapy Centre.

On arrival for therapy participants were given the Attitudes Towards Homework Scale (see Appendix B), and the Homework Performance Measure (see Appendix C) by the receptionist. The measures were completed by participants in the waiting room immediately
before going into their therapy session. On completion of the measures, participants placed their own forms in a locked box for removal at the end of the data collection time. The measures had a cover sheet, which identified client, date, session number and therapist (see Appendix A). All identifying features (client and therapist name) were removed before the forms left the center. Forms were then number coded before data was analyzed.

Analysis

Data was analyzed using descriptive and inferential statistics using the SPSS package (Coakes & Steed, 1999). As the hypotheses concern the relationship between attitudes and other treatment factors, data was analyzed using bivariate correlations and t-tests of independent means. Correlation tests were used because there were two continuous variables hypothesized to be in association in a positive direction. A scatter plot showed that assumptions of linearity and homoscedasticity were met. Where independent groups were compared, t-tests were used. Assumptions for t-tests were met by having interval-level data.

The sample size ($N = 18$), was too small to meet formal assumptions of normality. Testing for outliers involved an examination of the proximity of mean and median scores, and an examination of the distance of individual scores from the regression line (Coakes & Steed, 1999; Tabachnick & Fidell, 1996). This analysis revealed that there were no notable outliers.
Data Analysis procedures

Missing Data

Missing data were treated as such and were not replaced by mean scores. This resulted in varying $n$ scores. While mean scores could have been used to replace missing data, this could have potentially decreased the accuracy of the results, given the small sample size.

Composite scores

Data comprised scores from 18 clients over 57 therapy sessions with clients contributing an average of 3.16 session scores to the data. Since subjects varied in the number of sessions they contributed to the study, scores for each subject were calculated by summing session scores per subscale, and dividing the total by the number of sessions attended. This gave one composite score for each subject for each subscale.

Recoded items

Two items were recoded on the attitudes measure so that higher ratings always represented more of a given construct. For example, the obstacles subscale of the attitudes measure comprised three items worded negatively and one positively worded item. It made sense that obstacles, which are by definition negative, should have negative values in the attitudes measure, so the positive item was reversed. Items 6 and 10 were recoded for this reason for data analysis, where item 6 was: ‘I had no trouble remembering to do the homework’ (obstacles subscale), and item 10 was ‘It was easy for me to find time for the homework’ (avoidance subscale).
BDI scores

Subjects were initially screened on the BDI-IA. As this is an early version of the measure scores were transformed in accordance with the BDI-II scores (A. T. Beck et al., 1993). The transformed scores changes the mean score from 21.64 to 24.76 on the BDI-II, and the median changes from 22 to 26 on the BDI-II with the standard deviation changing from 11.39 to 12.86 on the BDI-II (see Table 4).

Sample normality

There was a predominance of female participants with 12 females and 6 males. Given the outpatient psychiatric context of therapy, this was not unusual, as there is a twofold greater prevalence of Major Depressive Disorder in women that in men (DSM-IV, 1994). Major Depressive Disorder was the most common presenting problem among the mood disorder sample. With anxiety disorders, women have a 30.5% lifetime prevalence of anxiety disorder, while men have a 19.2% lifetime prevalence (Kaplan & Saddock, 1998). Other aspects of the population were normal. Further demographic details are given in Table 1).

Possible scores for each subscale varied according to the number of items in each subscale (see table 5). The range of possible scores for each subscale in the attitudes measure were: mastery, 0 to 8; pleasure, 0 to 8; comprehension, 0 to 12; difficulty, 0 to 8; obstacles, 0 to 20; and avoidance, 0 to 16. The range of possible scores on the performance measure were: quantity, 0 to 4; quality, 0 to 4; and difficulty, 0 to 4.
Table 5 - Attitude Subscale Scores

