Therapist's experience of, and attitudes towards, barriers to the completion of therapeutic homework tasks in children, adolescents and families

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Gregg Shinkfield

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ABSTRACT

Homework is a widely used therapeutic tool, employed by clinicians from a range of training backgrounds and across a variety of theoretical orientations. Theoretical and empirical support suggests that homework is an effective component of treatment for clients from a variety of populations, presenting with a host of different disorders. Yet despite support for these assignments, few studies have directly investigated factors that may potentially interfere with the process of completing homework assignments. The present thesis aimed to address this gap in our knowledge by gathering survey data from a sample of 144 Marriage and Family Therapist regarding their attitudes and experience of homework barriers that have occurred in their clinical practice. Data obtained found support for the regular occurrence of twenty-one specific types of barriers. It was also revealed that a subset of "generic" factors frequently occurred across all client groups. The clinical implications of these barriers are discussed.

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Chapter One: Introduction

Overview

The following chapter presents an overview of the primary aim and rationale for the present thesis. The concepts of 'homework' and 'barriers to homework completion' are defined, and the historical context within which this study lies is described. Finally, the importance of this investigation for the field of psychotherapy is illustrated by the findings of recent practitioner surveys regarding the use of therapeutic homework tasks in clinical practice.

Introduction

In recent years, the use of between-session tasks has received increased attention in the psychotherapeutic literature (Kazantzis, Deane, Ronan & Lampropoulos, 2005). Often referred to as "homework", these between-session activities have been most frequently associated with cognitive behavioural therapy[1] (CBT; Beck, Rush, Shaw & Emery, 1979; Edelman & Chambless, 1993). However, in addition to CBT, homework is now also considered an integral component of many other therapeutic approaches. These include behavioural therapy (Shelton & Levy, 1981b), marital and family therapy (Carr, 1997; Hansen & MacMillan, 1990), solution-focused therapy (Beyebach, Morejon, Palenzuela & Rodriguez-Arias, 1996), child and adolescent therapy (Hudson & Kendall, 2002), systemic therapy (Dattilio, 2002a), brief dynamic therapy (Badgio, Halperin & Barber, 1999; Vakoch & Stupp, 2002), and a host of integrative and post-modern therapeutic approaches (Dattilio, L'Abate & Deane, 2005).

The use of homework is not new within the field of psychotherapy (Dattilio, 2002b). Indeed, between-session assignments have been viewed as a 'core and crucial component of cognitive behavioural therapy for decades' (Kazantzis, Deane & Ronan, 2004, pp 628). Homework assignments first entered the psychotherapeutic literature over 60 years ago (e.g., Dunlop, 1936;

[1] Within this thesis, the terms homework and between-session tasks have been used interchangeably. Both terms refer to activities that are completed by a client outside of normal session time and are designed to contribute towards the goals or process of therapy (Lambert, Harman & Slade, 2005).

Herzberg, 1941); however, initially these tasks were not seen as an integral part of the therapeutic experience. Rather, during this early period clients were only ever asked to engage in homework activities occasionally, and these assignments were viewed purely as an adjunct to the main tools of therapy. Freud (1952) for example, wrote that at times he would suggest socially phobic clients might do well to engage in the 'homework task' of venturing out into society on their own in order to face their fears. However, this suggestion would only be made after having engaged in psychoanalysis to explore the intra-psychic root of the client's distress first.

George Kelly's 'Fixed Role Therapy' (1955) was the first to incorporate homework as an *integral* component of a program for psychotherapeutic change (Coyne & Lombardo, 2002; Dattilio, 2002a). In this treatment approach Kelly urged his clients to adopt an interpersonal style that was different to the way they usually interacted with others. The client then practiced these different 'roles' outside of the therapeutic setting. Through this technique, clients were able to temporarily abandon their concept of *self* and to 'try on' new identities or personality characteristics while 'wearing the protective mask of make-believe' (Neimeyer, 1995, pp 113). It was proposed that clients were able to do this while safe in the knowledge that their own construction of self may be readopted when the role-play was over (Cruise & Sewell, 2000). During this process clients were encouraged to take note of how this experience of adopting a different role was for them, and to observe the feedback received from others while behaving in this new way. If the client persisted in maintaining these new roles in a range of situations, behaviours associated with these roles were often reinforced through positive social interactions. In this way, these adaptive behaviours became accommodated into the client's everyday behavioural repertoire (Kipper, 1996). Subsequently, as the client began to view themselves in more positive ways — congruent with their perception of others who behaved in a similar fashion — this change in behaviour served to mediate a cognitive shift, altering the client's perception of their own ability to address the problems that brought them to therapy initially (Neimeyer, et al., 2003).

Since these early beginnings, the use of homework assignments have gained in popularity and are now considered an integral component of a wide variety of manualised treatments. They have also become part of the everyday clinical practice of a large number of psychotherapists working within

a variety of disciplines (Kazantzis, Lampropoulos & Deane, 2005; Robinson, 2003). As will be demonstrated throughout the following chapters, a host of theoretical and empirical support currently exists regarding the efficacy of therapeutic homework tasks as a clinical tool. Yet despite support for these assignments, studies investigating homework compliance have indicated that clients frequently do not complete all tasks collaboratively assigned as part of therapy (Abramowitz, Franklin, Zoellner, & DiBernardo, 2002; Addis & Jacobson, 2000; Kazantzis, Deane, & Ronan, 2004). A client may encounter a large number of barriers that can potentially interfere with the completion of such activities. *Environmental, patient, task* and *therapist* factors have each been proposed as a potential source of non-completion of homework tasks (Detweiler & Whisman, 1999;Tompkins, 2003). However, in contrast to the large number of empirically based studies that have investigated many other aspects of therapeutic homework, much of what has been written to date regarding *homework barriers* has not been generated from empirical research. Rather, this has been derived in the main from the clinical experience of identified experts in the field (e.g., Hudson & Kendall, 2005; Freidberg & McClure, 2005; Tompkins, 2004). While it is acknowledged there is great value in presenting and discussing the processes and pitfalls that arise within clinical practice, the fact remains that the literature currently available portrays the experience of only a small number of clinicians. Although largely regarded as experts, these authors represent a restricted sample of clinicians and therefore may not have fully captured the complete range of barriers that occur in everyday practice. Furthermore, they may not accurately reflect the experience of the wider therapist population; in particular, those homework barriers encountered by therapists who are less clinically experienced or who are unfamiliar with the current literature regarding therapeutic homework tasks.

Of the small body of empirical research that has been generated regarding factors which potentially impact upon homework compliance, Kazantzis, Deane, Ronan and Lampropoulos (2005) note the majority of this work has been conducted in piecemeal fashion with any given study discussing only one or two factors in isolation. Furthermore, none of the authors that have previously reviewed this body of literature have conducted any investigation into how frequently these barriers manifest in clinical practice, or with which client populations they are likely to occur. Even fewer authors have investigated those barriers to homework completion that are experienced specifically by children,

adolescents or family groups. Therefore, given the weight of support for the use of homework, as well as the paucity of empirical knowledge regarding factors that may impede the completion of between-session tasks, the primary aim of the present thesis was to survey a wide sample of practicing clinicians regarding their experience of barriers to homework completion in their clinical practice. The development of this survey was based upon a detailed review of the empirical literature and clinical opinion regarding homework barriers, which have been suggested by previous authors. By gathering data from a wide sample of therapists regarding their experience of, and attitudes towards such barriers, it is anticipated this would go some way towards addressing this gap in our knowledge and provide a valuable step towards being able to develop strategies for overcoming these barriers.

Definitions

Homework tasks take a number of different forms and may include such activities as structured behavioural assignments, reading therapy related material, gathering information, observing thoughts, feelings and behaviours, keeping a journal, or a multitude of other activities that can be conceptualised as extending the therapeutic process into the time between sessions (e.g., Beck, et al., 1979; Padesky & Greenberger, 1995; Tompkins, 2004). In the context of the present thesis, homework assignments are therefore defined as *tasks that contribute towards the goals or process of therapy, which are completed by the client outside of normal session time* (Lambert, Harman & Slade, 2005).

The concept of barriers to homework completion is also not new to the field of psychotherapy. However, over the years these barriers have been conceptualised in a variety of different ways and have been referred to by an assortment of labels. Leahy (2001) for example, conceptualises homework barriers as a clients 'resistance' to therapy; Judith Beck (1995; 2002) viewed them as 'obstacles' that arise from a client's underlying maladaptive beliefs; whereas Detweiler and Whisman (1999) discuss homework 'non-adherence factors' and 'compliance issues'. The phrase 'barriers to homework completion' has itself also been used by a number of authors, and has recently grown in popularity as a term used to describe the myriad of factors that may potentially

interfere with a client completing between-session tasks (Baker, Heather, Stallard, O'Neil, & Wodak, 1994; Beck, et al., 1979; Carroll, Nich & Ball, 2005; Coon & Thompson, 2003; Detweiler-Bedell & Whisman, 2005; Glaser, Kazantzis, Deane & Oades, 2000; Johnson & Kazantzis, 2004; Kazantzis & Lampropoulos, 2002; Kazantzis, Deane & Ronan, 2000; Kazdin & Wassell, 2000; Myles & Milne, 2004; Scheel, Hanson, & Razzhavaikina, 2004). In addition, authors investigating factors that lead to disruption in other areas of psychotherapy have likewise adopted the rubric of 'barriers'. A notable example of this is the work of Allen Kazdin and colleagues (Kazdin, 1996; Kazdin, Holland, & Breton, 1991;Kazdin, Holland,fs & Crowley, 1997), in which the reasons most likely to account for the early withdrawal of children and their families from psychotherapeutic treatment were explored. Kazdin conceptualised the large number of factors that were found to contribute to the premature withdrawal of clients from treatment as 'barriers to treatment success'. This term was particularly useful as these barriers covered a diverse range of disruptive factors, some of which were within the control of the client, while others, the client had little direct influence over. The notion of multiple barriers is one that lends itself well to the many and diverse factors that lead to homework non-completion. Therefore, a 'homework barrier' is herein given to mean anything that *prevents or impedes a client from engaging in a homework activity* (Beck, et al., 1979).

As will be examined in Chapter 4, factors that may constitute a 'barrier' and therefore result in the non-completion or partial completion of homework tasks can arise from a range of sources. These may be either internal to a client, such as their beliefs about therapy and their perception of their own ability to complete a task (Beck, 2005), or from a range of external factors such as aspects of the client's situation, or due to the task or treatment itself (Detweiler & Whisman, 1999). Furthermore, it is likely that while many of these disruptive factors can be discussed independently, it may also be possible to view them as overlapping processes that arise within the context of the overall conceptualisation of the client's difficulties[2] (Beck, 2005; Kazantzis, MacEwan, & Dattilio, 2005).

[2] The clinical implications derived from the present thesis for conceptualising homework barriers in the context of the client's overall presenting difficulties are currently in press with the journal of *Cognitive and Behavioural Practice* (Kazantzis & Shinkfield, in press).

Practitioner Surveys

Until recently the extent to which homework was used in clinical practice was not fully known, as little research had been undertaken to directly investigate this. A large-scale randomised survey (*N* = 827) was conducted by Kazantzis, Lampropoulos and Deane (2005) that sought responses from an American sample of 3,000 practicing psychologists regarding the frequency with which they used homework tasks in their therapeutic practice. The survey gathered information on the types of activities typically assigned by these therapists and enquired also about their attitudes towards homework tasks in general. As the authors acknowledge, due to the nature of mail survey research, the study faced a number of limitations. In particular, the study obtained a modest rate of response (28%) and had relied solely upon clinicians' self-report, rather than using an experimental methodology (Coolican, 2004). As a result the sample obtained may have contained an over representation of psychologists with an interest in the use of homework assignments, or the responses given may have been influenced by social desirability or other response bias (Mangione, 1995). Even so, this study did highlight that practitioners from a range of therapeutic orientations endorse the regular use of homework tasks in their clinical practice. Specifically, the authors found from a screening question that 98% of those surveyed reported having asked their clients to scrutinise their thoughts, behaviours or emotions in the time outside of therapy sessions. Furthermore, therapists reported that they did so within an average of 57% of all of their sessions. It was also found that 68% of the sample indicated they 'often' or 'almost always' used homework assignments in their clinical practice. CBT therapists reported the highest use of homework tasks; however, it was noteworthy that homework assignments were also featured within the practice of respondents endorsing psychodynamic or interpersonal theoretical orientations as well.

The study by Kazantzis, Lampropoulos and Deane (2005) extends upon the findings of earlier survey research, including that of Kazantzis and Deane (1999), which explored the use of homework by psychologists in New Zealand (*n* = 221). This study also found that 98% of those psychologists surveyed reported using some form of homework assignments in their clinical practice. The data further suggested that 80% of those sampled believed that homework was of importance in the treatment of anxiety disorders, non-assertiveness and social skills training.

Additionally, 65% regarded homework as being of importance in the treatment of depression, insomnia, obsessions/compulsions and sexual dysfunction. However, it is important to recognise that due to the predominance of cognitive-behavioural theory in the clinical training of New Zealand psychologists (Kazantzis & Deane, 1998), more than half (57%) of the sample endorsed using a cognitive-behavioural therapeutic approach. Consequently, the findings of this New Zealand study may be considered to best reflect the beliefs of therapists working within a cognitive-behavioural framework and may not generalise to other clinicians.

A survey of mental health workers from a broad range of professions was also conducted by Kazantzis and colleagues (Kazantzis, Busch, Ronan, & Merrick, in press). The sample obtained by this survey included psychologists (29%), nurses (5%), psychiatrists/physicians (7%) and counsellors (52%). This study revealed that regardless of professional practice, overall 83% of the sample reported using between-session assignments when engaging therapeutically with clients. As with previous surveys, it was also found that those practitioners who reported having trained within a cognitive behavioural model used a greater number of homework assignments and employed these tasks more systematically than those practitioners from other theoretical orientations. However, these findings should be considered in the context of the limitations of the study. The sample was both non-randomised and of a moderate size ($N = 330$). Furthermore, the study drew upon a sample of New Zealand practitioners; therefore, the same limitations should be noted regarding the ability to generalise these findings to other populations.

A practitioner survey conducted by Fehm and Kazantzis (2004) investigated the hypothesis that a practitioner's beliefs regarding homework tasks would impact upon his or her use of these tasks in clinical practice (see also Addis & Krasnow, 2000; Kazantzis, Deane, Ronan & Lampropoulos, 2005; Kazantzis & Lampropoulos, 2005). This study drew upon a sample of German Psychologists ($N = 140$) to investigate the impact of attitudes held towards homework tasks upon the process and outcome of therapy. In contrast to other populations surveyed, the sample of German therapists was found to report a lower rate of homework use (37%) than in previous studies. Although therapists from a range of theoretical orientations reported using such tasks, once again, cognitive-behaviourally trained clinicians indicated using homework more frequently than psychodynamic practitioners. Furthermore, those clinicians who endorsed a cognitive-behavioural approach were

also significantly more likely to hold beliefs that homework is an indispensable component of therapy, that homework enhances therapy outcome and that it contributes to behavioural change in clients. Conversely, psychodynamically oriented therapists were more likely to agree that there is a lack of empirical support for homework and that assignments are not necessary for every patient.

Summary

What is illustrated by the above survey findings is that at present, homework tasks are regarded by a large number of psychologists as an important vehicle through which psychotherapeutic change occurs. Furthermore, these findings indicate that homework tasks are being regularly incorporated into the everyday clinical practice of psychologists from a range of theoretical orientations and training backgrounds. In addition, it is important to note that the opinion expressed within these surveys also finds theoretical and empirical support from a variety of studies reported in the psychotherapeutic literature. Therefore, given that homework has been considered an active ingredient in psychotherapy for several decades and that a large proportion of psychologists currently endorse the use of homework as a valuable component for therapeutic change, it is important to consider that should a barrier be encountered which prevents these tasks from being completed, the client may not gain the maximum possible benefit from engaging in therapy. As noted, the primary aim of the present study is to explore these *barriers to homework completion* and develop an understanding of the factors that may disrupt clients from engaging in between-session tasks. In order to understand more fully why such an investigation is of importance to the field of psychotherapy, the theoretical and empirical support for using homework as a therapeutic process will first be reviewed.

Chapter Two: Theoretical Basis For Homework.

Overview

The theoretical concepts that underpin the rationale for using homework as a therapeutic process are well established. However, until recently a detailed and unified account of these theoretical foundations has been difficult to find within the psychotherapeutic literature (Kazantzis & L'Abate, 2005). It is only within the past few years that the first articles and texts have begun to appear that provide a synthesis of the diverse theoretical concepts on which homework tasks are based. The core theoretical principals for the use of homework are drawn, in the main, from the fields of behavioural and cognitive psychology (e.g., Alford & Lantka, 2000, Kazantzis & L'Abate, 2005; Kazantzis, MacEwan & Dattilio, 2005). Within these frameworks, particular attention has been given to the principals of generalisation, classical conditioning, operant conditioning, shaping and maintenance. Additional support has been provided by social learning theory, the theory of reasoned action and the transtheoretical stage of change model. The following chapter will outline these principals in detail and demonstrate how each informs the theoretical basis for the use of homework in clinical practice.

Behavioural Principles

Generalisation – The Principal of Generality

Homework assignments have been most widely theorised as being the vehicle through which clients can practice and transfer the skills developed 'in session' to their home and work environments (Spiegler & Guevremont, 1998; Kazantzis, Deane, Ronan, & Lampropoulos, 2005). The process of transferring skills from one environment to another is the central concept in the behavioural principal of *generalisation* (Mazur, 1994). The phenomenon of generalisation occurs as a natural learning process throughout our lives as we develop skills to overcome obstacles in our environment (Ross, Ross & Evans, 1971). If this process did not occur, an individual would need to acquire a new skill for every novel, problematic situation encountered, rather than 'reusing' adaptive

behaviours previously developed in response to similar obstacles (Kazantzis & L'Abate, 2005; Spiegler & Guevremont, 1998). Specifically, generalisation occurs when either i) a behaviour that is learned in a training situation is transferred to the natural environment; ii) when training leads to the development of a *new* behaviour that has not been specifically taught; or iii) when a learned behaviour is maintained in the natural environment over time without further training being required (Mazur, 1994; Martin & Pear, 2003). Each of these outcomes embodies the important role it has been proposed homework plays in psychotherapy, namely that the effects of therapy are perpetuated from the clinical setting to the client's everyday life (Nauta, 2005).

Classical Conditioning

Classical or Respondent conditioning is the process by which a *neutral stimulus* that previously did not elicit a response from an individual becomes paired with an *unconditioned stimulus* that naturally elicits an *unconditioned response*. By associating the neutral stimulus with the unconditioned stimulus, the neutral stimulus in turn takes on the ability to elicit that response itself (O'Donohue, 1998). For example, during a painful dental procedure that requires the use of a dental drill, the sound of the drill may become paired with the fear and pain experienced by the patient. Having made this association, the sound of the drill will in the future be enough to elicit a fear response where this had not previously occurred before (See Figure 2.1; Mathews, Gelder, & Johnston, 1981; Rachman, 1990). The previously neutral stimulus is now referred to as a *conditioned stimulus* and the response it elicits is termed a *conditioned response*.

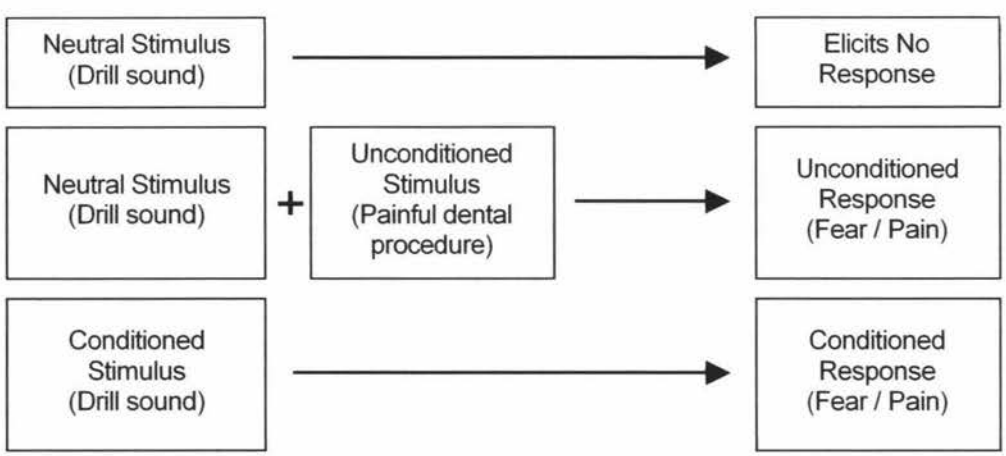

Figure 2.1

Illustration of the Classical Conditioning Process

It has also been demonstrated that the principals of classical conditioning can be used to extinguish links between a stimulus and its associated response. If a conditioned stimulus, such as the sound of the drill in the above example, is presented to an individual for an extended period without the conditioned response being produced, then the strength of the association between stimulus and response will be weakened and eventually eliminated. The empirically supported process of systematic desensitisation — which is commonly used in cognitive behavioural therapy to treat anxiety disorders — draws upon this process to extinguish anxiety responses elicited by environmental stimulus (Wolpe, 1958). For example, a client who experiences phobic anxiety (conditioned response) whenever they encounter a dog (conditioned stimulus), might work with a therapist to extinguish this response by being exposed to dogs in a safe environment for a period that is long enough to allow their fear to subside (see Figure 2.2). To ensure that extinction of the stimulus–fear response will generalise to all categories of the fear-eliciting stimulus (e.g., big dogs, little dogs, dogs of different breeds), homework tasks based on the principal of extinction are assigned to enable clients to engage in this extinction process in a real world context, with a range of fear inducing stimuli, outside the therapeutic setting (Kazantzis & L'Abate, 2005).

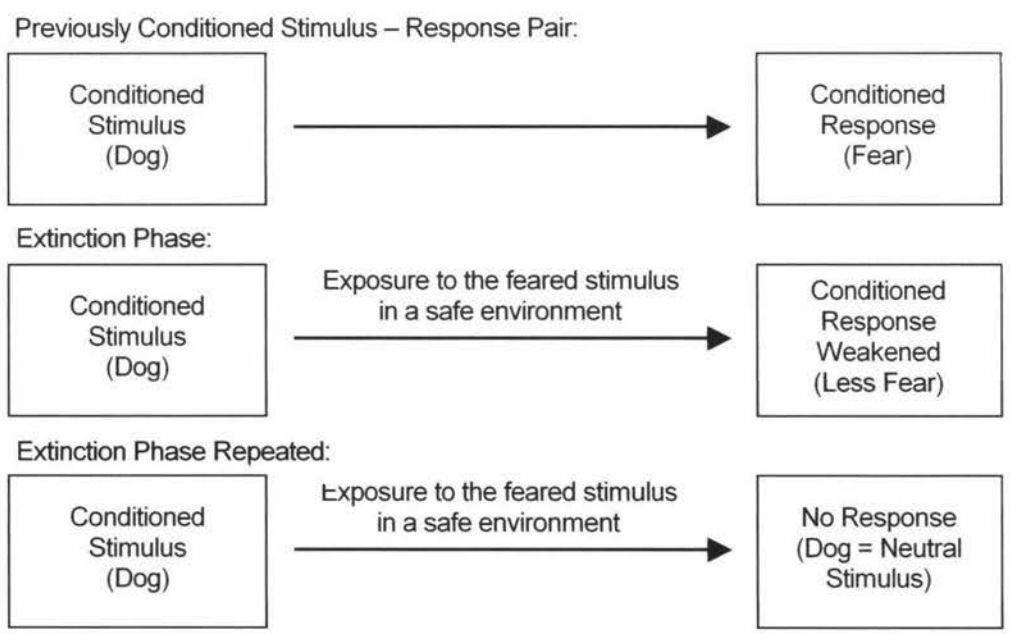

Figure 2.2

Illustration of the Process by Which a Classically Conditioned Response Is Extinguished

Operant Conditioning

In contrast to the stimulus–response associations of classical conditioning, operant conditioning occurs when the frequency of behaviour is altered by the consequences that follow it. Operant conditioning states that the rate to which an individual produces a behaviour will increase or decrease if it is followed by the presentation (or removal) of a stimulus that the individual finds either pleasant or aversive (Skinner, 1981). The term reinforcer refers to an event or stimulus, which when presented immediately following a behaviour, leads to that response occurring with an increased frequency (Thorndike, 1927). For example, a child who receives praise after a period of time during which they have been playing quietly, is more likely to continue this activity and will initiate similar behaviour again on future occasions (Martin & Pear, 2003). Conversely, an aversive (punishing) or neutral stimulus will lead to a reduction in frequency. When describing the process by which behaviour is reinforced or punished, the terms *positive* denotes that a stimulus has been added, whereas *negative* denotes that a stimulus has been removed (See Figure 2.3).

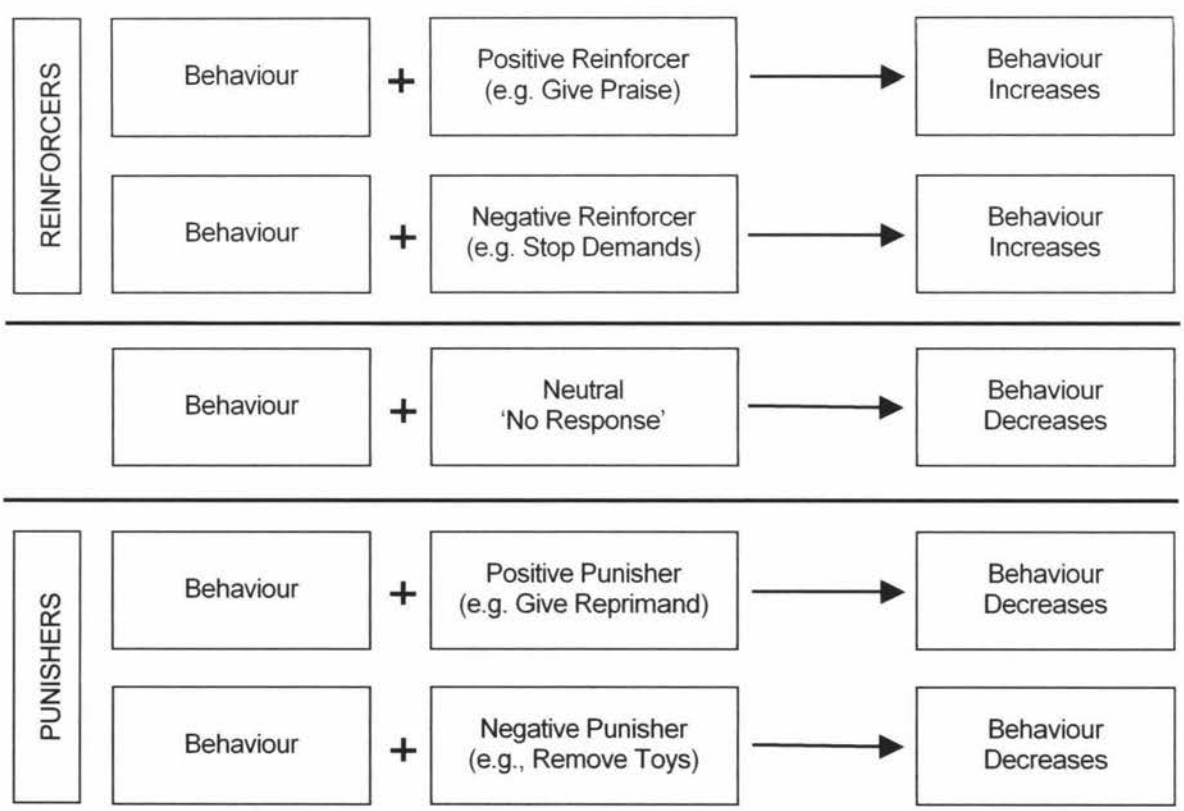

Figure 2.3

Illustration of Positive and Negative Reinforcers/Punishers That Can Be Used To Alter the Frequency of Behaviour through Operant Conditioning

In cognitive behavioural therapy, a commonly prescribed task for depression is to have a client schedule pleasurable activities into their daily routine. Depressed clients tend to be less active than non-depressed individuals, which in turn is theorised as contributing to their feelings of depression (Padesky & Greenberger, 1995). It has been found that providing depressed clients with opportunities to engage in pleasurable activities that are naturally reinforcing, leads to an increase in the amount of activity they engage in overall (Beck, 1995).

Immediate vs. Delayed Reinforcement

When using reinforcement to assist clients in acquiring new skills, a factor that must be considered is the impact on the rate of learning when a period of latency occurs between a behaviour being performed and the reinforcer being obtained. Findings from numerous animal studies have suggested support for the notion that a reinforcer provided *immediately* after performing a behaviour leads to that behaviour being learned more quickly than when a delay in reinforcement is imposed (Kimble, 1961). These findings hold true for human subjects as well, as people tend to learn new behaviours at a quicker rate when the period of latency between performing a given behaviour and receiving reinforcement is short (Salzman, 1951). In the context of homework tasks, when a client engages in therapeutic activities within their home and work environments, they expose themselves to the opportunity to receive reinforcement after performing a target behaviour (Kohler & Greenwood, 1986). Furthermore, there is a large probability that these behaviours will be reinforced quickly as the behaviours are likely to target problematic aspects of their everyday functioning and as such, when performed, these adaptive behaviours will likely bring about a desired outcome or response from their environment.

The concept of immediate versus delayed reinforcement is an important feature in a less referred to behavioural concept of 'the neurotic paradox' (Goldfried & Davidson, 1976, pp 26). This paradox describes the phenomenon that arises when a given behaviour is immediately followed by consequences that are experienced as positive, yet if the behaviour continues, in the long-term the effects become quite negative (Alford & Lantka, 2000). A clinical illustration of this can be seen in the behavioural pattern found in a variety of anxiety disorders, such as panic disorder, obsessive-

compulsive disorder, and social or specific phobias (Clark, Salkovskis, Hackmann, Wells, Ludgate, & Gelder, 1999; Sadock & Sadock, 2003). For instance, specific phobia is characterised by the experience of severe anxiety and arousal when individuals are exposed to situations or objects that the individual fears (APA, 2000). The cognitive behavioural model of anxiety suggests that when a person encounters a feared object, they seek to avoid it. If successful in avoiding the feared object, this in turn reduces the aversive feelings of anxiety experienced by that person. As the reduction of anxiety is likely to be rewarding and reinforcing for that individual, this will increase the probability of the avoidance behaviour being repeated on future occasions when the feared object is encountered again (Persons, 2001). Importantly, the long-term consequences of opting for this short-term reward can lead the situation to become worse, with the pattern of avoidance becoming entrenched over time (Mennin, Heimberg & Holt, 2000; Hollifield, Kanton & Skipper, 1997). The empirically supported treatment for specific phobia suggests that in order to disrupt this behavioural pattern, clients do well to engage in homework interventions such as exposure, relaxation training and response prevention, which enable the client to habituate to the feared stimulus (Mathews, Gelder, & Johnston, 1981; Persons, 2001; Rachman, 1990). However, as the short-term reward obtained from avoiding the feared object is more readily obtainable than the long-term reward associated with no longer fearing the phobic object, without providing a client with homework tasks that include strategies to enable them to achieve their long term goals, the individual is likely to opt for the short-term reward and will continue to produce safety seeking behaviours and maintain their anxiety.

The conflict between immediate versus delayed reinforcement was examined amongst a sample of psychiatric patients and non-patient subjects in a 1968 study by Shybut (Shybut, 1968). In this study, Shybut compared the disposition of participants to tolerate and opt for delayed reinforcement by having subjects choose between a small but *immediate* reinforcer, and a much larger but *delayed* reward (Alford & Lantka, 2000). The results of this study demonstrated that the greater the extent to which a subject was experiencing some form of clinical disorder, the greater the likelihood of that subject choosing the immediately available, yet less desirable reinforcer. This research has direct relevance for working therapeutically with clients, in that although a client may understand the potential benefits of altering some problematic aspect of their behaviour, they may be more likely to

continue with the maladaptive patterns they currently engage in, because any change will only be reinforced in the long term.

It has been proposed however, that carefully planned homework tasks may be useful to circumvent this pattern of opting for immediate rewards over more beneficial, but longer term consequences. When designing a homework task it is possible to explicitly build into these activities some form of immediate reinforcement, to increase the chance of the more adaptive behaviour being produced and repeated in the future (Wankel, 1993; Padesky & Greenberger, 1995). In this way, homework tasks can provide a bridge between performing an adaptive behaviour and the long-term reinforcing consequences that would not otherwise be available immediately. This concept was expanded on by both Whisman (1993) and Wankel (1993), each of whom suggested that in clinical practice more attention should be given to enhancing client motivation for completing homework assignments by ensuring there are adequate opportunities to receive reinforcement for engaging in such activities.

Natural Reinforcers

Many stimuli act as a common reinforcer for a large number of people (e.g., money, food, praise; Martin & Pear, 2003). However, what constitutes a reinforcer for each individual can be highly idiosyncratic and is usually dependant on what has been deprived from that person's environment (Michael, 1993; McAdam, Klatt, & Koffarnus, 2005). Therefore, engaging in adaptive behaviours within natural settings rather than therapeutic environments (e.g., having clients be assertive with their spouse or employer rather than limiting this experience to the therapist alone) may increase the chance of receiving a response that the client finds reinforcing (DeLeon & Iwata, 1996). In addition, when a client engages in homework tasks within their home and work environments, as the behaviours are likely to target problematic parts of their everyday functioning, the probability that these behaviours will be reinforced quickly is increased (Kohler & Greenwood, 1986).

A further benefit arising from having clients gain reinforcement from their natural environment for producing useful behaviours is illustrated by the concept of *behaviour trapping* (Baer & Wolf, 1978; Kohler & Greenwood, 1986). Behaviour trapping occurs when reinforcers that naturally occur in the

environment take over and maintain a behaviour that was initially developed through reinforcement provided by a therapist. Behavioural trapping is an effective way to ensure generalisation of behaviour occurs. A clinical example of this process can be seen in a behavioural therapy approach for overcoming shyness in children. By drawing on the principals of operant conditioning, a therapist can increase the frequency of social interaction in a shy child by providing praise and encouragement for engaging with other children. Once social behaviours have been established, the child will likely experience natural reinforcement from the other children they interact and play with. Subsequently, the therapist will no longer be required to provide reinforcement for these behaviours, as they will naturally be maintained by the child's environment (Martin & Pear, 2003).

Intrinsic Reinforcers

When designing homework tasks, not all activities a client is asked to engage in will have an *obvious* and *intrinsic* reinforcing quality for that individual. For example, a phobic client may be asked to expose him or herself to a feared stimulus, or a depressed client may be asked to monitor their thoughts and emotions as they go about their weekly routine (Padesky & Greenberger, 1995). Although performing these activities is likely to be of significant benefit in the long term in helping address a client's presenting problems (Emmelkamp, 2004; Bennett-Levy, 2003), in the short term engaging in these tasks may not obviously or directly lead to obtaining reinforcement. However, cognitive theory suggests that all behaviour has consequences, including internal effects, such as obtaining a feeling of mastery, pleasure or a sense of progress for completing an activity (Beck, et al., 1979). In this way, thoughts and feelings that occur within an individual following an action can have a reinforcing effect upon a client's behaviour[3]. As proposed by Kazantzis, MacEwan and Dattilio (2005), the significance of this for therapeutic homework is that it is necessary to work with a client to identify and emphasise what *is* reinforcing about the task. Attention should therefore be given to reinforcing thoughts and feelings that arise from within the client (e.g., feelings of satisfaction, mastery, pride or happiness; Cautela & Kearney, 1993; Martin & Osborne, 1993). Recalling the theory of operant conditioning, without identifying an immediate reward to be obtained from a task, it is unlikely that engaging in this activity would persist in the person's behavioural

[3] In this sense, an action may itself also be either an external or internal behaviour, including having thoughts themselves (Cautela & Kearney, 1993)

repertoire (Malott, 1980). Rather, the client will likely abandon the suggested adaptive behaviour and instead return to old response patterns that offer a more immediate reward (e.g., to continue avoiding the feared object). Therefore, by assisting a client to become aware of the reinforcing thoughts and feelings that occur following a completed task, homework assignments are useful in assisting the process of change to occur for the client (Padesky & Greenberger, 1995).

Cognitive Principles

Setting these behavioural processes aside, it is important to note that homework tasks also draw upon other theoretical models, with particular attention having been given to cognitive theory (Beck, et al., 1979).

Gathering Data

Cognitive theory suggests that homework tasks serve to not only promote skill acquisition and generalisation, but also provide clients with the opportunity to gather data about their own behaviours, thoughts and emotions in a real-world context (Beck, et al., 1979; Spiegler & Guevremont, 1998; Dattilio, L'Abate & Deane, 2005). A number of authors have suggested that unless a client is currently experiencing significant distress, it can sometimes be difficult to work on a problem in session, as the therapeutic situation may not be a salient trigger of the underlying maladaptive belief maintaining these difficulties (e.g., Tompkins, 2004). By having a client engage in homework assignments that place them in the actual problematic situation, they are able to gather data arising from these situations to provide 'grist for the therapeutic mill', which can then be explored and worked on in session by the client and therapist together. Furthermore, once explored in session, homework then offers clients an opportunity to directly test the validity of the assumptions and beliefs identified (Beck, 1995).

Social Cognition Theory – Self-Efficacy

By incorporating between-session assignments into therapy, it has been suggested that clients are presented with an opportunity to retain a sense of control, or ideally equal partnership, with the

therapist throughout the therapeutic process (Kazantzis, MacEwan & Dattilio, 2005; Tompkins, 2004). When designing homework tasks, clients will often be encouraged to take an active, collaborative role; or at the very least will be invited to participate in negotiating the logistics of how and when a task will take place. By working *collaboratively* in designing and assigning between-session tasks, a climate is created in which the client becomes an active participant in their treatment, rather than remaining inactive and unconnected to the therapeutic experience (Prochaska, DiClemente & Norcross, 1992). In this way, building upon Albert Bandura's theory of behaviour change (Bandura, 1977, 1986), the experience of developing and successfully completing homework assignments can increase a client's sense of self-efficacy and improve general motivation for persisting with treatment (Coyne & Lombardo, 2002)

The concept of 'self-efficacy' is important within Albert Bandura's Social Cognitive Model (1986) and provides an additional layer of support for the use of homework tasks in therapy. Social cognition theory — which evolved from the behavioural concept of reinforcement — posits that behaviour is regulated both through behavioural consequences and cognitive processes (Miller & Dowd, 1941; Kazantzis & L'Abate, 2005). According to this theory, an individual's behaviour is influenced not only by behavioural reinforcement, but also personal and environmental factors, which are internalised and used by the person to predict the likely outcome of an action before it is performed (see Figure 2.4).

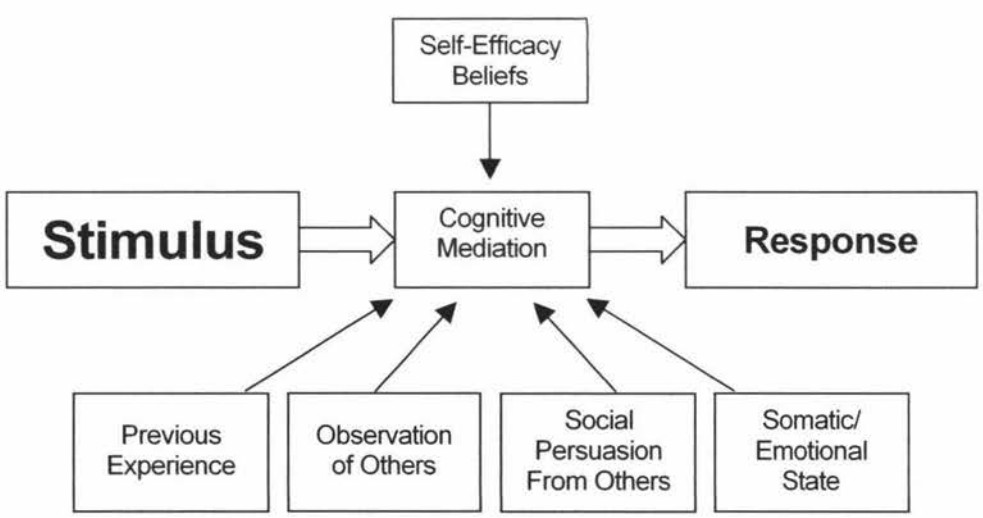

Figure 2.4

Social Cognitive Model Showing How Behaviour is Mediated by Cognitions

Self-efficacy beliefs can be viewed as an individual's perception of their own ability to perform or endure actions necessary to obtain a desired goal (Bandura, 1989). It has been noted that at times clients will present to therapy with feelings of poor self-efficacy and may view themselves as unable to cope with their present problems (Beck, 1995; Padesky & Greenberger, 1995). By having clients take an active role in designing, assigning and engaging in homework tasks, this may lead to the development of increased feelings of self-efficacy within the individual (Kazantzis, MacEwan & Datilio, 2005) Therefore, homework can be conceptualised as a tool that helps clients gain confidence in their ability to manage problems on their own, to the point where eventually they no longer require the assistance of the therapist (Tompkins, 2004). This is particularly significant for the long term outcome of therapy, as participation in the design of homework tasks has been associated with a decrease in the rate of relapse experienced by clients (Simons, Murphy, Levine & Wetzel, 1986)

Theory of Planned Behaviour

A related concept that arose from the social learning movement is the *Theory of Reasoned Action*, later revised to the *Theory of Planned Behaviour* (Ajzen , 1985, 1988; Ajzen & Fishbein, 1977). This theory postulates that an individual's *intent* to perform an action is the most important determinant of whether that action will occur (Kazantzis & L'Abate, 2005). Intent can be conceptualised as being composed of three main components: the first being an individual's attitude towards performing the activity; the second is the perception held by that person of the subjective norms about a particular behaviour; and third, an individual's perception of the difficulty of a task and the likely benefits that will arise from engaging in it. The relevance of this theory to the use of therapeutic homework, is that if a client; i) perceives an assignment to be useful and beneficial, ii) believes others view the activity positively, and iii) feels that the task is manageable, then that client will be likely to engage in it and obtain benefit from doing so. This theory also suggests that by collaborating with a client to develop a task and working with them to address each of these issues, the client is likely to feel an increased sense of *control* over the homework task. Engendering a sense of *control* both increases motivation for treatment and assists to develop a sense of competence for that individual (Beck, et al., 1979).

Stage of Change Model

Finally, theoretical support for the role of homework can be found in Prochaska and DiClemente's transtheoretical *Stage of Change* model (Prochaska & DiClemente, 1983; 1984; 1992; Prochaska, Velicer, Rossi, Goldstein, Marcus, Rakowski, 1994; Velicer, Huges, Fova, Prochaska & DiClemente, 1995). This model suggests there is a predictable sequence of stages an individual undergoes when in the process of changing an aspect of their life (see Figure 2.5). In the first stage, *precontemplation*, individuals are unlikely to be aware of having a problem and as such are not intending to change. The second stage, *contemplation*, categorises those who have considered making a change, however have not yet committed to taking action. Those in the *preparation* (or *decision*) stage have resolved to take action and have also committed to making this change. The fourth stage, *action*, is entered when an individual has begun to make overt changes, both in their behaviour and within their environment. Finally, individuals in the *maintenance* stage are those that have made changes and have managed to sustain them over time. Furthermore, the goal faced by an individual during the maintenance stage, is of stabilising their new behaviours and avoiding relapse into old patterns (Leahy, 2003).

There has been some criticism of stage models by authors who maintain these models lack precise operational definitions of what actually happens during each stage in terms of socio-cognitive variables (e.g., Armitage & Conner, 2000). This criticism aside, Prochaska and DiClemente's stage of change model is useful in the present context for conceptualising the role of homework in clinical practice. Although not directly discussed by Prochaska and DiClemente, it is possible to apply the same principals to selecting and assigning homework to clients (Leahy, 2003). By matching the number and type of between-session tasks assigned to a client, relative to their current stage of change, it is likely this will serve to increase compliance with and the effectiveness of both individual tasks and therapy in general (Prochaska et al., 1994). Furthermore, selecting tasks appropriate for the client's stage of change can help facilitate the client's *by in* to therapy. By way of example, a client within the *contemplative* stage may benefit from a few, tentative, data gathering assignments that serve to investigate the impact their current thoughts and behaviours have on the client's life. Those in the *active* stage may benefit from tasks that directly address a client's presenting

problems, such as exposure or increasing mastery and pleasure. Whereas those in the *maintenance* stage may benefit from rehearsal of previously developed scripts, such as relaxation or thought stopping procedures, and scheduling rewards for the ongoing production of new and adaptive behaviours. Homework tasks provide a vehicle by which a client can be moved through each stage and help maintain any changes once they have been made.

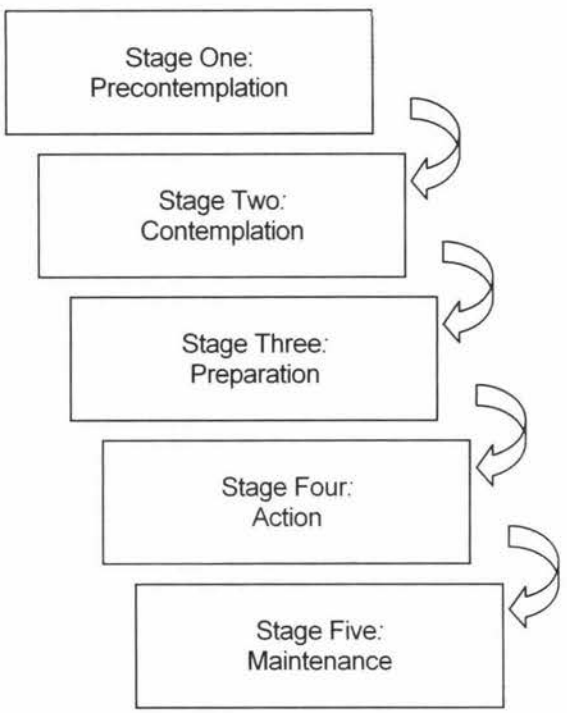

Figure 2.5

Prochaska and DiClemente's Transtheoretical Stage of Change Model. Adapted from Prochaska & DiClemente (1983; 1984; 1992)

Practical Benefits of Homework Use

Monitoring and Assessment Of Clients

In addition to the theoretical support described in the models above, there are also practical advantages to incorporating between-session tasks in therapeutic work. In the first instance, homework assignments have been described as a useful tool, which helps facilitate the ongoing monitoring and assessment of clients throughout therapy (Kazantzis & Lampropoulos, 2002). When clients engage in between-session activities, the therapist is provided with an opportunity to

determine how well they grasp the skill or concept being conveyed (Hudson & Kendall, 2002). Therefore, a client's degree of mastery over a specific task, particularly when completed in their natural environment, may provide valuable feedback regarding the progress made towards their treatment goals (Hudson & Kendall, 2005). Completion of homework tasks may also provide the therapist with an indication as to how well a client is likely to be able to employ similar skills in the future if new problematic situations were to arise (Kazantzis & Lampropoulos, 2002).

Cost Effective Treatment

From the perspective of the time and expense involved in treatment, the use of between-session assignments serves to optimise the treatment process in a cost effective way (Ellis, 1980; Coyne & Lombardo, 2002; Haby, Tonge, Littleford, Carter & Vos, 2004; Kazantzis & Lampropoulos, 2002). Practicing skills or gathering data during the time spent *outside* the therapeutic session, dramatically increases the amount of time clients spend focused on achieving their goals for therapy. Homework tasks, which by their nature are completed without the presence of the therapist, have been described as providing multiple sessions per week for the price of one (Beck, 1995; Blackburn & Twaddle, 1996). This aspect is becoming increasingly important, as there is an international trend towards the use of time-limited or *brief* therapies by therapeutic service providers (Lambert, Begin & Garfield, 2004; Tompkins, 2004). Therefore, making use of the many hours of the week when clients are not in the therapists' office can help meet this demand.

Summary

The above discussion demonstrates that the theoretical and practical basis for the use of therapeutic homework is many and varied. Homework tasks can be theorised as assisting with the reinforcement, maintenance and generalisation of skills learned in therapy to the client's natural environment. Homework provides an opportunity for clients to identify and gather data about their thoughts, emotions and behaviours, and provides an opportunity to test the validity of unhelpful beliefs in real-world contexts. Collaboratively designing homework helps to promote a sense of control and self-efficacy for a client and provides therapists with a legitimate and useful way to

monitor a client's progress towards their treatment goals. Finally, homework also serves the function of reducing the duration and expense of therapy by making use of time between sessions. However, support for the use of between-session assignments does not remain solely within the realm of theory alone. Over recent years, empirical support for the inclusion of these tasks in therapy has also begun to grow. The following chapter leaves this discussion of theory behind, and turns to the empirical evidence that lends support for the use of homework activities in clinical practice.

Chapter Three: Empirical Support for the Use of Homework

Overview

In response to the increased emphasis placed on the use of empirically supported and cost effective treatments within mental health services (Lambert, Bergin & Garfield, 2004), the number of studies that have evaluated the efficacy of homework as a therapeutic tool has also risen. Indeed, within the field of cognitive behavioural therapy, in which between-session tasks are considered an integral component, homework has received more empirical research attention than any other aspect (e.g., Beutler et al., 2004; Kazantzis, Deane & Ronan, 2000; Scheel et al., 2004). However, as will be reviewed below, although a substantial number of studies have established the link between the completion of homework tasks and positive treatment outcome (Kazantzis & Lampropoulos, 2002); by far the majority of these studies have focused on the use of homework with individual adult clients. Studies investigating other client groups remain sparse, with a particular absence of research regarding the use of homework with children, adolescents and families.

In a recent chapter discussing the *empirical foundations* of therapeutic homework, Kazantzis, Deane, Ronan, & Lampropoulos (2005) present a review of the research literature published between the years 2000 and 2005 regarding the efficacy of employing homework tasks with clients from a range of populations. At the time of writing however, the authors noted that they were unable to locate any empirical studies that could offer direct support for the use of therapeutic homework assignments with children or adolescents. This finding echoed an earlier review by Hudson and Kendall (2002), who reported that although homework had generally received strong support, the efficacy of employing between-session tasks in the treatment of children was yet to be supported empirically. It has been further reported that a similar situation exists for couples and families, with very little appearing in the professional literature regarding the use of homework with these particular groups of clients (Dattilio, 2002a). Therefore, the literature presented in this chapter has largely been drawn from studies of homework use that have been undertaken with samples of adult clients. Where research pertaining specifically to children, adolescents or families has been identified, this will be highlighted.

Empirical support

In a review of 500 treatment outcome studies published within eight scholarly journals between the years 1973 to 1980, Shelton and Levy (1981b) found that 68% of the studies reviewed had included some form of homework assignment as part of the therapeutic approach used. Their survey also revealed that within these articles, homework was most commonly assigned for treatments involving social skills training (80%), obsessive-compulsive symptoms (79%) and sexual dysfunction (79%). Fifteen years later, the findings of Shelton and Levy were partially replicated and corroborated in a study by Mahrer, Nordin and Miller (1995). Mahrer and colleagues completed an updated review of therapeutic literature, and found that homework continued to be incorporated as an important component of manualised treatments across a range of problem areas (Kazantzis, Deane, Ronan & Lampropoulos, 2005).

Since the publication of these reviews, empirical support for the efficacy of homework in therapy has continued to appear. A recent search by Kazantzis (2000) revealed that between the years 1980 and 1999 alone, over 700 studies involving homework had been published within the psychotherapeutic literature. Research in the form of process-outcome studies has shown homework to be an important factor in the effective treatment of clients presenting with a range of disorders, including but not limited to; agoraphobia (Edelmann & Chambless, 1993; 1995), anxiety (Andrews, Chino, Hunt, Lampe & Page, 1994), depression (Addis & Jacobson, 2000; Burns & Spangler, 2000), delusions and hallucinations (Bailer, Takats & Schmitt, 2002), panic disorder (Park, et al., 2001), substance abuse (Beck, Wright, Newman & Liese, 1993) and social phobia (Leung & Heimberg, 1996). However, support has not always been found for the use of these tasks (Kazantzis & Lampropoulos, 2002), with findings from a number of early studies reporting that although homework showed a trend toward improving therapeutic outcomes, the difference between those who received or did not receive homework as part of treatment was not significantly different (e.g., Blanchard et al., 1991). The ambiguity raised by these early findings led many researchers of the time to insist that there was not enough evidence to determine whether including homework tasks in therapy could provide any quantifiable benefit.

More recently, two studies by Kazantzis and colleagues (Kazantzis, 2000; Kazantzis, Dattilio, & Merrick in press) have proposed explanations as to what may have led to the mixed findings obtained by early research in this field. Kazantzis, Dattilio and Merrick (in press) have suggested that methodological limitations may be a key issue to consider when reflecting on this discrepancy between studies. In particular, the authors proposed that the variation in results may be due to a lack of attention by researchers toward measuring and reporting the degree of client compliance with homework in each of the studies. A review of psychotherapy outcome literature published between 1993 and 2003, (Kazantzis, et al., in press) revealed that although 64% of those studies reviewed reported assigning homework as part of treatment, only 6% had included a measure of how compliant clients were with the tasks assigned. This lack of specificity is a notable limitation when one considers that the extent to which a client is compliant with homework is likely to be an important factor in determining whether a client will receive benefit from these activities. Therefore, given that compliance information was omitted in over ninety percent of studies, the authors of those studies were unable to rule out the potential confound that the low effect sizes may have occurred as a result of client samples that were systematically biased towards exhibiting low compliance with the homework assigned — Thus accounting for the non-significant results obtained.

A second methodological limitation was proposed in a study by Kazantzis (2000), in which a power analysis was conducted of 27 studies (spanning the years 1980 to 1998) that had assessed the impact of homework in psychotherapy. Although limited to some extent by including only data that had been analysed by parametric tests — thereby rejecting a number of possible studies from the sample — the results of this power analysis revealed that within these earlier studies the magnitude of statistical power to detect significant effects was surprisingly low. In particular, the analysis suggested that on average, studies allowed only a 32 percent chance of finding an effect, should one actually exist. Stated another way, on average, the 27 studies examined within this power survey had a 68 percent chance of *not finding* a positive effect. Therefore, it would appear that the researchers who performed these investigations had not designed their studies to be sufficiently *sensitive* to detect any effect on treatment outcome that occurred due to the inclusion of homework as part of the therapeutic process (Kazantzis & Lampropoulos, 2002).

Meta-analytic reviews

In light of the evidence suggesting the low power of many early homework studies (Kazantzis, 2000), Kazantzis, Deane and Ronan (2000) conducted a meta-analytic review of the same cohort of 27 studies as had been used in the power survey. A meta-analytic technique was selected for this investigation as it was considered to be an accurate, objective and credible approach to reviewing research that would not be restricted by the limitations associated with low statistical power (Glass, McGaw, & Smith, 1980). The results of this meta-analysis found that although individual investigators had recorded a range of positive and negative outcomes, overall, the inclusion of homework assignments did indeed produce a significant positive result, with an effect size of (*r*) 0.36 being obtained. That is, treatment groups assigned homework in this sample of studies were found to improve by a magnitude of 36 percent over those control groups that had not received between session assignments.

In addition to the meta-analytic review by Kazantzis et al. (2000), preliminary empirical support for incorporating homework tasks specifically in the treatment of young clients was generated by Sukhodolsky, Kassinove, & Gorman, (2004). In this study the authors undertook a meta-analysis of treatment outcome studies that used cognitive behavioural therapy to combat anger-related problems in children and adolescents. The analysis included 21 published and 19 unpublished reports spanning the years 1968 to 1997. The authors coded each of the studies for the presence or absence of eleven variables, which they hypothesised, may potentially impact upon aggressive behaviour in children. Of the eleven variables included, only three were found to be significantly related to the magnitude of the overall effect size. The three significant variables were reported as: *providing feedback*, *modelling non-aggressive behaviour* and the use of *homework*. Spearman rank–order correlations for these variables with treatment outcome were $\rho = .55$ ($p < .001$), $\rho = .46$ ($p < .001$), and $\rho = .31$ ($p < .05$), respectively. Correlations between all other variables and the overall effect size were found to be non-significant. However, as the authors acknowledge, due to the nature of meta-analytic research and the lack of detailed reporting by some authors (see also Kazantzis, Dattilio & Merrick, in press), the level of compliance with homework tasks could not be evaluated as a factor of their analysis, as this information was frequently not reported in the original

studies. Therefore, the extent to which client compliance with homework had contributed to obtaining the significant effect observed could not be explored further.

In contrast to the findings of Kazantzis, et al. (2000) and Sukhodolsky et al. (2004), Beutler et al. (2004) also conducted an analysis of data gathered from a much smaller sample of studies. Citing the meta-analytic study of Kazantzis et al. (2000), the authors evaluated results of five homework studies published between 1984 and 1996. An effect size was evaluated from the data obtained by each study. It is important to note however, that the authors did not employ a true meta-analytic methodology (e.g., Cohen, 1988; Sharpe, 1997), yet by inspection stated the effect sizes of these studies ranged from (*r*) –0.29 to 0.66. Furthermore, the review reported a weighted mean effect size across all five studies of (*r*) 0.1, which the authors considered to be *clinically* non-significant. In light of the small magnitude of this mean effect size, the authors therefore concluded they had 'failed to confirm the importance of homework' as a therapeutic tool (pp 254). From a methodological perspective it should be recognised that the sample of studies included in this analysis was much smaller than that of Kazantzis, et al. (2000). This is a considerable limitation given that the number of articles published in the decade prior to 2004 was far greater than the number included in the analysis by Beutler and colleagues (Kazantzis, et al., 2000; Sukhodolsky, et al., 2004; Tompkins, 2004). As such, this small sample cannot be considered representative of the total pool of studies in this field, which is of critical importance when conducting any meta-analytic investigation (Glass, 1977). In addition, as the statistical methodology used in the analysis of these studies does not accurately approximate a true meta-analysis, it should not be considered as such and, therefore is limited in its ability to be compared directly against reviews of that type (Sharpe, 1997). It is worthy to note however, that although the authors stated their own analysis did not confirm the finding of Kazantzis et al. (2000), they did report that within the studies reviewed it was likely that client factors may have played a mediating role between completion of homework and obtaining a beneficial effect from treatment. In particular, the authors cited a study by Addis and Jacobson (2000), in which it was found that a client's acceptance of the therapist's rationale for using homework had independently contributed to outcome, over and above the client simply having complied with and completed homework tasks. As will be discussed further in Chapter 4 of this thesis, non-acceptance of the rationale for an individual task, or for homework generally, has

been identified by a number of authors as a potentially important factor which may lead to client non-compliance.

Structural Equation Modelling

In conjunction with the support for homework demonstrated by Kazantzis et al. (2000), Burns and Spangler (2000) published an investigation which sought to explore the underlying structure that could best account for the relationship between homework and treatment outcome. In this study, the authors used the statistical technique of structural equation modelling (SEM) to examine the impact of homework upon a large sample of clients who had presented with symptoms of depression. In the first instance, the study compared the outcomes obtained by clients in a treatment group that had been assigned homework, with a control group who were assigned none. At both the beginning and end of therapy the authors assessed each client's degree of depression using the Beck Depression Index (BDI; Beck, Steer, & Brown, 1996). At the conclusion of treatment, the therapists working with each client were asked to provide retrospective ratings of the client's level of compliance with homework tasks throughout therapy. The data obtained from this study demonstrated a significant correlation ($r = -0.34$, $p < .01$) between the therapist's retrospective ratings of client compliance and the magnitude of symptom reduction experienced by clients in the treatment (homework) group.

Having obtained a significant result that supported the hypothesis that homework tasks completed by depressed clients assist in the reduction of symptom severity, Burns and Spangler (2000) then sought to investigate the underlying mechanism that could best account for this change. The authors proposed four models, each of which could theoretically describe this relationship (see Figure 3.1). The first of the models (model A) hypothesised that homework would have a *causal effect* on symptom reduction and, therefore would lead to a reduction in depression. The second model (model B) hypothesised that the clients' degree of depression would conversely influence the amount of homework that was completed. The third model (model C) hypothesised that a positive feedback loop would exist, in which homework completion and degree of depression would have a *reciprocal* effect on each other. The fourth and final model (model D) hypothesised that homework and reduction in depression would be only spuriously correlated. In this final model it

was therefore proposed that a third variable, or group of variables, would be found to account for the change in both homework compliance and level of depression. Using the path analysis technique of SEM (Byrne, 2001; Kline, 1998), the hypothesised relationships of models A, B and C were initially investigated. The most reliable fit was obtained for model A, which led the authors to conclude that completion of homework tasks had the *causal* effect of reducing a clients' depression.

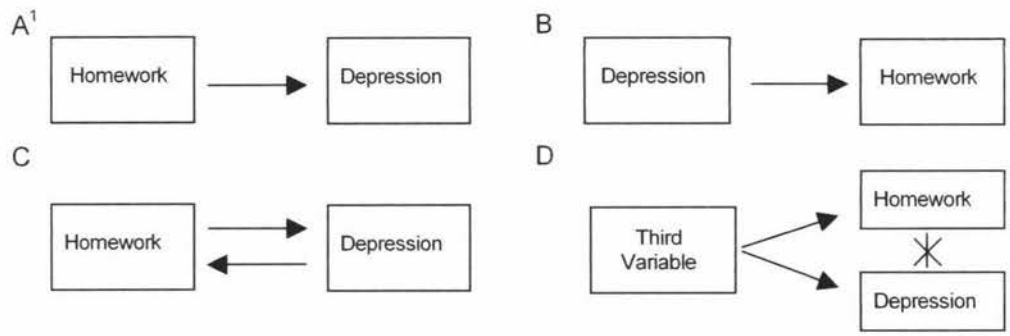

Figure 3.1

Detail of the four models proposed by Burns and Spangler (2000).

[1] *Model A was best supported by the author's findings.*

In response to Burns and Spangler's assertion that the relationship between homework compliance and symptom reduction was causal in nature, Kazantzis, Ronan and Deane (2001) noted that suggesting causality in this manner was not possible given the methodology employed. Although Kazantzis et al. (2001) did not dispute the overall model (i.e., that proposed homework and symptom reduction were significantly correlated), they did question whether such findings provided a sufficient foundation to conclude *causal* effects. This response reflects the views presented in a report by Wilkinson and the American Psychological Association Boards of Scientific Affairs Task Force on Statistical Inference (1999), which noted 'the use of complicated causal-model software rarely yields any results that have interpretation as causal effects' (pp 600). The basis on which this rebuttal rests is the poor ability of studies such as that by Burns and Spangler (2000) to effectively rule out *all possible* extraneous variables in order to conclude a causal relationship with any validity.

To test the hypothesised relationship proposed in model D (i.e., that a third variable accounts for change in both homework compliance and symptom reduction), Burns and Spangler (2000) introduced a number of additional variables into the model. The authors proposed that by doing so

it could be determined whether each of these additional factors had any effect on the strength of the relationship between homework compliance and symptom reduction. It was reported that each of the variables introduced into the model (e.g., client / therapist demographics, quality of therapeutic relationship and client motivation) had no significant effect on the strength of the relationship between client homework compliance and a reduction in depression. Consequently, the authors concluded that a third variable was not likely to have contributed to the observed effect. It could be argued however, that while the variables introduced by the authors may be most *likely* to account for a spurious effect, these factors in themselves are not exhaustive of all the possible variables that could influence the result. As such, the authors appear to be limited in their capacity to conclude that the relationship between homework and reduction in depression is a causal one, as potentially there may be other theoretically important variables that were not measured or discussed.

Although the claim of causality was questionable, it is important to underscore that this study did provide further support for the existence of a significant *correlation* between clients' compliance with homework tasks and positive treatment outcome (Hollon & Beck, 2004; Lambert, Harmon, & Slade, 2005). This finding supports earlier research, such as that by Persons, Burns and Perloff (1988), in which it was found that clients who were compliant with homework tasks showed a reduction in the severity of depression. Homework compliant clients in the study by Persons et al. (1988) demonstrated a mean reduction on the Beck Depression Index (BDI: Beck, Steer & Brown, 1996) of 16.6 points, whereas those who were non-compliant obtained a reduction of only 2.4 points. As Robinson (2003) notes, a reduction in BDI scores of the magnitude evidenced by compliant clients, was of sufficient size to lead to nearly complete elimination of symptoms for patients with mild to moderate levels of depression. However, a number of methodological limitations were noted in the Persons, et al (1998) study. The most critical of these being the method by which the authors determined the degree of compliance with homework tasks by each client within the sample. Specifically, the authors relied on therapists providing a *dichotomous*, *retrospective* rating of whether each client completed either *most* of the homework assigned (i.e., at least every two weeks), or *none*. The therapists who provided these ratings were also not blind to treatment outcome. Therefore, this may have led to biased recall of client compliance with homework tasks, potentially adversely influencing the validity of the data collected (Detweiler & Whisman, 1999).

Children and Adolescents

The strongest support for the use of homework tasks with children and adolescents comes from studies that have tested the effectiveness of assigning young clients the intervention of reading self-help information[4] as the main therapeutic approach (Ackerson, Scogin, McKendree-Smith & Lyman, 1998; Rapee, Abbott & Gaston, 2001; Kroener-Herwig & Denecke, 2002). As with homework, this form of therapy requires children to work independently from the therapist and therefore, theoretically operates in a similar fashion to other between-session tasks (Hudson & Kendall, 2002). In general, the results of these studies are positive and provide support for the notion that homework, at least in the form of bibliotherapy, can bring about meaningful change and provide sustained symptom relief in young clients (Ackerson, et al., 1998).

There have also been a small number of independent studies that have provided empirical support for the use of homework as part of a wider therapeutic approach when working with children presenting with a range of disorders. Studies published to date have focused on incorporating homework as a component of therapy for the treatment of aggression (Man & Yin, 1996), criminal or delinquent behaviour (Ollendick & Herson, 1979), disruptive behaviours (Warnke, 2004), paediatric headache (Kroener-Herwig & Denecke, 2002), Generalised Anxiety Disorder (Anderson, 2004), Post Traumatic Stress Disorder (Faust & Katchen, 2004), as well as for enhancing resilience towards anxiety and depression (Albano & Kendall, 2002; Alvord & Grados, 2005). Although none of these studies have focused specifically upon the role of homework itself, homework activities have served as an integral component in each of the treatment programs and as such it has been suggested they have contributed to treatment outcome.

Cognitive Behavioural Therapy Research

A host of empirical support for the efficacy of homework tasks can also be found within investigations conducted specifically within the field of cognitive behavioural therapy (CBT). As homework tasks are considered crucial to the delivery of CBT treatments (A.T. Beck, et al., 1979; J. Beck, 1995), the clinical effectiveness of these activities are of particular interest to therapists

[4] This form of therapy is also known as bibliotherapy

practicing in this field. Much of the research undertaken within the framework of CBT has sought to investigate whether the quantity or quality of homework tasks completed by clients has a significant impact on treatment outcome. These studies have explored the role clients' play in determining treatment success, emphasising the importance of client compliance with their therapist's recommendations as to how a task should be completed (Michelson et al., 1989; Neimeyer & Feixas, 1990; Park, et al., 2001; Lampropoulos & Rector, 2004; Schmit & Woolaway-Bickel, 2000; Woods, Chambless & Steketee, 2002). The majority of work on quantity and quality of task completion has been conducted through studies of CBT treatment for clients with depression (e.g., Burns & Nolen-Hoeksema, 1991; Burns & Spangler, 2000; Fennell & Teasedale, 1987; Neimeyer & Feixas, 1990; Startup & Edmonds, 1994; Persons, Burns & Perloff, 1988). For the most part, empirical evidence supports the assertion that depressed clients who complete a greater number of tasks, and importantly do so to a high standard, are likely to have better treatment outcomes than those who do not.

A study by Woods, Chambless and Steketee (2002) however, noted that when the research scope was widened to include problem areas other than depression, the empirical support for homework use was less equivocal. This was found to be particularly true for treatments targeting disorders of anxiety, such as panic disorder and social /specific phobias. Of the small number of empirical studies that have explored the impact of quantity and quality of homework completed by clients presenting with anxiety disorders (Edelmann & Chambless, 1993, 1995; Lampropoulos & Rector, 2004; Park, et al., 2001; Schmidt & Woolaway-Bickel, 2000; Woods, et al., 2002, Woody & Adessky, 2002), only Park et al. (2001) and Schmidt and Woolaway-Bickel (2000) found that these factors indeed produced a significant effect. In the main, anxious clients who were classified as homework compliant (i.e., completing the majority of homework assigned) did not achieve better post-treatment scores than those who were less compliant (Rodebaugh et al., 2004).

Interestingly, in an investigation of homework compliance with a sample of clients experiencing social phobia (Edelmann & Chambless, 1995), it was found that although no immediate reduction in phobic symptoms was observed at the termination of therapy, at 6-month follow-up those clients rated as 'homework compliant' reported the greatest decrease in avoidant behaviour and anxiety.

One explanation put forward to account for this has suggested that perhaps this might be attributable to the measures used to assess treatment outcome not being sensitive enough to measure change produced during the treatment period (Kazantzis, 2000). However, the authors of the study maintain that these findings indicate that the benefits arising from homework completion for anxious clients are likely to be of greatest significance in the long term, when the therapist is no longer present to aid the client in coping with anxiety inducing situations. Recalling the behavioural theory of generalisation discussed in Chapter 2, it might be hypothesised that the skills learned in treatment for anxiety have the greatest clinical significance for the client when applied and rehearsed in real-world settings. That is, the process of engaging in homework for clients with anxiety disorders may be conceptualised as providing clients with the skills to continue to reduce anxiety across a range of feared situations once therapy has drawn to a close. Applying skills in this way would provide the client with an opportunity for these skills to generalise to areas of their life other than those specifically addressed during treatment.

Compliance with homework tasks at different stages of therapy (i.e., tasks assigned during initial, middle or latter sessions) has also been the focus of research for a number of CBT studies; including those by Fennell and Teasedale (1987) and Leung and Heimberg (1996). In the first instance, Fennell and Teasedale (1987) found that for a sample of clients experiencing depression, compliance with homework during the *early stages* of treatment was a strong predictor of positive therapeutic outcome. In CBT for depression, homework tasks assigned in the initial phase of treatment are often designed to *reactivate* clients by increasing the client's level of functional activity (Hopko, Lejuez, Ruggiero & Eifert, 2003). Tasks assigned in this treatment approach often take the form of activity scheduling and graded task assignments (A.T. Beck et al., 1979; J. Beck, 1995, 2005; Hogg, 1996). These activities aim to provide a sense of achievement, mastery and pleasure for the client, as well as demonstrate that it is possible for them to effect a positive change in their situation. By engaging in such activities, the client has the opportunity to experience reinforcement for both becoming active and for engaging in homework tasks. It has been further suggested that this, in turn, engenders motivation for the client to continue treatment (Wright, Thase, Beck, & Ludgate, 1993).

By comparison, the second study (Leung & Heimberg, 1996) focused on homework compliance by clients experiencing social anxiety. The authors reported that assignments completed during the initial phase of therapy (sessions 1–2) were minimally related to positive treatment outcome. It was found however that compliance during the final phase of treatment (sessions 8–12) showed a much stronger relationship with increased treatment success. Based on these findings, the authors proposed that because homework tasks assigned during the latter stages of therapy directly addressed the factors which maintained social anxiety (e.g., behavioural exposure assignments to counter the client's avoidance of feared stimuli), whereas initial assignments were more likely to involve psycho-educational and self-monitoring tasks, better outcomes due to compliance with later assignments were to be expected. This hypothesis was further supported by the additional finding that during the middle phase of therapy, in which the exposure assignments began, clients reported an increase in levels of anxiety as they were confronting for the first time situations they feared the most (Rodebaugh et al., 2004). Taken together, the findings of Fennell and Teasedale (1987) and Leung and Heimberg (1996) suggest that in order for homework to be beneficial, clients must show compliance with those tasks designed to directly address their specific symptomatology, or that provide skills to assist in maintaining changes once therapy has drawn to a close.

Quantity vs. Quality

Setting aside studies that focus specifically on disorders of depression or anxiety; overall, CBT investigations with clients presenting with a range of clinical problems have generated evidence which suggests that it is the *quality* of homework completed, rather than simply the quantity of tasks engaged in, which is the strongest predictor of treatment success (see Kazantzis, Deane, Ronan & Lampropoulos, 2005). However, quantity is considered to play a role in this process, in that enough tasks need to be completed (at a high enough standard) in order for the client to derive benefit from them (Kazantzis, et al., 2005; Primakoff, Epstein & Covi, 1986). As Schmidt and Woolaway-Bickel (2000) note, some clients may do a lot of homework, but do it improperly or incompletely, whereas others complete fewer tasks, but carefully adhere to the details of how the activities are to be completed (see also Rees et al., 2005).

However, the question of how quality is defined depends on the type of homework task being assigned. A behavioural exposure task to treat agoraphobia, for example, is commonly assessed by the magnitude of change in the client's rating of their Subjective Units of Distress (SUDs) experienced during the exposure task (Roscoe, Martin & Pear, 1980). In addition, homework quality for this type of assignment is also determined by whether or not the client remained in the fear inducing situation long enough for habituation to occur (Woods, et al., 2002). By comparison, an operant conditioning activity may be conceptualised in terms of how consistently a reinforcer was administered following the successful completion of each instance of a given behaviour (Allen & Warzak, 2000). Kazantzis et al. (2005) suggests the degree to which a client learns from an assignment is a key aspect in the concept of *quality of homework compliance*. In general however, the concept of task quality can be understood most simply in terms of ensuring that whatever homework a client does engage in, these activities are completed as accurately as possible. In particular, attention should be given to the instructions and mechanics of each assignment being followed precisely, in order to provide the client with the greatest opportunity to move toward their goals for therapy (Schmidt & Woolaway-Bickel, 2000). There has been much written in the psychotherapy literature regarding issues of compliance with, and the quality of, treatment processes. As with many aspects of psychotherapy, this has increased in conjunction with the growing emphasis on empirically supported treatments (e.g., Chambless et al., 1996; Kendall & Chambless, 1998) and standardised treatment manuals (Addis & Krasnow, 2000; Luborsky & DeRubis, 1984; Waltz, Addis, Koerner, & Jacobson, 1993). However, aside from the brief overview provided above, a full discussion of these findings and their implications to the wider field of psychotherapy is outside of the scope of the present thesis. For a more detailed review the reader is referred to Kazantzis, Deane and Ronan (2004) and Kazantzis et al. (2005).

Summary

Empirical support suggests there is much to be gained by the inclusion of homework tasks in therapy. Research into the efficacy of homework assignments began to appear several decades ago; however, many of the early studies in this field encountered a number of methodological limitations. These limitations subsequently led to the development of a raft of inconsistent and

contradictory results. The methodological weaknesses of these earlier studies included such omissions as (i) a failure to adequately and consistently evaluate the degree to which therapists assigned homework; (ii) failure to measure prospectively the degree to which participants completed assignments, rather than relying solely on the retrospective recall of therapists; (iii) failure to assess the quality to which homework assignments were completed, rather than simply the *quantity* of tasks undertaken; and (iv) failure to account adequately for possible confounding variables (e.g., symptom severity and client motivation) in homework compliance (Carroll, Nich & Ball, 2005).

More recently though, evidence gathered from surveys of the literature and meta-analytic reviews attest to the overall effectiveness of this therapeutic technique. Studies have explored the relationship between homework use and successful treatment outcome, indicating that homework compliance is likely to assist in symptom reduction. Research comparing the outcome of treatment when homework has been included or omitted from the therapeutic process has highlighted that client compliance with homework tasks, and the quality with which they complete assignments, is positively associated with successful treatment outcome, and can therefore be taken as an indicator that a client is likely to benefit from engaging in homework activities. There is also a host of treatment-outcome research that supports the use of homework with a range of disorders. This research further suggests that such activities may be beneficial in different ways, depending on the specific psychopathology with which individual clients present (Kazantzis & Lampropoulos, 2002).

As noted at the outset of this chapter, the majority of empirical research published to date regarding the use of homework has been conducted using samples of clients drawn from adult populations. Less emphasis has been given to other client groups; in particular, children, adolescents and families. However, of the studies that do exist for these client populations, in the main these provide support for the notion that when young clients and family members successfully complete homework assignments, the effect on treatment outcome is likely to be positive. Therefore, although the empirical evidence for using homework tasks with these groups is not as strong as for individual adult clients, many notable writers in this field advocate the use of homework tasks with

children and families as an important component of treatment (e.g., Dattilio, 2002a; Hudson & Kendall, 2005).

Despite the evidence that suggests therapeutic homework tasks are a clinically useful and important tool, few studies have directly investigated factors that may potentially interfere with the process of completing these assignments. Furthermore, even fewer studies have looked specifically at the homework barriers that are faced by children, adolescents and families. The chapter that follows therefore moves away from the support for homework as a therapeutic process and presents a discussion of the barriers to homework completion that have been suggested as potentially disrupting this process from occurring.

Chapter Four: Barriers to Homework Completion

Overview

The following chapter presents a review of the homework barriers previously noted by other authors within this field. The barriers generated from this review are subsequently reduced into parsimonious categories to identify specific barriers for further research by the present thesis. Two guiding models are employed to provide a framework to assist the reduction of these barriers into discrete research items.

Previous reviews of homework barrier literature

To date, there have been several publications that have reviewed what Tompkins (2003) refers to as "Roadblocks to the completion of homework assignments" (pp 51) (e.g., Detweiler & Whisman, 1999; Tompkins, 2003; Tompkins, 2004). In general however, most reviews of homework barriers and their associated recommendations for overcoming these barriers in clinical practice have focused primarily on providing instructions for clinicians regarding therapist behaviours that are likely to improve client engagement with tasks. Much less has been written on the topic of barriers arising from a clinician's own beliefs regarding homework or the impact of a therapist's interpersonal reactions to their client on homework completion (Kazantzis, MacEwan & Dattilio, 2005). Previous reviews of homework barriers have also largely focused on barriers that arise specifically in the context of working individually with adult clients. As discussed in Chapter 3, this is largely due to the fact that the majority of work regarding therapeutic homework tasks has been undertaken using samples drawn from adult clinical populations. Although few authors have directly addressed homework non-completion with children, adolescents and families; of those that have, there appears to be a consensus that homework compliance is as critical for these populations as it is for adults (Dattilio, L'Abate & Deane, 2005; Freidberg & McClure, 2002; 2005; Hudson & Kendall, 2002; Kendall, Chansky, Kane, Kim, Kortlander, Ronan, et al., 1992).

Within the previously published reviews of homework barriers it has been suggested that these barriers can be separated into four qualitatively distinct categories: barriers arising from *the client*, from the *client's environment*, from some aspect of *the task itself*, or from the *therapist / therapeutic process* (Detweiler & Whisman, 1999, Shelton & Levy, 1981a; Tompkins, 2003; 2004). This four-factor structure is useful as it is relatively easy to make the conceptual distinction between these groups (see Figure 4.1). It should be noted though that many of the barriers within each category are not mutually exclusive and in many cases may arise due to similar mechanisms[5]. However, for the present thesis — as the ultimate purpose of this review was to generate a series of discrete barriers to be investigated further by the present study — each of the barriers proposed in the literature have been presented separately here. Therefore, in keeping with this four-factor conceptualisation, each of these classes of barriers will now be discussed.

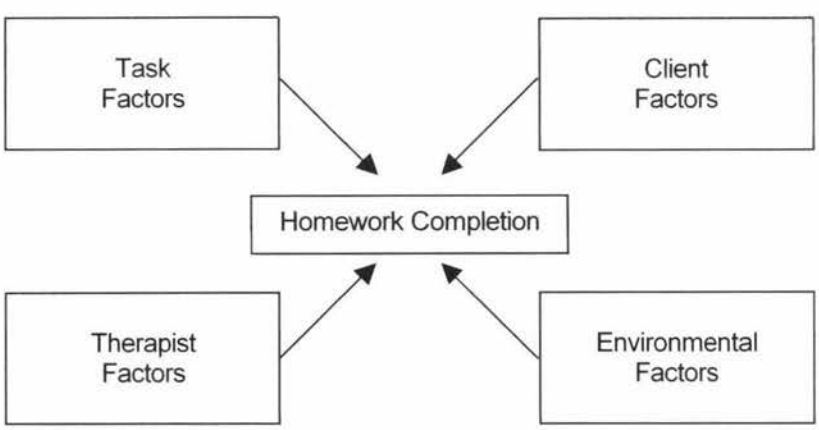

Figure 4.1

Four Classes of Barriers Proposed as Impacting Upon Completion of Homework Activities

Task factors

Within the literature regarding barriers to homework completion, three key barriers have been proposed as arising directly from the task itself. These can be conceptualised as the difficulty and number of tasks assigned, the clarity and concreteness of a task, and the match between a task and the client's goals for therapy.

[5] It may also be possible to conceptualise the barriers that interfere with an individual client's completion of homework in the context of that client's overall presenting difficulties. A discussion of this and the clinical implications of conceptualising barriers in this way is currently in press with the journal of *Cognitive and Behavioural Practice* (Kazantzis & Shinkfield, in press).

Task Difficulty

The concept of task difficulty has been discussed in terms of both the actual demands of a task and with regard to the client's perception of how difficult they *believe* the task will be (e.g., Beck, 2005; Kazantzis, MacEwan & Dattilio, 2005). A number of factors have been proposed as influencing a client's perception of task difficulty, including not only the content of the activity, but also the client's beliefs regarding the level of skill and knowledge that they themselves are able to bring to the assignment (Shelton & Levy, 1981b). As each client is likely to have an idiosyncratic perception of his or her own abilities, consequently what may be considered attainable for one client may not be so for another. Empirical research supports the clinical observation that clients exhibit less compliance with tasks they perceived as difficult. Specifically, it has been found that a negative correlation ($r = -0.63$) exists between task difficulty and homework compliance, with the frequency of homework completion decreasing as the degree of difficulty rises (Conoley, Padula, Payton & Daniels, 1994).

A strategy suggested by a number of authors to reduce non-compliance with homework due to task difficulty, is to introduce clients to the concept of completing homework by initially assigning small, non-threatening activities and gradually building up to more complex or demanding tasks over time (e.g., Kazantzis, et al., 2005). This process of building upon previous successes with homework is exemplified in the hierarchical process often used within behavioural exposure treatments or graded task assignments (e.g., Beck et al., 1979; Goldstein, 1994; Padesky & Greenberger, 1995). The theoretical basis for this suggestion is derived from both social cognition theory and classical behaviourism. As noted in Chapter 2, social cognition theory postulates that in addition to the influence of behavioural reinforcement, actions are also regulated through cognitive processes (Millar & Dowd, 1941). Therefore, the perception a client has of his or her ability to perform an activity will influence how likely it is that the task will be completed (Bandura, 1989; Beck, 1995). Hence, assigning less demanding tasks at the beginning of therapy serves to enhance not only a client's confidence in their own abilities, but also in the therapist and the therapeutic process (Beck, et al., 1979; Tompkins, 2003). Furthermore, assigning tasks that are perceived as too difficult is considered counterproductive, as it is likely that this will be experienced as overwhelming and may

deter the client from engaging in subsequent activities. When a client is unable to complete a task, this has the potential to reinforce a client's perception of themselves as being powerless and unable to effect positive change in their situation (Beck et al., 1979; Bandura, 1989). Given the potential negative consequences of assigning difficult tasks, several authors have also suggested it is critical for therapists to enquire about the client's perception of how difficult they believe a task will be before they are asked to undertake it (Miller & Rollnick, 2002; Kazantzis, MacEwan & Dattilio, 2005). This provides an opportunity for the client and therapist to collaboratively adapt the task and pre-empt the potential barrier before it arises.

The impact of task difficulty on homework completion has also been cited as a potential barrier when working with children. Specifically, this has most frequently been discussed in the context of a child's level of cognitive development or maturation (Freidberg & McClure, 2005). In accordance with developmental theories (e.g., Piaget, 1952; Gesell & Ilg, 1949), a child's ability to complete a task is likely to depend upon whether or not the child has the cognitive ability required to complete the assignment. The importance of matching homework activities to a child's developmental level is summarised well by Piaget's (1972) theory of *equilibration*. Piaget proposed that a child seeks a balance between what they encounter in their environment and the cognitive structures they currently possess. If a child's cognitive abilities are developed to a greater or lesser degree than the abilities required for an assigned task, the likelihood of the child engaging in the activity will be reduced. Consequently, matching homework assignments to a child's developmental level is essential to allow the greatest chance that it will be completed.