<table>
<thead>
<tr>
<th></th>
<th>Possible Scores</th>
<th>M</th>
<th>MSE</th>
<th>Mdn</th>
<th>SD</th>
<th>Variance</th>
<th>Range</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Attitudes Towards Homework Scale</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mastery</td>
<td>0 - 8</td>
<td>4.32</td>
<td>0.28</td>
<td>4.00</td>
<td>2.01</td>
<td>4.06</td>
<td>8.00</td>
<td>0.00</td>
<td>8.00</td>
</tr>
<tr>
<td>Pleasure</td>
<td>0 - 8</td>
<td>4.04</td>
<td>0.30</td>
<td>4.00</td>
<td>2.05</td>
<td>4.21</td>
<td>8.00</td>
<td>0.00</td>
<td>8.00</td>
</tr>
<tr>
<td>Comprehension</td>
<td>0 - 12</td>
<td>9.78</td>
<td>0.33</td>
<td>10.00</td>
<td>2.30</td>
<td>6.30</td>
<td>9.00</td>
<td>3.00</td>
<td>12.00</td>
</tr>
<tr>
<td>Difficulty</td>
<td>0 - 8</td>
<td>1.22</td>
<td>0.19</td>
<td>1.00</td>
<td>1.36</td>
<td>1.84</td>
<td>5.00</td>
<td>0.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Obstacles</td>
<td>0 - 20</td>
<td>8.50</td>
<td>0.68</td>
<td>8.00</td>
<td>4.73</td>
<td>22.34</td>
<td>19.00</td>
<td>1.00</td>
<td>20.00</td>
</tr>
<tr>
<td>Avoidance</td>
<td>0 - 16</td>
<td>4.48</td>
<td>0.38</td>
<td>4.00</td>
<td>2.71</td>
<td>7.36</td>
<td>10.00</td>
<td>0.00</td>
<td>10.00</td>
</tr>
<tr>
<td><strong>Homework Performance Measure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantity</td>
<td>0 - 4</td>
<td>2.42</td>
<td>0.19</td>
<td>3.00</td>
<td>1.40</td>
<td>1.95</td>
<td>4.00</td>
<td>0.00</td>
<td>4.00</td>
</tr>
<tr>
<td>Quality</td>
<td>0 - 4</td>
<td>2.00</td>
<td>0.16</td>
<td>2.00</td>
<td>1.14</td>
<td>1.29</td>
<td>4.00</td>
<td>0.00</td>
<td>4.00</td>
</tr>
<tr>
<td>Difficulty</td>
<td>0 - 4</td>
<td>1.69</td>
<td>0.17</td>
<td>2.00</td>
<td>1.19</td>
<td>1.41</td>
<td>4.00</td>
<td>0.00</td>
<td>4.00</td>
</tr>
</tbody>
</table>

**Measure score normality**

There were no notable outliers for any of the subscales. In all cases the mean scores were extremely close to median scores. In addition, all of the standard deviations fell well within the normal distribution curve of one standard deviation from the mean (see Table 5). In
examining the mean scores against the mean possible scores, there was evidence of high levels of homework completion (quantity). This was also evident with comprehension scores where the mean was 9.78 with the mean on the possible scores at 6, indicating high levels of comprehension. The mean score for difficulty was very low at 1.22 when compared to the possible mean score of 4, indicating that participants, on average, experienced little difficulty with their homework.

**Pre-treatment assessment normality for BDI-II and STAI-Y-1 scores**

**BDI-II**

For clinical purposes scores are rated as 0 to 13 (minimal depression), 14 to 19 (mild depression), 20 to 28 (moderate depression), and 29 to 63 (severe depression). The participants in the present study had scores similar to the outpatient sample used for the BDI-II normative data. Table 6 shows scores from the present study with normative data from the BDI-II, (A. T. Beck et al., 1996)
### Table 6 - BDI-II Scores and Normative Data

<table>
<thead>
<tr>
<th>Statistic</th>
<th>BDI-II Present Survey</th>
<th>BDI-II Normative Data</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Outpatient</td>
<td>Outpatient</td>
</tr>
<tr>
<td>$M$</td>
<td>24.76</td>
<td>22.45</td>
</tr>
<tr>
<td>$SD$</td>
<td>12.86</td>
<td>12.75</td>
</tr>
</tbody>
</table>

**STAI-Y-1**

STAI-Y-1 scores for normal working adults are 35.72 for males and slightly higher at 38.20 for females (Spielberger et al., 1983). Scores in the present study, coming from a clinical population are slightly higher as might be expected. Table 7 shows scores from the present study with the normative data from the STAI-Y-1. Overall pre-treatment symptom severity scores for the present study are shown in Table 3).
Table 7 - Mean STAI-Y-1 Scores and Normative Data