Clarity and Concreteness

The second barrier conceptualised as arising from the task itself is the clarity and concreteness of an assignment. A task is considered *concrete* when it is no longer an abstract idea (e.g., "do something you enjoy"), but rather is tangible and made real for the client (e.g., "go for a walk along the beach"). In comparison, task *clarity* can be understood as how specific and well defined an activity is. For example, a task for a client with social phobia, such as, "in the café during my lunch break on Wednesday, I will smile at three people and take note of whether or not they smile back",

is likely to be more effective than instructing them to "try smiling at people and see what happens". Beck et al. (1979) suggest that clients may have trouble completing homework assignments that are too vague, as a task that is neither concrete nor well defined may lead to misunderstanding or uncertainty on the part of the client. A lack of clarity may lead a client to interpret a task as requiring a greater amount of time and effort than was intended by the therapist and therefore the assignment may be perceived as daunting and unobtainable (Kazantzis et al., 2005; Ley, Jain & Skillbeck, 1976; Mazzulo, Lasagna & Griner, 1974). For example, a client that has been assigned the task of keeping a diary of their moods and activities throughout the week may find this task overwhelming if they are uncertain about the amount of information they are expected to include, or the frequency with which they are expected to record it. The client may attempt to record everything that happens during the day, or may believe they have to record this information continuously, rather than setting aside a few minutes two or three times a day to briefly jot down the activities and feelings experienced.

Having a client begin a task in session, or engaging the client in *covert rehearsal* of a task through *guided imagery* are useful strategies to investigate such potential problems. Covert rehearsal involves having a client imagine they are completing all of the steps that would be involved in undertaking the activity. This is done while talking aloud to the therapist, who listens for potential barriers that may interfere with the actual assignment. The client and therapist can then work together to address each obstacle and create an alternative course of action for each barrier. Employing techniques such as these provide a client with experiential learning regarding the task and also allow the therapist to ensure the mechanics of the activity have been clearly understood (Beck, 2005; Kazantzis, MacEwan & Dattilio, 2005).

Match with Therapy Goals

The final barrier arising from the task itself is the degree to which a task is perceived by a client to match their overall goals for therapy. It has been observed that if a client feels a task is not relevant to their presenting problems it is unlikely to be completed. Importantly, this clinical observation has also been supported empirically, with a positive correlation ($r = 0.55$) found between the frequency

of task completion and clients' ratings of how relevant they believe the activity is to addressing their current difficulties (Conoley, et al., 1994).

Therapist factors

The impact of individual therapist characteristics and other therapist variables on treatment outcome has been the focus of much research in the psychotherapeutic literature (e.g., Lambert, 2003). However, few studies have directly explored the relationship between therapist characteristics and client adherence to homework assignments (Bryant, Simons, & Thase, 1999; Detweiler & Whisman, 1999; Detweiler-Bedell & Whisman, 2005). Despite the lack of empirical evidence, a host of barriers have been proposed as potentially arising due to the therapist or the therapeutic process. These include the clinician's inability to develop and maintain a positive therapeutic alliance, an inability to effectively reinforce any instance of homework completion (shaping), setting unrealistic therapy goals, providing an ineffective rationale, lack of collaboration, an inability to foster trust in the client, the language used when describing the task, and unhelpful beliefs held by the therapist regarding the role of homework tasks in therapy.

Therapeutic Relationship

For many aspects of psychotherapy, the therapeutic relationship is the vehicle through which the activities of therapy come about (DiMatteo & DiNicola, 1982; Lambert & Ogles, 2004). As such, relationship factors including the therapist's ability to develop and maintain a positive therapeutic alliance and to foster trust in the client, have been proposed as being of importance in facilitating the completion of homework (Tompkins, 2003). Therefore, if these aspects of the therapeutic relationship become impaired, the potential arises for non-compliance with homework to occur (Leahy, 2001). In cognitive therapy, a process considered vital to developing and maintaining a strong therapeutic relationship is fostering an atmosphere of collaboration between the therapist and client (A.T.Beck et al., 1979; J.S.Beck, 1995). Working collaboratively to design and assign homework tasks is viewed as a significant factor in determining the success of between-session activities. It is posited that through collaboration, the client develops a sense of ownership and

increased self-efficacy towards a task. In turn these positive beliefs regarding the activity increase the likelihood that it will be adhered to by the client (Beck, 1979; Prochaska, DiClemente & Norcross, 1992). Conversely, when collaboration does not occur, this sense of ownership may not develop and the client might regard the activity as being unimportant or not relevant to their therapeutic goals (Beck, 2005). Therefore, in the context of the present study it is proposed that a strong therapeutic relationship, with a positive therapeutic alliance and an atmosphere of collaboration, is important to the completion of homework assignments and when absent may present a barrier to homework completion (Detweiler & Whisman, 1999).

Providing an Effective Rationale

Burns and Auerbach (1992) propose that the actions of a therapist are particularly crucial in determining the degree of compliance clients will demonstrate to homework tasks. These authors refer to what has recently been operationalised as therapist *adherence* and *competence* to best practice guidelines for employing homework in clinical practice (Barber, Liese, & Abrams, 2003; Kazantzis, 2003; Waltz, Addis, Koerner & Jacobson, 1993). In particular, Burns and Auerbach (1982) suggest that non-compliance is likely to occur as a result of the therapist having neglected to effectively explain the rationale for a task (Detweiler & Whisman, 1999). Support for the importance of providing an effective rationale can be found in a number of publications (e.g., Glaser, Kazantzis, Deane & Oades, 2000; Kazantzis & Lampropoulos, 2002), including that of Beck (1995) who contends that providing a clear rationale for homework tasks is essential for the maintenance of a collaborative relationship and adherence to homework activities. Goldfried and Davidson (1976) similarly note that by providing a rationale for treatment this serves to heighten a client's view of any therapeutic activities assigned as being both valid and credible.

Reinforcing and Shaping Homework Behaviour

In addition to the importance of assigning tasks in a manner that promotes adherence, how a therapist responds to and follows up on any completed or non-completed homework, may also have a significant impact on compliance with future tasks (Kazantzis, MacEwan, & Dattilio, 2005).

The theoretical basis for this can be found in the behavioural principals of 'shaping' and 'extinction'. *Shaping* is the process by which specific behaviours are elicited by reinforcing responses that resemble an aspect of the target behaviour. By reinforcing successively closer approximations of the target behaviour, this response is eventually obtained (Morgan, 1974). Therapists who enquire about the outcome of an assignment (i.e., give praise for any aspect of the task that has been completed) engage in the process of *shaping*. Therefore, reinforcing approximations of successful homework behaviour is likely to increase the chance of the client engaging in similar homework behaviour in the future (Burns & Auerbach, 1992; Detweiler & Whisman, 1999). Conversely, the principal of *extinction* informs us that a behaviour which is not reinforced will decrease in frequency over time (Pavlov, 1927). If a therapist fails to review or show interest in the results of a previously assigned homework task, behaviour associated with completing homework is likely to decrease, which may lead to non-compliance with future assignments.

Homework non-completion may also stem from the client's history of reinforcement for non-compliance with similar activities in the past. This may include such indicators as poor performance on schoolwork, failing to meet work deadlines, or a chronic pattern of missing therapy appointments. A pattern of non-compliance such as this can be viewed in terms of a history that has possibly included little in the way of reinforcement for the completion of activities, as well as a lack of negative consequences for tasks left undone. Recalling the study by Shybut (1968) discussed in Chapter 2, it is possible to conceptualise this chronic pattern of non-compliance as the client continually opting for the short term reinforcing consequences of avoiding completing tasks (i.e., that they don't have to expend effort on completing an activity), rather than the more valuable delayed reward that comes with completing the activity. This historical pattern of non-compliance may present a significant barrier for a clinician trying to engage a client in homework tasks, as even getting clients to engage in small, non-threatening tasks may be difficult.

Terms and Labels Used to Describe Homework

It has been suggested by several authors (e.g., Coon & Gallagher-Thompson, 2002; Freidberg & McClure, 2005) that a clinician may also undermine the completion of homework tasks by their

selection of terms and labels when introducing the concept of homework to a client. Specifically, the term *homework* has been noted as potentially being experienced as an emotionally loaded word, which has negative connotations for many clients regarding "being evaluated" or requiring the need for perfectionism (Dattilio, 2002a; Kazantzis & Lampropoulos, 2002; Hudson & Kendall, 2002; Tompkins, 2004). In line with this idea, a number of terms have been offered to replace the word 'homework' when discussing between-session tasks with clients. For instance, Kendall (1994, 1998, 2000a, 2000b) and colleagues adopted the label "Show That I Can tasks" when developing the *Coping Cat* program for children with anxiety disorders. The aim of using this term was to move the focus away from the potentially negative connotations of the word *homework* and towards "no lose" tasks that demonstrate the child's mastery of newly learned skills (Hudson & Kendall, 2002; see also the Coping Koala program adapted for Australian children; Barrett, 1998; Barrett, Dadds & Rapee, 1996). Several euphemistic labels have appeared in the literature that have arisen from a desire to circumvent using the word homework. These include labels such as "self-help tasks" (Burns, 1989), "Building your toolkit" (Freidberg & McClure, 2002), "Learning Enhancement Tools" (Alvord & Grados, 2005), "Experiments" (Dattilio, L'Abate & Deane, 2005; Martin & Pear, 2003) and "Can Do's" (Tompkins, 2004). Although this creative naming of homework tasks is probably a useful strategy — indeed most recommendations on this topic support avoiding the use of this term — to date no empirical support for the benefits of using alternative words to describe homework has been gathered (Hudson & Kendall, 2005).

It has been suggested that a therapist's use of the word *homework* might simply reflect differences in the training of therapists across theoretical orientations or academic institutes. However, it has also been suggested that a therapist's use of the word homework may be indicative of a propensity to use other unhelpful terms, or to hold the view that therapeutic homework is analogous to an academic based assignment (Kazantzis, Lampropoulos & Deane, 2005; Kazantzis, MacEwan & Dattilio, 2005; Tompkins, 2003). From an educational perspective, homework is conceptualised as a task which is *set* by a child's teacher, usually with little input from the child. Academic homework is often marked or graded and as such can therefore be failed. Furthermore, it is likely to have negative consequences if not completed (Buell, 2004; VanAuker-Ergle, 2003). Each of these aspects of an academic homework task are quite different to the conceptualisation of a therapeutic

assignment, in that between-session activities should be developed collaboratively, be treated as an experiment (with no right or wrong outcome) and have no negative consequences for having not been completed fully or correctly.

Therapist Beliefs

A therapist's beliefs regarding homework may be a particularly important area for consideration in terms of barriers to homework completion. Beck (1995) suggests that an individual's beliefs provide the basis for how one acts and interacts with others. If a clinician holds negative beliefs towards homework tasks, it is likely this will be transmitted to the client and may reduce the likelihood of the task being completed. A recent survey of attitudes held by psychologists towards homework assignments (Kazantzis, Lampropoulos & Deane, 2005) indicated that there are a number of unhelpful beliefs potentially held by therapists regarding homework tasks. These beliefs may impact on the way assignments are delivered to clients and, perhaps more critically, on whether or not they are used at all. The data gathered by Kazantzis et al (2005) were investigated using structural equation modelling to evaluate the underlying factor structure of the beliefs identified. From this analysis a two-factor model was derived which the authors labelled Positive Homework Effect (e.g., 'homework enhances therapy outcomes' or 'homework contributes to behavioural change') and Negative Session Impact (e.g., 'homework is directive and prescriptive' or 'homework places unrealistic expectations on clients'). It was found that therapists who indicated using a large number of homework tasks also reported high endorsement of positive beliefs and low endorsement of negative beliefs. Conversely, the reverse was found for those therapists that reported little use of homework.

Unhelpful therapist beliefs regarding homework may take many forms, including such attitudes as 'the client will feel coerced and controlled', 'homework interferes with the therapeutic relationship', 'the client will not want to do the assignment', or ' homework is threatening' (Tompkins, 2003). Furthermore, Haarhoff and Kazantzis (in press) suggest that difficulties with homework may arise from the clinician's own core beliefs or schema regarding the need for perfectionism or fear of failure. Regardless of the empirical and theoretical support that exists for the use of therapeutic

homework tasks, if a therapist holds such beliefs, this may prevent them from successfully incorporating homework in their practice. Unhelpful therapist beliefs are therefore considered a possible homework barrier and, indeed due to their potential to prevent homework being used at all, may have a particularly significant impact.

Client factors

Of the four classes into which homework barriers can be grouped (task factors, therapist factors, client factors and environmental factors), the category that has generated the largest amount of discussion are those barriers that potentially arise from the clients themselves, with many researchers focusing on this aspect of non-compliance. However, the danger associated with focusing on the client as the sole reason that homework tasks are not completed is that this may overlook the significant improvements that can occur due to a slight change in a homework assignment or a change in the therapist's behaviour when assigning, designing and reviewing a task (Beck, 2005; Tompkins, 2003). The literature that currently exists suggests barriers arising from the client may include: a client's unhelpful beliefs about themself or the therapeutic approach, cultural beliefs or cultural understanding of mental health problems, co-morbid personality disorders, high symptomatology, fear of treatment, a lack of commitment to treatment, the client's level of skill or knowledge and the function that non-compliance serves in the client's life. It has been suggested that many of these barriers will likely arise from a common source, in that most are related to the client's core beliefs, underlying assumptions and compensatory behaviors (Beck, 2005; Haarhoff & Kazantzis, in press). Indeed, Russo (1987) proposes that negative beliefs held by the client appear to be the starting point for most instances of nonadherence. However, as each has been presented separately in the psychotherapeutic literature, these individual barriers will also be described and discussed separately here.

Client Beliefs

As noted in the discussion of therapist factors, an individual's beliefs play an important role in compliance with homework assignments. Unhelpful beliefs that inhibit homework completion can

be viewed as falling into three main categories: a client's beliefs about their own abilities and preferred strategies for coping with distress (Tompkins, 2004), beliefs about the presenting problem and therapeutic approach used (i.e., what has and has not worked for the client previously) (Kazantzis, MacEwan & Dattilio, 2005), or culturally based beliefs about the nature and cause of mental illness (Kleinman, 1977; Marsella & Pedersen, 1981; Sue & Zane, 1987). Beck (1995; 2005) proposes that when considering the role of client beliefs in homework non-compliance, it is useful to reflect upon the *case conceptualisation* developed for the individual client. Underlying dysfunctional core beliefs or pervasive personality traits exhibited by a client may be manifested when homework is assigned (Edleman & Chambless, 1995). Therefore, Beck (2005) contends that a client's non-compliance with homework may often make conceptual sense in the context of their presenting problems as a whole. Beliefs held by a client regarding their self-efficacy or ability to complete homework activities may inhibit them from engaging in these tasks (Kazantzis & L'Abate, 2005). As such, homework barriers may be theorised as arising from a client's desire to protect him or her self from a perceived threat associated with engaging in an activity (Dowd & Saunders, 1994; Newman, 1994).

It has been suggested that when non-completion of homework is discussed with a client, this may reveal automatic negative thoughts, core beliefs / schema and compensatory strategies that are likely to impact upon other areas of their life (Beck, 2005; Haarhoff & Kazantzis, in press). For example, if a client firmly holds the belief that they are "fundamentally flawed or incompetent" (Tompkins, 2003, pp 54), then the likelihood of them completing a task diminishes, as they cannot conceive they will be able to complete it successfully. Depressed clients who view the future as hopeless are unlikely to initiate behaviours that could bring about reward or pleasure (Lewinsohn, 1974). Similarly, anxious clients whose schema of the world is of mistrust and that others are unsafe or threatening, are unlikely to engage in anxiety inducing tasks (e.g., exposure assignments) without the therapist having worked to instil a greater sense of self-efficacy in the individual first (Coyne & Lombardo, 2002; Tompkins, 2003; Beck, 1995). Therefore, any such beliefs held by the client that are not addressed directly will likely present as a barrier to homework completion.

With respect to a client's beliefs regarding the therapeutic approach itself, Kazantzis et al. (2005) note that some clients enter therapy possessing the belief that they will be the passive recipients of treatment. This often manifests as the expectation that it is the therapist's job to 'cure' them without any effort on their own behalf. It has been suggested that adequate socialisation to the process and procedures of a collaborative psychotherapeutic approach is vital to the success of therapy (Shelton & Levy, 1981b). However, without this socialisation process, these beliefs are likely to persist and increase the client's resistance to homework.

Culturally specific beliefs, particularly those regarding the nature of mental health problems and the methods by which these are best addressed, also present a potential barrier to homework completion. A client's cultural expectations about the nature of their illness and the explanatory model used to understand the cause of their problems may affect compliance with certain homework tasks (Pedersen, Draguns, Lonner & Trimble, 1981). Furthermore, beliefs regarding the appropriateness of certain behaviours may restrict the range of tasks a client will complete. For example, some clients will view writing down thoughts or emotional experiences (e.g., CBT based Thought Records; Padesky & Greenberger, 1995) as unusual and inconsistent with their cultural expectations of therapy (Kazantzis, et al, 2005). Cultural norms regarding the sharing of problems, such as obtaining social support or the freedom to express emotions, can likewise impede clients from engaging in tasks of this type. Should this facet of the client's belief system be overlooked, the likelihood of assigning a task that contradicts their cultural worldview is increased (Sue & Zane, 1987).

Degree of Psychopathology and family dysfunction

High levels of psychopathology faced by the client or the presence of a co-morbid personality disorder (Edelman & Chambless, 1995), has been proposed as a further set of disruptive factors that potentially disrupt homework completion. In a study by Edelman and Chambless (1995), the authors examined adherence to homework assignments during a cognitive-behavioural treatment for social phobia. The findings of this study suggest that those clients who were less anxious at the

outset of treatment were also more compliant with homework assignments than those who began treatment with higher levels of anxiety.

The nature and extent of a young client's distress or the degree of psychopathology experienced by a child, has also been proposed as creating a barrier to homework completion. A study published by Kazdin (1997) investigated the reasons children and their families withdrew prematurely from treatment. Of the factors examined, Kazdin found that the level of psychopathology experienced by clients was particularly significant in leading to early withdrawal. Likewise, the presence of psychopathology was found to correlate with increased non-adherence to the treatment recommendations of the therapist. In contrast to the adult focused literature however, it is useful to note that for children the degree of psychopathology is not conceptualised as being limited to the client themselves, but rather encompasses the degree of dysfunction within the child's family or home environment as well (Selye, 1974; Kazdin, 1996; Hudson & Kendall, 2005). This reflects the finding that in many cases, a child's presenting problems may have an aetiology that includes a dysfunctional home environment as a contributing factor to their clinical presentation (Carr, 1999). Therefore, it is proposed that should a dysfunctional family system exist, this is likely to interfere with the completion of homework set for a child.

Skill or Knowledge Deficits

From a practical perspective, the level of skill or knowledge needed by a client to fulfil the requirements of an assignment also potentially presents a barrier to homework completion (Kazantzis, MacEwan & Dattilio, 2005; Tompkins, 2004; Shelton & Levy, 1981b). Therapeutic homework tasks draw upon a range of skills, which if not possessed by the client will prevent the task from being completed. These can include educational deficits, such as reading and writing, or cognitive abilities such as the capacity to plan, remember and attend to aspects of the assigned activity (Tompkins, 2003). Notably, barriers created by these skill deficits can often be easily circumvented, but without having actively enquired about them, the therapist may not become aware of the deficit until the client fails to complete the task. In this sense a barrier due to a client's skill deficit can equally be conceptualised as a lack of competence on the therapist's behalf. Best practice guidelines for integrating homework into therapy suggest a core therapist task in

collaboratively assigning homework is to enquire about these difficulties before a task is assigned (Kazantzis, et al. 2005, Scheel, et al., 2004). As noted previously, Beck (1995) suggests that a useful strategy for exploring these potential barriers is to engage in the process of *covert rehearsal* through *guided imagery*. In doing so the client and therapist can work together to address each obstacle and create an alternative course of action for each barrier.

Environmental factors

The final category of barriers to homework completion concerns those factors that arise from some aspect of the client's environment. The literature in this area suggests that environmental factors can be broken into two main groups: lack of support by a spouse, parent or significant other; and practical obstacles such as lack of transportation and money or a physical disability.

Lack of Support

A lack of support from a client's partner, friends or family may present a homework barrier for clients in two ways. In the first instance the client may not receive much needed reassurance, without which they may be deterred from attempting an assignment. Secondly, the client may also require assistance in completing assignments, particularly during the early stages of treatment. Persons (1989) proposes that a barrier arising from lack of support may in fact reflect similar problems to those the client contends with in daily life. Furthermore, it is possible that the same environmental factors that prevent homework completion may be the very things that brought them to seek treatment in the first place. For example, a depressed client who has agreed to engage in pleasurable activities throughout the week may work with their therapist to develop a plan that involves scheduling time to go out for dinner with their spouse. If the spouse is not receptive to this the client may feel despondent and give up on the assignment, especially if they do not have the skills or motivation to find an alternative solution on their own. Similarly, if the client then arranges to go out for dinner with a friend and the spouse reacts negatively or jealously, the impact of this response will create a distressing experience for the client. Therefore, rather than the positive experience the task was designed to provide, the consequences may in fact be adverse and will

serve to reduce the client's likelihood of attempting to engage in further tasks in the future (Shelton & Levy, 1981b).

Practical Obstacles

Regardless of how carefully a task has been constructed, there are occasions in which homework tasks are not completed due to unforseen obstacles or situations within their environment that are out of the client's awareness or control (Hudson & Kendall, 2002). However, there are other practical obstacles that the client *is* aware of, but if left undisclosed can serve as a barrier to homework completion. Kazdin (1997) notes for example, that socio-economic disadvantage or the physical environment in which the client lives may not be conducive to certain types of assignments. By troubleshooting such potential problems, alternative activities could be agreed upon instead. Yet without this discussion the barrier may not be uncovered and consequently the task is unlikely to be completed.

Physical disability is an often-cited practical obstacle to homework completion (Olkin, 1999). Careful consideration of the environmental constraints that might influence the appropriateness of homework tasks is particularly important for members of this client group. When a client's disability is outwardly obvious (e.g., requiring a wheelchair for mobility), this process is fairly easy to negotiate as the limitations of the client can be readily evaluated (Tompkins, 2003). However, Zeiss and Steffen (1996) suggest it is often unseen disabilities such as dyslexia or significant social skills deficits that cause the greatest difficulty with a client's ability to comply with homework tasks.

Impact of Family on a Child's Homework Completion

Practical obstacles have been cited as a significant impediment faced by young clients also. In particular, a child's family has been noted as an important factor that may determine the success or failure of an assignment (Hudson & Kendall, 2002). When homework is assigned to young client's it should be remembered that homework tasks engaged in by children and adolescents are always completed within a familial context (Friedberg & McClure, 2005). A young person is rarely fully

autonomous and is likely to be living and functioning within a family group. Therefore, the beliefs of a family will be a critical influence in the child's life. Consequently, a homework task that violates either the norms or beliefs of a family will be unlikely to find support with the child's caregivers and may be left uncompleted. By way of illustration, Freidberg and McClure (2002) suggest that it is counter productive to develop an assignment which fosters greater autonomy in a young client, when the child's family culture favours less autonomy and a strong sense of community.

It has been suggested that the inclusion of caregivers in a child's homework is particularly important, as caregivers are able to assist with homework completion by scheduling "homework time" and provide other forms of support as their child engages in the tasks (Graziano & Mooney, 1980; Hudson & Kendall, 2005; VanAuker-Ergle, 2003). However, caregivers also encounter obstacles of their own that impact negatively upon the child's completion of homework. The most salient of these obstacles are those arising from the caregiver having an overly busy schedule or a lack of motivation or investment in the child's therapy (Hudson & Kendall, 2005). Kendall et al. (1992) also cautions that although parents may provide a valuable resource to aid completion of homework tasks, some parents may offer too much assistance and thereby negate the learning effect for the child. According to Vygotsky's *zone of proximal development* theory (Vygotsky, 1962), the impact of providing help to a child may be counterproductive to gaining benefit from completing a task. This theory stems from the observation that children who display high levels of problem solving ability when operating in isolation often show a marked reduction when coached by an adult or peer (Carr, 1999). This discrepancy between aided and unaided performance led Vygotsky to hypothesise that optimal learning occurs if the child's caregiver adjusts their level of input to take into account the child's level of ability and limits assistance to the minimum needed for success.

Areas For Investigation In The Present Thesis

The present chapter has thus far described the large number of homework barriers that have been presented in the therapeutic literature to date. However, on close inspection of this body of literature it was possible to recognise underlying factors common across a number of these barriers. For example, the literature reviewed suggested that the beliefs of the client, therapist and significant

others all have an impact on a client's completion of homework tasks. However, in all three cases the critical factor underlying these barriers might be conceptualised simply as 'negative beliefs'. Therefore, to reduce the number of barriers investigated by this study into a theoretically meaningful and manageable number, those barriers considered conceptually similar have been amalgamated on the basis of their underlying construct. To facilitate this process, guiding models were employed as a conceptual framework by which groups of barriers could be combined. The first model upon which this study draws was developed by Kazantzis, MacEwan and Dattilio (2005) for the use of homework within the context of CBT. Secondly, the 'Barriers to Treatment Participation' model developed by Kazdin and colleagues (Kazdin, Holland & Crowley, 1997) was also found to be a useful source of guidance. Therefore, the remainder of this chapter presents a brief overview of these models and describes how the theoretical framework of these models was used to reduce the large number of barriers derived from the literature into parsimonious items for investigation by the present thesis.

Guiding Model One – Homework

As greater knowledge regarding the use of therapeutic homework tasks has been obtained, there have been a number of attempts to synthesize this research into guiding models for practice (e.g., Beck 1995; Detweiler & Whisman, 1999; Persons, Davidson & Tompkins, 2001; Scheel et al, 2004; Shelton & Ackerman, 1974; Shelton & Levy, 1981). The earliest appearance of guidelines for the use of homework arose from the traditions of behavioural therapy, such as those presented by Shelton and Ackerman (1974) in their clinician's guide of 150 behavioural homework assignments. In addition to the tasks suggested within this manual, the authors provided guidance as to how these tasks might best be integrated into therapeutic practice (Kazantzis, et al., 2005). Although the ideas proposed by Shelton and Levy (1981) were useful as a guideline, they were not formulated into a specific model for practice and therefore were not considered a useful framework for use in this project

Extending on earlier work, an attempt to synthesise a guiding model from both theory and research was undertaken by Shelton and Levy (1989). The Shelton and Levy model was developed with a focus on the use of homework in CBT and aimed to be consistent with the recommendations

proposed by Beck et al. (1979). The authors proposed guidelines that sought to target client non-compliance with therapeutic homework tasks. However, it was recently discovered by two therapist surveys (Kazantzis & Deane, 1999; Kazantzis, Busch, Merrick, & Ronan, 2004) that although the recommendations of Shelton and Levy had existed for over two decades, in fact only a small proportion of therapists who used homework actually followed these guidelines. This finding could be interpreted in two ways, in the first instance it could hypothesised that therapists are departing from clinical theory and recommendations for practice. An alternative explanation is that the model does not accurately capture the process of using homework. In either case, questions about the usefulness of the guidelines offered by Shelton and Levy were raised (Kazantzis, et al., 2005).

A decade later in 1999, Detweiler and Whisman's *Heuristic Model* sought to incorporate client, therapist and task characteristics that had been found to inhibit clients' compliance with homework tasks. This model was based mainly on a review of previously published empirical studies that had investigated specific factors found to impact upon the client's degree of compliance with homework tasks. Importantly though, the Heuristic Model was not developed in conjunction with an underlying theoretical framework (e.g., cognitive, behavioural or psychoanalytic theory), but solely from this review of previous findings. Moreover, the focus of these recommendations centred for the most part on client factors as a source of non-compliance, rather than systemic or process factors over which the therapist has at least some direct influence. As a result, these recommendations were considered limited in their utility to serve as a guiding model for this study, other than for those aspects specifically relating to the client.

A forth set of recommendations were published in 2004 by Scheel and colleagues (Scheel, et al., 2004), which drew upon theoretical and empirical research regarding the use of homework in practice. The authors proposed that the process of incorporating between-session tasks into therapeutic work could be delineated into six phases (see Table 4.1). Each phase was supplemented by a brief practice strategy designed to help overcome difficulties with compliance. However, only these authors suggested a limited number of barriers and, as with the Detweiler and Whisman model, the strategies proposed for addressing the difficulties arising at each phase were not based on an underlying theoretical framework regarding the use of homework. Consequently,

these recommendations were considered to have significant limitations with respect to its usefulness for both the present study and for clinical practice in general.

Table 4.1

Six-Phase Model of the Homework Process. Adapted from Scheel, et al. (2004)

	Phase of homework completion	Therapeutic process strategy
1st Phase	Client-Therapist formulation of homework	- Collaborative process - Problem-homework fit
2nd Phase	Therapist delivers homework recommendation	- Explicitness of homework instructions - Rationale provided by therapist - Difficulties of homework addressed
3rd Phase	Receipt of homework by client	- Enquire about client's beliefs regarding homework
4th Phase	Client out-of-session implementation of homework recommendation	- Client understanding of homework - Barriers to completing homework
5th Phase	Next session, therapist asks client about homework experience	Feed-back – Feed-forward Interactions [a]
6th Phase	Client reports about homework experience	

[a] *Information gained from disusing previous homework experiences is conceptualised as influencing the client's future homework experiences*

More recently, Kazantzis, MacEwan and Dattilio (2005) have published a model that proposes guidelines to assist therapists to successfully integrate homework into clinical practice, thus overcoming many of the limitations encountered by these earlier models. The model by Kazantzis et al. (2005) offered a set of empirically and theoretically based principals for increasing the likelihood of client completion of homework assignments. These principals were derived from the theoretical framework of Cognitive and Behavioural theory and drew upon a host of studies that provide support for each of the guidelines proposed. Although developed with particular reference to the theoretical underpinnings of Cognitive and Behavioural Therapies, the principals contained within the Kazantzis et al. model are equally applicable to many treatment approaches that incorporate homework. It was therefore hypothesised that each of these principals, if not adhered to, would serve as a barrier to the completion of homework activities. The Kazantzis et al. model captured many of the barriers identified from the literature review presented earlier in this chapter.

As such, the principals proposed by Kazantzis et al. were adapted to serve as a valuable source of guidance for the selection of "barriers" for investigation by the present study.

The Kazantzis et al. model proposes that compliance with homework tasks may increase or decrease as a result of the processes and attitudes adopted by a therapist with respect to homework tasks during the phases of designing, assigning and reviewing assignments (see Figure 4.2). The authors further proposed that the beliefs held by a therapist and client may influence compliance with between-session activities. From this model, a total of twelve categories of homework barriers were developed based on the barriers suggested from the literature review and the underlying theory on which this model lies (a summary of these barriers is presented in Figure 4.3 at the end of this chapter).

Guiding Model Two – Barriers To Treatment Participation

A further thread to the theoretical context of the present study is the Barriers to Participation in Treatment (BPT) Model proposed by Alan Kazdin and colleagues (Kazdin, Holland & Breton, 1991). The BPT model was developed in response to the finding that of all children, adolescents and families who begin treatment in the United States of America, between 40% and 60% terminate prematurely (Kazdin, 1996). In light of these statistics, Kazdin sought to discover the reasons that best accounted for this high dropout rate. The BPT model details a range of therapeutic process factors and client characteristics that have demonstrated a strong association with early withdrawal from psychotherapeutic treatment by young people and their families (Kazdin, Holland & Crowley, 1997). As with the Kazantzis et al. (2005) model, many of the barriers highlighted from the literature review presented throughout this chapter were captured by the BPT model. It is proposed that the factors identified by Kazdin and colleagues may present significant barriers to the completion of homework tasks for young clients and have therefore been adapted for investigation by the present study. From this model, a further six categories of barriers were identified based on the barriers suggested from the literature review, as well as the underlying theory on which this model lies (a summary of these barriers is presented in Figure 4.3 at the end of this chapter).

Development of research items

In order to develop a comprehensive list of barriers to be investigated by the present study, the findings of Kazdin and colleagues were integrated with the guiding principals suggested by Kazantzis et al. (2005). By drawing guidance from the two models, each barrier was examined and as a result it was possible to identify eighteen unique categories of barriers. In addition, there were four barriers suggested within the therapeutic literature that had not appeared in either of the guiding models. Given however, that there was sufficient evidence available for the existence of these barriers, they were therefore included as part of the present investigation. A summary of each of the categories of homework barriers generated from this review can be found in Figure 4.3, with further detail presented in Appendix A.

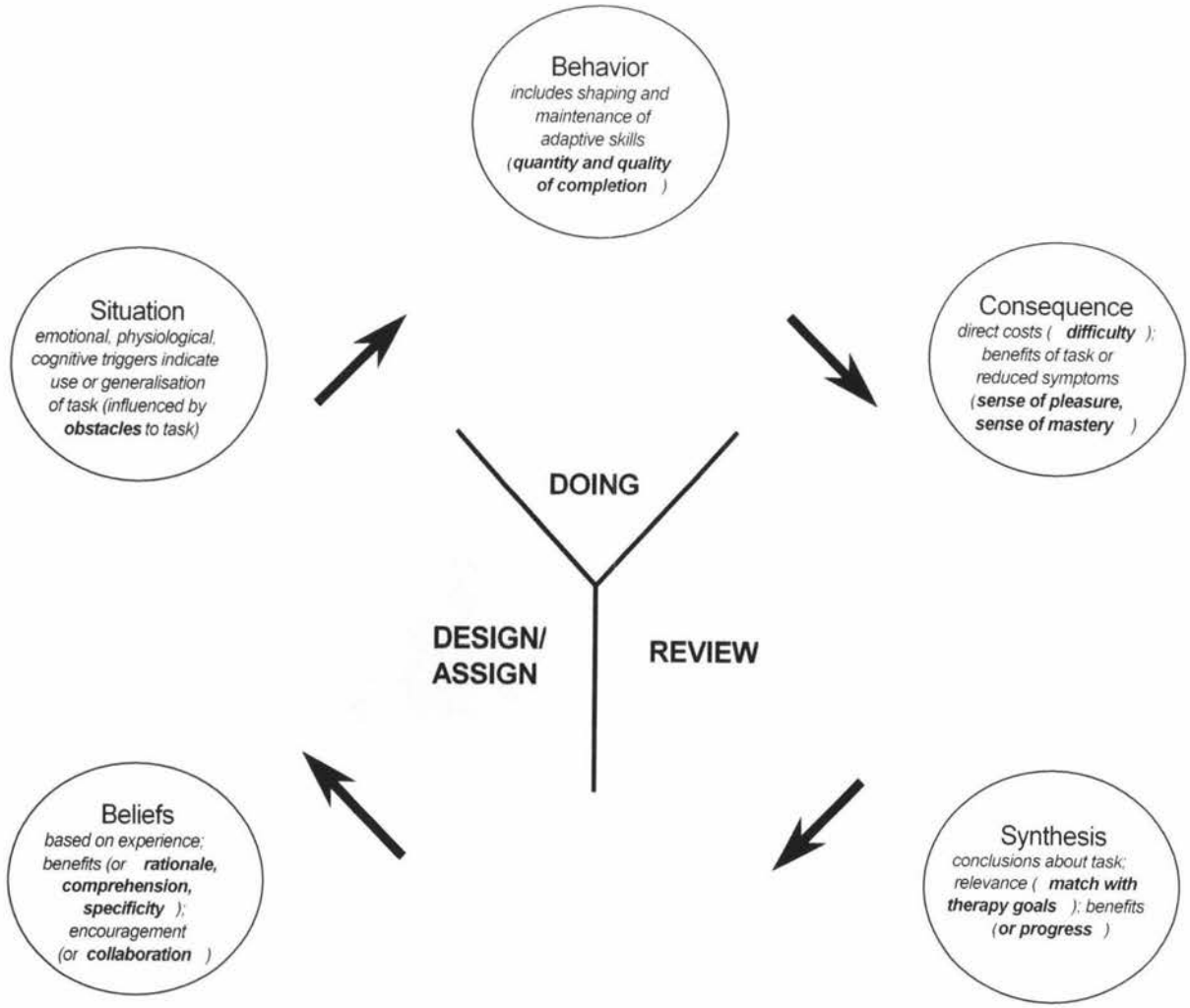

Figure 4.2: Integrated cognitive behavioural theory foundations to homework adherence. © Copyright 2005 by Nikolaos Kazantzis, Frank Deane, and Kevin Ronan. From the book "Using Homework Assignments in Cognitive Behavior Therapy", by N. Kazantzis, F. P. Deane, K. R. Ronan, & L. L'Abate (2005). New York: Routledge. Reprinted with permission.

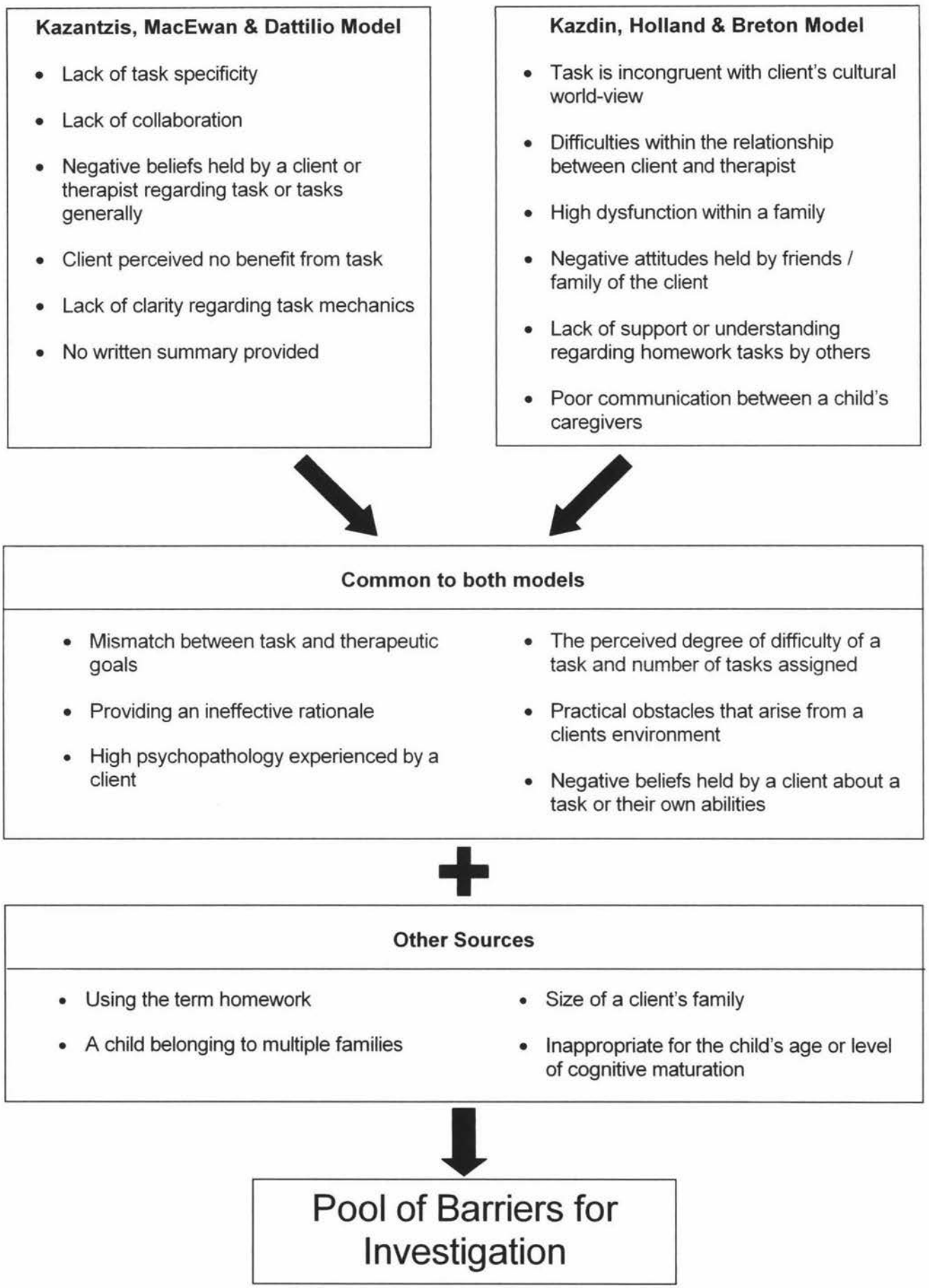

Figure 4.3
Summary of Barriers To Homework Completion Derived From Guiding Models and Other Literature Source

Summary

The present chapter has highlighted the large array of barriers that have been hypothesised as impacting on the completion of homework tasks. These barriers have been suggested as falling into four main categories, namely barriers that arise from the task, client, therapist or the client's environment. Each set of barriers presents a challenge to the client and therapist and may potentially disrupt homework completion, preventing the client from gaining maximum benefit from therapy. Many of the authors that have contributed to this field have also suggested that investigating potential problems with clients and addressing them before they arise, may avoid or minimise many of these barriers. A key step to this process however, lies in identifying those areas in which barriers are most likely to occur. Developing an understanding of the possible sources of client non-compliance with homework will assist the process of identifying barriers for individual clients.

However, it is important to reiterate that the majority of the barriers discussed throughout this chapter have been gathered from the literature based solely on theory and the clinical experience of identified experts. As such, there is a lack of empirical evidence that actually supports the occurrence of a number of these barriers in clinical practice. It should also be noted that these barriers have, in the main, been suggested in the context of working with adult clients. Although it may be a reasonable hypothesis that many of these barriers (e.g., therapist beliefs, practical obstacles, cultural beliefs) may also potentially arise when working with other client groups, there is presently only sparse empirical evidence that supports this.

Having comprehensively reviewed the literature regarding previously described homework barriers, the large number of barriers generated from this review was then reduced by drawing upon two guiding models (Kazantzis et al., 2005; Kazdin, et al., 1997). At the conclusion of this process, a cohort of 22 unique and theoretically distinct barriers was identified. Having thus generated a parsimonious list of homework barriers, the present thesis now turns its attention to obtaining empirical support for or against the occurrence of each of these barriers in everyday clinical practice of currently practicing clinicians.

Chapter Five: The Present Study

Overview

The following chapter details and describes the aims and hypotheses of the present thesis.

Aims and Objectives

The present thesis had six discrete aims. The first was to draw together and review the theoretical and empirical support for the existence of homework barriers that may potentially arise when working therapeutically with clients. The second aim was to obtain preliminary support for or against the occurrence of each of these barriers in clinical practice, by drawing upon the experience of a large pool of clinicians. The third aim was to explore clinicians' awareness of each of the barriers previously cited in the therapeutic literature, and sought to investigate the attitudes and beliefs held by clinicians regarding how they conceptualise "what is a barrier to homework completion". The fourth aim was to investigate whether the frequency with which clinicians use homework is altered as a function of i) the clinician's beliefs regarding homework barriers, ii) the clinician's experience of encountering barriers in their own practice, and iii) the clinician's perception of the quality and compliance their clients have demonstrated previously when homework tasks have been assigned.

In addition to the primary aims of this thesis, two secondary objectives arose in response to deficits identified as currently existing in our present understanding of the use of homework with children, adolescents and families. It was noted within the preceding review, although a number of authors have recommended the use of homework across all three populations, to date there has been little empirical data to suggest that these tasks are indeed currently being used with each of these clients groups. Therefore, the fifth aim of the present thesis was to gather preliminary data regarding the frequency with which homework is used by therapists working with young clients and family groups.

Finally, it has been suggested that the use of the term *homework* may have a negative impact on clients' completion of these activities; however, as yet this also has not been investigated empirically. Therefore, the sixth aim of the present thesis was to explore the words and phrases therapists use when referring to homework with their clients, and to investigate clinicians' perceptions of the impact using the word 'homework' has on client compliance with activities that are assigned.

In summary, the specific research aims of this study are: 1) To investigate the types of barriers to homework completion experienced by children, adolescents and families. 2) To investigate if and how frequently therapists working with children, adolescents or families, experience homework barriers in their clinical practice. 3) To investigate therapists' attitudes towards each of the barriers to homework completion derived from the literature and guiding models (i.e., what factors do they perceive as being a barrier?). 4) To investigate if the frequency of clinicians' homework use is altered due to their attitudes towards, and experience of, homework barriers and their perception of the degree of quality and compliance clients have shown to previously assigned tasks. 5) To investigate if, or how frequently, therapists assign homework tasks when working with children, adolescents and families. 6) To investigate therapists' use of, and attitudes toward, the term 'homework' and to explore any alternative terms used by therapists when describing these tasks to their clients.

Hypotheses

Use of Homework

Based on the findings of previous research (e.g., Kazantzis & Deane, 1999; Kazantzis, Lampropoulos & Deane, 2005), it was hypothesised that therapists in the present study would report using homework tasks when working with children, adolescents and families (hypothesis 1).

Prior research has also indicated that, historically, homework has been most widely adopted by clinicians working within either cognitive or behavioural theoretical models (Kazantzis, Lampropoulos & Deane, 2004). Therefore, given the association between homework and cognitive

/ behavioural therapies, it is hypothesised that therapists working within these frameworks would report using the largest number of homework tasks (hypothesis 2).
Regarding the types of activities used by clinicians, it was hypothesised that respondents from all theoretical orientations would report using a range of different homework activities with their clients (hypothesis 3). However, it is also proposed that CBT trained practitioners would report employing the largest range of tasks overall (hypothesis 4).

Many sources of information can be draw upon by clinicians when select homework tasks for clients (e.g., published therapy guides, diagnosis-specific treatment models, treatment manuals). It is hypothesised however that in the present study, in keeping with the recommendations suggested in the literature (e.g., Kazantzis, MacEwan, & Datillio, 2005), respondents will report their choice of assignment is mainly influenced by the conceptualisation / formulation of their client's presenting problems (hypothesis 5)

It has been proposed by several authors that when describing homework to clients, the use of the word *"homework"* may potentially deter some clients from completing an assigned activity (Coon & Gallagher-Thompson, 2002; Dattilio, 2002; Freidberg & McClure, 2005; Kazantzis & Lampropoulos, 2002; Hudson & Kendall, 2002; Tompkins, 2004). Although there is currently little empirical evidence to support this suggestion, for the present study it was hypothesised that respondents would concur with this view, and report that using the word homework impacts negatively upon homework completion (hypothesis 6). Moreover, it is also hypothesised that respondents will indicate a preference for referring to these tasks by words other than the label "homework" (hypothesis 7)

Homework Barriers

A large number of *therapeutic process* and *client* related barriers have been suggested in the literature as disrupting the completion of homework tasks assigned to young clients and family groups. It is therefore proposed that therapists working with each of these populations will report having experienced homework barriers to occur in their clinical practice (hypothesis 8). It is also

hypothesised that the types of barriers experienced by children and adolescents will reflect a young client's lack of autonomy and need to obtain assistance from their parents or caregivers (hypothesis 9). Furthermore, it is hypothesised that therapists working with families will report that homework completion for this group will be most affected by a lack of commitment demonstrated by one or more family members (hypothesis 10).

In addition to reporting having experienced homework barriers, it is anticipated that clinicians in the present study will also report being aware of the potential for these barriers to arise. Specifically, it is hypothesised that, overall respondents will report endorsing holding the belief that each of the proposed barriers would impede homework completion if it were to arise (hypothesis 11).

Relationship between Experience, Attitudes, Quality, Compliance and Homework Use

Drawing on the principals of both social cognition theory (Bandura, 1977, 1986) and classical behaviourism (Martin & Pear, 2003; Skinner, 1969; Thorndike, 1898), it is anticipated that a clinician's use of homework will be influenced by the perception they hold of how valuable these tasks are as a therapeutic tool. In particular, it is proposed that a clinicians use of homework will be influenced by their attitudes and experience of homework barriers. Furthermore, it is also anticipated that a clinician's attitudes towards homework barriers will be influenced by their perception of the degree of quality and compliance their clients have demonstrated to previously assigned tasks (Primakoff, et al., 1986; Scheel, et al., 2004). Based on these propositions, a hypothetical model was constructed to investigate the relationship between clinicians' experience/attitudes towards homework barriers, clinicians' perceived degree of quality and compliance to previously assigned tasks, and use of homework in clinical practice (see figure 5.1). Specifically, it is hypothesised that negative beliefs held by a client regarding homework barriers, a history of experiencing a many homework barriers and a history of low quality and compliance with homework tasks would be significantly correlated with a reduction in the frequency with which homework is used by clinicians (hypothesis 12).

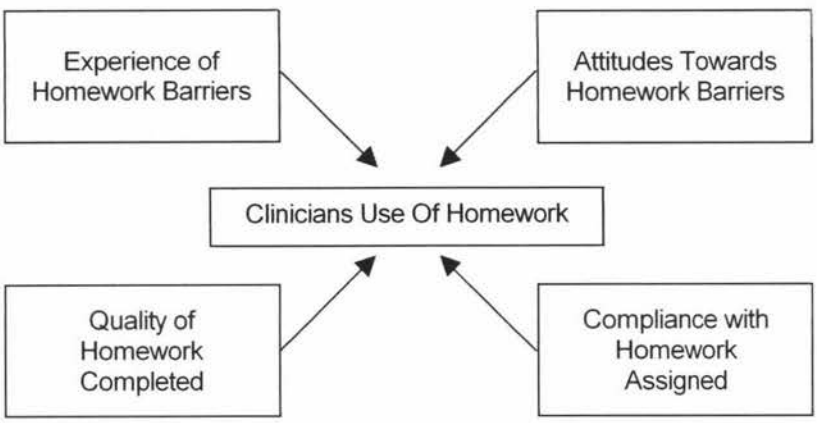

Figure 5.1

Factors Hypothesised As Impacting Upon Homework Tasks By Practicing Clincians

Chapter Six: Method

Overview

The current chapter describes the method employed by the present study to investigate each of the aims detailed in Chapter 5. The literature reviewed by the author to guide the development of this study and to provide a rationale for the approach selected is also discussed. Finally, the development of the research instrument and the statistical analysis procedures employed are presented.

Study Design

A mail survey was selected as the method most suited to achieve the present study's primary aim of describing therapists' attitudes and experience of homework barriers. Although a design of this type can potentially present a number of limitations, upon careful consideration of the strengths and weaknesses of this method, it was concluded that survey methodology would indeed be appropriate. This decision was based mainly upon three important features of mail survey research. Namely, the ease of gathering data from a large and diverse sample, the appropriateness of obtaining data through closed-ended questions, and the anonymity and confidentiality a mail survey provides to its respondents.

In the first instance, mail survey research is widely regarded as a valuable tool that is well suited to gathering a large amount of information from a diverse range of respondents. Furthermore, this can be achieved in a relatively short period of time and within a limited budget (Leong & Austin, 1996; Mangione, 1995). As the primary goal of the present study was to investigate the attitudes and experience of homework barriers from a large number of clinicians, a mail survey was considered to lend itself well to this objective.

Secondly, it was deemed feasible to gather meaningful data for this study through a series of closed-ended questions that had been derived from a careful study of the existing literature. It was

anticipated that by providing respondents with a preformatted list of potential homework barriers, participants would be able to indicate the frequency with which each barrier had occurred in their own clinical practice. It was also considered possible to use a similar list to allow respondents to indicate their beliefs regarding the potential impact each barrier may have on homework completion, regardless of their own clinical experience of client non-compliance with homework. Gathering information in this way was intended to both increase the ease with which a participant could respond to the survey (Coolican, 1999; Mangione, 1995), while providing an opportunity for respondents to include ratings for barriers that have historically been reported less frequently and may therefore, not be as readily recalled.

The final feature of mail survey research considered important for the present study was the confidentiality and anonymity that mail surveys provide (Futrell & Hise, 1982). By ensuring no identifying information was requested by the questionnaire, it was proposed that respondents would be more likely to provide answers without being concerned that their responses could be linked directly to them. This method of data collection has been described as lending itself well to gathering information from participants who are invested personally or professionally in a topic of study (Mangione, 1995). Participants in the present study were asked to report their own experience of client non-compliance with tasks they had assigned as part of their clinical practice. It was possible that for some respondents, client non-compliance may be viewed as reflecting a negative aspect of the clinician's practice, and as such, they may have been less inclined to report this information. It was hoped that the anonymity provided by this method of data collection would assist in obtaining honest responses that were less influenced by the effects of social desirability bias than may otherwise have been elicited through alternate modes of enquiry (Vaux, 1996). This was considered important for the present study, as it has been noted by authors of previous practitioner surveys, that when gathering information pertaining to attitudes and beliefs, ensuring truthful responding is particularly critical (Addis & Krasnow, 2000; Prochaska & Norcross, 1983).

As with all research methodologies, there are a number of limitations inherent in gathering data through a mail survey research design (Leong & Austin, 1996). The most significant of these limitations arise in regard to a questionnaire's rate of response, the depth of data obtained,

misinterpretation of questions, the inability to follow-up individual responses, and the impact of a researcher's own bias during the creation of survey items. Literature regarding research methodology and questionnaire development (e.g., Coolican, 1999; de Vaus, 1995; Leong & Austin, 1996; Mangione, 1995; Oppenheim, 1992) was reviewed in order to gain an understanding of how best to address these issues. In particular, through careful wording of questions, receiving expert feedback and pilot testing of the survey before data collection was undertaken.

Target Population

The present study targeted therapists identified as working regularly with children, adolescents or family groups. To facilitate obtaining a sample of clinicians working with each of these populations, this project drew participants from a randomly selected sample of currently practicing therapists from the *American Association of Marriage and Family Therapy* (AAMFT). The AAMFT is the professional association for practitioners of marriage and family therapy, which represents the professional interests of more than 46,000 marriage and family therapists (MFTs) throughout the United States, Canada and abroad (American Association of Marriage and Family Therapists, 2002; Northey, 2002). AAMFT therapists are trained to evaluate and treat psychological disorders, other health and behavioural problems, and address a wide array of relationship issues within the context of the family system. Individual practitioners can obtain membership with the AAMFT only after completion of graduate training (i.e., a Master's or Doctoral degree) in marriage and family therapy, in addition to primary training in the fields of either psychiatry, psychology, social work, psychiatric nursing or pastoral counselling. Members are also required to have completed at least two years of supervised clinical experience prior to registration (American Association of Marriage and Family Therapists, 2002).

The AAMFT population of therapists was selected for participation in the present study for several reasons. Firstly, a recent survey of AAMFT members conducted on behalf of the Association (Northey, 2002), revealed that although the stated focus of this organisation is to conduct therapy with adult couples and family groups, in practice, therapists affiliated with the AAMFT reported providing therapeutic services to a wide range of client populations. Specifically, the data illustrated

that 45% of the therapists within the AAMFT described working solely with adult clients, but 28% also worked individually with children and adolescents, and a further 27% worked with couples and family groups.

Secondly, the Northey (2002) study also revealed that therapists affiliated with the AAMFT practice within a number of theoretical frameworks and draw upon a variety of training backgrounds. This is a significant advantage for the present study, as a secondary aim was to explore the differences in the experience and attitudes towards barriers to homework completion as a function of these therapist attributes. Based on the information presented in the Northey study, the AAMFT therapist population was deemed ideally placed to answer questions relating to the experience of clients from all three populations and to investigate the attitudes towards homework barriers held by therapists from a variety of training backgrounds and theoretical orientations.

Finally, there is currently little known about the attitudes, experience and use of homework tasks by Marriage and Family Therapists. Previous surveys that have investigated this aspect of clinical practice (e.g., Fehm & Kazantzis, 2004; Kazantzis, Busch, Ronan & Merrick, in press; Kazantzis & Deane, 1999; Kazantzis, Lampropoulos & Deane, 2005) have consistently under-represented Marriage and Family Therapists within their samples. Within these studies this cohort of therapists are often grouped by their primary training background (e.g., psychologist, psychiatrist, mental health nurse) rather than as Marriage and Family Therapists. Therefore, it was anticipated that the focus on Marriage and Family Therapists would further enhance the contribution of the present study to the literature.

Questionnaire: Therapist Homework Survey

As there was no existing measure that assessed therapist attitudes and experience of barriers to homework completion, a new eight-page, self-administered questionnaire was developed specifically for use in this study. Questions were designed to elicit information falling into five areas: practitioners' general use and experience of homework activities; clinicians' experience of barriers to homework completion with children, adolescents and families; therapist's attitudes/beliefs

regarding barriers to the completion of between-session activities; and participant demographics (Appendix C).

Drawing in particular upon the Kazantzis, MacEwan and Dattilio (2005) guiding model of homework in clinical practice, as well as from exploratory research into factors identified as presenting *barriers to treatment participation* for children and families (Kazdin, Holland & Breton, 1991), a theoretical basis for the questionnaire was established (see Chapter 4). Based on these reviews, an item pool was developed and subsequently refined to give the most salient and commonly proposed barriers to homework completion cited in the literature to date. Items that were similar in content, or shared a common theoretical basis, were grouped to reduce the total number of items included.

In total, 133 items were composed. These included both filtering and demographics questions, with the bulk of the survey being devoted to items related to the therapist's attitudes and experience of barriers to homework completion. To assist data analysis, particularly regarding the differing experience of therapists working with clients from each of the three populations (i.e., children, adolescents and families), the questionnaire was divided into nine separate sections (see Table 6.1). Barriers that were considered as potentially arising within all population groups (e.g., ineffective rationale, practical obstacles, or poor match with therapy goals) were presented to all therapists. Those barriers conceptualised as being relevant only to young clients (e.g., due to the child's level of cognitive maturation, belonging to multiple families, or difficulties with caregivers) were extracted and presented only to those clinicians who indicated working with children or adolescents. Finally, those barriers considered pertinent only to family groups (e.g., the size of the family, or non-participation by one family member) were presented to therapists who indicated working with families. Respondents were instructed to only answer those sections that related directly to the client groups with which they worked. As such, an individual respondent was required to answer a maximum of 90 items.

Table 6.1

Sections Within the Marriage and Family Therapist Homework Questionnaire

Content
General Homework Use
Experience of Homework Barriers: All populations
Use of Homework and Experience of Barriers: Children
Use of Homework and Experience of Barriers: Adolescents
Use of Homework and Experience of Barriers: Families
Attitudes/Beliefs Toward Between-Session Activities
Demographics

Question Content

During the design phase of the present questionnaire, attention was given to the choice of language that was used, both within each item and within the questionnaire as a whole. In particular, *theoretically neutral* language was adopted to prevent the appearance of the questionnaire being aligned with any specific theoretical paradigm. Therefore, the Cognitive Behavioural term 'homework' was replaced with the phrase 'between-session activities' throughout (Kazantzis, Lampropoulos & Deane, 2005).

Section A was designed to gather data regarding the respondent's use of homework in their clinical practice. The first question in this group served to filter out those respondents who had never previously assigned homework tasks. Question two (*activities used*) asked respondents to indicate the types of activities typically used in their clinical practice, and to provide the frequency with which each has been typically assigned. In total, a list containing twelve homework activities was presented to respondents (see Table 6.2). This list was developed from an independent review of the literature conducted by the present author regarding between-session activities. The list of activities was then augmented with five categories (i.e., bibliotherapy, gathering data, interpersonal interactions, cognitive techniques, and manipulating behaviour) from a previously published clinician survey (Kazantzis, Lampropoulos & Deane, 2005). Respondents indicated endorsement of an activity by rating how frequently they have used the task, on a five-point Likert scale ranging from 1 (never) to 5 (almost always) (Likert, 1952).

Table 6.2

List of "Activities Used" Presented in MFT Homework Questionnaire (Questions 2 to 14)

Bibliotherapy / Reading literature (e.g., self-help material)
Gathering data about thoughts, behaviours or emotions
Hyperventilation or other induced physiological states
Increasing mastery
Increasing pleasure
Interpersonal interaction
In-vivo exposure
Manipulating behaviour via cues or consequences
Relaxation practice, controlled breathing or distraction
Parent management techniques/training
Practicing cognitive techniques (e.g., examining the evidence for thoughts)
Scheduling activities or exercise

Homework use items

To investigate the relationship between the number of tasks typically assigned by a clinician and the respondent's experience of barriers to homework completion, two questions were included from a study by Kazantzis, Lampropoulos and Deane (2004). These items requested respondents to indicate both the number of activities typically assigned during the *first ten sessions* (question three), and the number of different types of assignments typically assigned during *each session* (question four).

Question five (*homework resources used*) enquired about the resources most commonly drawn upon by clinicians when selecting assignments for clients (see Table 6.3). Several authors have suggested that homework tasks should arise directly from the case conceptualisation or formulation of a client's presenting problems (e.g., Beck et al., 1979). However, there are also a number of other sources that may provide inspiration for homework tasks, including peer reviewed journals, diagnosis specific treatment models and a series of manuals that present a multitude of "ready-made" assignments (e.g., Bevilacquo & Dattilio, 2001; Schultheis, 1998; Tompkins, 2004). The

quality of the instructions provided by these manuals, regarding how to integrate assignments into therapy, varies considerably. Therefore, gathering information on the resources a clinician draws upon when assigning homework was considered to be of potential interest in the scope of the present study, as the use of different resources may correlate with an increase in barriers to homework completion.

Table 6.3

List of "Homework Resources" Presented in MFT Homework Questionnaire

Conceptualisation/ formulation
Diagnosis-specific treatment models
Published case studies
Published outcome studies
Published practice planners
Published therapy guides/ texts
Treatment manuals

The final question in Section A (*terms used*) requested that respondents indicate the word, term or phrase most frequently used when discussing homework tasks with their clients. This item was included, as several authors have recommended using terms other than homework when discussing homework with clients. This suggestion arises from the proposition that the word *homework* may potentially carry unhelpful connotations for some clients (see Chapter 4). Respondents were presented with a list of phrases most frequently cited in the psychotherapeutic literature, including "Homework", "*Show That I Can* tasks", "Assignments", "Experiments", "Between-session activities", "*Coping Cat* tasks", "Home practice", "Self help" and "Tasks". These terms and phrases were presented with the instruction to select "the one term that you most prefer to use when discussing between-session tasks with clients". Participants were prompted to add any other words or terms they use in their clinical practice.

Experience of Homework Barriers

Sections B, C, D and F consisted of items assessing frequency of homework use, practitioner's experience of client compliance with homework, practitioner's experience of the quality to which client's complete tasks, and details of the types of barriers that had been encountered. As noted above, questions regarding the respondent's experience of homework barriers were divided into four parts. Each respondent was instructed to answer all items presented in Section B, as these consisted of barriers considered to potentially arise across all populations (see Table 6.4). Sections C and D consisted of barriers conceptualised as relevant only to children and adolescents respectively (see Table 6.5). Section F presented barriers that were conceptualised as relevant only to family groups (see Table 6.6). Participants were directed to answer only those sections pertaining to the client populations with whom they work. Respondents were asked to consider each barrier listed, then indicate how frequently they had encountered that barrier using a 5-point Likert scale, ranging from 1 (never) to 5 (almost always).

Table 6.4

Items Presented in Section B, "Experience of Barriers to Homework Completion With All Client Groups"

B1	The rationale for the task was not effective (e.g., not clear, understood, or accepted)
B2	The task was poorly defined or non-specific (e.g., lacked clarity on what, when, where, how often, and/or how long the task should take)
B3	The client perceived task to be too difficult (e.g., given current skill, task complexity or quantity)
B4	The client held negative beliefs towards the task (e.g., utility or relevance of specific task)
B5	A high degree of psychopathology/dysfunction interfered with task completion
B6	The task was inappropriate for the client's personal, family, or cultural beliefs
B7	The client did not understand what to do (i.e., comprehension)
B8	The therapeutic alliance, collaboration, or relationship was poor
B9	A practical obstacle arose that was not anticipated (e.g., unexpected commitments)
B10	The link/match between the task and the client's goals for therapy was unclear
B11	The client did not consider task to be beneficial (i.e., no pleasure, mastery, sense of progress)

Table 6.5

Items Presented in Sections C/D, "Experience of Barriers to Homework Completion With Children and Adolescents"

C/D4	The task was not appropriate for the child/adolescent's age or level of cognitive maturation
C/D5	The degree of dysfunction within the child/adolescent's family prevented task completion
C/D6	Significant others outside the child/adolescent's family (e.g., school, extended family, friends) did not support the between-session task (including receiving negative reactions from others)
C/D7	The child/adolescent's caregiver did not support the between-session task (e.g., little encouragement, did not set aside 'homework' time, little involvement or interest in the tasks)
C/D8	The child/adolescent's caregiver had a lack of understanding about the task (e.g., poor understanding of rationale behind the task)
C/D9	Size of the child/adolescent's family interfered with completion of the between-session task
C/D10	Poor communication between child/adolescent's caregivers (e.g., parents, school, family)
C/D11	Belonging to multiple families caused interference with between-session task completion (e.g., parents separated, step or blended families, cared for part-time by extended family members)

Table 6.6

Items Presented in Section F, "Experience of Barriers to Homework Completion With Family Groups"

F4	Significant others outside the immediate family (e.g., extended family, friends) did not support the between-session task (including receiving negative reactions from others)
F5	One or more members of the immediate family (i.e., those members engaged in therapy) did not support the between-session task
F6	The family size was too large (e.g., difficulty bringing all members together in large family)

Attitudes Towards Homework Barriers

The present study also sought to assess practitioners' attitudes regarding each of the homework barriers detailed in Chapter 4. In particular, this section investigated how practitioners currently conceptualise homework barriers, as well as their awareness of and beliefs regarding the potential for each barrier to arise. Section H consisted of twenty-one attitudinal items phrased as statements, regarding each barrier generated from the pool of research items (see Table 6.7). Practitioners were requested to indicate their agreement with each statement on a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The rationale being that although a clinician may

not have encountered each of the barriers in their own practice, they could still potentially indicate how likely they believe each barrier would be to impact upon homework completion if it were to arise.

Table 6.7

Attitudinal Items Presented in Section H, "Clinicians' Attitudes Towards Barriers to Homework Completion"

SECTION H	
H1	Having an ineffective rationale for tasks usually leads to non-completion
H2	Non-specific or unclear tasks usually lead to non-completion
H3	Using tasks perceived by the client to be too difficult or demanding usually leads to non-completion
H4	Negative client attitudes about tasks usually lead to non-completion
H5	High psychopathology or dysfunction in clients usually leads to non-completion
H6	Using tasks incongruent with a client's cultural worldview usually leads to non-completion
H7	Using tasks not clearly related to the client's goals for therapy usually leads to non-completion
H8	A poor therapeutic relationship (e.g., lack of collaboration, poor therapeutic alliance) usually leads to task non-completion
H9	High dysfunction in clients' families usually leads to task non-completion
H10	Unexpected practical obstacles usually leads to task non-completion
H11	Assigning tasks that are not collaboratively selected usually leads to non-completion
H12	Assigning too many tasks usually leads to non-completion
H13	Negative attitudes toward tasks held by the client's family/ friends (not involved in therapy) usually lead to non-completion
H14	Lack of support from significant others (e.g., spouse, partner, family members, caregivers) usually leads to task non-completion
H15	Lack of understanding about a between-session task by significant others (e.g., spouse, partner, family members, caregivers) usually leads to task non-completion
H16	A lack of understanding about what is involved in a task (i.e., mechanics of how it is to be completed) usually leads to non-completion
H17	Assigning tasks without a written summary (i.e., description of task, mechanics of its completion) usually leads to non-completion
H18	Children and adolescents experience a range of specific barriers to the completion of between-session tasks that are not experienced by other clinical populations
H19	Families experience a range of specific barriers to the completion of between-session tasks that are not experienced by other clinical populations
H20	Couples experience a range of specific barriers to the completion of between-session tasks that are not experienced by other clinical populations
H21	Using the term "homework" usually leads to non-completion of between-session tasks

Demographic Questions

The final section of the questionnaire, Section I, gathered data pertaining to the demographic characteristics of each respondent. Participants were asked to describe themselves in terms of their age, gender, highest degree held, the professional discipline of their highest degree, theoretical orientation, years of clinical experience, and primary employment setting. This section also sought data regarding which client populations each therapist most frequently works with, to enable a comparison between therapists working with different client groups. Items in this section were developed based on information gathered from a large number of previous practitioner surveys, and were tailored to reflect the demographics of North American participants (Addis & Krasnow, 2000; Byrne & Reinhart, 1990; Garfield & Kurtz, 1975; Garrett & Davis, 1995; Kazdin, Siegel & Bass, 1990; Kazantzis, Lampropoulos & Deane, 2004; Norcross, Karg & Prochaska, 1997; Norcross & Prochaska, 1982; Norcross & Wogan, 1983; Prochaska & Norcross, 1983). These items also reflect recommendations regarding both the validity of demographic constructs when participants from a wide range of backgrounds are surveyed (Beutler, 1997), as well as ensuring there is consistency throughout the field of psychological research in the use of specific demographic terms (de Vaus, 1995). For example, the construct 'clinical experience' was operationalised in terms of 'years spent in clinical practice' within the present study, which is consistent with previously published practitioner surveys (e.g., Beutler, Brown, Crothers, Booker & Seabrook, 1996; Kibblewhite, 2002).

Questionnaire Development and Consultation

An initial draft of the MFT Homework Questionnaire was prepared in March 2005. This allowed time for a comprehensive piloting and refinement process to occur over several months, prior to being used to gather data. The development of this questionnaire was undertaken as a collaborative effort by three researchers, including the primary researcher Gregg Shinkfield (Masters Student, Massey University) with academic supervisor Dr. Nikolaos Kazantzis (Massey University) and key

collaborator Dr. Frank Dattilio (Harvard Medical School)[6]. A number of practitioners and experts were also consulted during this process, including university academic staff and clinical practitioners who each had extensive experience in the fields of both research and therapy. Furthermore, fellow research students were consulted for their opinions and feedback regarding the structure of the questionnaire, the clarity and phrasing of questions, and typographical or grammatical errors. Finally a pilot study (n =10) was conducted, the results of which are detailed in Chapter 7. Feedback gathered from each of these sources was incorporated into the questionnaire, with survey content being finalised in November 2005.

Considerations in Questionnaire Construction

In addition to item content, several structural issues were considered during questionnaire development. Attention was given to producing a questionnaire that would maximise the likelihood of participants engaging in the survey. It was considered important that the questionnaire be appealing to participants, be easy to read, while at the same time be of a minimal length. In line with recommendations drawn from survey methodology literature, questions were kept brief, relevant to the topic, jargon-free and as easy to answer as possible (Mangione, 1995).

As the questionnaire was intended to serve a number of functions and to obtain a large amount of data, the issue of participant response was continually weighed against the objectives of the study. It has been noted in the literature that questionnaires of four pages or less, correlate strongly with high rates of return (Yammarino et al, 1991). However, this finding was weighed against the objectives of the study, and while a large response rate was desirable, this did not outweigh the need to elicit useful and high quality information (Suskie, 1996).

Finally, as Likert scales were featured throughout the questionnaire, literature regarding the use of such scales was also reviewed (e.g., Mangione, 1995; Jamieson, 2004; Weng & Cheng, 2000). Particular consideration was given to the relative merits of providing scales containing a greater or lesser number of response categories (e.g., 3, 4, 5, 6, 7 or more). It has been found by several

[6] The present thesis was conducted as a theoretically distinct component of a larger study investigating the use of homework by marriage and family therapists. Data obtained via the survey was coded, analysed and reported separately in the present study.

studies that as the number of response categories drops, so too does the reliability of participant responses (Streiner & Norman, 1998). It has also been noted that, for the majority of participants, it is hard to discriminate between response categories when more than seven classes are available (Streiner & Norman, 1998). Overall, research suggests that scales containing 5 or 7 categories tend to produce equivocal results (Mangione, 1995). However, as five-point scales have been commonly used in attitudinal research they were selected for use in the present study (Cohen, Manion & Morrison, 2000).

Consideration was also given to the *psychological distance* (Dobson & Mothersill, 1979; Mangione, 1995) between the anchor points used within each Likert scale (e.g., never, rarely, occasionally, often and almost always). This was deemed important, as there has been much debate regarding the legitimacy of analysing data obtained from Likert scales by parametric techniques, given that this data technically falls within the ordinal level of measurement (Jamieson, 2004; Blaikie, 2003). However, it has been suggested that it is feasible to treat this data as if it were at the interval level if the anchor points selected are such that the respondent is likely to interpret the *distance* between each pair of points as being equal (Mangione, 1995; Knapp, 1990; Jamieson, 2004). Research further indicates there are several response scales that are recognised as being interpreted by respondents as having qualitatively equal distances between each anchor point (Coolican, 2004; Dobson & Mothersill, 1979). The Likert scales employed in the present study are drawn from these recommendations.

Procedural Issues

When data is collected via survey methodology the potential exists for the limitation of obtaining a low rate of response to be encountered (Weisberg, Krosnick & Bowen, 1996). Therefore, it was important for the present study to address this limitation in a number of ways to ensure the maximum possible response was received. There have been several techniques presented within the research literature that have shown efficacy in increasing the response rate obtained from participants. The most well documented of these are: providing a well formatted and motivating introductory letter (Hornik, 1981; Houston & Nevin, 1977); supplying a pre-stamped, self addressed

return envelope (McCrohan & Lowe, 1981; Yammarino, Skinner & Childers, 1991), assuring respondents their data will be treated with complete confidentiality and anonymity (Futrell & Hise, 1982; McDaniel & Jackson, 1981), and providing timely reminders to respondents (Furse, Stewart & Rados, 1981; Mangione, 1995; Yammarino, Skinner & Childers, 1991). Although these guidelines cannot guarantee that mail survey research will yield a large response, they have been shown to increase the likelihood that this will occur. In line with the above recommendations, each questionnaire was accompanied by a pre-stamped, self-addressed envelope (McCrohan & Lowe, 1981; Yammarino, Skinner & Childers, 1991) and included a covering letter designed to serve several important functions. Specifically, the covering letter aimed to engage with each participant, explain the rational for the questionnaire, and to encourage completion and return of the survey. The letter was worded to appeal to the practitioner's sense of professional obligation and importance, by acknowledging the expertise of each clinician in the psychotherapeutic treatment of children, adolescents and family groups (Childers & Skinner, 1996; Church, 1993; Kibblewhite, 2002). Emphasis was placed on the value of each participant's clinical experience and the relevance of their opinions. To demonstrate the authenticity of the questionnaire, and to show affiliation with a recognised and respected organisation, the covering letter was written on university letterhead paper (Childers & Skinner, 1996; Kibblewhite, 2002; Suskie, 1996). Affiliation with *both* Massey University and Harvard Medical School was emphasised to add further weight to the importance of the data gathered (see copy of cover letter in Appendix B).

A follow-up prompt was sent to each of the participants. The prompt thanked those who had already responded and encouraged those who had not yet done so. The timing of this prompt was determined from a literature review regarding survey methodology. It was suggested by this review that during the first 5 to 7 days following the posting of a questionnaire, the initial responses should begin to arrive. Between days 8 to 10, the majority of those who are likely to respond will do so during this period. After day 10 the number of responses begin to level off, until day 14 when they begin to drop of rapidly (Mangione, 1995). The present study sought to capitalise upon this pattern of responding by sending the prompt letter to participants so it would coincide with this precipitous drop in responding at around day 14. A short delay between initial posting and sending a prompt serves to build on the momentum that was created by the cover letter (de Vaus, 1995; Furse,

Stewart & Rados, 1981). The use of this prompting technique has been shown to increase survey response rates by up to 10% (Weisberg, Krosnick & Bowen, 1996; Yammarino, et al, 1991). Research also indicates that including a second copy of the questionnaire with the prompt letter and following this with an additional prompt, increases the rate of response even further (Frazer & Lawley, 2000; Mangione, 1995). Unfortunately, due to budget constraints this was not possible in the present study. Instead, instructions were provided in the second posting, directing clinicians who had misplaced their original form but wished to respond, to contact Dr. Frank Dattilio in order obtain a replacement copy (Appendix D).

The inclusion of incentives for respondents has been suggested as a useful device to increase participant response (Furse & Stewart, 1982; Mangione, 1995; Vaux, 1996; Yammarino, Skinner & Childers, 1991). The cover letter bundled with the present survey provided three incentives designed to encourage participation. Firstly, attached to each survey pack was a stick of chewing gum, with the opening sentence indicating that in the time it takes to chew the flavour out of the enclosed chewing gum, the survey could be completed. Secondly, the cover letter emphasised the contribution participants would make to the field of psychotherapy and in particular, to the field of Marriage and Family Therapy. Thirdly, the participants were invited to indicate their interest in receiving a personal copy of the findings of the research. To obtain a copy of the findings the respondent was instructed to send a request via email to Dr. Frank Dattilio at Harvard Medical School. Separating a participant's request for a summary of the findings of the study from their questionnaire responses, ensured there was no way to match the individual questionnaires to specific respondents.

Procedure

The participant sample used by the present study was drawn from the entire AAMFT database of approximately 46,000 therapists. To obtain participants, a computer-generated, random selection of 4000 mailing labels were purchased from the AAMFT. These were requested with the constraints that each member was currently practicing and had a primary mailing address in the United States of America. During November 2005 a pilot study was conducted, consisting of forty survey

packages sent to a randomly selected sample drawn from the 4000 mailing labels. This restricted sample permitted a final opportunity to correct any issues that had been overlooked and to gauge the rate of response that would likely occur if the survey were conducted with the full compliment of participants. As no problems or significant issues were noted and the rate of response was considered adequate (see Chapter 7), in December 2005 survey packages were sent to a randomly selected sample of one thousand AAMFT members inviting their voluntary participation in the main phase of the research. The distribution of survey packs and prompt letters was undertaken by INFOCUS MARKETING, INC. (4245 Sigler Road, Warrenton, VA 20187, United States of America). Return envelopes were addressed to Dr. Frank Dattilio, Harvard Medical School. Questionnaires were then mailed to New Zealand for data entry and analysis.

Data Preparation

Raw data obtained via the MFT Homework Questionnaire was entered into a spreadsheet for analysis using the Statistical Package for the Social Sciences (SPSS) version 13 (SPSS, 2004) and Analysis of Statistical Moments (AMOS) version 5.0 (Arbuckle & Wothke, 1999). In the main, items and responses were pre-coded on the questionnaire, which enabled most data to be entered directly without any recoding of responses being required. However, four items did require recoding prior to data entry. Specifically, this involved items that had requested participants to provide qualitative responses to items containing the response category 'other'. In each case, the qualitative data was inspected for similarities across responses. From these similarities post-hoc codes were developed. The reliability and accuracy of these pos-hoc codes were checked by a research assistant, who recoded the data for each of these items. The degree of consistency between each rater was then evaluated by generating Cohen's kappa values for this data (Fleiss, 1981; Norusis, 2005). As a measure of reliability, Cohen's kappa measures the agreement between the evaluations of two raters when both are rating the same object. A value of 1.00 indicates perfect agreement. A value of 0.00 indicates that agreement shown was no better than chance (Cohen, 1960; Kraemer, 1982). Kappa values greater than .75 are considered to indicate *strong agreement* between raters (Fleiss, 1981). For each of the items evaluated, the inter-rater reliability of the post-

hoc codes was excellent, with all kappa values being greater than 0.9. The kappa values for each question are presented in the text below.

The first item recoded, question A17, requested participants to indicate the resources most frequently used when selecting tasks. From the responses obtained, twelve categories were developed including: *conceptualisation / formulation*, *diagnosis-specific models*, *published therapy guides*, *published practice planners*, *own experience*, *treatment manuals*, *published outcome studies*, *seminars/workshops*, *books*, *published case studies*, *12 step program techniques* and *Other (non-specified)*. The inter-rater reliability for question A17 showed excellent agreement for these categories ($k = 0.991$; $p < 0.00$). Question A18, 'terms or phrases used to describe homework', was coded in a similar fashion, with 17 categories being developed. These included: *homework*, *assignments*, *experiments*, *between-session tasks*, *home practice*, *tasks*, *something to try*, *home play*, *self-help*, *takeaways*, *free therapy*, *suggestions*, *healthy self talk*, *therapy work*, *helpful things*, *home fun* and *no term used (none)*. The inter-rater reliability for question A18 was also excellent ($k = 0.981$; $p < 0.00$). By inspection of the responses obtained regarding question I4, 'highest degree earned', it was considered most useful to code this data into four categories, namely "Doctoral Degree", "Masters Degree", "Bachelors Degree" and "Non-University Vocational Training". The inter-rater reliability for these codes achieved perfect agreement ($k = 1.00$; $p < 0.00$). Finally, question I10, 'primary theoretical orientation', generated five categories. Four of these codes were taken directly from the response list (i.e., *CBT*, *psychodynamic*, *experiential*, *systemic*, and *post-modern*), with only the addition of the category *eclectic* being required. The inter-rater reliability for question I10 was excellent ($k = 0.985$; $p < 0.00$).

To assist analysis of the data as a function of client population (i.e., children, adolescents, families, and adults), participants were also assigned a code based on the client groups with which each respondent worked. This coding took place in three stages. In the first stage, all participants who indicated that they spent at least 25% of their clinical time working with one client group were coded as "WITHchildren", "WITHadolescents", "WITHfamilies", or "WITHadults", respectively. In the second stage, participants that had been coded as working with two client groups were also coded as "WITHchildrenAND adolescents", "WITHchildrenANDfamilies", and "WITHadolescentsANDfamilies", respectively. Finally, participants coded as working with all three

client groups were also coded as "WITHchildren+ adolescents+families", while those who indicated working solely with adult clients were coded "Adults".

As a result of instructing participants to respond only to those sections pertaining to the client groups they worked with, most respondents omitted completing at least some aspect of the questionnaire. Therefore missing data was treated as such and was not replaced with mean scores, or any by other method. By not replacing missing data, this produced varying *n* scores across groups. Furthermore, while mean scores could have been used to replace missing data *within* client population groups, this could potentially have decreased the accuracy of the results (Coolican, 1999).

Prior to any manipulation or analysis, the data were screened to ensure they had been entered accurately. This checking process was conducted in three stages. Firstly, summary statistics were generated with particular attention given to the maximum and minimum scores obtained for each variable, to identify idiosyncratic data outside the range of expected values. Secondly, a sample consisting of twenty-five questionnaires was selected using the *random number generation* function of SPSS. For each randomly selected questionnaire, the values that had been entered were re-checked manually. No inaccuracies were found for any of the twenty-five questionnaires audited. During the screening process it was also determined whether particular variables met the conditions for parametric or non-parametric analysis. Specifically it was investigated whether data pertaining to *types of homework used*, *resources employed*, *terms used to describe homework*, and *therapist theoretical orientation* were normally distributed and if variance was equal across client groups. Normality was tested by performing a One-Sample Kolmogorov-Smirnov Test (Massey, 1951; Pallant, 2002). Each data set was found to reach a level of significance ($p < 0.001$), indicating that none of these variables could be considered normally distributed (Tabachnick & Fidell, 2001). Finally, equality of variance was investigated by performing a Levene's test of homogeneity. For each of the variables of interest (*types of homework used*, *resources employed*, *terms used to describe homework*, and *therapist theoretical orientation)*, F values and their associated probabilities were obtained. It was found that the probability for each variable reached statistical significance. Therefore, it was concluded that the variance was not equal between

groups. Based on these analyses, the data for these variables was considered to have not met the conditions required for the legitimate use of parametric analysis.

Data Analysis Procedure

Due to the number of hypotheses investigated in the present study, a range of analytic tools were employed. Data was analysed using the descriptive and inferential statistical functions of SPSS 13.0 (SPSS, 2004). In addition, AMOS 5.0 (Arbuckle & Wothke, 1999) was used to investigate the hypothesised relationship between attitudes / experience of homework barriers, a clinician's experience of client quality / compliance with previously assigned homework, and the frequency of homework use in clinical practice (see Figure 6.1).