<table>
<thead>
<tr>
<th>Study</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present Study</td>
<td>46.6</td>
<td>45.9</td>
</tr>
<tr>
<td>Normative Data</td>
<td></td>
<td></td>
</tr>
<tr>
<td>working adults</td>
<td>35.72</td>
<td>36.20</td>
</tr>
<tr>
<td>college students</td>
<td>36.47</td>
<td>38.74</td>
</tr>
<tr>
<td>military recruits</td>
<td>44.05</td>
<td>47.01</td>
</tr>
</tbody>
</table>

Summary

The 18 participants attending the Waitemata Health Cognitive Therapy Centre were given a diagnostic interview and completed a battery of screening tests as part of their intake assessment. Participants presented predominantly with mood or anxiety disorders. Data were collected over a three-month period, tested for normality, and analyzed.
Chapter 7: Results

Introduction

Results showed differing attitudes towards homework between the groups with mood and anxiety disorders. Pre-treatment symptom severity also influenced attitudes towards homework, with severely depressed participants showing an increased avoidance of homework. The strongest relationship emerged between high scores of mastery and pleasure and homework compliance, while difficulty and obstacles produced a negative influence on homework compliance.

Subscales in the Attitudes Towards Homework Measure

For the purposes of this study, attitudes were defined as ways of thinking or behaving towards homework (Cowie, 1989). Positive attitudes were equated with experiences of mastery and pleasure, while negative attitudes were equated with experiences of avoidance, difficulties and obstacles in doing homework. The remaining subscale in the Attitudes Towards Homework Scale was comprehension. In the present study, comprehension scores were extremely high with the median score at 9.78 out of a possible maximum score of 12. While administration of homework was not examined in this study, these results would suggest that therapists at the Cognitive Therapy Centre were possibly using elements of systematic administration of homework.

When the attitude measurement subscale items were correlated (see Table 8) there was a significant positive relationship between mastery and pleasure, $r = .488$, $p < .05$, as might be
expected. There was a significant inverse relationship between pleasure and difficulty, \( r = -0.695, \ p < 0.01 \), suggesting that increased levels of difficulty decreased the pleasure from doing homework. There was a significant positive relationship between obstacles and difficulties, \( r = 0.556, \ p < 0.05 \). For this study obstacles related to practical difficulties in doing homework, while difficulties related to perceptions that the homework might be onerous or in some way too difficult.

Table 8 - Relationships with Mastery, Pleasure, Difficulty, and Attitude Subscale Scores

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mastery</th>
<th>Pleasure</th>
<th>Comprehension</th>
<th>Difficulty</th>
<th>Obstacles</th>
<th>Avoidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mastery</td>
<td>Pearson Correlation</td>
<td>1.000</td>
<td>0.488*</td>
<td>0.268</td>
<td>-0.083</td>
<td>0.031</td>
</tr>
<tr>
<td></td>
<td>( n )</td>
<td>18</td>
<td>18</td>
<td>18</td>
<td>18</td>
<td>17</td>
</tr>
<tr>
<td>Pleasure</td>
<td>Pearson Correlation</td>
<td>0.488*</td>
<td>1.000</td>
<td>0.419</td>
<td>-0.695**</td>
<td>-0.380</td>
</tr>
<tr>
<td></td>
<td>( n )</td>
<td>18</td>
<td>18</td>
<td>18</td>
<td>18</td>
<td>17</td>
</tr>
<tr>
<td>Difficulty</td>
<td>Pearson Correlation</td>
<td>-0.083</td>
<td>-0.695**</td>
<td>-0.073</td>
<td>1.000</td>
<td>0.556*</td>
</tr>
<tr>
<td></td>
<td>( n )</td>
<td>18</td>
<td>18</td>
<td>18</td>
<td>18</td>
<td>17</td>
</tr>
</tbody>
</table>

Note. Varying \( n \) due to missing data
*Correlation is significant at the 0.05 level.
**Correlation is significant at the 0.01 level.
Disorders and Attitudes Towards Homework

The first hypothesis examined the expected positive relationship between negative attitudes towards homework and high levels of pre-treatment symptom severity, and that attitudes might also vary as a function of the presenting problem. The scores for the BDI-II were taken as the measure of pre-treatment symptom severity for mood disorders. The scores for the STAI-Y-1 were taken as the measure of pre-treatment symptom severity for anxiety disorders. Pre-treatment symptom severity was correlated with each of the six attitude subscales (see Table 9).