Demographic Data

In the first instance, demographic data were analysed by obtaining mean scores and standard deviations for the variables *age, years practicing MFT,* and *years practising any form of therapy.* Subsequently, percentages of the total sample were generated for the variables *gender, ethnicity, theoretical orientation, highest degree held,* and *client groups worked with.* This data was compared against the demographic profile of the entire population of AAMFT members (Northey, 2002).

Use of Homework Data

Data regarding the use of homework by participants was analysed for both the entire sample and for participants working with each group of clients. The frequency that participants estimated they used homework during the first ten sessions, and the number of tasks participants estimated they would assign per session, were analysed by calculating the mean value for these scores and percentage of the sample that endorsed each frequency rating. The difference between the mean scores for each population group was then analysed to obtain an indication of whether the difference between groups were statistically significant, or rather if they were merely an artefact of random error. As it was found that the variable *use of homework* did not meet the assumptions of

parametric ANOVA analysis, differences in homework use between each client population was investigated using a Kruskal-Wallis analysis of variance test (Daniel, 1990; Pallant, 2002).

The frequency with which different types of tasks were used by participants, the resources used when selecting assignments, and the terms used to describe homework tasks to clients, were each calculated by averaging the values obtained from participants for these items. This was undertaken for the entire population, for each client group, and for clinicians of different theoretical orientations.

Attitudes and Experience of Barriers data

Data regarding clinicians' attitudes and experience of barriers were analysed by calculating the mean rating for each barrier provided by the entire sample of therapists and subsequently for each client group. Differences observed in the barriers experienced by therapists working with each client group were also investigated using the Kruskal-Wallis analysis of variance test.

Factors Affecting the Frequency of Homework Use

For the final phase of data analysis, a Structural Equation Model was developed based on the hypothesis that a clinician's *experience of homework barriers,* their *attitudes towards homework barriers,* and the degree of *quality* and *compliance* clients have demonstrated to previously assigned tasks, would each correlate with the *frequency* to which clinicians use homework in their clinical practice (Hypothesis 10; see Figure 6.1). A model of this relationship was developed in two stages. In the first instance, a confirmatory factor analysis (CFA) was conducted using the data reduction function of SPSS 13 (SPSS, 2004). This was done to ensure the items contained within the *experience* and *attitudes* sections of the questionnaire were both empirically and conceptually distinct from each other. By removing those items that loaded on both factors, the items within each section were collapsed into separate scales[7]. These scales could then be used as observed variables within the structural equation model. The second stage of analysis involved specifying the

[7] Ideally, a cross-validation of this analysis would also have been performed by randomly splitting the data into two groups and comparing the results of a factor analysis with each half (Picard & Cook, 1984). However, the sample obtained was not large enough to permit this (see Chapter 8).

hypothesised relationships between each of the factors. This was done by constructing a Structural Equation Model to enable the strength of the relationship between each of the factors to be investigated. Structural Equation Models that use observed, rather than latent variables, to test direct and indirect relationships between factors are referred to as *path analysis* (Pedhazur, 1982). Path analysis directly measures the specified relationships between observed variables, and tests the significance of the relations between each (Byrne, 2001). In this way, path analysis offers estimates of the plausibility of *correlational* and *causal* effects between variables based on knowledge and theoretical considerations (Kline, 1998; Morrison, 2005). This portion of the analysis was undertaken using AMOS 5.0 Graphics.

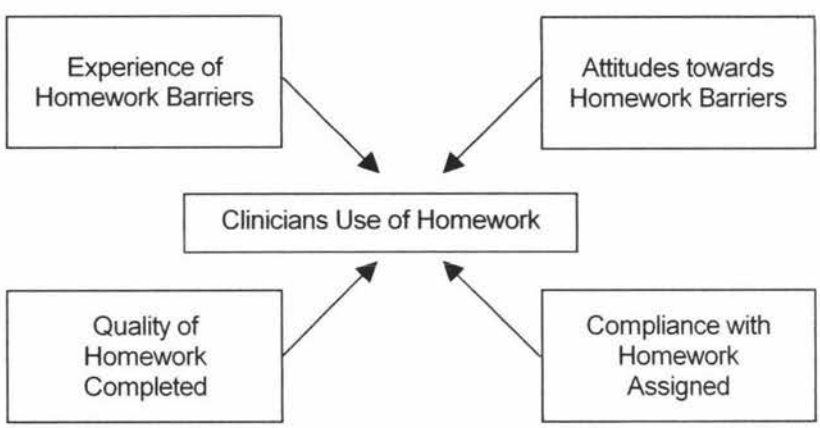

Figure 6.1

Factors Hypothesised As Impacting Upon Homework Tasks Within The Present Study

Chapter Seven: Pilot Studies

Overview

Data for the present thesis was collected in three stages. In the first instance, to assist with questionnaire development, a mini-pilot study ($N = 10$) was conducted in October 2005. Feedback was obtained from this sample regarding the face validity, content and structure of the questionnaire. A second pilot study ($N = 40$) was undertaken during November 2005, to provide an opportunity for final feedback and to procure an indication of the magnitude of response likely to be received by the main study. Finally, the main data collection phase was conducted between December 2005 and January 2006. The current chapter presents and discusses the results obtained from data collected from both pilot studies. Data from the main survey is detailed in Chapter 8.

Mini-Pilot Study

The primary aim of the mini-pilot study was to obtain feedback on the initial draft of the Marriage and Family Therapist Homework Questionnaire. Having canvassed the opinions of university academic staff, clinical practitioners and fellow students, it was also considered important to obtain feedback from members of the population from which the main sample would be drawn. To acquire feedback from this group, ten members of the AAMFT were approached to participate in this pilot. Respondents were not randomly selected, but rather were targeted for inclusion as they were known personally to a key collaborator of the study (Dr. Frank Dattilio, Harvard Medical School). Each respondent was requested to complete the Marriage and Family Therapist Homework Questionnaire, and to provide ratings on a feedback questionnaire regarding the survey's length, repetition, relevance to the respondent's work, and the likelihood that they would have completed the survey if it had arrived as part of the main distribution. Specifically, feedback was solicited to the following questions: "How did you feel about completing this questionnaire", with the available responses of 1 (It was too long), 2 (It was long, but manageable), 3 (It asked too many of the same questions and it was tedious), 4 (Questions were repeated, but this was acceptable), 5 (It didn't really pertain to my work at all), and 6 (It was relevant to my work); "If you had received this

questionnaire as part of the main survey mail out, would you have been as inclined to complete it?", with the available responses of 1 (Yes), 2 (Maybe), 3 (I don't know), and 4 (No); "Is there any other aspect of the questionnaire that was annoying to you?", with the available responses of 1 (Some of the language), 2 (Grammatical errors or misspellings), 3 (Layout or format of the questionnaire), and 4 (Other). Finally, participants were asked to comment on any aspects of the survey they found frustrating or unclear, and were asked to provide other feedback they considered pertinent. (Appendix E).

Feedback from Mini-Pilot

Of the ten practitioners contacted to participate in Pilot Study One, nine returned completed questionnaires and one chose not to respond. The responses obtained via the feedback questionnaire produced encouraging results. Overall, most respondents (*N*=7) felt the survey was long but manageable. Five respondents noted that although there was some degree of repetition within the questions, this was acceptable; and four respondents indicated that they considered the survey to be relevant to their work. Three respondents indicated they would not have been likely to complete the survey if it had arrived as part of the main sample. However, two respondents suggested they would have done so, with the majority (*N*=4) indicating that they *may have* responded. Finally, seven participants reported they found nothing to be frustrating about the survey. Two respondents indicated some of the language was a problem for them, and one participant indicated there was a problem with the layout. One final comment was offered, in which the respondent indicated they would have preferred the category "almost never", rather than 'never', to be included in Sections A, B,C,D, E and F. No spelling or grammatical errors were noted.

In addition to the responses obtained from the feedback questionnaire, the data provided to the questions in the main questionnaire was inspected for the presence of any unreported difficulties or unexpected patterns of responding. Participants had managed to follow all instructions within the questionnaire and no difficulties were identified. Due to the small sample size and systematic selection of participants, no formal analysis of the data was conducted.

The results obtained from the mini-pilot study were favourable, providing preliminary evidence that the questionnaire could successfully be used with a sample of AAMFT members to gather useful data for all areas investigated. Feedback further indicated that an acceptable proportion of potential participants (i.e., 30% – 40%) would likely complete the questionnaire if it had been sent unsolicited as part of the main sample. This was deemed acceptable, as previous therapists surveys of clinician attitudes have yielded response rates in the region of 30% (e.g., Addis & Krasnow, 2000; Kazantzis, Lampropoulos & Deane, 2005).

As the feedback suggested that no major changes were necessary to improve the clarity of the questionnaire, the survey was considered ready for distribution to a larger sample of AAMFT members. However, based on the feedback that 7 out of 9 respondents had felt the survey was "long but manageable", it was possible that the length of the questionnaire may deter a number of potential participants from responding. Therefore, due to the considerable costs of conducting mail survey research, a second pilot study was conducted to obtain an indication of the likely rate of response this questionnaire would receive if sent unsolicited to an actual sample of respondents.

Pilot Study Two

The primary aim of Pilot Study Two was to investigate the rate of response that would likely be received if the full compliment of one thousand surveys were distributed. It was anticipated this second pilot would also provide a further opportunity to identify potential difficulties or problems with the questionnaire that had been previously overlooked.

The distribution process for Pilot Study Two was conducted following the protocol devised for distribution of the main survey (see Chapter 6). A sample of 40 mailing labels was selected at random from the 4000 that had been purchased from the AAMFT. A survey pack, containing the questionnaire, covering letter and a pre-stamped, self-addressed envelope, was then distributed to each member of the sample during October 2005.

Results

Of the 40 practitioners sampled for Pilot Study Two, 16 returned completed questionnaires obtaining an overall response rate of 40%. This rate of response was considered favourable and suggested it was likely an adequate number of surveys would be returned if the main survey were to be conducted. To obtain an estimate of how representative the present sample was of the AAMFT population as a whole, respondent demographic data were compared with a previously published report of AAMFT membership (Northey, 2002). Descriptive statistics of participant demographic and their professional characteristics are presented in Table 7.1. In terms of participant age, ethnicity, years spent in clinical practice and highest degree held, the present sample was similar to the composition of the entire AAMFT population (Northey, 2002). Differences were observed between the present sample and the composition of AAMFT membership with regards to gender and theoretical orientation. However, taking the small sample size into consideration, the match between the present sample and the AAMFT population was good.

No further feedback was received from participants and no difficulties were noted with the content or structure of the questionnaire. Each respondent completed all applicable sections of the questionnaire and no systematic errors were noted in the responses obtained. Therefore, due to the favourable response rate obtained, the ability of the survey to gather information from a representative sample of AAMFT members, and the ability demonstrated by the questionnaire to gather useful data regarding clinician's attitudes / experience of homework barriers, it was deemed feasible to continue with distribution of questionnaires.

Table 7.1

Pilot Study Two: Demographic Data (AAMFT Demographic Data Presented for Comparison)

	Pilot Study Two (n = 16)		AAMFT population (n = 292)	
Age				
Mean (SD)	51.8 years (8.64)		53.0 years (8.1)	
Years in Practice				
MFT (SD)	20.84 years (11.0)		16.4 years (7.3)	
Any Field (SD)	23.69 years (10.3)		19.7 years (8.2)	
	n	***%***	***n***	***%***
Gender				
Male	4	25.0	121	41.6
Female	12	75.0	171	58.4
Ethnicity				
European-American/Caucasian	16	100.0	278	95.0
Other	0	0.0	14	5.0
Highest Degree Held				
Vocational	1	7.1	123	42.2[a]
Bachelors	0	0.0		
Masters	6	64.3	93	31.8
Doctoral	3	28.6	76	26.0
Theoretical Orientation				
CBT	4	25.0	80	27.3
Systemic	2	22.2	31	10.6
Psychodynamic	2	12.5	8	2.7
Experiential	1	6.3	4	1.4
Alderian	1	6.3	7	2.4
Eclectic	3	18.8	24	8.2
Other	0	0.0	177	60.7[b]

Note. MFT= Marriage and Family Therapy; CBT = Cognitive Behavioural Therapy; Comparison demographic data presented for members of the American Association of Marriage and Family Therapy (AAMFT) was obtained from Northey (2002).

[a] Northey (2002) combines vocational training and bachelors degree together.
[b] Northey (2002) allowed respondents to describe their primary therapy model. This produced a large number of categories, most of which were not included in the present survey.

Chapter Eight: Results

Participant Sample

At the completion of this study, a total of 1000 questionnaires had been sent out to a randomised sample of practicing clinician's selected from the AAMFT database. Of the practitioners sampled, 130 returned surveys. Two were returned uncompleted, with 128 containing useable data. This yielded an overall response rate of 12.8%. In order to obtain a sample that was large enough to permit analysis, data obtained from pilot study two was combined with that collected from the main survey. It was deemed feasible to combine samples in the way, as data from pilot study two was gathered from the same population as the main survey, using an identical methodology, with no alterations having been made to the survey (see Chapter 7). The inclusion of data from pilot study two increased the total sample size to 144, yielding an overall response rate of 14%.

Descriptive statistics of participant demographics and professional characteristics are presented in Table 8.1. By way of evaluating how representative the present sample was of the entire AAMFT population, respondent demographic characteristics were compared with the most recently published report of AAMFT membership (Northey, 2002). In terms of age, gender, ethnicity and years spent in clinical practice, the main sample for the present study bore close resemblance to the composition of the wider AAMFT population. Differences were, however, observed for the variables theoretical orientation, highest degree held and clinician caseloads. Overall, the match between the present sample and the wider AAMFT membership was good, and was considered to be consistent with this population.

As shown in Table 8.1, the majority of participants were female (n = 95, 66.4%), with males (n = 48, 33.6%) comprising only one third of the sample. One respondent did not specify their gender. The ages of participants ranged from 29 to 70 years for males (M = 53.3 years, SD = 11.1), and 28 to 75 years for females (M = 54.41 years, SD = 10.5), with an overall mean age of 53.7 years (SD = 11.5).

Table 8.1

Demographic Data of Participant Sample and AAMFT Membership

	Participant Sample (n = 144)		AAMFT population (n = 292)	
Age				
Mean (SD)	53.7 years (11.5)		53.0 years (8.1)	
Years in Practice				
MFT (SD)	19.2 years (9.4)		16.4 years (7.3)	
Any Field (SD)	21.2 years (9.6)		19.7 years (8.2)	
	n	***%***	***n***	***%***
Gender				
Male	48	33.6	121	41.6
Female	95	66.4	171	58.4
Ethnicity				
European-American/Caucasian	132	93.6	278	95.0
Other	9	6.4	14	5.0
Highest Degree Held				
Vocational	1	0.7	123	42.2[a]
Bachelors	1	0.7		
Masters	91	63.6	93	31.8
Doctoral	50	35.0	76	26
Theoretical Orientation				
Systemic	67	46.5	31	10.6
CBT	38	26.4	80	27.4
Psychodynamic	13	9.0	8	2.7
Experiential	8	5.6	4	1.4
Post-modern	4	2.8	10	3.4
Solution Focused	2	1.4	19	6.5
Eclectic	8	5.6	24	8.2
Other	4	2.8	116	39.7[b]

Note. MFT= Marriage and Family Therapy; CBT = Cognitive Behavioural Therapy; Comparison demographic data presented for members of the American Association of Marriage and Family Therapy (AAMFT) was obtained from Northey (2002).

[a] Northey (2002) combines 'vocational training' and 'bachelors degree' together.

[b] Northey (2002) allowed respondents to describe their primary therapy model. This produced a large number of categories, most of which were not included in the present survey.

In terms of ethnicity, 132 respondents (93.6%) described themselves as European, with two individuals identifying as either African-American, Asian-American or Hispanic/Latino. One participant reported being of Native American decent and one indicated that were Jewish. Four participants endorsed the *other* category but did not specify their ethnicity. On average the respondents had spent a mean length of 19.2 years (SD = 9.4) practicing Marriage and Family therapy (males, M = 21.4, SD = 10.5; females, M = 18.1, SD = 8.5), and a mean length of 21.2 years (SD = 9.6) practicing any form of therapy (males, M = 24.5, SD = 10.5; females, M = 19.5, SD = 8.7). The majority of respondents (n = 67, 46.5%) described their primary theoretical orientation as drawing upon Systemic theory, with 26.4% (n = 38) endorsing a CBT approach, 9% (n = 13) psychodynamic, 5.6% (n = 8) Experiential, and 5.6% (n = 8) reported using an eclectic approach in their clinical practice. The highest degree held by participants was most commonly a Masters (63.6%; n = 91) or Doctoral (35.0%; n = 50) degree, with the remaining two respondents having completed either a Bachelors qualification (0.7%; n = 1) or vocational training (0.7%; n = 1).

Table 8.2 outlines the proportion of respondents working with clients from each population of interest in this study. 36.2% (n = 51) reported working individually with children, 65.7% (n = 92) with adolescents, and 72.5% (n = 100) with family groups. As the percentages suggest, there was a considerable overlap in the client populations with which individual respondents worked. 34.8% (n = 49) of respondents indicated working with both children and adolescents, 34.8% (n = 49) with both children and families, 56.3% (n = 80) with both adolescents and families, and 33.6% (n = 47) with all three groups. In addition, it was found that 20.6% (n = 28) of respondents reported that they did not work with any of these populations, suggesting that by the criteria of the present thesis they worked solely with adult clients on an individual basis.

As is illustrated by Figure 8.1 (below), there were few clinicians within the sample who reported working exclusively with children, adolescents or families alone (1%, 3% and 6%, respectively). Due to the large degree of overlap, the ability of the present study to identify trends regarding clinicians' experience of working with individual client groups was limited.

Table 8.2

Proportion of the entire sample working with each client group

Client Population	*n*	Percentage of entire sample (*n*=144)
Children	51	36.2%
Adolescents	92	65.7%
Families	100	72.5%
Both Children and Adolescents	49	34.8%
Both Children and Families	49	34.8%
Both Adolescents and Families	80	56.3%
Children, Adolescents and Families	47	33.6%
Individual Adult clients only	28	18%

Note. Percentages do not sum to 100%, as clinicians reported working with more than one client group

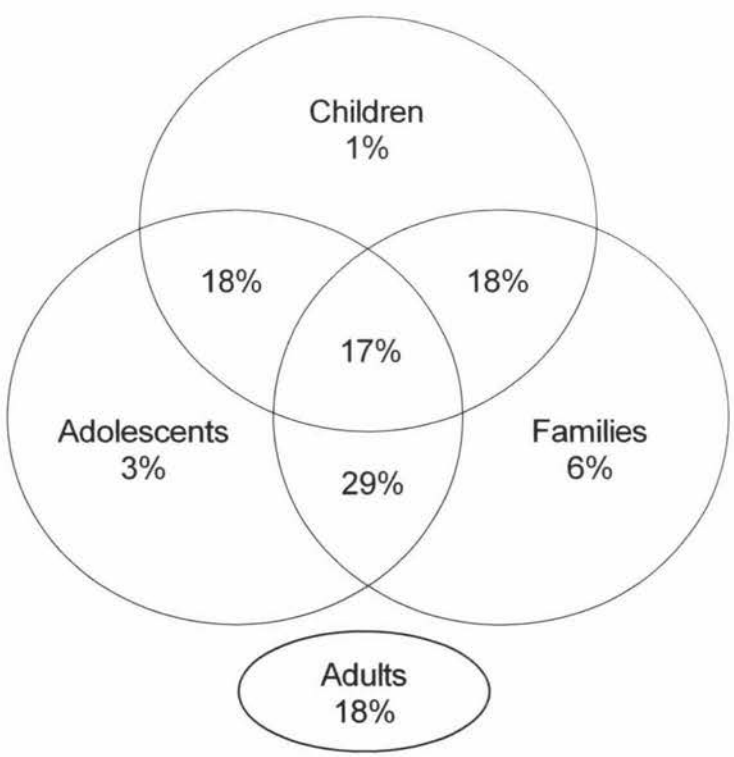

Figure 8.1

Venn Diagram Showing the Percentage of Respondents Working With Each Client Group

Homework Use

Almost all (96.5%; *n* = 139) respondents in the present sample indicated they had assigned some form of between-session activity as part of their therapeutic practice. Table 8.3 summarises the frequency that homework tasks were reported as being used by therapists working with children, adolescents and families. Of those respondents that indicated they worked with each group, 20.6% (*n* = 29) reported they would *often* or *almost always* assign homework to children, 40.7% (*n* = 57) with adolescents, and 52.2% (*n* = 72) with families (Hypothesis 1).

Table 8.3

Frequency of Homework Use

	Client Populations			
	Overall (%)	Children (%)	Adolescents (%)	Families (%)
Never	23.6	50.3	25.7	23.0
Rarely	25.7	13.5	8.6	3.6
Occasionally	31.9	15.6	25.0	20.6
Often	14.6	14.9	31.4	38.7
Almost Always	2.8	5.7	9.3	14.1

Over the course of the first 10 sessions, respondents estimated that they would assign an average of 3.8 different types of homework activities, with most practitioners estimating they would assign two, three, four, or greater than six different assignments during this period (15.7%, 36%, 15%, and 22.1% of the sample, respectively). Most respondents also indicated that they would assign either one or two different tasks per therapy session (72.1% and 20.1%, respectively) (see Table 8.4).

Table 8.4

Number of Tasks Assigned

	First ten sessions		Tasks per session	
	n	%	*n*	%
One	3	2.1	104	74.3
Two	22	15.7	29	20.7
Three	51	36.4	6	4.3
Four	21	15.0	1	0.7
Five	12	8.6		
Six or more	31	22.1		

Table 8.5 presents the mean number of tasks used per session, and the mean number of tasks used during the first 10 sessions, by theoretical orientation across the entire sample. In the present sample, when investigated using the nonparametric Kruskal-Wallis analysis of variance test[8], no statistically significant differences were found as a result of a clinician's theoretical orientation, in either the number of tasks assigned in the first ten sessions ($\chi^2 = 9.347$, $p = .096$), or the number of tasks assigned per session ($\chi^2 = 8.944$, $p = 0.111$) (Hypothesis 2).

Table 8.5

Number of Different Tasks Assigned by Theoretical Orientation

	First 10 sessions		Each session	
	M	*SD*	*M*	*SD*
Entire Sample	3.82	1.47	1.33	0.56
Systemic	3.86	1.44	1.25	0.53
Cognitive Behavioural	4.21	1.51	1.50	0.73
Psychodynamic	2.83	1.12	1.17	0.39
Experiential	3.86	1.86	1.29	0.49
Post-modern	3.25	0.50	1.00	0.00
Eclectic	3.38	1.51	1.63	0.74
Other	2.50	0.58	1.00	0.00

Note. *M* = mean number of tasks; *SD* = Standard Deviation

[8] As discussed in chapter six, the Kruskal-Wallis analysis of variance was selected for this investigation as the groups did not meet the requirements for using the parametric ANOVA or MANOVA tests. These analytic techniques assume that the sample is multivariate normal; shows homogeneity of variance; has linearity and that the data is of interval level (Coolican, 2004; Pallant, 2002). In the present study, each subset of data for which the variance between groups was explored were found not to show multivariate normality, nor linearity, thereby preventing the legitimate use of MANOVA. Therefore, all analysis of variance investigations discussed in this chapter have been undertaken using Kruskal-Wallis tests.

Tasks Used

Responses indicated that clinicians in the present sample used each of the twelve varieties of homework tasks included within the questionnaire (Hypothesis 3). However, it was found that each specific type of task was used to a differing extent (see Table 8.6). The most commonly assigned activity was *in vivo exposure* tasks, followed by *cognitive techniques*, *gathering data*, *activity scheduling*, and *parent training*.

Table 8.6

Use of Specific Types of Homework Tasks (n = 140)

	M	*SD*
In-vivo exposure	4.08	0.814
Cognitive techniques	3.86	0.898
Gathering data	3.86	0.806
Activity scheduling	3.80	0.875
Parent training	3.73	0.867
Relaxation practice	3.55	0.980
Bibliotherapy	3.53	0.843
Increasing pleasure	3.47	1.075
Increasing mastery	3.36	1.036
Manipulating behaviour	3.31	1.014
Interpersonal interaction	2.34	1.016
Hyperventilation	1.76	1.031

Note. *M* = Mean frequency; *SD* = Standard deviation

Given the high proportion of cognitive behaviourally trained therapists in the present sample (26.4%), it was possible this may have inflated the mean frequency that tasks strongly associated with CBT (e.g., cognitive techniques, in-vivo exposure, and activity scheduling) were reported to be used. To investigate the likelihood of this, the relationship between clinician's *theoretical orientation* and *tasks used* was investigated using the non-parametric Kruskal-Wallis analysis of variance test (see Table 8.7), with differences between the groups of therapists from each theoretical orientation subsequently explored via post-hoc Mann-Whitney U tests (see Table 8.9).

Table 8.7

Kruskal-Wallis Analysis of Homework Task Use by Theoretical Orientation

	Chi-Square χ^2	*df*	*p*
Bibliotherapy	6.855	5	0.232
Gathering data	7.289	5	0.200
Hyperventilation	10.218	5	0.069
Increasing mastery	16.833	5	0.005*
Increasing pleasure	10.055	5	0.074
In-vivo exposure	8.063	5	0.153
Interpersonal interaction	10.389	5	0.065
Manipulating behaviour	20.591	5	<0.001**
Relaxation practice	12.592	5	0.080
Parent training	12.937	5	0.098
Cognitive Techniques	24.028	5	<0.001**
Activity scheduling	5.637	5	0.343

* $p < 0.05$
** $p < 0.001$

Results of the Kruskal-Wallis test indicated that with the exception of *Increasing mastery, Manipulating behaviour and Cognitive techniques*, the frequency with which each of the homework activities were employed was not significantly different. However, due to the limited power of non-parametric tests, the above analysis does not indicate between which theoretical orientation groups this statistically significant difference is likely to have occurred. Inspection of the mean rank scores generated by the Kruskal-Wallis test for the three activities in which a significant difference was observed (i.e., *Increasing Mastery, Manipulating behaviour* and *Cognitive Techniques*) revealed that for all three activities, CBT practitioners reported using these tasks with the highest frequency (see Table 8.8)

Table 8.8

Mean Rank Scores For Homework Activities Showing Significant Differences Across Theoretical Orientation

	Increasing Mastery		Manipulating behaviour		Cognitive Techniques	
	n	*M*	*n*	*M*	*n*	*M*
Cognitive-Behavioural	35	82.8	36	82.6	38	87.7
Eclectic	8	74.3	8	49.8	8	45.3
Experiential	7	65.5	7	33.8	7	41.8
Systemic	63	57.5	59	59.3	64	61.2
Psychodynamic	12	47.6	12	48.8	12	66.0
Post-modern	3	37.2	3	61.8	3	27.2
Total	128		125		132	

Note. M = Mean Rank

By collapsing the results for each of the theoretical orientations other than CBT together into a single group, a post-hoc Mann Whitney U test was conducted to determine if the difference in the frequency with which these activities were used by CBT and non-CBT was statistically significant. As demonstrated by Table 8.9, this was indeed found to be the case (Hypothesis 4).

Table 8.9

Post-Hoc Mann Whiney U Test of Variance of Task Use Frequency Across Theoretical Orientation

Homework Tasks x (CBT or Other)	U	*z*	*p*
Manipulating behaviour	987.5	-3.57407	.000**
Increasing mastery	896	-4.04329	.000**
Cognitive Techniques	981.5	-4.28159	.000**

** $p < 0.001$

Resources employed

Although respondents indicated drawing upon a range of resources when selecting homework assignments, it was most commonly reported that tasks were selected based upon the case

conceptualisation of a client's presenting problems (47.8%) (Hypothesis 5; see Table 8.10). This was followed by respondents drawing upon diagnosis specific treatment models (14.2%), published therapy guides (11.2%) and published practice planners (9.0%).

Table 8.10

Resources Used By Respondents When Selecting Between-Session Tasks

	n	%
Conceptualisation/Formulation	64	47.8
Diagnosis-specific model	19	14.2
Published therapy guides	15	11.2
Published practice planners	12	9.0
Own experience	9	6.7
Treatment manuals	4	3.0
Other	3	2.2
Published outcome studies	2	1.5
Seminars/Workshops	2	1.5
Books	2	1.5
Published case studies	1	0.7
12 step program	1	0.7
Total	134	100.0

Note. % = Percentage of respondents that reported endorsing each type of homework assignment.

Terms Used to Describe "Homework"

Data indicated that although there was some variation in the terms respondents used when describing between-session tasks to clients, by far the most widely used term was "homework" (42.4%), followed by "assignments" (14.4%), "experiments" (10.8%), and "between-session tasks" (10.8%) (Hypothesis 7). In addition, a number of other terms were reported to be used by clinicians that had not been previously documented (see Table 8.11).

Table 8.11

Frequency Of Terms Used By Clinicians When Describing Between-Session Tasks To Clients

	n	%
Homework	59	42.4
Assignments	20	14.4
Experiments	15	10.8
Between-session tasks	15	10.8
Home practice	9	6.5
Tasks	7	5.0
Something to try	2	1.4
Home Play	2	1.4
Self-Help	1	0.7
Takeaways	1	0.7
Free Therapy	1	0.7
Suggestions	1	0.7
Healthy Self Talk	1	0.7
Therapy Work	1	0.7
Helpful things	1	0.7
Home Fun	1	0.7
None	2	1.5
Total	133	100.0

Note. % = Percentage of respondents that reported using each term

Attitudinal data indicated that respondents held a range of beliefs as to whether using the word 'homework' has a negative impact on client compliance with between-session tasks. However, most respondents (54.2%) indicated they either disagreed or strongly disagreed (18.3% and 35.9%, respectively) with the statement "Using the term "*homework*" usually leads to non-completion of between-session tasks". Nearly a third of the sample (31.7%) indicated they were neutral in their attitudes regarding the impact of the word homework on client compliance. A small proportion of respondents (14.1%) indicated they agreed or strongly agreed (12.7% and 1.4%, respectively) that the word homework leads to non-completion of between-session tasks (Hypothesis 6). Exploring this data with a Kruskal-Wallis test for analysis of variance, indicated there were no statistically significant differences in the attitudes held by clinicians as a function of theoretical orientation ($\chi^2 = 2.041$, $df = 4$, $p = .73$), the level of client compliance with tasks clinicians had previously experienced ($\chi^2 = 2.797$, $df = 2$, $p = .25$), or the degree of client quality of task completion clinicians had previously experienced ($\chi^2 = 1.635$, $df = 2$, $p = .44$).

Experience of Barriers

Respondents were asked to estimate the frequency with which a range of homework barriers identified from the literature review (see Chapter 4) had occurred in their clinical experience. In the first instance, barriers hypothesised as pertaining to all client groups were presented to each respondent. Subsequently, barriers hypothesised as arising for specific client groups were presented to clinicians who reported working with each client population.

General Barriers Among All Populations

Data obtained by the present study supported the hypothesis that all of the barriers proposed from the literature review would occur in clinical practice (Hypothesis 8). Survey participants reported that each barrier had occurred at least occasionally in their clinical experience. The most commonly encountered homework barrier was *Practical Obstacles*, followed by *Client Negative Beliefs About a Task* and the *Task Was Not Considered Beneficial by the Client*. *Personal, Family and Cultural beliefs* were reported as having had the least impact on client's completion of homework tasks (see Table 8.12)

Table 8.12

Experience of Barriers to Homework Completion Hypothesised as Pertinent To All Client Groups

	M	*SD*
Practical Obstacles	3.2	0.790
Client Negative Beliefs	2.9	0.919
Not Considered Beneficial	2.8	0.881
High Psychopathology	2.8	1.056
Too Difficult	2.7	0.767
Poor Rationale	2.5	0.822
Poor Match with Therapy Goals	2.4	0.727
Non-Specific	2.2	0.737
Lack of Comprehension	2.2	0.745
Therapeutic Process Factors	2.1	0.620
Personal, Family, & Cultural Beliefs	1.7	0.676

Note. *M* = Mean response; *SD* = Standard Deviation

Inspection of the responses provided by clinicians working with children, adolescents, families or individual adult client groups, suggested there was little variation in the experience of these barriers across each population. This was formally tested by conducting an analysis of variance test on this data. As shown in Table 8.13, the results of this analysis confirmed there were no significant differences in the barriers experienced by clinicians working with each client population

Table 8.13

Kruskal-Wallis Analysis of Variance of Homework Barriers Experienced by Each Client Population

	Chi-Square χ^2	*df*	*p*
Poor Rationale	0.034	2	0.983
Non-Specific	1.448	2	0.485
Too Difficult	0.073	2	0.964
Client Negative Beliefs	2.685	2	0.261
High Psychopathology	2.938	2	0.230
Personal, Family, Cultural Belief	0.112	2	0.946
Lack of Comprehension	0.061	2	0.970
Therapeutic Process Factors	2.027	2	0.363
Practical Obstacles	4.754	2	0.093
Poor Match with Therapy Goals	0.537	2	0.765
Not Considered Beneficial	0.247	2	0.884

Homework Barriers with Children and Adolescents

Respondents who indicated that had assigned homework tasks to children and adolescents were asked to rate the frequency they had encountered barriers hypothesised to pertain specifically to these groups. Each of the barriers identified from the literature review were reported to have occurred in clinical practice (Hypothesis 8). There were no statistically significant differences observed in the ratings provided by clinicians working with either children or adolescents for each of the barrier experienced, with the exception of the item *no support from caregivers* (see Table 8.14). Clinicians who reported working with children rated *no support from caregivers* as preventing homework completion at a significantly higher frequency than those working with adolescents. However, as the difference in the ratings provided by clinicians working with these groups was not

otherwise statistically significant, data pertaining to barriers experienced by children and adolescents have therefore been presented together.

Table 8.14

Kruskal-Wallis Analysis of Variance of Homework Barriers Experienced by Client Population

	Chi-Square χ^2	*df*	*p*
Dysfunction in Child's family	3.465	1	0.063
No support from caregivers	8.589	1	0.003*
Belonging to multiple families	3.452	1	0.063
No support from significant others	2.149	1	0.143
Poor communication between caregivers	2.184	1	0.139
Poor understanding by caregivers	1.403	1	0.236
Size of child's family	0.917	1	0.338
Not appropriate for child's age	0.605	1	0.437

* $p < 0.05$

The barrier receiving the highest rating by clinicians working with young clients was *Dysfunction in a Young Person's Family*. This was followed by *No Support From Caregivers, Belonging to Multiple Families*, and *No Support From Significant Others Outside of the Family* (Hypothesis 9). Assigning tasks *Not Appropriate For a Young Person's Age* and *The Size of the Young Person's Family* were reported as having occurred least often (Table 8.15).

Table 8.15

Experience of Barriers to Homework Completion Hypothesised as Pertinent To Young Clients

	M	SD
Dysfunction in young persons family	3.4	0.833
No support from caregivers	3.0	0.985
Belonging to multiple families	2.9	0.946
No support from significant others	2.8	0.902
Poor communication between caregivers	2.7	0.905
Poor understanding by caregivers	2.5	0.833
Size of young person's family	2.0	0.848
Not appropriate for young parson's age	1.9	0.699

Note. *M* = Mean response; *SD* = Standard deviation

Homework Barriers with Family Groups

Respondents who had assigned homework tasks to family groups were asked to rate the frequency with which they had encountered barriers that were hypothesised as pertaining specifically to families. Each of the barriers identified from the literature review were reported to have occurred in clinical practice. The barrier receiving the highest rating was *One or More Family Members Did Not Support the Task* (Hypothesis 10). Having *No Support From Significant Others Outside of the Family* or *The Size of the Family* were reported as having occurred the least often in the clinical experience of respondents working with families (see Table 8.16).

Table 8.16

Experience of Barriers to Homework Completion Hypothesised as Pertinent To Families

	M	*SD*
One or more family members did not support task	3.5	0.888
No support from Significant others outside of family	2.3	0.819
Family size was too large	2.2	0.951

Note. *M* = Mean response; *SD* = Standard deviation

Attitudes

Hypothesis 11 proposed that clinicians would report that they believed each of the proposed barriers would impede homework if it were to arise in clinical practice. Overall the data obtained supported this hypothesis. Of all the barriers proposed, respondents indicated they believed that only *Not providing a written summary*, would be unlikely to interfere with homework completion. The barriers which respondents most strongly believed had the potential to disrupt homework completion across all populations were *Assigning too many tasks* and *Clients holding negative attitudes towards tasks*, followed by *Assigning tasks that are perceived as too difficult*, *Assigning non-specific or unclear tasks, Having a poor therapeutic relationship*, and *Assigning tasks that are incongruent with a client's cultural worldview* (see Table 8.17).

Table 8.17

Attitudes Towards Homework Barriers Held Across the Entire Sample of Respondents

	M	SD
Too many tasks	4.3	0.86
Client negative attitude	4.3	0.74
Task Difficulty	4.2	0.75
Non-specific Task	4.2	0.77
Therapeutic relationship	4.2	0.88
Culture	4.1	0.90
Lack of understanding task mechanics	4.0	0.74
Goals for therapy	4.0	0.87
Psychopathology	4.0	0.99
Rationale	4.0	0.93
Practical obstacles	3.9	0.82
Lack of support from significant others	3.8	0.83
Dysfunction in family	3.7	1.02
Lack of understanding by significant others	3.6	0.88
Collaboration	3.5	1.03
Negative attitudes by family	3.3	0.96
Not providing a written summary	2.7	0.99

Note. *M* = Mean frequency; *SD* = Standard deviation

Inspection of the attitudinal data obtained from clinicians working with each client group revealed there was little difference either in the rank order, or mean response, obtained for each attitudinal item across groups (See Appendix F). By selecting those respondents who indicated they worked only with children, adolescents, families or adults, an analysis of variance was conducted to investigate if any statistical difference existed between the attitudes held towards homework barriers by clinicians working with members of each client group (see Table 8.18). The results of this investigation confirmed there were no statistically significant differences between the attitudes held by clinicians working with each group.

Table 8.18

Kruskal-Wallis Analysis of Variance of the Attitudes Held by Clinicians Working With Each Client Group

	Chi-Square Σ^2	*df*	*p*
Poor Rationale	1.15	2	0.56
Non-specific Tasks	1.45	2	0.48
Task Difficulty	1.98	2	0.37
Client Negative Attitude	0.42	2	0.81
High Psychopathology	0.33	2	0.85
Cultural Beliefs	3.44	2	0.18
Poor Match with Client Goals for therapy	0.29	2	0.86
Poor Therapeutic Relationship	0.35	2	0.84
High Dysfunction in Family	1.42	2	0.49
Practical obstacles	5.06	2	0.08
Lack of Collaboration	4.41	2	0.11
Too many tasks	1.29	2	0.52
Negative attitudes by family	0.25	2	0.88
Lack of support from significant others	1.76	2	0.41
Lack of understanding by significant others	1.23	2	0.54
Lack of understanding task mechanics	4.38	2	0.11
Not providing a written summary	0.22	2	0.90

Relationship between experience, attitudes, quality, compliance and homework use

The final hypothesis of the present study (Hypothesis 12) was that there would be a significant correlation between the frequency with which clinicians use homework and i) a clinician's *attitudes* towards homework barriers, ii) a clinician's *experience* of encountering barriers in their own practice, iii) a clinician's perception of the *quality* clients have demonstrated to previously assigned tasks, and iv) a clinician's perception of the *compliance* clients have demonstrated to previously assigned tasks (see Figure 8.2). The relationship between each of these five variables was investigated using structural equation modeling (SEM), through developing and exploring an

observed variable correlational path model (Byrne, 2001). It had initially been proposed that these relationships would be investigated for therapists working with children, adolescents and families individually. However, due to the small sample size and large degree of overlap in the client groups respondents reported working with, this was not possible. Rather, a general model for clinicians working with all populations was investigated. In the model presented below, the variables were assigned labels as follows, *Experience of homework barriers* (EXP), *Attitudes towards homework barriers* (ATT), *Quality of homework completion* (QUAL), *Compliance with homework task* (COMP), and *Frequency of homework use* (USE).

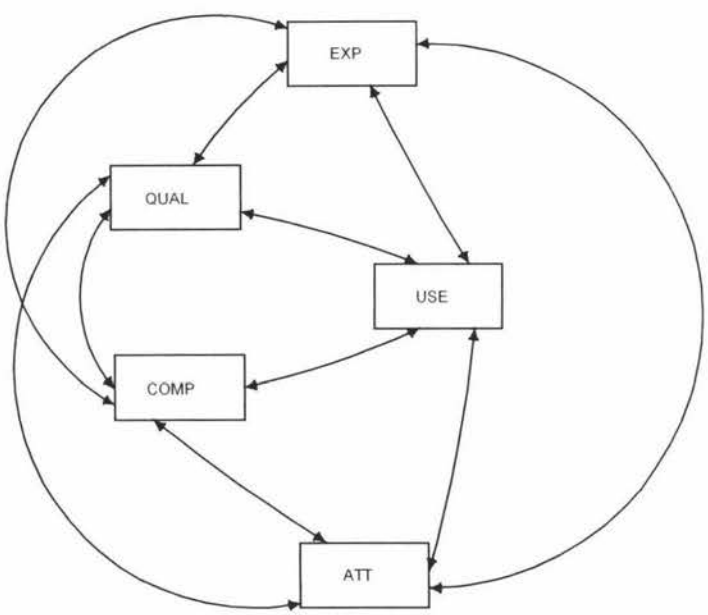

Figure 8.2
Path Model Showing the Correlational Relationships to be Investigated

Prior to conducting this investigation, the questionnaire items to be included in the analysis were first screened to ensure the items conceptualised as measuring the constructs *experience* and *attitudes* did not overlap each other. If items were found to provide a measure of both *experience* and *attitudes* it is likely that this would force a statistical relationship between the constructs, as these items would in effect be measuring the same thing. Therefore, to verify these constructs were internally coherent and empirically distinct, a confirmatory factor analysis was first conducted.

Factor Analysis

The questionnaire items that enquired about clinicians' *experience* of and *attitudes* towards barriers to homework completion were factor analysed together. As noted, the small sample size prevented an investigation of the items pertaining to each of the therapist/client groups. Therefore, only the *experience of barriers* items from Section B of the questionnaire (i.e., all populations) were included in the experience scale, while those pertaining to individual client populations were omitted (i.e., experience items from Sections C, D and F).