There was a positive correlation between high BDI scores and avoidance, $r = .408$, suggesting that highly depressed clients are likely to avoid doing homework. There was also an inverse relationship between severe symptoms of depression and mastery, $r = -.338$, and severe symptoms of depression and pleasure, $r = -.380$, suggesting that participants experiencing severe symptoms of depression are less likely to experience mastery or pleasure in doing homework. This fits with the symptoms of lack of motivation, anhedonia, and hopelessness (DSM-IV, 1994) inherent in an episode of depression. However, there was a positive correlation between high STAI-Y-1 scores and mastery ($r = .320$) and pleasure ($r = .221$) suggesting that higher levels of anxiety are related to higher levels of mastery and pleasure in doing homework (see Table 9). There was also a slight inverse relationship between high anxiety scores and avoidance ($r = -.310$), suggesting that clients with high anxiety scores are less likely to avoid doing homework.
Table 9 - Correlation of Attitude Subscales and Pre-Treatment Symptom Severity

<table>
<thead>
<tr>
<th>Measure</th>
<th>Mastery</th>
<th>Pleasure</th>
<th>Comprehension</th>
<th>Difficulty</th>
<th>Obstacles</th>
<th>Avoidance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BDI - II</strong></td>
<td>Pearson Correlation</td>
<td>-0.338</td>
<td>-0.380</td>
<td>0.076</td>
<td>0.176</td>
<td>0.164</td>
</tr>
<tr>
<td></td>
<td>$n$</td>
<td>17</td>
<td>17</td>
<td>17</td>
<td>17</td>
<td>16</td>
</tr>
<tr>
<td><strong>STAI-Y-1</strong></td>
<td>Pearson Correlation</td>
<td>0.320</td>
<td>0.221</td>
<td>0.332</td>
<td>0.052</td>
<td>0.182</td>
</tr>
<tr>
<td></td>
<td>$n$</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>14</td>
</tr>
</tbody>
</table>

*Note:* Varying $n$ due to missing data

From the group statistics (see Table 10), a pattern emerged suggesting that participants with mood disorders rated more difficulty, obstacles and avoidance in their experience of homework, while participants with anxiety disorders rated more mastery and pleasure in their experience of homework. Levels of homework comprehension were very similar for both groups.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Disorder</th>
<th>( n )</th>
<th>( M )</th>
<th>( SD )</th>
<th>( MSE )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mastery</td>
<td>Depression</td>
<td>9</td>
<td>3.46</td>
<td>1.65</td>
<td>0.55</td>
</tr>
<tr>
<td></td>
<td>Anxiety</td>
<td>9</td>
<td>4.50</td>
<td>1.52</td>
<td>0.51</td>
</tr>
<tr>
<td>Pleasure</td>
<td>Depression</td>
<td>9</td>
<td>2.93</td>
<td>1.33</td>
<td>0.44</td>
</tr>
<tr>
<td></td>
<td>Anxiety</td>
<td>9</td>
<td>4.50</td>
<td>1.66</td>
<td>0.55</td>
</tr>
<tr>
<td>Comprehension</td>
<td>Depression</td>
<td>9</td>
<td>9.83</td>
<td>1.63</td>
<td>0.54</td>
</tr>
<tr>
<td></td>
<td>Anxiety</td>
<td>9</td>
<td>9.64</td>
<td>2.34</td>
<td>0.78</td>
</tr>
<tr>
<td>Difficulties</td>
<td>Depression</td>
<td>9</td>
<td>1.80</td>
<td>1.37</td>
<td>0.46</td>
</tr>
<tr>
<td></td>
<td>Anxiety</td>
<td>9</td>
<td>0.76</td>
<td>0.73</td>
<td>0.24</td>
</tr>
<tr>
<td>Obstacles</td>
<td>Depression</td>
<td>8</td>
<td>8.50</td>
<td>5.62</td>
<td>1.99</td>
</tr>
<tr>
<td></td>
<td>Anxiety</td>
<td>9</td>
<td>7.93</td>
<td>2.73</td>
<td>0.91</td>
</tr>
<tr>
<td>Avoidance</td>
<td>Depression</td>
<td>9</td>
<td>5.46</td>
<td>2.53</td>
<td>0.84</td>
</tr>
<tr>
<td></td>
<td>Anxiety</td>
<td>9</td>
<td>4.18</td>
<td>1.76</td>
<td>0.59</td>
</tr>
</tbody>
</table>

*Note: Varying \( n \) due to missing data*

It was expected that there would be a positive correlation between higher levels of compliance (quality and quantity of homework completion) and positive attitudes towards
homework. Homework compliance was correlated with each of the attitude subscales (see Table 11). A significant correlation was found between quality of homework completion and pleasure, $r = .707, p < .01$. There were several negative associations. Difficulty was negatively associated with both quality ($r = -.601, p < .01$), and quantity ($r = -.508, p < .05$), of homework completion. Obstacles were also negatively associated with both quality ($r = -.772, p < .01$), and quantity ($r = -.620, p < .01$) of completion. There was also an inverse relationship between difficulty and pleasure, $r = -.419, p < .05$.)
Table 11 - Correlation of Homework Performance and Attitude Subscales

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mastery</th>
<th>Pleasure</th>
<th>Comprehension</th>
<th>Difficulty</th>
<th>Obstacles</th>
<th>Avoidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity</td>
<td>Pearson Correlation</td>
<td>-0.157</td>
<td>0.385</td>
<td>0.007</td>
<td>-0.508**</td>
<td>-0.620**</td>
</tr>
<tr>
<td></td>
<td>n</td>
<td>18</td>
<td>18</td>
<td>18</td>
<td>17</td>
<td>18</td>
</tr>
<tr>
<td>Quality</td>
<td>Pearson Correlation</td>
<td>0.047</td>
<td>0.707**</td>
<td>0.342</td>
<td>-0.601**</td>
<td>-0.772**</td>
</tr>
<tr>
<td></td>
<td>n</td>
<td>18</td>
<td>18</td>
<td>18</td>
<td>17</td>
<td>18</td>
</tr>
<tr>
<td>Difficulty</td>
<td>Pearson Correlation</td>
<td>-0.199</td>
<td>-0.419</td>
<td>0.017</td>
<td>0.332</td>
<td>-0.159</td>
</tr>
<tr>
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<td>n</td>
<td>18</td>
<td>18</td>
<td>18</td>
<td>17</td>
<td>18</td>
</tr>
</tbody>
</table>

Note: Varying n due to missing data
*Correlation is significant at the 0.05 level
**Correlation is significant at the 0.01 level

A secondary analysis examined the relationship between global difficulty on the Homework Performance Measure and difficulty on the Attitudes towards Homework Scale. There was a mild but non-significant relationship \( r = .332 \).
Chapter 8: Discussion

Introduction

The present study provided preliminary evidence for the assertion that clients with mood and anxiety disorders differed in their attitudes towards homework, and that symptom severity was also related to attitudes towards homework. Pleasure was significantly related to homework compliance, while negative attitudes towards homework, as indicated by difficulties, obstacles, and avoidance, were related to reduced homework compliance.

Previous research has demonstrated that homework produces positive effects on therapy and that homework compliance is associated with outcome (e.g. Kazantzis, 2000b), that homework is an integral part of cognitive therapy and is used for a wide range of disorders (e.g. Shelton & Levy, 1981), that increasingly, therapists assign homework (e.g. Shelton & Levy, 1981, Kazantzis & Deane, 1999), and that those clients who comply with homework have enhanced progress in therapy (e.g. Neimeyer & Feixas, 1990; Persons et al., 1988; Schmidt & Woolaway-Bickel, 2000). However, research to date has not considered the effect of client attitudes towards homework, or of client attitudes as a contributing factor in the quality and quantity of homework completion.

Present Study

Findings from the present study suggest several key factors, which may influence client attitudes towards homework. Pleasure appears to be especially related to the quality of homework completion. This adds to a recent finding by Schmidt and Woolaway-Bickel (2000) into panic disorder, which found that quality of homework completion gave a better
indication of therapy outcome than quantity of completion. Pleasure has also been associated with client motivation (Wankel, 1993). This suggests the need to enhance factors which might lead to this outcome, such as individualising homework to take into account therapeutic needs, homework preferences, and client abilities (J. S. Beck, 1995).