The 28 items (i.e., eleven *experience of barriers* items, questions B1 to B11, and seventeen *attitudinal* items, questions H1 to H17) were factor analysed with Principal Component Analysis (PCA; Coolican, 2002; Tabachnick & Fidell, 2001). The obtained solution was then transformed using Varimax rotation in order to simplify and improve its interpretability (Hubbard & Allen, 1987). The solution was set for two factors to represent the two components (i.e., experience and attitudes). A Parallel Analysis of Eigen values (Horn, 1965) produced by the present study was found to support the two-factor solution proposed[9] (see Table 8.19). For a discussion of the use of parallel analysis the reader is referred to Appendix G.

Table 8.19

Comparison of Eigenvalues Obtained from Principal Component Analysis of Questionnaire Data and the Corresponding Values Generated by Parallel Analysis

Component Number	Actual Eigen value from PCA	Criterion value from parallel analysis	Decision
1	**5.342**	1.9045	Accept
2	**3.471**	1.7523	Accept
3	1.538	**1.6516**	Reject
4	1.199	**1.5581**	Reject
5	1.128	**1.4802**	reject

Note. Values in **bold** indicate the highest Eigen values for each component; Only first five values shown; All other component values were rejected; number of variables = 27; number of subjects = 144; number of replications = 100; PCA = Principal Component Analysis

[9] Eigen values were generated for Parallel Analysis using the program *Monte Carlo PCA for Parallel Analysis* (Watkins, 2000).

Prior to performing PCA, the suitability of data for factor analysis was first assessed. Inspection of the correlation matrix revealed the presence of many coefficients of 0.3 or greater. The Kaiser-Meyer-Olkin value was 0.720, exceeding the recommended value of 0.6 (Kaiser, 1970, 1974) and the Bartlett's Test of Sphericity (Bartlett, 1954) reached statistical significance ($p < 0.001$). In combination, these elements were taken as an indication that factor analysis was appropriate (Pallant, 2002). The resulting matrix accounted for 42.2% of the variance.

Most of the items loaded on the hypothesised factors of *Experience* or *Attitudes* (see Table 8.20). All experience items loaded on the first factor and all but two of the attitude items loaded on the second. Two items, "(ATT)-Psychopathology" and "(ATT)-Dysfunction in the family", were found to cross load on both experience and attitude factors. These items measure the degree to which an individual's level of clinical or environmental distress impacts upon their ability to complete homework tasks. It is possible that these items were either not interpreted by respondents in the same manner as the other attitudinal items, or they may tap similar constructs to those contained in the experience items. Therefore, it is likely that the theoretical relationship between these items may force a statistical relationship between the constructs of attitudes and experience. In order to make the eventual data analysis as conservative as possible, both items were removed (Morrison, 2005). Furthermore, items "(ATT)-Practical Obstacles" and "(EXP)-Practical Obstacles" had an absolute value less than .3 and so were also removed (Coolican, 2002). In total, four items were identified for removal. The removed items are shaded in grey on Table 8.20 for ease of recognition.

Table 8.20

First Rotated Component Matrix Generated Through Principal Component Analysis of the Experience and Attitude Items. Items to Be Removed Are Shaded In Grey

Item	Item Wording Factor	1	2
B2 (exp)	The task was poorly defined or non-specific (e.g., lacked clarity on what, when, where, how often, and/or how long the task should take)	.721	
B10(exp)	The link/match between the task and the client's goals for therapy was unclear	.696	
B1 (exp)	The rationale for the task was not effective (e.g., not clear, understood, accepted)	.670	
B6 (exp)	The task was inappropriate for the client's personal, family, or cultural beliefs	.629	
B7 (exp)	The client did not understand what to do (i.e., comprehension)	.598	
B4 (exp)	The client held negative beliefs towards the task (e.g., utility or relevance of task)	.576	
B11(exp)	The client did not consider the task to be beneficial (i.e., no pleasure, mastery)	.574	
B8 (exp)	The therapeutic alliance, collaboration, or relationship was poor	.557	
B3 (exp)	The client perceived the task to be too difficult (e.g., given current skill, task complexity)	.526	
B5 (exp)	A high degree of psychopathology interfered with task completion (e.g., clinical crisis)	.386	
B9 (exp)	A practical obstacle arose that was not anticipated (e.g., unexpected commitments)		
H6 (att)	Using tasks incongruent with client's cultural worldview leads to non-completion		.740
H7 (att)	Using tasks not related to the client's therapy goals usually leads to non-completion		.690
H8 (att)	A poor therapeutic relationship (e.g., lack of collaboration, poor therapeutic alliance) usually leads to task non-completion		.663
H12(att)	Assigning too many tasks usually leads to non-completion		.638
H16(att)	A lack of understanding about what is involved in a task (i.e., mechanics of how it is to be completed) usually leads to non-completion		.598
H3 (att)	Using tasks the client perceived to be too difficult/demanding leads to non-completion		.571
H2 (att)	Non-specific or unclear tasks usually lead to non-completion		.556
H14(att)	Lack of support from significant others (e.g., spouse, partner, family members, caregivers) usually leads to task non-completion		.535
H4 (att)	Negative client attitudes about tasks usually lead to non-completion		.523
H1 (att)	Having an ineffective rationale for tasks usually leads to non-completion		.505
H13(att)	Negative attitudes toward tasks held by the client's family/ friends (not involved in therapy) usually lead to non-completion		.490
H15(att)	Lack of understanding about a between-session task by significant others (e.g., spouse, partner, family members, caregivers) usually leads to task non-completion		.487
H11(att)	Assigning tasks that are not collaboratively selected usually leads to non-completion		.405
H9 (att)	High dysfunction in clients' families usually leads to task non-completion	-.311	.301
H5 (att)	High psychopathology or dysfunction in clients usually leads to non-completion	-.305	.307
H10(att)	Unexpected practical obstacles usually leads to task non-completion		

Note. exp = Experience item; *att* = Attitudinal item; Extraction: Principal Component Analysis. Rotation: Varimax with Kaiser Normalisation; Rotation converged in 3 iterations. Loading less than 0.3 are not shown

With the four indicated items removed from the analysis, the solution accounted for 51.6% of the variance and the items in each scale loaded together as single components. The revised Kaiser-Meyer-Olkin Measure of Sampling Adequacy had a value of 0.754, and Bartlett's test of Sphericity remained at a level of significance ($p < 0.001$). A second parallel analysis was performed for the new data set (see Table 8.21). This analysis continued to support the two-factor solution proposed. Table 8.22 shows the final PCA, with the solution set to two factors representing the two components.

Table 8.21

Comparison of Eigen Values from Principal Component Analysis and the Corresponding Values Obtained from the Second Parallel Analysis

Component Number	Actual Eigen value from PCA	Criterion value from parallel analysis	Decision
1	**5.281**	1.8250	Accept
2	**3.310**	1.6892	Accept
3	1.483	**1.5806**	Reject
4	1.176	**1.4943**	Reject
5[a]	1.107	**1.4108**	Reject

Note. Values in **bold** indicate the highest Eigen values for each component; Only first five values shown; All other component values were rejected; number of variables = 24; number of subjects = 144; number of replications = 100; PCA = Principal Component Analysis

Table 8.22

Final Rotated Component Matrix Generated from Principal Component Analysis of the Experience and Attitude Items

Item	Wording	Factor 1	2
B2 (exp)	The task was poorly defined or non-specific (e.g., lacked clarity on what, when, where, how often, and/or how long the task should take)	.717	
B10(exp)	The link/match between the task and the client's goals for therapy was unclear	.694	
B1 (exp)	The rationale for the task was not effective (e.g., not clear, understood, accepted)	.672	
B6 (exp)	The task was inappropriate for the client's personal, family, or cultural beliefs	.607	
B7 (exp)	The client did not understand what to do (i.e., comprehension)	.605	
B11(exp)	The client did not consider the task to be beneficial (i.e., no pleasure, mastery)	.593	
B4 (exp)	The client held negative beliefs towards the task (e.g., utility of specific task)	.590	
B8 (exp)	The therapeutic alliance, collaboration, or relationship was poor	.583	
B3 (exp)	The client perceived the task to be too difficult (e.g., given current skill, task complexity)	.540	
B5 (exp)	A high degree of psychopathology interfered with task completion (e.g., clinical crisis)	.448	
H6 (att)	Using tasks incongruent with a client's cultural worldview leads to non-completion		.747
H7 (att)	Using tasks not clearly related to the client's goals for therapy leads to non-completion		.710
H8 (att)	A poor therapeutic relationship (e.g., lack of collaboration, poor therapeutic alliance) usually leads to task non-completion		.664
H12(att)	Assigning too many tasks usually leads to non-completion		.644
H16(att)	A lack of understanding about what is involved in a task (i.e., mechanics of how it is to be completed) usually leads to non-completion		.641
H3 (att)	Using tasks perceived by the client to be too difficult usually leads to non-completion		.600
H2 (att)	Non-specific or unclear tasks usually lead to non-completion		.598
H1 (att)	Having an ineffective rationale for tasks usually leads to non-completion		.570
H14(att)	Lack of support from significant others (e.g., spouse, partner, family members, caregivers) usually leads to task non-completion		.506
H4 (att)	Negative client attitudes about tasks usually lead to non-completion		.501
H15(att)	Lack of understanding about a between-session task by significant others (e.g., spouse, partner, family members, caregivers) usually leads to task non-completion		.459
H13(att)	Negative attitudes toward tasks held by the client's family/ friends (not involved in therapy) usually lead to non-completion		.456
H11(att)	Assigning tasks that are not collaboratively selected usually leads to non-completion		.387

Note. exp = Experience items; *att* = Attitudinal items; Extraction: Principal Component Analysis. Rotation: Varimax with Kaiser Normalisation; Rotation converged in 3 iterations. Loading less than 0.3 are not shown

The rotated solution presented in Table 8.22 clearly shows the presence of simple structure (Thurstone, 1947), with both components showing a number of strong loadings on each scale (Pallant, 2002). The Cronbach's alpha reliability estimates for the experience and attitude scales were all found to be acceptable (α = 0.803 and 0.837 respectively) (Coolican, 2004). The resulting scales were therefore used in the subsequent path analysis by obtaining a mean score on each scale for all respondents.

Path Analysis

The factor analysis described above verified that the *experience* and *attitude* scales used in the questionnaire were not only internally coherent, but also measured conceptually and empirically distinct variables (Morrison, 2005; Tabachnick & Fidell, 2001). Consequently, it was possible to statistically test the relationship between these variables. In addition to experience of and attitudes towards homework barriers, the present study sought to investigate the relationship between these variables, the level of quality and compliance clinicians' have experienced clients to demonstrate towards previously assigned homework, and the frequency with which they use homework in their clinical practice. A measure of clinically-rated quality and compliance with homework was obtained from the mean scores provided by each respondent to items c2, d2 and f2 (compliance with homework for each population), and c3, d3, and f3 (quality of homework for each population) of the questionnaire. Likewise *frequency of homework use* was obtained from item a15 ("On average, how many between-session activities would you usually recommend during the first 10 treatment sessions?") (See Table 8.23).

Prior to engaging in Path Analysis, each of the five variables were tested for normality. As described earlier in this chapter, normality was tested by employing a One-Sample Kolmogorov-Smirnov test (Massey, 1951; Pallant, 2002). None of the variables reached the level of significance, indicating each could be considered approximate to a normal distribution (Attitudes, p = .160; Experience, p = .192; Use of homework, p = .59; Quality, p = .78; Compliance, p = .82).

Table 8.23

Compliance, Quality and Frequency of Homework Use items

Variable	Item	Wording
Compliance (COMP)	C2	In your experience, how would you describe children's average level of **compliance** with between-session activities?
	D2	In your experience, how would you describe adolescent's average level of **compliance** with between-session activities?
	F2	In your experience, how would you describe your family therapy clients' average level of **compliance** with between-session activities?
Quality (QUAL)	C3	In your experience, how would you describe children's average **quality** of between-session activity completion?
	D3	In your experience, how would you describe adolescent's average **quality** of between-session activity completion?
	F3	In your experience, how would you describe your family therapy clients' average quality of between-session activity completion?
Frequency of homework use (USE)	A15	On average, how many different types of between-session activities would you usually recommend during the **first 10 treatment sessions**?

Correlation Model of the Relationships Between All Five Factors

To investigate the relationships between each of the variables (as shown in Figure 8.2 above), the AMOS computer application (Version 5; Arbuckle, 1999) was used to complete the analysis.

SEM Assumptions

Estimation of parameters was based on the Maximum Likelihood method (Arbuckle, 1999), which assumes a) the sample is large, and b) the scale of the observed variables is continuous (Byrne, 2002). Kline (1998) suggests however, that what constitutes a *large* sample size is not a fixed quantity, but rather is dependant upon the number of parameters (hypothesised relationships) to be tested in a given model. A meta-analytic study by Breckler (1990) investigated the sample sizes that were used across 72 psychological research studies in which SEM was used as an analytic tool. The median sample size found by this analysis was 198 cases, with 53% of the studies using a sample that lay between 100 and 500 cases. However, as the number of subjects required for an analysis depends most upon the complexity of the model being tested, Kline (1998) proposed that a ratio of at least 10:1 be used, with 10 cases being obtained for every parameter to be estimated. By inspection of Figure 8.2, it can be seen that in the correlational model there were 10 parameters

to be estimated. Following Kline's 10:1 guideline, a minimum of 100 cases would be needed to adequately undertake this analysis. It was therefore considered that the sample obtained by the present study (n = 144) was adequate to undertake this analysis as this allowed approximately 14 participants per parameter estimated.

The second assumption of SEM is that the data to be analysed should be continuous. There has been much debate in the literature as to whether Likert scales, such as those used in the present study, can be considered to produce data that is continuous (e.g., Jamieson, 2004). Indeed, several authors have suggested that Likert scale data is ordinal and discrete, which thus violates this assumption of SEM (Coolican, 2002; Knapp, 1990). However, in response to this challenge, a statistical correction referred to as the Satorra-Bentler Scaled Statistic (SBSC; Satorra & Bentler, 1988) has been developed. This works to correct the test statistic that is generated by path analysis when discrete data is used and permits variables to be treated as if they were at the continuous level of measurement. The SBSC is frequently employed when testing data generated by Likert scales (Byrne, 2002). Therefore, in the interests of treating the present data in as conservative a manner as possible, the data of the present study was analysed by employing the Maximum Likelihood method with the Satorra-Bentler Scaled Statistic correction.

Goodness of fit statistics were generated for the model tested, to enable an evaluation of how well the model described the relationships between each variable. Indices of model fit included: the *Comparative Fit Index* (CFI; Bentler, 1990; Bentler & Bonett, 1980; where values greater than .9 indicate adequate fit), the *Normed Fit Index* (NFI; Bentler, 1992; Bentler & Bonett, 1987; where values greater than .9 indicate adequate fit), and the *Root-Mean-Square Error of Approximation* (RMSEA; Browne & Cudeck, 1993; where values of less than .05 indicate adequate fit) with a 90% confidence limit (CI).

The correlational relationships between each of the variables are presented in Figure 8.3. Table 8.24 shows the statistical significance of each of the paths tested. Fit of the correlational model was reasonable, with only the RMSEA statistic failing to reach significance (CFI = 1.00, NFI = 1.00, RMSEA = .178 [CI = .130 - .228]). The AMOS output is provided in Appendix H.

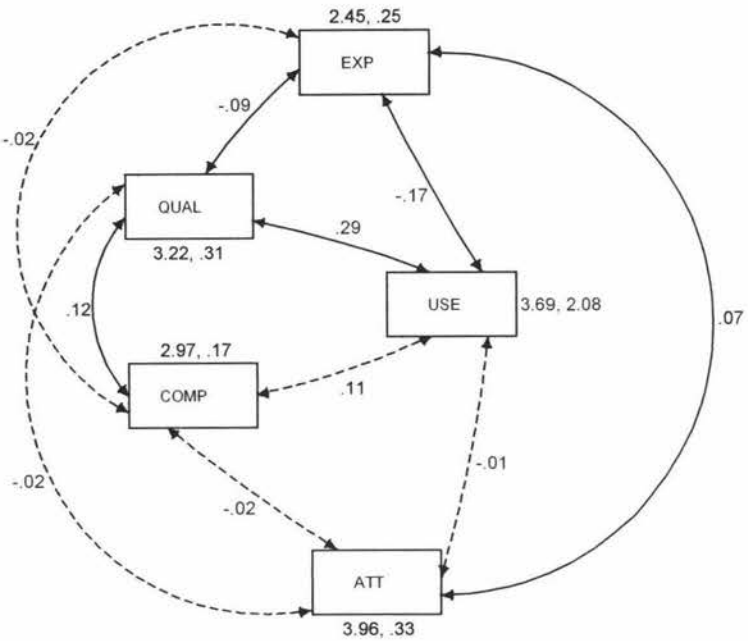

Figure 8.3

Correlation Model Showing Paths Between Each of the Five Factors. The Dashed Lines Indicate the Regression Between Two Variables Is Not Significant at the 0.05 Level

Table 8.24

Showing Critical Ratio values (parameter estimate divided by standard error) of the Regression Paths

Regression Path			*C.R.*	Estimate	*S.E.*	*P*
USE	↔	QUAL	3.126	0.294	0.094	0.002
QUAL	↔	COMP	4.344	0.123	0.028	0.000
COMP	↔	ATT	-0.899	-0.023	0.026	0.369
QUAL	↔	EXP	-2.807	-0.09	0.032	0.005
USE	↔	EXP	-2.126	-0.171	0.081	0.034
ATT	↔	EXP	2.133	0.068	0.032	0.033
USE	↔	COMP	1.724	0.113	0.066	0.085
USE	↔	ATT	-0.147	-0.013	0.09	0.883
COMP	↔	EXP	-1.051	-0.024	0.022	0.293
QUAL	↔	ATT	-0.581	-0.02	0.035	0.561

Note. C.R. = Critical Ratio; C.*R.* values >±1.96 are considered to be statistically significantly. Parameter estimates and standard errors are also shown, along with the probability level (*p*) indicated in Figure 8.3

The values of most importance in Table 8.24 are the test statistics Critical Ratio (C.R.) and Probability (p) level. The critical ratio operates as a z-statistic in testing that the estimate is statistically different from zero (Morrison, 2005). Based on the probability level of 0.05, the test statistic needs to be >±1.96 to achieve statistical significance (Byrne, 2001). The final column presents details of the probability level of each regression path. The probability statistic indicates the likelihood that the tested relationship would have occurred by chance. Several of the hypothesised correlations were significant and all were in the expected direction.

From Table 8.24, the paths "Frequency of use ↔ Quality", "Quality ↔ Compliance", "Quality ↔ Experience of Barriers", "Frequency of use ↔ Experience of Barriers", and "Attitudes towards Barriers ↔ Experience of Barriers" were found to be significant. Whereas the paths "Compliance ↔ Attitudes towards Barriers", "Frequency of use ↔ Compliance", "Frequency of use ↔ Attitudes towards Barriers", "Compliance ↔ Experience of Barriers", and "Quality ↔ Attitudes towards Barriers" are shown to be non-significant, both because the critical ratio value for these relationships is less than ±1.96, and because the probability level is greater than 0.05.

Of particular interest from Table 8.24 were the correlations between frequency of homework use, attitudes towards homework barriers and compliance with homework. It was hypothesised that each variable (experience, attitude, quality and compliance) would show a significant correlation with frequency of homework use (Hypothesis 13). However, the resulting correlation matrix indicates that only experience of homework barriers and quality of homework completed were found to have a significant relationship with frequency of homework use. The lack of a significant relationship between clinicians' attitudes and history of compliance with homework use may indicate that these factors have little effect on clinician's use of homework; whereas, it appears the other factors may influence the frequency with which homework tasks are employed. This is clearly illustrated by removing the non-significant relationships, to leave the following correlational model (see Figure 8.4):

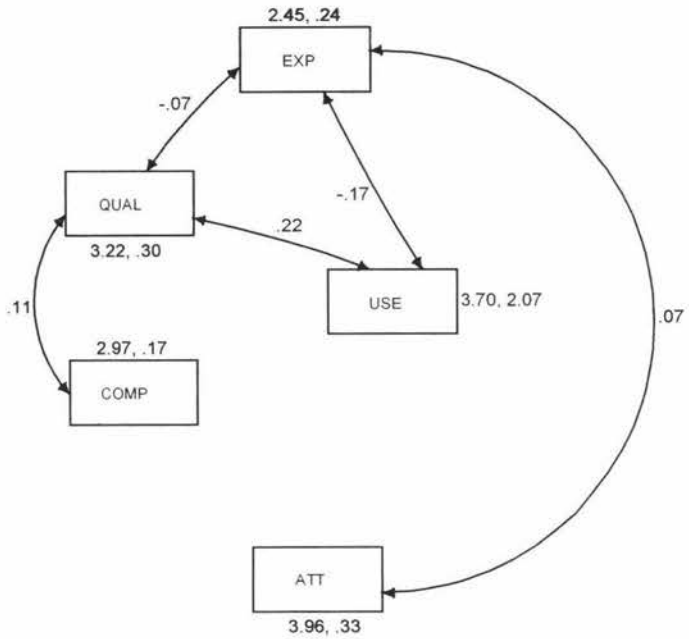

Figure 8.4

Correlational Model with Non-Significant Paths Removed

Chapter Nine: Discussion

Overview

The following chapter reviews the aims and hypotheses of the present study, and discusses the implications of the data collected in the context of these. The limitations of the present study, areas for further research, and he importance of these findings for clients and therapists are also discussed.

Review of main aims and findings

The overall goal of the present study was to gather empirical support for the existence of barriers to homework completion that may potentially arise when working with children, adolescents or family groups. Within this broad research focus there were four key aims addressed. Firstly, this study aimed to draw together and review the theoretical and empirical support for the existence of homework barriers that had been previously published in the psychotherapeutic literature. As detailed in Chapter 4, this review revealed there had been a large number of factors identified, or at the very least, hypothesised as potentially arising. However, it was also noted that many of these barriers had not been either investigated empirically or verified as regularly occurring in clinical practice. Furthermore, this review also highlighted that previous attempts to provide a synthesis of the large number of homework barriers have consistently neglected to discuss the impact that is had upon the completion of homework by the attitudes and beliefs held by clinicians regarding these activities (Fehm & Kazantzis, 2004). Following this literature review, the large number of barriers identified were then examined for similarities and subsequently reduced into a parsimonious list of twenty-two factors.

The second aim of the present study was to obtain preliminary empirical support for or against the existence of each of the proposed barriers. This was undertaken by surveying a random selection of 1040 practicing marriage and family therapists regarding the frequency with which they had experienced each barrier to occur in their own clinical practice.

The third aim was to explore clinicians' awareness of each of these barriers and to investigate how therapists as a group conceptualise 'what is a barrier to homework completion'.

Finally, the forth aim was to investigate whether the frequency with which clinicians assign homework is associated with i) a clinician's attitudes towards homework barriers, ii) a clinician's experience of encountering barriers in their own practice, and iii) a clinician's perception of the degree of quality and compliance clients have demonstrated to previously assigned homework tasks.

In addition to the main aims, the present study also sought to gather empirical evidence regarding whether or not, or indeed how frequently, clinician's practicing as Marriage and Family Therapists currently use homework tasks when working with children, adolescents or families. Each of these aims were investigated using the research instrument "The Marriage and Family Therapy Homework Questionnaire", which was designed specifically for use in this study (Appendix B and C).

Use of Homework Assignments

The data obtained by the present study was found to corroborate many of the findings described by previously published homework surveys (e.g., Fehm & Kazantzis, 2004; Kazantzis, Busch, Ronan, & Merrick, in press; Kazantzis & Deane, 1999; Kazantzis, Lampropoulos & Deane, 2005). Homework was reported as being widely used by respondents, with 96.5% of those therapists surveyed indicating they had previously assigned homework to clients. This is consistent with the findings of Kazantzis and colleagues (e.g., Kazantzis, Busch, Ronan, & Merrick, in press; Kazantzis & Deane, 1999; Kazantzis, Lampropoulos & Deane, 2005), which indicated that between 83% and 98% of practicing clinicians report having engaged their clients in some form of homework tasks. It was hypothesised by the present study that not only would it be found that homework was used by the majority of respondents, but more specifically that clinicians working with children, adolescents and families would each report employing homework in their clinical practice (hypothesis 1). This hypothesis was supported by the data. However, it was also found that clinicians which indicated

working with children reported using homework significantly less often than those working with either of the other populations. Of the 51 respondents that reported working with children, only 21% indicated they would *often* or *almost always* assign homework to young clients. By comparison 41% of those working with adolescents and 52% of those respondents working with family groups indicated they would assign homework *often* or *almost always* with these populations. Due to the nature of survey research, the reason for this discrepancy in homework use across populations was unable to be explored further. It might be speculated, however, that the lower rate of homework use with children may be due, at least in part, to difficulties associated with assigning homework to young clients. It should also be noted that the difference in frequency of homework use reported by clinicians working with each of the populations might also be due to the nature of the clinician sample accessed in this study. As a group, the clinicians surveyed in the present sample were trained primarily to work with families and couples, rather than children and adolescents. Therefore, the lower rate of homework use by Marriage and Family therapists when working with children may not be representative of therapists that have been trained specifically to work with a young client population.

Previous studies have reported that the extent to which individual practitioners use homework is dependant, at least to some extent, upon the clinician's alignment with a particular theoretical orientation (e.g., Kazantzis, Busch, Ronan & Merrick, in press; Kazantzis, Lampropoulos, & Deane, 2005). Specifically, earlier studies have noted that cognitive-behaviourally trained clinicians tend to use homework to a greater extent than others (Kazantzis, Lampropoulos & Deane, 2004). Therefore it was hypothesised that therapists working within a cognitive or behavioural model would report using homework with the greatest frequency (hypothesis 2). However, data from the present study was not found to support this hypothesis, as no statistical differences were observed in the use of homework by clinicians aligned with Cognitive-Behavioural, Psychodynamic, Experiential, Systemic, or Post Modern approaches.

Regarding the specific homework activities used by clinicians, it was found that each of the tasks presented to respondents were reported as being used *at least* occasionally in clinical practice (hypothesis 3). There was, however, a difference noted in the frequency with which homework

activities that involved *Cognitive Techniques, Manipulating Behaviour* or *Increasing Mastery* were used across the sample. Overall, CBT trained practitioners reported using these activities to a greater extent than practitioners from other theoretical orientations (hypothesis 3). It was interesting to note also that clinicians from a range of theoretical paradigms endorsed the use of a number of activities that have been traditionally considered to fall within the cognitive-behavioural domain (e.g., *activity scheduling* and *in-vivo exposure* tasks). This may provide preliminary evidence that these activities have begun to permeate into the practice of clinicians working within therapeutic modalities other than CBT. However, it was also noted that a large proportion of respondents in the present study reported drawing upon systemic therapy as their primary therapeutic model (46.5%; $n = 67$). As with Cognitive and Behavioural therapies, homework has also been an important component of systemic therapy for many years (Dattilio, 2002a). Moreover, it has also been noted that systemic therapy often draws upon cognitive and behavioural activities as part of the therapeutic approach employed (Gladding, 2002). Therefore, given the large number of clinicians endorsing the use of systemic therapy within the present sample, this may account for the use of traditionally CBT based homework tasks by members of other therapeutic modalities.

Words and phrases used to describe homework

An interesting finding that emerged from the present thesis pertains to the choice of words used by clinicians when describing the concept of homework to clients. It has been suggested by a number of authors that using the word "homework" may potentially interfere with a client's completion of assigned activities due to the negative connotations this term may have for some individuals (Coon & Gallagher-Thompson, 2002; Dattilio, 2002; Freidberg & McClure, 2005; Kazantzis & Lampropoulos, 2002; Hudson & Kendall, 2002; Tompkins, 2004). It was hypothesised by the present study that respondents would indicate a preference for using words other than "homework" when describing between session tasks to clients (hypothesis 6). This was partially supported by the data, as respondents indicated that they used a wide variety of terms in place of the word "homework". However, respondents indicated that overall they used the term "homework" most frequently.

It was also hypothesised that clinicians would report holding the *belief* that referring to between session tasks as "homework", would deter clients from engaging in the task (hypothesis 7). However, the data was found to not support this. While it is acknowledged that this finding is based upon clinicians' beliefs rather than direct observation of clinical practice, these preliminary findings suggest that although some clients may react negatively to the idea of completing "homework", overall the data indicates that clients do not appear to be influenced by this. However, it is possible that the may also reflect a lack of awareness on the behalf of the clinicians in the present sample, regarding the effect this word has upon homework compliance. It should also be remembered that the sample within the present study consisted of a cohort of North American Marriage and Family Therapists. As such, it is possible that the attitudes towards the impact of the word "homework" held by member of this sample, may not generalise to therapists with expertise in working with other client populations (e.g., children or older adults) or to those from other countries, including New Zealand.

Barriers to Homework Completion

The findings of the present study suggest that barriers to homework completion are a very real and significant part of clinical practice. It was hypothesised that clinicians working with each of the client populations would report having experiencing at least some form of homework barrier in their therapeutic work (hypothesis 8). Data obtained by the present study supported this hypothesis, as respondents endorsed each of the barriers that were proposed.

The data obtained regarding the barriers experienced by clinicians working with each of the three clients groups (children, adolescents and family groups) revealed two important findings. In the first instance, of those barriers hypothesised as being likely to occur for all clients, irrespective of the population to which they belonged, it was indeed found that these barriers had occurred at approximately same rate for each group. This finding provides support for the notion that these *generic barriers* should be considered as having the potential to arise when assigning homework to any client.

In addition to these generic barriers, it was also revealed that each population experienced an additional subset of barriers that were particular only to them. It was hypothesised by the present study that the types of barriers experienced by young clients would reflect their lack of autonomy within their family and also their need to obtain assistance from parents or caregivers (hypothesis 9). The data obtained supported this hypothesis, as the barriers reported to occur with the greatest frequency for young clients included: *the existence of a high level of dysfunction in a child's family*; *a lack of support from caregivers;* and *a lack of support from significant others*. This finding was consistent with those obtained by Kazdin and colleagues, who noted that high levels of familial dysfunction and a lack of caregiver support were risk factors for the premature withdrawal of children from treatment (Kazdin, 1996; Kazdin, Holland, & Breton, 1991).

Respondents that indicated working with families were also found to report having encountered barriers that were specific to this client group. The present study identified one barrier that was particularly prominent for families, namely difficulties due to *one or more family members not supporting the task* (Hypothesis 10). It has been noted by previous authors that behaviour which occurs within a family system is often in some way adaptive or useful for one or more of its members (Alexander & Parsons, 1982). For some individuals, maintaining the status quo will be more valued than addressing and altering the dysfunction that exists, as the patterns of behaviour within the system allow the individual to achieve their needs and goals at the expense of others (Schwebel & Fine, 1992). Functional family therapy, which is a systemic approach for working with dysfunction within family groups, suggests that an important aspect of treatment with families is to explore how altering the dysfunction within the system will affect both the family as a whole and each member individually (Gladding, 2002). In light of this theory, the finding of the present study make conceptual sense, as it is likely that if an individual within the family is resistant to change, then they will also be resistant to engaging in and completing homework tasks. Therefore, non-completion of homework by one or more members of a family may provide an indication that the therapist has not yet adequately addressed the reason why some members may not support the change proposed.

In addition to differences regarding the number and type of homework barriers arising for each client group, it was also proposed by the present study that differences would be observed in the barriers experienced by clinicians who practice within a range of theoretical models. Specifically, it was hypothesised that due to the emphasis placed on homework within cognitive and behavioural therapies, clinicians who endorse this approach would report experiencing fewer barriers to homework completion than others. However, it was found that the data obtained did not support this hypothesis. No differences were observed in the number, or type, of barriers reported by clinicians when grouped by theoretical orientation.

Attitudes Towards Barriers to Homework Completion

The findings of the present study suggest that clinicians are aware of the potential for a large number of barriers to arise in clinical practice (hypothesis 11). Of the twenty-two factors presented to respondents via the questionnaire, twenty-one were endorsed as being likely to create a barrier for clients should they arise. Interestingly the only exception to this was *not providing the client with a written summary of the task*, which respondents considered to be unlikely to negatively impact upon homework completion. However, this finding does not imply that respondents do not provide clients with written summaries of homework assignments, but rather they simply did not consider that a failure to do this would impede homework from being completed.

Attitudes regarding homework have been found to vary widely among clinicians (Fehm & Kazantzis, 2004). Likewise, the development of attitudes and beliefs is influenced by many facets of an individual's learning history (Ajzen, 1988; Kazantzis, Lampropoulos, & Deane, 2005; Mazur, 1994). In the context of the present study, it was proposed that training within a particular theoretical model would be an important influence upon the type of attitudes a clinician was likely to develop (Kazantzis, Busch, Ronan & Merrick, in press). As such, it was anticipated that a difference would be observed in the attitudes toward homework barriers held by respondents as a function of the theoretical framework they reported being most closely aligned with. Specifically, it was hypothesised that clinicians endorsing the use of a Cognitive Behavioural approach would report being aware of a greater number of homework barriers than clinicians from other modalities.

However, it was found that the data did not support this hypothesis, as no differences were present in the number, or type of attitudes reported by clinicians across theoretical paradigms. A caveat to this finding though, is that due to the way in which the questionnaire was designed, the responses provided by respondents might have been influenced by the way in which the attitudinal statements were presented. As such, the attitudes reported might not accurately represent those held by clinicians. That is, respondents were provided with a preformatted list of barriers and asked to rate how strongly they believed each would be to disrupt homework completion if it were to occur. These prompts may have influenced respondents to recall barriers that they may not otherwise have noted. Therefore it is possible that if a less leading format had been employed, respondents aligned with different theoretical models may have only reported an awareness of a sub-set of barriers. Given this possibility, this hypothesis may have been investigated with greater validity if the present study simply asked respondents to "describe the difficulties you believe may arise when assigning homework to clients".

Relationship between experience, attitudes, quality, compliance and homework use

It has been argued throughout this thesis, that given the theoretical and empirical support for the importance of homework, if a client is prevented from completing a homework task, they are not likely to receive the maximum possible benefit from engaging in treatment. Likewise, it might also be argued that the most significant barrier to completing homework is not being assigned any tasks to complete in the first place. Therefore an important aspect of the present study was to investigate whether the frequency with which a clinician employs homework in their clinical practice is associated with the therapist's own experience and attitudes regarding homework barriers, or their experience of the resistance clients have shown to homework in the past. As a measure of resistance, the present study has suggested this might be best conceptualised as being demonstrated by clients through their poor completion of tasks and low compliance with previously assigned activities.

It was hypothesised that a significant correlational relationship would exist between each of these variables (hypothesis 12). The hypothesised relationships between each of these variables were

investigated by developing an *observed variable* path model (Byrne, 2001), using the analytical technique of structural equation modeling (SEM). Data from the present study indicated mixed support for this hypothesis, as several of the proposed relationships were found not to be significant (see Figure 9.1)

As can be seen by inspection of Figure 9.1, only *Experience of Homework Barriers* and *Quality of Previously Assigned Homework* were significantly correlated with the *Frequency* that clinicians reported to use homework. Both of these relationships were in the expected direction.

Experience of homework barriers was negatively correlated with homework use, suggesting that as the number of barriers encountered by a clinician increases, the frequency with which they use homework decreases. In contrast to the relationship between experience and homework use, a clinicians perception of the Quality clients have demonstrated to previously assigned tasks was positively correlated with Frequency of homework use. The suggests that clinicians who experience their clients to complete these tasks to a high standard, will be likely to assign homework with an increased frequency on future occasions.

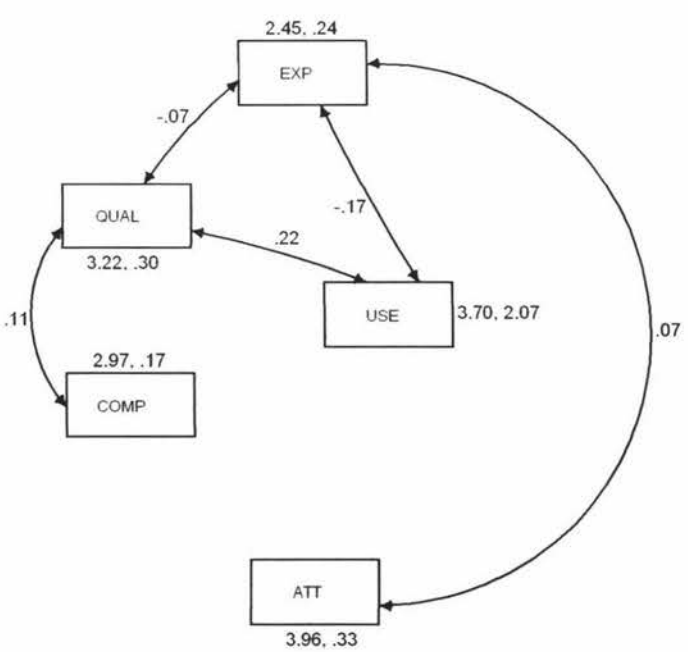

Figure 9.1

Correlational Model showing the significant relationships between each variable

Limitations of the Present Study

A number of limitations regarding the present study have been noted. Most significantly, the sample size and rate of response obtained were considerably lower than was anticipated. This was particularly notably given the reasonable response that had been received by the pilot study conducted prior to the main phase of data collection. The potential for a low rate of response is considered one of the most significant impediments faced by survey research (Vaux, 1986), with mail-surveys generally receiving a lower response than other forms of data collection (Mangione, 1995). Unfortunately a poor response impacts upon the quality of a study as a whole, by producing data that lends weight to tentative conclusions only (Leavitt, 1991; Yammarino, Skinner & Childers, 1991). Consequently the low rate of response obtained by the present study may have compromised the ability to generalise the findings to both the wider AAMFT population and to other groups of therapists working with children, adolescents and family groups (Coolican, 2004). Although there may be a number if reasons for this poor response, including an over surveying of AAMFT members or problems associated with questionnaire construction (e.g., word choice or overall survey length; Mangione, 1995), however it is also significant that the distribution of the survey was disrupted due to a factor outside of the researchers control. As a result of a clerical error on the behalf of the company commissioned to perform the task of questionnaire distribution, the protocol for survey distribution described in Chapter 6 was not strictly adhered to. In particular, there were concerns regarding the timeliness with which the follow-up prompt was sent to participants, with a number of respondents indicating they received the prompt letter before the questionnaire pack had arrived. As a consequence of these difficulties, it is possible that a biased sample of participants may have been obtained. Specifically, the present sample may contain an over representation of respondents with and interest in either homework assignments or clinical research. Therefore, the data presented might best be considered to reflect the attitudes / experience of this subgroup of respondents.

A second limitation to the present study was found to have arisen as a direct consequence of employing a survey methodology. As data for this study was gathered via a self-report questionnaire, and did not involve direct observation of clinical practice, it is therefore possible that

participants may have responded to items in what they considered to be a socially or clinically desirable way (de Vaus, 1995; Mangione, 1995; Vaux, 1996). This may have led to an under-reporting of barriers that have been experienced, or an over-reporting of the attitudes and awareness of homework barriers by clinicians. However, as it was not possible to investigate this by following up responses provided by participants, it is unknown to what extent this has occurred.

Finally, difficulties were noted in the present study's ability to differentiate the responses provided by participants working with each of the client groups. It is proposed that this arose from problems with the structure of the questionnaire. As detailed in chapter six, in an attempt to reduce the length of the questionnaire, questions regarding participants' experience of barriers were divided into four sections. Those barriers hypothesised as pertaining to all client groups were presented to each respondent, while those hypothesised as being particular to either children, adolescents or families were presented only to respondents working with these groups. As a consequence of presenting barriers in this way, the present study was limited in its ability to directly compare the barriers arising for each group, as clinicians reported experience of homework barriers for their clinical work overall. In addition, this difficulty was further compounded by the fact that respondents generally reported working with more than one population. Therefore, it could not be easily ascertained if a clinician's experience of each individual barrier was different when working with clients of each of the groups. This is a significant limitation for the present study as a key aim was to investigate the differences in the number and type of barriers that occurred for each client group.

Further Research

As noted in chapter three, homework has received more empirical research attention than any other individual technique currently being used by modern therapists (e.g., Beutler et al., 2004; Kazantzis, Deane & Ronan, 2000; Scheel et al., 2004). It has also been noted that homework is widely used by therapists from a range of training backgrounds and has been demonstrated as being an effective component of treatment for clients from a variety of populations and who present with a host of different disorders (Kazantzis, Deane, Ronan, & Lampropoulos, 2005). Yet despite this, there has been a paucity of research that has investigated the factors that may interfere with

the completion of these assignments. The present thesis aimed to address this gap in our knowledge. Although encountering a number of limitations, the present study has provided preliminary empirical support that indicates twenty-one homework barriers regularly occur when working not only with children, adolescents and family groups, but also potentially with a wide range of clients. However, it is recommended further research be conducted to extend upon the findings of this study.

In the first instance it is proposed that it would be beneficial to investigate homework barriers from the perspective of clients. By surveying clients who are actively engaged in the process of completing homework tasks, in particular regarding their experience of factors that resulted in their own non-completion of the homework, this may provide further insight into the areas most likely to lead to homework barriers.

Secondly, it is recommended that future research into homework barriers would also do well to move away from using survey methodology and instead opt for direct observation of clinical practice. Although this was not possible in the present study given the limits on the time and resources available to complete a Masters thesis, obtaining data on homework barriers by direct observation of therapy sessions may provide a more accurate illustration of the type and number of barriers encountered by clients. Furthermore this method of data collection may also provide useful information regarding the ways in which clinicians work to mitigate the effects of these barriers.

Finally, it is also proposed that it would be useful extend this research by investigating the experience of homework barriers in relation to: treatment outcome (e.g., cognitive change, reduction in symptomatology, or client distress); generalisation and maintenance of treatment gains; or the reduction of unhelpful coping strategies (e.g., client avoidance or withdrawal).

Implication for clinical practice

There are a number of clinical implications that have emerged from the present study. In the first instance, it was suggested by the data that clinicians from all of the theoretical orientations

represented in the present sample reported using homework in their clinical practice. Due to the limitations of the methodology employed, it was not possible to ascertain the accuracy of this finding. However, there are likely to be both positive and negative implications for clinical practice if this is found to be true. Viewing this finding positively, it could be argued that given the empirical and theoretical support for the efficacy of homework tasks, the use of these activities by a wide range of therapists is likely to have a beneficial outcome for clients. Conversely, it might also be suggested that as therapists draw from the tools and techniques of a wide range of theoretical frameworks, some therapists may begin employing techniques for which they have received little or no training.

For many tasks, a lack of specific training may not be an overly critical issue (e.g., assigning book or other material to read). However, for those tasks that may potentially create distress for a client or indeed may lead the client's situation to worsen if not applied correctly, obtaining adequate training becomes particularly important. Homework assignments involving in-vivo exposure tasks are a case in point. As described in Chapter 2, exposure treatments are based on the principal of extinction within the framework of operant conditioning. In this treatment approach, a client is gradually exposed to a fear-inducing situation and is assisted by the therapist to remain in contact with the stimulus long enough for them to habituate to the fear that is produced (Wolpe, 1958; 1990). Over time, as the client habituates to one stimulus, they are introduced to stimuli that are experienced as increasingly noxious. This graded exposure to more intensely feared stimuli is based on a fear hierarchy that is developed collaboratively by the client and therapist before the exposure activity commences (Borden, 1992). However, a lack of understanding about the principals that underpin this process may result in a client's behavioural avoidance of the feared stimuli being reinforced and their fear of the object or situation potentially increasing (the reader is referred to Persons, (2001) for a detailed discussion of this process).

Data from the present study was found to provide support for the concept of *homework barriers*, which may potentially prevent clients from completing a between session activity that has been assigned. It was also revealed that within the large number of barriers identified, there were a subset of "generic" barriers that occur frequently across all client groups (see figure 9.2).

It was also noted that those barriers over which therapists have a direct influence (e.g., clarity of the task's rationale, match of tasks to therapy goals, specificity of task instructions, and therapeutic process factors) were reported by respondents in the present study as having occurred with the lowest frequency. Conversely, it was found that barriers related to the client, or the client's situation (e.g., level of psychopathology, client negative beliefs about a task, and undisclosed practical obstacles), were rated as occurring with the greatest frequency. Taken together, these findings underscore the importance of therapists working with their clients to carefully elicit and address these potential barriers before the client engages in any homework tasks (Beck, 1995; 2005; Kazantzis et al, 2005).

<table>
<tr><td>Poor / Unclear rationale</td><td>Poorly Defined or Non-Specific</td><td>Too Difficult</td><td>Violates a client's personal or cultural beliefs</td></tr>
<tr><td>Lack of Comprehension</td><td colspan="2" rowspan="2">Common Barriers to Homework</td><td>Unclear Link to Clients Goals for Therapy</td></tr>
<tr><td>Not Considered to be Beneficial</td><td>Poor Therapeutic Alliance or Relationship</td></tr>
<tr><td>Lack of Collaboration</td><td>Negative Beliefs Held by a Client</td><td>High Degree of Psychopathology</td><td>Practical Obstacles</td></tr>
</table>

Figure 9.2

Common Barriers to Homework Completion

In addition to these generic barriers, it was also found that for young client, difficulties with a lack of support, or commitment to the therapeutic process, by caregivers were associated homework non-compliance. The implication of this for clinical practice is when assigning tasks to children, it is critical that the therapist works not only with the child but also with the child's caregivers in order to

foster a strong alliance with them in the early part of treatment. In particular it may be beneficial for a clinician to attempt to understand and address the caregiver's expectations of therapy, convey to them how the strategies used within treatment are relevant to their child's difficulties; and to facilitate their 'buy in' with the treatment and to any tasks assigned (Kazdin, Holland, & Crowley, 1997). The findings of the present study also indicate that this is equally applicable for both children and adolescent clients.

It was indicated by respondents in the present study that providing clients with a written summary of homework task is unnecessary to ensure the activity will be completed. However, a small amount of empirical evidence currently exists that suggests providing a written summary is indeed likely to be a useful strategy (Cox, Tisdell, & Culbert, 1988). In a recently published guiding model, Kazantzis and colleagues (Kazantzis, MacEwan & Datillio, 2005) suggest that providing a written summary of an assignment assists the completion of homework in four ways. In the first instance, the authors propose that providing a written summary ensures that clear limits are set regarding what or how much the client has been requested to complete. This may be important to reduce any anxiety that might potentially arise for a client due to feeling a task is too overwhelming, or from uncertainty about what is expected of them. Secondly, written reminders are also considered beneficial if several assignments (or an assignment with several components) are assigned at one time. Third, summaries provide a prompt that clients can use to remind them they have homework that is still to be completed. This may be particularly helpful both for clients who experience memory difficulties as part of their clinical presentation (Dunn, Morrison, & Bentall, 2002; Glasser et al., 2000), or for young clients who have not yet developed the cognitive capacity to attend to, or recall the specifics of how a task is to be performed (Carr, 1999). Finally, by writing the homework assignment down, the client makes a public statement of their commitment to engage in the activity. Each of these aspects of providing a written summary may help to circumvent one or more barriers that could interfere with homework completion.

Finally, the findings of the correlational model investigated by the present study, suggest that ensuring successful completion of homework tasks is not only important for clients but also is equally important for clinicians as well. Specifically the findings indicate that it is likely clinicians who

assign homework which is not successfully completed by client are likely to assign less homework on subsequent occasions. Reluctance on the part of clinicians to assign homework may, in turn, have a negative impact on their ability to provide clients with the most empirically supported and cost effective treatment. A recently published article by Haarhoff and Kazantzis (in press) discusses both the importance of training clinicians in the effective use of homework, and the importance of providing adequate supervision for trainees to enable them to process their unhelpful beliefs regarding homework tasks which may result from negative experiences with client non-completion of activities. The findings of the present study lend support to this view.

Conclusion

The present study has demonstrated the empirical and theoretical support for the efficacy of employing homework as a therapeutic technique. It has also been demonstrated that there are a number of barriers that frequently arise and result in non-completion or partial completion of homework. Barriers that interfere with homework completion are not simply a source of annoyance for clients and therapists, but rather are a point that requires critical consideration in a client's overall course of therapy. This is particularly so, as a failure to complete homework may result in a client not receiving the maximum possible benefit from treatment. The behavioural theory of operant conditioning suggests that any behaviour that is followed by either punishing consequences, or indeed simply is not reinforced, will subsequently reduce in frequency over time. As such, if a client encounters a barrier to homework completion and is unable to complete the task, they will not receive the reinforcing consequences the task is designed to elicit. Indeed non-completion of homework may also produce a range of aversive consequences for that individual, which may be potentially harming rather than therapeutic (i.e., that the client may believe they are a failure or were unable to complete the task as they were not competent enough to do so). Therefore given the support for the large number of homework barriers identified by the present study, it is suggested that it is vital for therapists to enquire about and address these barriers before they occur to ensure clients have a *success experience* from engaging in homework tasks. Without this experience of success, the likelihood that they will engage in further tasks in subsequent sessions will decrease.

REFERENCES

Ackerson, J., Scogin, F., McKendreee-Smith, N., & Lyman, R. D. (1998). Cognitive bibliotherapy for mild and moderate adolescent depressive symptomatology. *Journal of Consulting and Clinical Psychology, 66*(4), 685 - 690.

Addis, M. E., & Jacobson, N. S. (2000). A closer look at the treatment rationale and homework compliance in cognitive behavioural therapy for depression. *Cognitive Therapy and Research, 24*, 313 - 326.

Addis, M. E., & Krasnow, A. D. (2000). A National Survey of Practicing Psychologists' Attitudes Toward Psychotherapy Treatment Manuals. *Journal of Consulting and Clinical Psychology, 68*(2), 331-339.

Ajzen, I. (1985). From interventions to actions: A theory of planned behavior. In J. Kuhl & J. Beckman (Eds.), *Action-control: From cognition to behavior* (pp. 11 - 39). Heidelberg: Springer.

Ajzen, I. (1988). *Attitudes, personality, and behavior.* Chicago, Il: Dorsey.

Ajzen, I., & Fishbein, M. (1977). Attitude-behavior relations: A theoretical analysis and review of empirical research. *Psychological Bulletin, 84*, 888 - 914.

Albano, A. M., & Kendall, P. C. (2002). Cognitive behavioural therapy for children and adolescents with anxiety disorders: Clinical research advances. *International Review of Psychiatry, 14*, 129 - 134.

Alexander, J., & Parsons, B. V. (1982). *Functional Family Therapy.* Pacific Grove, CA: Brooks Cole.

Alford, B. A., & Lantka, A. L. (2000). Processes of clinical change and resistance. *Behavior Modification, 24*(4), 566 - 579.

Allen, K. D., & Warzak, W. J. (2000). The problem of parental nonadherence in clinical behavior analysis: Effective treatment is not enough. *Journal of Applied Behavior Analysis, 33*, 373 - 391.

Alvord, M. K., & Grados, J. J. (2005). Enhancing Resilience in Children: A Proactive Approach. *Professional Psychology: Research and Practice, 36*(3), 238–245.

American Association of Marriage and Family Therapists. (2002). *American Association for Marriage and Family Therapy.* Retrieved 23/11/05, from http://www.aamft.org/faqs/index_nm.asp

Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step process. *Psychological Bulletin, 103*(3), 411 - 423.

Anderson, K. G. (2004). Cognitive behavioral therapy for generalized anxiety in a 6-year-old. *Clinical Case Studies, 3*(3), 216 - 233.

Andrews, G., Chino, R., Hunt, C., Lampe, L., & Page, A. (1994). *The treatment of anxiety disorders.* New York: Cambridge University Press.

Arbuckle, J. L., & Wothke, W. (1999). *Amos user's guide: Version 4.0.* Chicago, Il: Smallwaters Corporation.

Armitage, C. J., & Conner, M. (2000). Social cognition models and health behaviour: A structured review. *Psychology and Health, 15*, 173 - 189.

Arndorfer, R., Allen, K. D., & Aljazireh, L. (1999). Behavioral health needs in pediatric medicine and the acceptability of behavioural solutions: Implications for behavioral psychologists. *Journal of Applied Behavior Analysis, 26*, 137 - 148.

APA. (2000). *Diagnostic and statistical manual of mental disorders : DSM-IV-TR* (4th ed., text revision ed.). Washington, DC: American Psychiatric Association.

Badgio, P. C., Halperin, G. A., & Barber, J. P. (1999). Acquisition of adaptive skills: Psychotherapeutic change in cognitive and dynamic therapies. *Clinical Psychology Review, 19*, 721 - 737.

Baer, D. M., & Wolf, M. M. (1970). The entry into natural communities of reinforcement. In R. Ulrich, T. Stachnik & J. Mabry (Eds.), *Control of human behavior* (Vol. 2, pp. 319 - 324). Glenview, Il: Scott Foresman.

Bailer, J., Takats, I., & Schmitt, A. (2002). Individualized cognitive-behavioural therapy for schizophrenic patients with negative and social disabilities: II. Responder analysis and predictors of treatment response. *Verhaltnstherapie, 12*, 192 -203.

Baker, A., Heather, N., Stallard, A., O'Neill, K., & Wodak, A. (1994). *A manual of cognitive behavioural techniques aimed at reducing HIV risk-taking behaviour in injecting drug users*: NDARC Monograph No. 28, Annual Report.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 19*, 721 - 737.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.

Bandura, A. (1989). Human agency in social cognitive theory. *American Psychologist, 44*, 1175 - 1184.

Barber, J. P., Liese, B. S., & Abrams, M. J. (2003). Development of the cognitive therapy adherence and competence scale. *Psychotherapy Research, 13*, 205 - 221.

Barrett, P. M. (1998). Evaluation of cognitive-behavioural group treatments for childhood anxiety disorders. *Journal of Clinical Child Psychology, 27*(4), 459 - 468.

Barrett, P. M., Dadds, M. R., & Rapee, R. M. (1996). Family treatment of childhood anxiety: A controlled trial. *Journal of Consulting and Clinical Psychology, 64*, 333 - 342.

Bartlett, M. S. (1954). A note on the multiplying factors for various chi square approximations. *Journal of the Royal Statistical Society, 16*, 296 - 298.

Beck, A. T., Rush, A. J., Shaw, B. F., & Emery, G. (1979). *Cognitive therapy of depression*. New York: Guilford Press.

Beck, A. T., Steer, R.A., & Brown, G.K. (1996). *BDI-II Manual*. San Antonio, TX: Psychological Corporation.

Beck, A. T., Wright, F. D., Newman, C. F., & Liese, B. S. (1993). *Cognitive Therapy of Substance Abuse*. New York: Guilford Press.

Beck, J. S. (1995). *Cognitive therapy: basics and beyond*. New York: The Guilford Press.

Beck, J. S. (2005). *Cognitive therapy for challenging problems: What to do when the basics don't work*. New York: Guilford Press.

Bennett-Levy, J. (2003). Mechanisms of change in cognitive therapy: The case of automatic thought records and behavioural experiments. *Behavioural & Cognitive Psychotherapy, 31*(3), 261-277.

Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin, 107*, 238 - 246.

Bentler, P. M. (1992). On the fit of models to covariances and methodology to the Bulletin. *Psychological Bulletin, 112*, 400 - 404.

Bentler, P. M., & Bonett, D. G. (1987). This week's citation classic. *Current contents, social and behavioral sciences, 19*, 16.

Beutler, L. E. (1997). The psychotherapist as a neglected variable in psychotherapy: An illustration by reference to the role of therapist experience and training. *Clinical Psychology: Science and Practice, 4*, 44 - 52.

Beutler, L. E., Brown, M. T., Crothers, L., Booker, K., & Seabrook, M. K. (1996). The dilemma of fictitious demographic distinctions in psychological research. *Journal of Consulting and Clinical Psychology, 64*(5), 892 - 902.

Beutler, L. E., Malik, M., Alimohamed, S., Harwood, T. M., Talebi, H., Nobel, S., et al. (2004). Therapist variables. In M. J. Lambert (Ed.), *Bergin and Garfield's handbook of psychotherapy and behavior change* (5th ed.). New York: John Wiley & Sons.

Bevilacqua, L. J., & Dattilio, F. M. (2001). *Brief family therapy homework planner.* Toronto: John Wiley & Sons.

Beyebach, M., Morejon, A. R., Palenzuela, D. L., & Rodriguez-Arias, J. L. (1996). Research on the process of solution-focused therapy. In S. D. Miller, M. A. Hubble & B. L. Duncan (Eds.), *Handbook of solution-focused brief therapy,* (pp. 299 - 334). San Francisco, CA: Jossey-Bass.

Blackburn, I. M., & Twaddle, V. (1996). *Cognitive therapy in action: A practitioner's casebook.* London: Souvenir Press.

Blaikie, N. (2003). *Analyzing quantitative data.* London: Sage.

Blanhard, E. B., Nicholson, N. I., Radnitz, C. L., Steffek, B. D., Appelbaum, K. A., & Dentinger, M. P. (1991). The role of home practice in thermal biofeedback. *Journal of Consulting and Clinical Psychology, 59*, 507 - 512.

Bollen, K. A. (1989). *Structural equations with latent variables.* New York: Wiley.

Borden, J. W. (1992). Behavioral treatment of simple phobia. In S. M. Turner, K. S. Calhoun & H. E. Adams (Eds.), *Handbook of clinical behavior therapy* (pp. 77 - 94). New York: John Wiley & Sons.

Breckler, S. J. (1990). Applications of covariance structure modeling in psychology: A cause for concern? *Psychological Bulletin, 107*, 260 - 273.

Browne, M. W., & Cudeck, R. (Eds.). (1993). *Alternative ways of assessing model fit.* Newbury Park, CA: Sage.

Bryant, M. J., Simons, A. D., & Thase, M. E. (1999). Therapist skill and patient variables in homework compliance: Controlling an uncontrolled variable in cognitive therapy outcome research. *Cognitive Therapy and Research, 23*, 381 - 399.

Buell, J. (2004). *Closing the book on homework : enhancing public education and freeing family time*. Philadelphia: Temple University Press.

Burns, D. D. (1989). *The feeling good workbook*. New York: William Morrow.

Burns, D. D., & Auerbach, A. H. (1992). Does homework compliance enhance recovery from depression? *Psychiatric Annals, 22*, 464 - 469.

Burns, D. D., & Nolen-Hoeksema, S. (1991). Coping styles, homework compliance, and the effectiveness of cognitive behavioral therapy. *Journal of Consulting and Clinical Psychology, 59*, 305 - 311.

Burns, D. D., & Spangler, D. L. (2000). Does psychotherapy homework lead to improvements in depression in cognitive-behavioral therapy or does improvement lead to increased homework compliance? *Journal of Consulting and Clinical Psychology, 68*(1), 46 - 56.

Byrne, D. G., & Reinhart, M. I. (1990). Professional activities and theoretical orientations of Australian clinical psychologists. *Australian Psychologist, 25*(2), 103 - 114.

Byrne, M. B. (2001). *Structural equation modeling with AMOS: Basic concepts, applications, and programming*. Mahwah, New Jersey: Lawrence Erlbaum Associates.

Carr, A. (1997). Positive practice in family therapy. *Journal of Marital and Family Therapy, 23*(271 - 293).

Carr, A. (1999). *The handbook of child and adolescent clinical psychology: A contextual approach*. Padstow, UK: Routledge.

Carroll, K. M., Nich, C., & Ball, S. A. (2005). Practice makes progress? Homework assignments and outcome in treatments of cocaine dependence. *Journal of Consulting and Clinical Psychology, 73*(4), 749 - 755.

Catell, R. B. (1966). The scree test for number of factors. *Multivariate Behavioral Research, 1*, 245 - 276.

Cautela, J. R., & Kearney, A. (1993). *The covert conditioning handbook*. Pacific Grove, CA: Brooks Cole.

Cavell, T. A. (2000). *Working with parents of aggressive children: A practitioner's guide*. Washington, DC: American Psychological Association.

Chambless, D. L., Sanderson, W. C., Shoham, V., Johnston, S. B., Pope, K. S., Crits-Christoph, P., et al. (1996). An update on empirically validated treatments. *The Clinical Psychologist, 49*, 5 - 18.

Clark, D. M., Salkovskis, P. M., Hackmann, A., Wells, A., Ludgate, J., & Gelder, M. (1999). Brief cognitive therapy for panic disorder: a randomized controlled trial. *Journal of Consulting and Clinical Psychology, 67*(4), 583-589.

Cohen, L., Manion, L., & Morrison, K. (2000). *Research methods in education* (5th ed.). London: Routledge-Falmer.

Conoley, C. W., Padula, M. A., Payton, D. S., & Daniels, J. A. (1994). Predictors of client implementation of counselor recommendation: Match with problems, difficulty level and building on client strengths. *Journal of Counseling Psychology, 41*, 3 - 7.

Coolican, H. (2004). *Research methods and statistics in psychology*. London: Hodder & Stoughton.

Coon, D. W., & Gallagher-Thompson, D. (2002). Encouraging homework completion among older adults in therapy. *Journal of Clinical Psychology, 58*(5), 549 - 563.

Coon, D. W., & Thompson, L. W. (2003). The relationship between homework compliance and treatment outcomes among older adult outpatients with mild-to-moderate depression. *American Journal of Geriatric Psychiatry, 11*, 53–61.

Cox, D. J., Tisdell, D. A., & Culbert, J. P. (1988). Increasing adherence to behavioral homework assignments. *Journal of Behavioral Medicine, 11*, 519 - 522.

Coyne, L. W., & Lombardo, T. W. (2002). Homework. In *Encyclopedia of Psychotherapy* (Vol. 1): Elsevier Science (USA).

Cruise, K. R., & Sewell, K. W. (2000). Promoting self-awareness and role elaboration. *Journal of Constructivist Psychology, 13*, 231–248.

Daniel, W. (1990). *Applied nonparametric statistics* (2nd ed.). Boston: PWS-Kent.

Dattilio, F. M. (2002a). Homework assignments in couple and family therapy. *Journal of Clinical Psychology, 58*(5), 535 - 547.

Dattilio, F. M. (2002b). Cognitive-behavior family therapy: Contemporary myths and misconceptions. *Contemporary Family Therapy, 23*(1), 3 - 18.

Dattilio, F. M., L'Abate, L., & Deane, F. D. (2005). Families. In N. Kazantzis, F. D. Deane, K. R. Ronan & L. L'Abate (Eds.), *Using homework assignments in cognitive-behaviour therapy* (pp. 171 - 190). New York: Brunner-Routledge.

de Vaus, D. A. (1995). *Surveys in social research* (4th ed.). New South Wales, Australia: Allen & Unwin.

DeLeon, I. G., & Iwata, B. A. (1996). Evaluation of a multiple-stimulus presentation format for assessing reinforcer preferences. *Journal of Applied Behavioural Analysis, 25*, 519 - 533.

Detweiler, J. B., & Whisman, M. A. (1999). The role of homework assignments in cognitive therapy for depression: Potential methods for enhancing adherence. *Clinical Psychology: Science and Practice, 6*(3), 267 - 282.

Detweiler-Bedell, J. B., & Whisman, M. A. (2005). A lesson in assigning homework: Therapist, client, and task characteristics in cognitive therapy for depression. *Professional Psychology: Research and Practice, 36*(2), 319 - 223.

Dickter, D. N., & Roznowski, M. (1996). Basic statistical analysis. In F. T. L. Leong & J. T. Austin (Eds.), *The psychology research handbook: A guide for graduates and research assistants* (pp. 208 - 218). California: Sage.

DiMatteo, M. R., & DiNicola, D. D. (1982). *Achieving patient compliance: The psychology of the medical practitioner's role.* New York: Pergamon Press.

Dobson, K. S., & Mothersill, K. J. (1979). Equidistant categorical labels for construction of Likert-type scales. *Perceptual and Motor Skills, 49*(2), 575-580.

Dowd, E. T., & Saunders, D. (1994). Resistance, reactance, and the difficult client. *Canadian Journal of Counseling, 28*, 13 - 24.

Dunlop, K. L. (1936). *Elements of psychology*. St. Louis: Mosby.

Dunn, H., Morrison, A. P., & Bentall, R. P. (2002). Patients' experiences of homework tasks in cognitive behavioral therapy for psychosis: A qualitative analysis. *Clinical Psychology and Psychotherapy, 9*, 361 - 369.

Edelman, R. E., & Chambless, D. L. (1993). Compliance during sessions and homework in exposure-based treatment of agoraphobia. *Behaviour Research and Therapy, 31*(8), 767 - 773.

Edelman, R. E., & Chambless, D. L. (1995). Adherence during sessions and homework in cognitive-behavioral group treatment of social phobia. *Behaviour Research and Therapy, 33*, 573 - 577.

Ellis, A. (1980). The value of efficient psychotherapy. *Psychotherapy: Theory, Research and Practice, 17*(4), 414 - 419.

Emmelkamp, P. M. G. (2004). Behavior therapy with adults. In M. J. Lambert (Ed.), *Bergin and Garfield's handbook of psychotherapy and behaviour change* (5th ed., pp. 393 - 446). New York: John Wiley & Sons.

Faust, J., & Katchen, L. B. (2004). Treatment of children with complicated posttraumatic stress reactions. *Psychotherapy: Theory, Research, Practice, Training, 41*(4), 426–437.

Fehm, L., & Kazantzis, N. (2004). Attitudes and use of homework assignments in therapy: A survey of German psychologists. *Clinical Psychology and Psychotherapy, 11*, 332 - 343.

Fennell, M. J. V., & Teasdale, J. D. (1987). Cognitive therapy for depression: Individual differences and the process of change. *Cognitive Therapy and Research, 11*, 253 - 271.

Freud, S. (1952). Inhibitions, symptoms and anxiety (A. Strachey, Trans.). In R.M.Hutchins (Ed.), *Great books of the western world* (pp. 718 - 734). Chicago, Il: Encyclopedia Britannica.

Friedberg, R. D., & McClure, J. M. (2002). *Clinical practice of cognitive therapy with children and adolescents: the nuts and bolts.* New York: The Guilford Press.

Friedberg, R. D., & McClure, J. M. (2005). Adolescents. In N. Kazantzis, F. D. Deane, K. R. Ronan & L. L'Abate (Eds.), *Using homework assignments in cognitive-behaviour therapy* (pp. 95 - 116). New York: Brunner-Routledge.

Furse, D. H., Stewart, D. W., & Rados, D. L. (1981). The effect of foot-in-the-door, cash incentives, and follow-ups on survey response. *Journal of Marketing Research, 18*, 473 - 478.

Futrell, C., & Hise, R. T. (1982). The effects of anonymity and a same-day deadline on the response rate to mail surveys. *European Research, 10*, 171 - 175.

Garfield, S. L., & Kurtz, R. A. (1975). A survey of clinical psychologists: Characteristics, activities and orientations. *The Clinical Psychologist* (Winter), 8 - 10.

Garrett, T., & Davis, J. (1995). So who are we anyway? *Clinical Psychology Forum, 78*, 2 - 4.

Gladding, S. T. (2002). *Family therapy: History, theory and practice* (3rd ed.). New Jersey: Pearson Education Inc.

Gladding, S. T. (2002). *Family Therapy: History, theory, and practice* (3rd ed.). New Jersey: Pearson Education Inc.

Glaser, N. M., Kazantzis, N., Deane, F. D., & Oades, L. G. (2000). Critical issues in using homework assignments within cognitive-behavioral therapy for schizophrenia. *Journal of Rational-Emotive and Cognitive-Behavior Therapy, 18*, 247 - 261.

Glass, G. V. (1977). Integrating findings: The meta-analysis of research. *Review of Research in Education, 5*(351 - 379).

Glass, G., McGaw, B., & Smith, M. (1980) *Meta Analysis in Social Research.* Beverley Hills: Sage publications.

Goldfried, M. R., & Davidson, G. C. (1976). *Clinical behavior therapy*. New York: Holt, Rinehart & Winston.

Graziano, A. M., & Mooney, K. C. (1980). Family self-control instruction for children's nighttime fear reduction. *Journal of Consulting and Clinical Psychology, 48*, 206 - 213.

Haarhoff, B. A., & Kazantzis, N. (in press). How to supervise the use of homework in cognitive behavior therapy: The role of trainee therapist beliefs. *Cognitive and Behavioral Practice: Special Issue*.

Haby, M. M., Tonge, B., Littlefield, L., Carter, R., & Vos, T. (2004). Cost-effectiveness of cognitive behavioural therapy and selective serotonin reuptake inhibitors for major depression in children and adolescents. *Australian and New Zealand Journal of Psychiatry, 38*, 579 – 591.

Hansen, D. J., & MacMillan, V. M. (1990). Behavioral assessment of child-abuse and neglectful families: Recent developments and current issues. *Behavior Modification, 14*(3), 255 - 278.

Herzberg, A. (1941). Short-term treatment of neurosis by graduate tasks. *British journal of medical psychology, 29*, 36 - 51.

Hoffman, M. (1970). Moral development. In P. Mussen (Ed.), *Carmichael's manual of child psychology* (pp. 80 - 132). Chichester: Wiley.

Hogg, L. (1996). Psychological treatments for negative symptoms. In G.Haddock & P. D. Slade (Eds.), *Cognitive behavioural interventions with psychotic disorders* (pp. 151–167). London: Routledge.

Hollifield, M., Kanton, W., & Skipper, B. (1997). Panic disorder and quality of life: Variables predictive of functional impairment. *American Journal of Psychiatry, 154*, 766.

Hollon, S. D., & Beck, A. T. (2004). Cognitive and cognitive behavioral therapies. In M. J. Lambert (Ed.), *Bergin and Garfield's handbook of psychotherapy and behaviour change* (5th ed., pp. 447 - 492). New York: John Wiley & Sons.

Hopko, D. R., Lejuez, C. W., Ruggiero, K. J., & Eifert, G. H. (2003). Behavioral activation as a treatment for depression: Principles, procedures, and process. *Clinical Psychology Review, 23*, 699-717.

Hornik, J. (1981). Time cues and time perception effect on response to mail surveys. *Journal of Marketing Research, 18*, 243 - 248.

Houston, M. J., & Nevin, J. R. (1977). The effects of source and appeal on mail survey response patterns. *Journal of Marketing Research, 12*, 114 - 117.

Hubbard, R., & Allen, S. J. (1987). An empirical comparison of alternative methods for principal component extraction. *Journal of Business Research, 15*, 173 - 190.

Hudson, J. L., Hughes, A. A., & Kendall, P. C. (2004). Treatment of generalized anxiety disorder in children and adolescents. In P. M. Barret & T. H. Ollendick (Eds.), *Handbook of interventions that work with children and adolescents* (pp. 115 - 144). Chichester: John Wiley & Sons.

Hudson, J. L., & Kendall, P. C. (2002). Showing you can do it: Homework in therapy for children and adolescents with anxiety disorders. *Journal of Clinical Psychology, 58*(5), 525 - 534.

Hudson, J. L., & Kendall, P. C. (2005). Children. In N. Kazantzis, F. D. Deane, K. R. Ronan & L. L'Abate (Eds.), *Using homework assignments in cognitive-behaviour therapy* (pp. 75 - 94). New York: Brunner-Routledge.

Jamieson, S. (2004). Likert scales: how to (ab)use them. *Medical Education, 38*, 1212 - 1218.

Johnson, M.H., Kazantzis, N. (2004) Cognitive behavioral therapy for chronic pain: strategies for the successful use of homework assignments. Journal of Rational-Emotive and Cognitive-Behavioural Therapy 22, 187-216

Kaiser, H. (1970). A Second Generation Little Jiffy. *Psycometrika, 35*, 401-415

Kaiser, H. (1974). An index of factorial simplicity. *Psychometrika, 39*, 31 - 36.

Kanfer, F. H., Karoly, P., & Newman, A. (1975). Reduction of children's fear of the dark by competence-related and situational threat-related verbal cues. *Journal of Consulting and Clinical Psychology, 43*, 251 - 258.

Kazantzis, N. (2000). Power to Detect Homework Effects in Psychotherapy Outcome Research. *Journal of Consulting and Clinical Psychology, 68*(1), 166-170.

Kazantzis, N. (2003). Therapist competence in cognitive and behavioural therapies: Review of the contemporary empirical evidence. *Behavior Change, 20*, 1 - 12.

Kazantzis, N., Busch, R., Ronan, K. R., & Merrick, P. L. (2004). Mental health practitioners' use and perceived importance of homework assignments in psychotherapy. *Journal of Consulting and Clinical Psychology, 68*, 166 - 170.

Kazantzis, N., Busch, R., Ronan, K. R., & Merrick, P. L. (in press). Using homework assignments in psychotherapy: Differences by theoretical orientation and professional training. *Behavioural & Cognitive Psychotherapy*.

Kazantzis, N., Dattilio, F. M., & Merrick, P. L. (in press). Do Researchers Do Their Homework? A 10-Year Survey of Psychotherapy Outcome Research Published in Journal of Consulting and Clinical Psychology. *Journal of Consulting and Clinical Psychology*.

Kazantzis, N., & Deane, F. D. (1998). Theoretical Orientations of New Zealand Psychologists: An International Comparison. *Journal of Psychotherapy Integration, 8*(2), 97 - 113.

Kazantzis, N., & Deane, F. D. (1999). Psychologist's use of homework assignments in clinical practice. *Professional Psychology: Research and Practice, 30*, 581 - 585.

Kazantzis, N., Deane, F. D., & Ronan, K. R. (2000). Homework assignments in cognitive and behavioral therapy: A meta-analysis. *Clinical Psychology: Science and Practice, 7*, 189 - 202.

Kazantzis, N., Deane, F. D., & Ronan, K. R. (2004). Assessing compliance with homework assignments: Review and recommendations for clinical practice. *Journal of Clinical Psychology, 60*(627 - 641).

Kazantzis, N., Deane, F. D., & Ronan, K. R. (2005). Assessment of homework completion. In N. Kazantzis, F. D. Deane, K. R. Ronan & L. L'Abate (Eds.), *Using homework assignments in cognitive-behaviour therapy* (pp. 61 - 74). New York: Brunner-Routledge.

Kazantzis, N., Deane, F. D., Ronan, K. R., & Lampropoulos, G. K. (2005). Empirical foundations. In N. Kazantzis, F. D. Deane, K. R. Ronan & L. L'Abate (Eds.), *Using homework assignments in cognitive-behaviour therapy* (pp. 35 - 60). New York: Brunner-Routledge.

Kazantzis, N., & L'Abate, L. (2005). Theoretical foundations. In N. Kazantzis, F. D. Deane, K. R. Ronan & L. L'Abate (Eds.), *Using homework assignments in cognitive-behaviour therapy* (pp. 9 - 34). New York: Brunner-Routledge.

Kazantzis, N., & Lampropoulos, G. K. (2002). Reflecting on homework in psychotherapy: What can we conclude from research and experience? *Journal of Clinical Psychology, 58*(5), 577 - 584.

Kazantzis, N., Lampropoulos, G. K., & Deane, F. P. (2005). A national survey of practicing psychologists' use and attitudes toward homework in psychotherapy. *Journal of Consulting and Clinical Psychology, 73*(4), 742 - 748.

Kazantzis, N., MacEwan, J., & Datillio, F. M. (2005). A guiding model for practice. In N. Kazantzis, F. D. Deane, K. R. Ronan & L. L'Abate (Eds.), *Using homework assignments in cognitive-behavior therapy* (pp. 357 - 404). New York: Brunner-Routledge.

Kazantzis, N., Ronan, K. R., & Deane, F. D. (2001). Concluding causation from correlation: Comment on Burns and Spangler (2000). *Journal of Consulting and Clinical Psychology, 69*, 1079 - 1083.

Kazdin, A. E. (1996). Dropping out of child therapy: Issues for research and implications for practice. *Clinical Child Psychology and Psychiatry, 1*, 133-156.

Kazdin, A. E., Holland, L., & Crowley, M. (1997). Family experience of barriers to treatment and premature termination from child therapy. *Journal of Consulting and Clinical Psychology, 65*(3), 453 - 463.

Kazdin, A. E., Holland, L., & Breton, J.L. (1991). *Barriers to participation in treatment scale - Parent and Therapist Versions.* New Haven. CT: Yale University.

Kazdin, A. E., & Mascitelli, S. (1982). Covert and overt rehearsal and homework practice in developing assertiveness. *Journal of Consulting and Clinical Psychology, 50*, 250 - 258.

Kazdin, A. E., & Mazurick, J. L. (1994). Dropping out of child psychotherapy: Distinguishing early and late dropouts over the course of treatment. *Journal of Consulting and Clinical Psychology, 62*, 1069-1074.

Kazdin, A. E., Siegel, T. C., & Bass, D. (1990). Drawing on clinical practice to inform research on child and adolescent psychotherapy: Survey of practitioners. *Professional Psychology: Research and Practice, 21*(3), 189 - 198.

Kazdin, A. E., & Wassell, G. (2000). Therapeutic changes in children, parents, and families resulting from treatment of children with conduct problems. *Journal of the American Academy of Child and Adolescent Psychiatry, 39*(4), 414 - 420.

Kelly, G. A. (1955). *The psychology of personal constructs.* New York: Norton.

Kendall, P. C. (1994). Treating anxiety disorders in children: Results of a randomized clinical trial. *Journal of Consulting and Clinical Psychology, 62*, 100 - 110.

Kendall, P. C. (2000a). Guiding theory for therapy with children and adolescents. In P. C. Kendall (Ed.), *Child and adolescent therapy: Cognitive-behavioral procedures* (2nd ed.). New York: Guilford Press.

Kendall, P. C. (2000b). *Cognitive-behavioral therapy for anxious children: Treatment manual (2nd ed.).* Ardmore, P.A.: Workbook Publishing.

Kendall, P. C., & Chambless, D. L. (1998). Empirically supported psychological therapies [Special Section]. *Journal of Consulting and Clinical Psychology, 66*(1 - 167).

Kendall, P. C., Chansky, T. E., Kane, M. T., Kim, R. S., Kortlander, E., Ronan, K. R., et al. (1992). *Anxiety disorders in youth: Cognitive behavioral interventions.* Massachusetts: Allyn and Bacon.

Kibblewhite, J. J. (2002). *Bridging the research-practice gap in child and adolescent psychotherapy: A survey of New Zealand practitioners.* Unpublished Masters Thesis, Massey University, Auckland.

Kimble, G. A. (1961). *Hilgard and Marquis' conditioning and learning.* New York: Appleton-Century-Crofts.

Kipper, D. A. (1996). The emergence of role-playing as a form of psychotherapy. *Journal of Group Psychotherapy, Psychodrama and Sociometry, 49*(3), 99 - 120.

Kleinman, A. M. (1977). Depression, somatization and the "new cross-cultural psychiatry". *Social Science and Medication, 11*, 3 - 10.

Kline, R. B. (1998). *Principals and practice of structural equation modeling.* New York: Guilford Press.

Knapp, T. R. (1990). Treating ordinal scales as interval scales: an attempt to resolve the controversy. *Nursing Research, 39*, 121 - 123.

Kochanska, G. (1993). Towards a synthesis of parental socialization and child temperament in the early development of conscience. *Child Development, 64*, 325 - 347.

Kohler, F. W., & Greenwood, C. R. (1986). Toward technology of generalization: The identification of natural contingencies of reinforcement. *The Behaviour Analyst, 9*, 19 - 26.

Kroener-Herwig, B., & Denecke, H. (2002). Cognitive-behavioral therapy of pediatric headache: are there differences in efficacy between a therapist-administered group training and a self-help format? *Journal of Psychosomatic Research, 53*(6), 1107 - 1114.

L'Abate, L. (2001). Hugging, holding, huddling, and cuddling (3HC): A task prescription in couple and family therapy. *The journal of clinical activities, assignments & handouts in psychotherapy practice, 1*, 5 - 18.

L'Abate, L., & De Giacomo, P. (2003). *Intimate relationships and how to improve them: Integrating theory with preventive and psychotherapeutic interventions.* Westport, CT: Praeger.

Lambert, M. J., Bergin , A. E., & Garfield, S. L. (2004). Introduction and historical overview. In M. J. Lambert (Ed.), *Bergin and Garfield's handbook of psychotherapy and behaviour change* (5th ed., pp. 3 - 15). New York: John Wiley & Sons.

Lambert, M. J., Harmon, S. C., & Slade, K. (2005). Directions for research on homework. In N. Kazantzis & L. L'Abate (Eds.), *Handbook of homework assignments in psychotherapy: Research, practice and prevention* (pp. 709 - 742). New York: Springer.

Lambert, M. J., & Ogles, B. M. (2004). The efficacy and effectiveness of psychotherapy. In M. J. Lambert (Ed.), *Bergin and Garfield's handbook of psychotherapy and behaviour change* (5th ed., pp. 139 - 193). New York: John Wiley & Sons.

Lampropoulos, G. K., & Rector, N. A. (2004). *Homework compliance in cognitive behavior therapy for anxiety disorders: Predictors of outcome.* Paper presented at the Poster presented at the 30th Annual Harvey Stancer Research Day, Department of Psychiatry, University of Toronto, Toronto.

Leahy, R. L. (2001). *Overcoming resistance in Cognitive Therapy.* New York: Guilford Press.

Leahy, R. L. (2003). *Roadblocks in cognitive-behavioral therapy: Transforming challenges into opportunities for change.* New York: Guilford Press.

Leong, F. T. L., & Austin, J. T. (Eds.). (1996). *The Psychology Research Handbook: A Guide for Graduate Students and Research Assistants.* Thousand Oaks, CA: Sage.

Leung, A. W., & Heimberg, R. G. (1996). Homework compliance, perceptions of control, and outcome of cognitive-behavioral treatment of social phobia. *Behaviour Research and Therapy, 34*, 423 - 432.

Lewinsohn, P. M. (1974). A behavioral approach to depression. In R. J. Friedman & M. M. Katz (Eds.), *The psychology of depression: Contemporary theory and research* (pp. 157 - 158). Washington, DC: Wiley.

Ley, P., Jain, V., & Skillbeck, C. (1976). A method for decreasing medication errors. *Psychiatric in Medicine, 6*, 599 - 601.

Likert, R. A. (1952). A technique for the development of attitude scales. *Educational and psychological measurement, 12*, 313 - 315.

Linehan, M. M., & Kehrer, C. A. (1993). Borderline personality disorder. In D. H. Barlow (Ed.), *Clinical handbook of psychological disorders: A step-by-step treatment manual* (2nd ed., pp. 396 - 441). New York: Guilford Press.

Luborsky, L., & DeRubis, R. J. (1984). The use of psychotherapy treatment manuals: A small revolution in psychotherapy research style. *Clinical Psychology Review, 4*, 5 - 14.

Mackay, J., & Eriksen, M. (2002). *The Tobacco Atlas.* Geneva: World Health Organization.

Mahrer, A. R., Nordin, S., & Miller, L. S. (1995). If a client has this kind of problem, prescribe that kind of post-session behavior. *Psychotherapy, 32*, 194 - 203.

Malott, R. W. (1980). *Rule-governed behaviour and the achievement of evasive goals: A theoretical analysis.* Unpublished manuscript, Western Michigan University, Kalamazoo.

Man, T. K., & Yin, F. S. (1996). Applying cognitive-behavioural approach in an anger management group for aggressive children. *Asian Journal of Counseling Psychology, iv*, 1 - 16.

Mangione, T. W. (1995). *Mail Surveys: Improving the quality.* Thousand Oaks, CA: Sage.

Manne, S. L. (1998). Treatment adherence and compliance. In R. T. Ammerman & J. V. Campo (Eds.), *Handbook of pediatric psychology and psychiatry* (Vol. 2, pp. 103 - 132). Boston: Allyn and Bacon.

Marks, I. M., Lelliott, P., Basoglu, M., Noshirvani, H., Monteiro, W., Cohen, D., et al. (1988). Clomipramine, self-exposure, and therapist-aided exposure for obsessive—compulsive rituals. *British Journal of Psychiatry, 152*, 522-534.

Marsella, A. J., & Pedersen, P. B. (1981). *Cross-cultural counseling and psychotherapy.* New York: Pergamon Press.