Factors which negatively influenced participant attitudes towards homework included an increased level of difficulty of the homework, and practical difficulties (obstacles), which make it more difficult for clients to do homework. As discussed in earlier, low levels of difficulty, and the client having the resources (personal and practical) to carry out homework, have been found to enhance the likelihood of compliance (Conoley et al., 1994). There was a positive relationship between high pre-treatment depression scores and avoidance of homework, which was mirrored by an inverse relationship between high pre-treatment anxiety scores and avoidance, suggesting that the more depressive symptoms a person has the more likely he or she is to avoid homework, while the more anxiety symptoms a person has the more likely he or she is to do homework.

A t-test of independent samples of the participant group with mood disorders and the participant group with anxiety disorders on attitudes towards homework showed a similar trend of participants with anxiety disorders showing higher levels of mastery and pleasure than participants with mood disorders, who showed higher levels of difficulty, obstacles, and avoidance. This suggests support for the assertion that different diagnoses are related to different attitudes towards homework. However, by dividing the participants into groups according to disorder and examining the difference in attitudes, it is difficult to establish whether the result is a feature of the sample (pre-treatment symptom severity) or the types
of homework from different therapy packages (i.e. different types of homework because of the different needs arising from the different disorders).

On one hand, it might be expected that participants with mood disorders, with negative views of the self, experience and the future would equally have a negative experience of homework. Also, it might be expected that this group, comprising predominantly participants with Major Depressive Disorder, would have less mastery and pleasure. The criteria for Major Depressive Episode include diminished interest or pleasure in all, or almost all daily activities, and feelings of worthlessness or excessive and inappropriate guilt (DSM-IV, 1994), so that reduced pleasure and mastery are inherent in the diagnosis. This is also suggested by Detweiler & Whisman (1999) who conclude that as depressed clients have negative expectations about the future, they are unlikely to initiate behaviours, which could reward themselves, or give themselves pleasure. A. T. Beck et al., (1979), give several reasons for reduced experiences of pleasure in clients with depression. Clients may engage in activities as homework which were not pleasurable for them even prior to the episode of depression, the negative cognitions from the depression may be so strong as to over-ride any sense of pleasure, or the client may give selective inattention to any sensations of pleasure. These reasons may also apply to the reduced experience of mastery in clients with depression.

The perceived increase in difficulties, obstacles, and avoidance also fits with the diagnostic criteria for depression, including such features as fatigue or loss of energy, and diminished ability to think or concentrate, or indecisiveness, which might actually make doing homework more difficult (DSM-IV, 1994) possibly because of the activity level involved in
homework, or some other factor, such as motivation. Other factors, which may affect perceived difficulties, obstacles, and avoidance may include the chronicity of the depression, as a client with recurrent depression may be more resistant to therapy, or even the type of depression. For instance, a client with Dysthymia may find therapy relatively easier because of the more moderate levels of depressive symptoms experienced, than a client with Major Depressive Disorder.

However, some studies, as discussed earlier, suggest that clients with severe symptoms of depression are able to complete homework as well as those with mild symptoms, both in quality and quantity of completion (Edelman & Chambless, 1995; Startup & Edmonds, 1994), and that pre-treatment symptom severity for depression is unrelated to compliance (Burns & Nolen-Hoeksema, 1991; Startup & Edmonds, 1994), which is in contrast with the present results. There are mixed results in research regarding symptom severity with the Elkin et al., (1989) study suggesting medication as the therapy of choice for severely depressed clients. Severe depression in the Elkin et al., (1989) study was measured at 20+ on the HRSD. The mean score in the present study for the HRSD was 12.78, suggesting a moderate level of depression for present study participants. Participants in the present study, nevertheless, were influenced by the difficulties and obstacles they experienced in relation to doing their homework. Recent research by Addis, Truax, and Jacobson, (1995); Addis and Jacobson, (2000), examined the ‘profile’ of clients with depression, to identify specific client factors, which might make subgroups more receptive to cognitive therapy. It might be expected that such subgroups would also exhibit differing attitudes towards therapy.
Clients with anxiety disorders typically have very different cognitive sets to clients with mood disorders. As discussed earlier, Alnaes and Torgersen (1990) found that clients with Panic Disorder had increased sensitivity, compliance, and insecurity, suggesting possibly some social desirability response bias might enhance compliance in this group. This result fits with the participants in the current study, who did not exhibit avoidance as the participants with mood disorders did.

However, this is also unusual, given that avoidance is a feature of anxiety (DSM-IV, 1994). Katerndahl (1999), in a study of clients with panic disorder, found those clients had certain personality characteristics associated with phobic avoidance, suggesting that some other factors, perhaps Axis 2 symptoms (DSM-IV, 1994) might be of influence. Participants in the present study may have experienced rapid symptom relief from cognitive therapy, and a sense of mastery as potentially incapacitating symptoms were overcome. This may have counteracted any tendency towards avoidance.

The assertion that clients who have a more positive attitude towards homework are more likely to have greater homework compliance was partially supported. There was a strong positive correlation between quality of homework done and pleasure. This fits with behavioral theories of positive reinforcement, as it is likely that subjects will spend more time doing something they enjoy, and by spending more time doing it, quality is likely to also increase.

High levels of both difficulty and obstacles meant that less homework was done, and the quality of that homework dropped markedly. Higher levels of difficulty also were
associated with a decrease in pleasure. Earlier research has also found a relationship between difficulty and homework compliance (Cowley et al., 1994), while Shelton and Levy (1981) note that if there are factors in a client’s life which make doing homework difficult, or do not support doing homework, then non-compliance is the likely result.

Mastery was not related to either quality or quantity of completion. This was somewhat surprising, given that even though mastery and pleasure are two discrete concepts, mastery and pleasure showed a significant positive relationship in an earlier analysis. Under the principle of positive reinforcement it might be expected that if something were done well and gave a sense of pleasure, that there would also be an accompanying sense of achievement, but this was not supported in the present study. Symptoms of the disorders may have overridden any feelings of achievement, even if the homework was completed satisfactorily, or some participants may have compared current levels of functioning with premorbid functioning levels. In this way even if a homework task was done well this ‘achievement’ may have seemed meaningless compared with previous high levels of functioning (Beck et al., 1979) Related to this is the cognitive error of focusing on negative events. Participants may have focused on the larger performance deficit and have failed to recognise the achievement of completing the homework task.

**Limitations**

The results of this study are limited by the small sample size \((N = 18)\). Other factors which affect attitudes such as the method of administration of homework, and the therapeutic relationship were also deliberately omitted from the present study as they were covered elsewhere in the broader study. There are several problems associated with examining
attitudes towards homework and client diagnoses. The main ones potentially confounding any results from the present study are medication use and the substantial degree of comorbidity of mood and anxiety disorders, which were not taken into account in the present study. There is a recognised relationship between anxiety and symptoms of depression so that clients who are anxious may also have depressive symptoms and those who have mood disorders may also have a degree of anxiety. Three anxiety disorder participants also had Dysthymia included in their secondary diagnosis. These factors may have blurred some of the distinction in attitudes between the two subject groups.

**Contribution to research**

The present study lends support to, and augments the existing knowledge and practice of systematic administration of homework in cognitive therapy. Two aspects of attitudes which appear particularly relevant from the present study, is the importance of pleasure, which is strongly related to homework compliance, and the importance of difficulty, which impacts negatively on pleasure and is associated with reduction in homework compliance. In the present study it is noted that while difficulty has these associations, few clients had problems with difficulty, a factor possibly attributable to therapist skill and care in homework assignment. As there is now some evidence supporting the relationship between quality of completion and therapeutic change (e.g. Schmidt & Woolaway-Bickel, 2000), and as the present study has found a strong positive relationship between pleasure and quality of completion, this research adds to the evidence identifying the effective components of homework in cognitive therapy.
As attitudes are related to homework completion, future research could usefully examine which attitudes are likely to promote, and which might decrease homework compliance. In examining presenting diagnoses and client attitudes it might be useful to more clearly define the reason for differing attitudes and whether these are inherent in the disorder, whether they are due to differing homework set as a consequence of that disorder, or come as an additional factor in the client's personality. For example, difficulties accepting the rationale of cognitive therapy, difficulties doing homework, and interpersonal difficulties are factors known to make clients less receptive to cognitive therapy (e.g., Fennel & Teasdale, 1987; Persons et al., 1988; Edelman, 1995). Another potential area of research comes from the suggestion that differing personality disorders are related to homework avoidance (J. S. Beck, 1995; March, 1997). While this factor was not examined directly in this study, avoidance did correlate with mood disorder. It might be useful to examine the extent to which factors such as avoidance are linked to the disorders of Axis 1 or to the Axis 2 personality disorders in the DSM-IV. The present study, therefore, points the way towards a finer grained analysis of potential factors in client attitudes that might be examined given a larger sample size.

**Conclusion**

It is known that homework adds to therapy and on a practical level is a means of extending the effects of the therapy session throughout the time between sessions. It is also known that one of the advantages cognitive therapy has over other treatments is the rate of relapse prevention, whether this be by adaptive skills learned in therapy or by cognitive restructuring. As homework is such an important part of therapy, any increase compliance is likely to also increase the effectiveness of therapy. Attitudes towards homework are
important here, as they are likely to affect the amount of homework done and the quality of that homework. Systematic administration of homework and associated factors of therapist skill in assigning homework are important areas of current research, particularly given the implications for successful outcome in therapy and long-term therapeutic gains. Just what clients think of homework and how they behave towards homework i.e. their attitudes towards homework, are additional factors, which may influence the course of therapy. Specific factors suggested by the present research are the need for therapists to consider carefully individual client’s abilities and needs in setting homework, and the collaborative need to set homework which is at a manageable level of difficulty and gives a sense of pleasure to the client. Anticipating obstacles and working on these in session could help increase compliance by modifying attitudes towards homework in the therapy session. Therapists need to be mindful of client attitudes, and the effect these have, when clients are doing homework.
References


Brantley, P. J., Mehan D. J. (jr), Thomas, J.L. The Beck Depression Inventory (BDI) and the Center for Epidemiological Studies Depression Scale (CES-D) in Maruish, M.E. (Ed.). *The use of psychological testing for treatment and outcomes assessment*. Mahwah, NJ: Lawrence Erlbaum Associates.


Appendices

Appendix A - Beginning of Session Form

Beginning of Session Form

Today's Date: ____________________________

Session Number: __________________________

Client Name: _____________________________

Therapist's Name: _________________________
### Appendix B - Attitudes Towards Homework Scale

**Attitudes Towards Homework***

*(from last session)*

Instructions: Put a tick (✓) after each item to indicate the extent to which the following statements are true for you in relation to your homework from last session. Please answer all the items.

<table>
<thead>
<tr>
<th>Item</th>
<th>0 - Not At All</th>
<th>1 - Somewhat</th>
<th>2 - Moderately</th>
<th>3 - A Lot</th>
<th>4 - Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I feel a sense of achievement at having attempted the homework</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I feel good about having attempted the homework</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. My life is too stressful for homework right now.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>4. I don't like doing homework unless I can get it right.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. I am more in control of my problems from having attempted the homework</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>6. I had no trouble remembering to do the homework</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. I didn't have an opportunity to do the homework</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>8. I felt worse when thinking about the things I had to do for homework</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>9. I understood how to do the homework.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. It was easy for me to find time for the homework.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. The homework was too difficult for me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Unexpected events made it difficult for me to do the homework.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. I understood what I had to do for homework.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. I enjoyed doing the homework.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. There was too much homework for me to do.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>16. I understood why I was asked to do the homework.</td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>17. It was hard to find the energy to do the homework.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>18. I had trouble getting started on the homework.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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## Appendix C - Abbreviated Homework Performance Measure

### Homework Performance*

Instructions: Circle the number of the scale to describe your performance of the homework from last session. Your responses on this form will be kept strictly confidential. Please answer all three questions. Thank you.

<table>
<thead>
<tr>
<th>Question</th>
<th>Description</th>
<th>None</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>How much homework did you do?</td>
<td>None</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2.</td>
<td>How well did you do the homework?</td>
<td>Not at all</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3.</td>
<td>How difficult was the homework?</td>
<td>Not at all</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

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