Massey, F. J. Jr. (1951). The Kolmogorov-Smirnov test of goodness of fit. *Journal of the American Statistical Association*, 46.

Martin, G., & Osborne, J. G. (1993). *Psychological adjustment and everyday living* (2nd ed.). Englewood Cliffs, NJ: Prentice Hall.

Martin, G., & Pear, J. (2003). *Behavior modification: What it is and how to do it.* New Jersey: Prentice Hall.

Martins, M. P. (2002). The use of structural equation modeling in counseling psychology research. *The counseling psychologist, 33*(3), 269 - 298.

Mathews, A. M., Gelder, M. G., & Johnston, D. W. (1981). *Agoraphobia: nature and treatment.* New York: Guilford Press.

Mazur, J. E. (1994). *Learning and behavior* (3rd ed.). New Jersey: Prentice Hall.

Mazzulo, S. M., Lasagna, L., & Griner, P. F. (1974). Variations in interpretation of prescription assignments. *Journal of the American Medical Association, 227*, 929 - 931.

McAdam, D. B., Klatt, K. P., & Koffarnus, M. (2005). The Effects Of Establishing Operations On Preferences For Tangible Items. *Journal of Applied Behavior Analysis, 38*(1), 107-110.

McCrohan, K. F., & Lowe, L. S. (1981). A cost/benefit approach to postage used on mail questionnaires. *Journal of Marketing, 45*, 130 - 133.

McDaniel, S. W., & Jackson, R. W. (1981). An investigation of respondent anonymity's effect on mailed questionnaire response rate and quality. *Journal of the Market Research Society, 23*, 150 - 160.

McFarlane, W. R., Gingerich, S., Deakins, S.M., Dunne, E., Horen, B.T., & Newmark, M. (2002). Problem solving in multifamily groups. In W. R. McFarlane (Ed.), *Multifamily groups in the treatment of severe psychiatric disorders* (pp. 142 - 171). New York: Guilford Press.

Mennin, D. S., Heimberg, R. G., & Holt, C. S. (2000). Panic, agoraphobias, phobias and generalized anxiety disorder. In M. Hersen & A. S. Bellack (Eds.), *Psychopathology in adulthood*. Needham Heights: Allyn and Bacon.

Michael, J. (1993). Establishing operations. *Behaviour Analyst, 16*, 191 - 206.

Michelson, L., Mavissakalian, M., Marchione, K., Dancu, C., & Greenwald, M. (1986). The role of self directed in vivo exposure in cognitive, behavioral, and psychophysiological treatments for agoraphobia. *Behaviour Therapy, 17*, 91 - 108.

Miller, N. E., & Dollard, J. (1941). *Social learning and imitation*. New Haven. CT: Yale University.

Miller, W. R., & Rollnick, S. (2002). *Motivational interviewing: Preparing people for change* (2nd ed.). New York: Guilford Press.

Morgan, W. G. (1974). The shaping game: A teaching technique. *Behavior Therapy, 5*, 271 - 272.

Morrison, R. K. L. (2004). Informal relationships in the workplace: Associations with job satisfaction, organisational commitment and turnover intentions. *New Zealand Journal of Psychology, 33*(3), 114 - 128.

Morrison, R. K. L. (2005). *Informal relationships in the workplace: Associations with job satisfaction, organisational commitment and turnover intentions.* Unpublished Doctoral Thesis, Massey University, Auckland.

Myers, L. B., & Midence, K. (1998). *Adherence to treatment in medical conditions*. Amsterdam: Harwood Academic Publishers.

Myles, P. J., & Milne, D. L. (2004). Outcome evaluation of a brief shared learning programme in cognitive behavioural therapy. *Behavioural and Cognitive Psychotherapy, 32*, 177-188.

Nauta, M. H. (2005). *Anxiety disorders in children and adolescents: Assessment, cognitive behavioral therapy, and predictors of treatment outcome*. Unpublished Doctoral thesis, University of Groningen, Groningen, The Netherlands.

Neimeyer, G. J. (1995). The challenge of change. In R. A. Neimeyer & M. J. Mahoney (Eds.), *Constructivism in psychotherapy* (pp. 111–126). Washington, DC: American Psychological Association.

Neimeyer, R. A., & Feixas, G. (1990). The role of homework and skill acquisition in the outcome of group cognitive therapy for depression. *Behaviour Therapy, 21*, 281 - 292.

Neimeyer, R. A., Ray, L., Hardison, H., Raina, K., Kelley, R., & Krantz, J. (2003). Fix role in a fishbowl: Consultation-based fixed role therapy as a pedagogical technique. *Journal of Constructivist Psychology, 16*, 249 - 271.

Newman, C. F. (1994). Understanding client resistance: Methods for enhancing motivation to change. *Cognitive and Behavioral Practice, 1*, 47 - 69.

Norcross, J. C., Karg, R. S., & Prochaska, J. O. (1997). Clinical psychologists in the 1990's: II. *The Clinical Psychologist, 50*(3), 4 - 11.

Norcross, J. C., & Prochaska, J. O. (1982). A national survey of clinical psychologists: Affiliations and orientations. *The Clinical Psychologist, 35*(5), 3 - 6.

Norcross, J. C., & Wogan, M. (1983). American psychotherapists of diverse persuasions: Characteristics, theories, practices, and clients. *Professional Psychology: Research and Practice, 14*(4), 529 - 539.

Northey, W. F. (2002). Characteristics and clinical practices of marriage and family therapists: A national survey. *Journal of Marital and Family Therapy, 28*(4), 487 - 494.

O'Donohue, W. (1998). *Learning and behavior therapy*. Boston: Allyn and Bacon.

Olkin, R. (1999). *What psychotherapists should know about disability*. New York: Guilford Press.

Ollendick, T. H., & Hersen, M. (1979). Social skills training for juvenile delinquents. *Behaviour Research and Therapy, 17*, 547 - 554.

Ollendick, T. H., & King, N. J. (1998). Empirically supported treatments for children with phobic and anxiety disorders: Current status. *Journal of Clinical Child Psychology,, 27*, 156–167.

Oppenheim, A. N. (1992). *Questionnaire design, interviewing and attitude measurement*. London: Pinter Publishers.

Padesky, C. A., & Greenberger, D. (1995). *Clinician's guide to Mind over Mood*. New York: Guilford Press.

Pallant, J. F. (2005). *SPSS survival manual: A step by step guide to data analysis using SPSS* (2nd ed.). Crows Nest, Australia: Allen & Unwin.

Park, J. M., Mataix-Cols, D., Marks, I. M., Ngamthipwatthana, T., Marks, M., Araya, R., et al. (2001). Two-year follow-up after a randomized controlled trial of self- and clinician-accompanied exposure for phobia/panic disorders. *British Journal of Psychiatry, 178*, 543 - 548.

Pavlov, I. P. (1927). *Conditioned reflexes: An investigation of the physiological activity of the cerebral cortex*. London: Oxford University Press.

Pedersen, P. B., Draguns, J. G., Lonner, W. J., & Trimble, W. J. (1981). *Counseling across cultures*. Honolulu, HI: University Press of Hawaii.

Pedhazur, E. J. (1982). *Multiple regression in behavioral research* (2nd ed.). New York: Holt, Rinehart & Winston.

Persons, J. B. (1989). *Cognitive therapy in practice: A case formulation approach*. New York: Norton.

Persons, J. B. (2001). Understanding the exposure principal and using it to treat anxiety. *Psychiatric Annals, 31*(8), 471.

Persons, J. B., Burns, D. D., & Perloff, J. M. (1988). Predictors of dropout and outcome in cognitive therapy for depression in a private practice setting. *Cognitive Therapy and Research, 12*, 557 - 575.

Persons, J. B., Davidson, J., & Tompkins, M. A. (2001). *Essential components of cognitive-behavior therapy for depression.* Washington, DC: American Psychological Association.

Piaget, J. (1952). *The origins of intelligence in children.* New York: International Universities Press.

Piaget, J. (1972). *The psychology of intelligence.* Totowa: NJ: Littlefield, Adams.

Picard, R. R., & Cook, R. D. (1984). Cross-validation of regression models. *Journal American Statistical Association, 79*, 575 - 583.

Primakoff, L., Epstein, N., & Covi, L. (1986). Homework compliance: An uncontrolled variable in cognitive therapy outcome research. *Behavior Therapy, 17*, 433 - 446.

Prochaska, J. O., & DiClemente, C. C. (1983). Stages and processes of self-change in smoking: Toward an integrative model of change. *Journal of Consulting and Clinical Psychology, 51*, 390 - 395.

Prochaska, J. O., & DiClemente, C. C. (1984). *The transtheoretical approach: Crossing the traditional boundaries of change* (Vol. 51). Homewood, IL: Irwin.

Prochaska, J. O., & DiClemente, C. C. (1992). *Stages of change in the modification of problem behaviors.* Newbury Park, CA: Sage.

Prochaska, J. O., DiClemente, C. C., & Norcross, J. C. (1992). In search of how people change: Applications to addictive behaviors. *American Psychologist, 47*(9), 1102 - 1114.

Prochaska, J. O., & Norcross, J. C. (1983). Contemporary psychotherapists: A national survey of characteristics, practices, orientations, and attitudes. *Psychotherapy: Theory, Research and Practice, 20*(2), 161 - 173.

Prochaska, J. O., Velicer, W. F., Rossi, J. S., Goldstein, M. G., Marcus, B. H., Rakowski, W., et al. (1994). Stages of change and decisional balance for 12 problem behaviors. *Health Psychology, 13*, 39 - 46.

Rachman, S. J. (1990). *Fear and courage.* New York: Freeman.

Rapee, R. M., Abbott, M., & Gaston, J. (2001). *Bibliotherapy in the treatment of children with anxiety disorders.* Paper presented at the triannual meeting of the World Congress of Behavioral and Cognitive Therapies, Vancouver, Canada.

Robinson, P. (2003). Homework in Cognitive Behaviour Therapy. In W. O'Donohue, J. E. Fisher & S. C. Hayes (Eds.), *Cognitive Behavior Therapy: Applying Empirically Supported Techniques in your Practice* (pp. 202 - 211). New Jersey: John Wiley & Sons.

Rodebaugh, T. L., Holaway, R. M., & Heimberg, R. G. (2004). The treatment of social anxiety disorder. *Clinical Psychology Review, 24*, 883 – 908.

Roscoe, B., Martin, G. L., & Pear, J. J. (1980). Systematic self-desensitization of fear of flying: A case study. In G. L. Martin & J. G. Osborne (Eds.), *Helping in the community: Behavioral applications* (pp. 345 - 352). New York: Plenum Press.

Ross, D. M., Ross, S. A., & Evans, T. A. (1971). The modification of extreme social withdrawal be modeling with guided participation. *Journal of Behavior Therapy and Experimental Psychiatry, 2*, 273 - 279.

Sadock, J. S., & Sadock, V. A. (2003). *Kaplan & Sadock's Synopsis of Psychiatry: Behavioural Sciences / Clinical Psychiatry* (9th ed.). Philadelphia: Lippincot, Williams & Wilkins.

Salkovskis, P. M., Clark, D. M., Hackmann, A., Wells, A., & Gelder, M. G. (1999). An experimental investigation of the role of safety-seeking behaviours in the maintenance of panic disorder with agoraphobia. *Behaviour Research and Therapy, 37*, 559±574.

Salzman, I. J. (1951). Delay of reward and human verbal learning. *Journal of Experimental Psychology, 41*, 437 - 439.

Sattora, A., & Bentler, P. M. (1988). *Scaling corrections for chi-square statistics in covariance structure analysis.* Paper presented at the American Statistical Association 1988 proceedings of the business and economics section, Alexandria VA.

Scheel, M. J., Hanson, W. E., & Razzhavaikina, T. I. (2004). The process of recommending homework in psychotherapy: A review of therapist delivery methods, client acceptability, and factors that affect compliance. *Psychotherapy: Theory, Research, Practice, Training, 41*(1), 38 - 55.

Schmidt, N. B., & Woolaway-Bickel, K. (2000). The effects of treatment compliance on outcome in cognitive-behavioral therapy for panic disorder: Quality versus quantity. *Journal of Consulting and Clinical Psychology, 68*, 13 - 18.

Schroeder, C. S., & Gorden, B. N. (1991). *Assessment and treatment of childhood problems: A clinician's guide.* New York: Guilford Press.

Schultheis, G. M. (1998). *Brief therapy homework planner.* Toronto: John Wiley & Sons.

Schwebel, A. I., & Fine, M. A. (1992). *Understanding and helping families: A cognitive-behavioral therapy approach.* New York: Macmillian.

Selye, H. (1974). *Stress without distress.* New York: Signet.

Sharpe, D. (1997). Of apples and oranges, file drawers and garbage: Why validity issues in meta-analysis will not go away. *Clinical Psychology Review, 17*(8), 881 - 901.

Shelton, J. L., & Levy, R. L. (1981a). A survey of the reported use of assigned homework activities in contemporary behaviour therapy literature. *The Behaviour Therapist, 4*, 13 - 14.

Shelton, J. L., & Levy, R. L. (1981b). *Behavioral assignments and treatment compliance: A handbook of clinical strategies.* Champaign, IL: Research Press.

Shybut, J. (1968). Delay of gratification and severity of psychological disturbance among hospitalised psychiatric inpatients. *Journal of Consulting and Clinical Psychology, 32*, 462 - 468.

Simons, A. D., Murphy, G. E., Levine, J. L., & Wetzel, R. D. (1986). Cognitive therapy and pharmacotherapy for depression: Sustained improvement over one year. *Archives of General Psychotherapy, 25*, 37 - 45.

Skinner, B. F. (1969). *Contingencies of reinforcement: A theoretical analysis.* New York: Appleton-Century-Crofts.

Skinner, B. F. (1981). Selection by consequences. *Science, 213*, 501 - 504.

Spiegler, M. D., & Guevremont, D. C. (1998). *Contemporary behavior therapy* (3rd ed.). New York:: Brooks Cole.

SPSS. (2004). Statistical Package for the Social Sciences (Version 13): SPSS, inc.

Startup, M., & Edmonds, J. (1994). Compliance with homework assignments in cognitive-behavioral psychotherapy for depression: Relation to outcome and methods of enhancement. *Cognitive Therapy and Research, 18*, 567 - 579.

Streiner, D. L., & Norman, G. R. (1998). *Health measurement scales: A Practical guide to their development and use* (2nd ed.). New York: Oxford University Press.

Sue, S., & Zane, N. (1987). The role of culture and cultural techniques in psychotherapy. *American Psychologist, 42*, 37 - 45.

Sukhodolsky, D. G., Kassinove, H., & Gorman, B. S. (2004). Cognitive-behavioural therapy for anger in children and adolescents: A Meta Analysis. *Aggression and Violent Behaviour, 9*, 247 - 269.

Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics* (4th ed.). New York: HarperCollins.

Tharp, R. G., & Wetzel, R. J. (1969). *Behavior modification in the natural environment.* New York: Academic Press.

Thorndike, E. L. (1927). The law of effect. *American journal of psychology, 39*, 212 - 222.

Thurstone, L. L. (1947). *Multiple factor analysis.* Chicago, Il: University of Chicago Press.

Tompkins, M. A. (2003). Effective homework. In R.L.Leahy (Ed.), *Roadblocks in cognitive-behavioral therapy: Transforming challenges into opportunities for change* (pp. 49 - 66). New York: Guilford Press.

Tompkins, M. A. (2004). *Using homework in psychotherapy: Strategies, guidelines, and forms.* New York: Guilford Press.

Vakoch, D. A., & Strupp, H. H. (2002). Psychodynamic approaches to psychotherapy: Philosophical and theoretical foundations of effective practice. In C. R. Snyder & R. E. Ingram (Eds.), *Handbook of psychological change* (pp. 200 - 216). New York: Wiley.

VanAuker-Ergle, K. A. (2003). *Barriers to low achievers' success in the elementary classroom as perceived by teachers: A qualitative study.* Unpublished Doctoral Thesis, University of Florida.

Vasta, R., Haith, M., & Miller, S. (1995). *Child psychology: The modern science* (2nd ed.). New York: Wiley.

Vaux, A. (1996). Conducting Mail Surveys. In F. T. L. Leong & J. T. Austin (Eds.), *The psychology research handbook: A guide for graduate students and research assistants* (pp. 127 - 138). Thousand Oaks, CA: Sage.

Velicer, W. F., Hughes, S. L., Fava, J. L., Prochaska, J. O., & DiClemente, C. C. (1995). An empirical typology of subjects within stage of change. *Addictive Behavior, 20*, 299 - 320.

Waltz, J., Addis, M. E., Koerner, K., & Jacobson, N. S. (1993). Testing the integrity of a psychotherapy protocol: Assessment of adherence and competence. *Journal of Consulting and Clinical Psychology, 61*, 620 - 630.

Waltz, J., Addis, M. E., Koerner, K., & Johnston, N. S. (1993). Testing the integrity of a psychotherapy protocol: Assessment of adherence and competence. *Journal of Consulting and Clinical Psychology, 61*, 620 - 630.

Wankel, L. M. (1993). The importance of enjoyment to adherence and psychological benefits from physical activity. *Journal of Sport Psychology, 24*(151–169).

Warnke, M. G. (2004). *Self-monitoring procedures with elementary aged children of color with disruptive behaviors in an urban setting.* Unpublished Doctoral thesis, The University of Wisconsin, Milwaukee.

Watkins, M. (2000). *Monte Carlo PCA for Parallel Analysis computer program.* Retrieved 15th January, 2006, from www.allenandunwin.com/spss.htm

Watson, T. S., & Gresham, F. (1998). Current issues in child behavior therapy. In T. S. Watson & F. Gresham (Eds.), *Handbook of child behavior therapy: Ecological considerations in assessment, treatment, and evaluation* (pp. 499 - 504). New York: Plenum Press.

Weng, L. J., & Cheng, C. P. (2000). Effects of response order on Likert-type scales. *Educational and psychological measurement, 60*(6), 908 - 924.

Whisman, M. A. (1993). Mediators and moderators of change in cognitive therapy of depression. *Psychological Bulletin, 114*, 248–265.

Wilkinson, L., & American Psychological Association Board of Scientific Affairs Task Force on Statistical Inference. (1999). Statistical methods in psychology journals: Guidelines and explanations. *American Psychologist, 54*, 594 - 604.

Wolpe, J. (1958). *Psychotherapy by reciprocal inhibition.* Stanford: Stanford University Press.

Wolpe, J. (1990). *The practice of behavior therapy* (4th ed.). New York: Pergamon Press.

Woods, C. M., Chambless, D. L., & Steketee, G. (2002). Homework compliance and behavior therapy outcome for panic with agoraphobia and obsessive compulsive disorder. *Cognitive Behavior Therapy, 31*(88 - 95).

Woody, S. R., & Adessky, R. S. (2002). Therapeutic alliance, group cohesion, and homework compliance during cognitive behavioral group treatment of social phobia. *Behavior Therapy, 33*, 5–27.

Wright, J. H., Thase, M. E., Beck, A. T., & Ludgate, J. W. (1993). *Cognitive therapy with inpatients: Developing a cognitive milieu.* New York: Guilford Press.

Yammarino, F. J., Skinner, S. J., & Childers, T. L. (1991). Understanding mail survey response behavior. *Public Opinion Quarterly, 55*, 613 - 639.

Zeiss, A. M., & Steffen, A. (1996). Treatment issues with elderly clients. *Cognitive and Behavioral Practice, 3*, 371 - 389.

Zwick, W. R., & Velicer, W. F. (1986). Comparison of five rules for determining the number of components to retain. *Psychological Bulletin, 99*, 432 - 442.

Appendix A

Summary of literature support for barriers to homework completion

Barrier Type	Publication	Year
Task Factors		
	Number and Difficulty	
	Beck, Rush, Shaw & Emery	1979
	Conoley, Padula & Daniels	1994
	Goldstein	1994
	Kazantzis, MacEwan & Dattilio	2005
	Shelton & Levy	1981
	Tompkins	2003
	Clarity, Concreteness or Specificity	
	Ley, Jain & Skillbeck	1976
	Mazzulo, Lasagna & Griner	1974
	Tompkins	2003
	Link Between Client Ability And Goals For Therapy	
	Burns & Auerbach	1982
	Conoley, Padula & Daniels	1994
	Detweiler & Whisman	1999
	Vygotsky	1963
Therapist Factors		
	Positive Therapeutic Alliance / Relationship	
	Beck, Rush, Shaw & Emery	1979
	Detweiler & Whisman	1999
	DiMatteo & DiNicola	1982
	Leahy	2001
	Tompkins	2003
	Collaboration In Developing And Assigning Tasks	
	Beck	1995
	Beck, Rush, Shaw & Emery	1979
	Prochaska, DiClemente & Norcross	1992

Rationale For Specific Task And Homework In General

Beck	1995
Burns & Auerbach	1982
Glaser, Kazantzis, Deane & Oades	2000
Goldstein & Davidson	1976
Kazantzis & Lampropoulos	2002

Reinforcement For Homework Completed

Burns & Auerbach	1992
Detweiler & Whisman	1999
Kazantzis, MacEwan & Dattilio	2005

Therapist Beliefs

Kazantzis, Lampropoulos & Deane	2005
Kazantzis, MacEwan & Dattilio	2005
Tompkins	2003
Tompkins	2004

Use Of The Term Homework

Barrett	1998
Barrett, Dadds & Rapee	1996
Coon & Gallagher-Thompson	2005
Dattilio	2002
Freidberg & McClure	2005
Hudson & Kendal	2002
Hudson & Kendal	2005
Kazantzis & Lampropoulos	2002
Tompkins	2004

Client Factors

Client Beliefs About Self

Coyne & Lombardo	2002
Kazantzis & L'Abate	2005
Lewinsohn	1974
Persons	1989
Russo	1987

Client Beliefs About Treatment

Kazantzis, MacEwan & Dattilio	2005
Shelton & Levy	1981

Cultural Beliefs

Kleinman	1977
Marsella & Pedersen	1981
Pedersen, Draguns, Lonner & Trimble	1981
Sue & Zane	1987
Freidberg & McClure	2005

High Symptomatology / Comorbid Personality Disorder

Edelman & Chambless	1995
Kazdin	1997

Function Of Non-Compliance For The Client

Dowd & Saunders	1994
Linehan & Kehrer	1993
Newman	1994
Dattilio, L'Abate & Deane	2005
Leahy	2001

Skills

Beck	1995
Kazantzis, MacEwan & Dattilio	2005
Shelton & Levy	1981
Tompkins	2003

Skills

Beck	1995
Kazantzis, MacEwan & Dattilio	2005
Shelton & Levy	1981
Tompkins	2003

Age Of The Client / Cognitive Maturation

Freidberg & McClure	2005
Hudson & Kendal	2002
Hudson & Kendal	2005
Vasta, Haith & Millar	1995

Environmental Factors

Lack Of Support / Environment Devoid Of Reinforcement

DiMatteo & DiNicola	1982
Persons	1989
Shelton & Levy	1981

Practical Obstacles

Hudson & Kendall	2002
Kazdin	1997
Olkin	1999
Tompkins	2003
Zeiss & Steffen	1996

Degree Of Dysfunction Within A Family

Carr	1999
Hudson & Kendal	2005
Kazdin	1997
Selye	1974

Negative Attitudes Held By A Client's Family Or Friends

Kazdin	1996
Kazdin, Holland & Bretton	1991
Kazdin, Holland & Crowley	1997

Appendix B

Marriage and Family Therapist Homework Questionnaire – Cover Letter

May 17, 2005
Dear Colleague,
In the time that it would take you to chew the flavor out of the enclosed stick of gum, you could easily complete this survey. We appreciate how busy your schedule must be, but we can assure you that your time will be extremely well spent and your answers taken seriously.

There has been an increase in the attention given to the role of between-session activities in couple and family therapy in recent years. What is needed now are representative data concerning practitioners' use, experience, and attitudes with respect to these activities.

The enclosed survey aims to gather data on the barriers that interfere with between-session activities. It also aims to gather data on the impact of these activities on the relationship with the client. The process of therapy is very different between clinical populations, so the questionnaire addresses work with these populations separately (i.e., child, adolescent, family, and couples). This means that you may not need to complete every section of the questionnaire, so please answer only those that are relevant to your work.

This survey is part of a study sponsored by the Harvard Medical School and Massey University, which together have an ongoing research program on the use of homework. Your responses will make a valuable contribution to the current knowledge of between-session assignments. This survey should only require 15-20 minutes of your time to complete. Once you have completed the survey, please return it in the enclosed, self-addressed, stamped envelope within two weeks of receipt of date at the top of this correspondence.

This survey is designed to be completely anonymous, so please do not include your name or any other identifying information on the survey. Your participation in the study is strictly voluntary. You may refuse to participate by simply discarding the survey. However, your completion and return of the survey indicates your consent for us to use the answers that you provide without any indication of your identity. Again, the survey is anonymous.

If you have any questions regarding this research, you are encouraged to e-mail Dr. Frank M. Dattilio at [redacted] or call him at [redacted] This project has been reviewed according to Harvard Medical School and Massey University procedures governing human subjects' research participation. *If you have any questions regarding your rights as a participant in this research, you can contact Dr. Dattilio at the above address.*

The results of this survey will be summarized in a report and sent to all interested participants. We thank you for your time and attention.

Sincerely,

Frank M. Dattilio, Ph.D. (*Harvard Medical School*)
Nikolaos Kazantzis, Ph.D. (*Massey University*)

Appendix C

Marriage and Family Therapist Homework Questionnaire

Section A: Use and Experience of Between-Session Activities

A1. Have you ever asked a couple, family, or individual client to engage in any activity or assignments that are to be completed **outside** of the therapy session? *(Please circle your response)*

Yes No

If you answered "NO" to the above question, please skip to Section I

Please use the following scale to indicate how often you recommend activities that would fit into each of the following categories:

1	2	3	4	5
Never	**Rarely**	**Occasionally**	**Often**	**Almost Always**

A2.	Bibliotherapy / Reading literature (e.g., self-help material)	1 2 3 4 5
A3.	Gathering data about thoughts, behaviors or emotions	1 2 3 4 5
A4.	Hyperventilation or other induced physiological states	1 2 3 4 5
A5.	Increasing mastery	1 2 3 4 5
A6.	Increasing pleasure	1 2 3 4 5
A7.	Interpersonal interaction	1 2 3 4 5
A8.	In-vivo exposure	1 2 3 4 5
A9.	Manipulating behavior via cues or consequences	1 2 3 4 5
A10.	Relaxation practice, controlled breathing or distraction	1 2 3 4 5
A11.	Parent management techniques/training	1 2 3 4 5
A12.	Practicing cognitive techniques (e.g., examining evidence for thoughts)	1 2 3 4 5
A13.	Scheduling activity or exercise	1 2 3 4 5
A14.	Other (specify) _____	1 2 3 4 5

A15. On average, how many different types of between-session activities would you usually recommend during the **first 10 treatment sessions?**

One **Two** **Three** **Four** **Five** **Six or more**

A16. On average, how many different between-session activities would you usually recommend **at each session**?

One **Two** **Three** **Four or more**

A17. Please circle the **one resource** that you most commonly use when selecting between-session tasks:

1. Conceptualization/ formulation
2. Diagnosis-specific treatment models
3. Published case studies
4. Published outcome studies
5. Published practice planners
6. Published therapy guides/ texts
7. Treatment manuals
8. Other (Please Specify): _____

A18. Please circle the **one term** that you most prefer to use when discussing between-session tasks with clients:

1. Homework
2. "Show That I Can" Tasks
3. Assignments
4. Experiments
5. Between-session activities
6. "Coping Cat" Tasks
7. Home practice
8. Self-help
9. Tasks
10. Other (specify): _____

Section B: Barriers to the Completion of Between-Session Activities

We are interested in your **experience** of factors that have specifically inhibited your clients from engaging in between-session tasks. Thinking about the times your clients have NOT completed between-session tasks, using the scale below, please indicate the **frequency** with which **you have experienced** each of the following as serving as a barrier to task completion:

1	2	3	4	5
Never	**Rarely**	**Occasionally**	**Often**	**Almost Always**

B1	The rationale for the task was not effective (e.g., not clear, understood, or accepted)	1 2 3 4 5
B2	The task was poorly defined or non-specific (e.g., lacked clarity on what, when, where, how often, and/or how long the task should take)	1 2 3 4 5
B3	The client perceived the task to be too difficult (e.g., given current skill, task complexity or quantity)	1 2 3 4 5
B4	The client held negative beliefs towards the task (e.g., utility or relevance of specific task)	1 2 3 4 5
B5	A high degree of psychopathology/dysfunction interfered with task completion (e.g., clinical crisis)	1 2 3 4 5
B6	The task was inappropriate for the client's personal, family, or cultural beliefs	1 2 3 4 5
B7	The client did not understand what to do (i.e., comprehension)	1 2 3 4 5
B8	The therapeutic alliance, collaboration, or relationship was poor	1 2 3 4 5
B9	A practical obstacle arose that was not anticipated (e.g., unexpected commitments)	1 2 3 4 5
B10	The link/match between the task and the client's goals for therapy was unclear	1 2 3 4 5
B11	The client did not consider the task to be beneficial (i.e., no pleasure, mastery, sense of progress)	1 2 3 4 5

Section C: Using Between-Session Activities with CHILDREN

C1. How often do you use between-session activities in your practice with children (aged 12 years or under) **in an individual mode of therapy**?

1	2	3	4	5
Never	**Rarely**	**Occasionally**	**Often**	**Almost Always**

If you DO NOT work with children individually OR answered "NEVER," please skip to Section D.

C2. In your experience, how would you describe children's average level of **compliance** with between-session activities?

1	2	3	4
No compliance whatsoever	**Low level of compliance**	**Moderate level of compliance**	**High level of compliance**

C3. In your experience, how would you describe children's average **quality** of between-session activity completion?

1	2	3	4	5
Very low quality	**Low quality**	**Moderate quality**	**High quality**	**Very high quality**

We are interested in your experience of factors that have specifically inhibited **children** from engaging in between-session tasks. Thinking about the times your child clients have NOT completed between-session tasks, using the scale below, please indicate the **frequency** with which **you have experienced** each of the following as serving as a barrier as a barrier to the completion of between-session assignments:

1	2	3	4	5
Never	**Rarely**	**Occasionally**	**Often**	**Almost Always**

C4	The task was not appropriate for the child's age or level of cognitive maturation	1 2 3 4 5
C5	The degree of dysfunction within the child's **family** prevented task completion	1 2 3 4 5
C6	Significant others outside the child's family (e.g., school, extended family, friends) did not support the between-session task (including receiving negative reactions from others)	1 2 3 4 5
C7	The child's caregiver did not support the between-session task (e.g., little encouragement, did not set aside 'homework' time, little involvement or interest in the tasks)	1 2 3 4 5
C8	The child's caregiver had a lack of understanding about the task (e.g., poor understanding of rationale behind the task)	1 2 3 4 5
C9	The size of the child's family interfered with completion of the between-session task	1 2 3 4 5
C10	Poor communication between caregivers (e.g., parents, school, extended family)	1 2 3 4 5
C11	Belonging to multiple families caused interference with between-session task completion (e.g., parents separated; step or blended families; cared for part-time by extended family members)	1 2 3 4 5

Section D: Using Between-Session Activities with ADOLESCENTS

D1. How often do you use between-session activities in your practice with adolescents (aged 13 – 18 years) **in an individual mode of therapy**?

1	2	3	4	5
Never	**Rarely**	**Occasionally**	**Often**	**Almost Always**

If you DO NOT work with adolescents individually OR answered "NEVER," please skip to Section E.

D2. In your experience, how would you describe children's average level of **compliance** with between-session activities?

1	2	3	4
No compliance whatsoever	**Low level of compliance**	**Moderate level of compliance**	**High level of compliance**

D3. In your experience, how would you describe children's average **quality** of between-session activity completion?

1	2	3	4	5
Very low quality	**Low quality**	**Moderate quality**	**High quality**	**Very high quality**

We are interested in your experience of factors that have specifically inhibited **adolescents** from engaging in between-session tasks. Thinking about the times your adolescent clients have NOT completed between-session tasks, using the scale below, please indicate the **frequency** with which **you have experienced** each of the following as serving as a barrier to the completion of between-session assignments:

1	2	3	4	5
Never	**Rarely**	**Occasionally**	**Often**	**Almost Always**

D4	The task was not appropriate for the adolescent's age or level of cognitive maturation	1 2 3 4 5
D5	The degree of dysfunction within the adolescent's **family** prevented task completion	1 2 3 4 5

D6	Significant others outside the adolescent's family (e.g., school, extended family, friends) did not support the between-session task (including receiving negative reactions from others)	1 2 3 4 5
D7	The adolescent's caregiver did not support the between-session task (e.g., little encouragement, failed to set aside "homework" time, little involvement or interest in the tasks)	1 2 3 4 5
D8	The adolescent's caregiver had a lack of understanding about the task (e.g., poor understanding of rationale behind the task)	1 2 3 4 5
D9	The size of the adolescent's family interfered with completion of the homework task	1 2 3 4 5
D10	Poor communication between caregivers (e.g., parents, school, extended family)	1 2 3 4 5
D11	Belonging to multiple families caused interference with between-session task completion (e.g., parents separated, step or blended families, cared for part-time by extended family members)	1 2 3 4 5

Section E: Using Between-Session Activities with COUPLES

E1. How often do you use between-session activities in your practice with couples?

1	2	3	4	5
Never	**Rarely**	**Occasionally**	**Often**	**Almost Always**

If you DO NOT work with couples OR answered "NEVER," please skip to Section F.

E2. In your experience, how would you describe your couple therapy clients' average level of **compliance** with between-session activities?

1	2	3	4
No compliance whatsoever	**Low level of compliance**	**Moderate level of compliance**	**High level of compliance**

E3. In your experience, how would you describe your couple therapy clients' average **quality** of between-session activity completion?

1	2	3	4	5
Very low quality	**Low quality**	**Moderate quality**	**High quality**	**Very high quality**

We are interested in your experience of factors that have inhibited **couples** from engaging in between-session tasks. Thinking about the times your couples clients have NOT completed between-session tasks, using the scale below, please indicate the **frequency** with which **you have experienced** each of the following as serving as a barrier to the completion of between-session assignments:

1	2	3	4	5
Never	**Rarely**	**Occasionally**	**Often**	**Almost Always**

E4	The amount of psychopathology/dysfunction within the couple prevented task completion	1 2 3 4 5
E5	Significant others outside of the couple (e.g., parents, children, grandchildren, extended family, friends) did not support the between-session task (including encountering negative reactions)	1 2 3 4 5
E6	One or both members of the couple did not support the between-session task	1 2 3 4 5

Section F: Using Between-Session Activities with FAMILIES

F1. How often do you use between-session activities in your practice with families?

1	2	3	4	5
Never	**Rarely**	**Occasionally**	**Often**	**Almost Always**

If you DO NOT work with families OR answered "NEVER," please skip to Section G.

F2. In your experience, how would you describe your family therapy clients' average level of **compliance** with between-session activities?

1	2	3	4
No compliance whatsoever	**Low level of compliance**	**Moderate level of compliance**	**High level of compliance**

F3. In your experience, how would you describe your family therapy clients' average **quality** of between-session activity completion?

1	2	3	4	5
Very low quality	**Low quality**	**Moderate quality**	**High quality**	**Very high quality**

We are interested in your experience of factors that have specifically inhibited **families** from engaging in between-session tasks. Thinking about the times your family clients have NOT completed between-session tasks, using the scale below, please indicate the **frequency** with which **you have experienced** each of the following as serving as a barrier to the completion of between-session assignments:

1	2	3	4	5
Never	**Rarely**	**Occasionally**	**Often**	**Almost Always**

F4	Significant others outside the immediate family (e.g., extended family, friends) did not support the between-session task (including receiving negative reactions from others)	1 2 3 4 5
F5	One or more members of the immediate family (i.e., those members engaged in therapy) did not support the between-session task	1 2 3 4 5
F6	The family size was too large (e.g., difficulty bringing all members together in large family)	1 2 3 4 5

Section G: Impact of Activities on the Therapeutic Relationship

When clients do not complete between-session activities, some clinicians experience a resulting influence on the therapeutic relationship. Using scale below, please rate your experience of how clients' **non-completion** of between-session tasks impacts upon your **qualities as a therapist**:

1	2	3	4	5
Negative impact	**Somewhat negative impact**	**No impact**	**Somewhat positive impact**	**Positive impact**

G1	Concern	1 2 3 4 5	G5	Positive regard	1 2 3 4 5
G2	Empathy	1 2 3 4 5	G6	Sincerity	1 2 3 4 5
G3	Genuineness/congruence	1 2 3 4 5	G7	Warmth	1 2 3 4 5
G4	Neutrality	1 2 3 4 5			

Using scale below, please rate your experience of how clients' **non-completion** of between-session tasks impacts upon the following **relationship processes**:

1	2	3	4	5
Negative impact	**Somewhat negative impact**	**No impact**	**Somewhat positive impact**	**Positive impact**

G8	Delivery of appropriate feedback	1 2 3 4 5
G9	Ability to repair alliance ruptures	1 2 3 4 5
G10	Ability to manage feelings about the client	1 2 3 4 5
G11	Quality of therapist's interpretation of the therapy relationship (e.g., as a reflection of past or present relationships with others)	1 2 3 4 5

Using scale below, please rate your experience of how clients' **non-completion** of between-session tasks impacts upon the following **relationship components**:

1	2	3	4	5
Negative impact	**Somewhat negative impact**	**No impact**	**Somewhat positive impact**	**Positive impact**

G12	Agreement on goals	1 2 3 4 5
G13	Agreement on tasks	1 2 3 4 5
G14	Caring	1 2 3 4 5
G15	Collaboration (i.e., working as a team)	1 2 3 4 5
G16	Commitment to therapy (client or therapist)	1 2 3 4 5
G17	Mutual liking	1 2 3 4 5
G18	Perceived similarity (between client and therapist)	1 2 3 4 5
G19	Respect	1 2 3 4 5
G20	Trust	1 2 3 4 5

Section H: Attitudes/Beliefs Toward Between-Session Activities

We are interested in **your attitudes/beliefs** about a range of **barriers** that may inhibit clients from engaging in and benefiting from between-session activities. Using the following scale, please rate each statement by circling the number that best describes your opinion:

1	2	3	4	5
Strongly Disagree	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**

H1	Having an ineffective rationale for tasks usually leads to non-completion	1 2 3 4 5
H2	Non-specific or unclear tasks usually lead to non-completion	1 2 3 4 5
H3	Using tasks perceived by the client to be too difficult or demanding usually leads to non-completion	1 2 3 4 5
H4	Negative client attitudes about tasks usually lead to non-completion	1 2 3 4 5
H5	High psychopathology or dysfunction in clients usually leads to non-completion	1 2 3 4 5
H6	Using tasks incongruent with a client's cultural worldview usually leads to non-completion	1 2 3 4 5
H7	Using tasks not clearly related to the client's goals for therapy usually leads to non-completion	1 2 3 4 5
H8	A poor therapeutic relationship (e.g., lack of collaboration, poor therapeutic alliance) usually leads to task non-completion	1 2 3 4 5
H9	High dysfunction in clients' families usually leads to task non-completion	1 2 3 4 5
H10	Unexpected practical obstacles usually leads to task non-completion	1 2 3 4 5
H11	Assigning tasks that are not collaboratively selected usually leads to non-completion	1 2 3 4 5
H12	Assigning too many tasks usually leads to non-completion	1 2 3 4 5
H13	Negative attitudes toward tasks held by the client's family/ friends (not involved in therapy) usually lead to non-completion	1 2 3 4 5
H14	Lack of support from significant others (e.g., spouse, partner, family members, caregivers) usually leads to task non-completion	1 2 3 4 5
H15	Lack of understanding about a between-session task by significant others (e.g., spouse, partner, family members, caregivers) usually leads to task non-completion	1 2 3 4 5

H16	A lack of understanding about what is involved in a task (i.e., mechanics of how it is to be completed) usually leads to non-completion	1 2 3 4 5
H17	Assigning tasks without a written summary (i.e., description of task, mechanics of its completion) usually leads to non-completion	1 2 3 4 5
H18	Children and adolescents experience a range of specific barriers to the completion of between-session tasks that are not experienced by other clinical populations	1 2 3 4 5
H19	Families experience a range of specific barriers to the completion of between-session tasks that are not experienced by other clinical populations	1 2 3 4 5
H20	Couples experience a range of specific barriers to the completion of between-session tasks that are not experienced by other clinical populations	1 2 3 4 5
H21	Using the term "homework" usually leads to non-completion of between-session tasks	1 2 3 4 5

We are also interested in **your attitudes/ beliefs** about the impact of client non-completion of between-session activities on the **therapists' qualities, therapeutic relationship processes and components**. Using the following scale, please rate how strongly you believe that non-completion of between-session tasks **reduces** each of the following factors:

	1 **Strongly Disagree**	2 **Disagree**	3 **Neutral**	4 **Agree**	5 **Strongly Agree**	
H22	Therapist concern for the client					1 2 3 4 5
H23	Therapist empathy for the client					1 2 3 4 5
H24	Therapist genuineness/congruence					1 2 3 4 5
H25	Therapist neutrality					1 2 3 4 5
H26	Therapist positive regard					1 2 3 4 5
H27	Therapist sincerity					1 2 3 4 5
H28	Therapist warmth					1 2 3 4 5
H29	Therapist delivery of appropriate feedback					1 2 3 4 5
H30	Therapist ability to repair alliance ruptures					1 2 3 4 5
H31	Therapist ability to manage thoughts, emotions, and/or behaviors toward the client (e.g., countertransference, interpetrsonal reactions)					1 2 3 4 5
H32	Therapist ability to provide an interpretation of the therapy relationship (e.g., as a reflection of past or present relationships with others)					1 2 3 4 5
H33	Therapist caring in the relationship					1 2 3 4 5
H34	Therapeutic collaboration					1 2 3 4 5
H35	Mutual agreement on therapy **goals**					1 2 3 4 5
H36	Mutual agreement on therapy **tasks**					1 2 3 4 5
H37	Mutual commitment to therapy					1 2 3 4 5
H38	Mutual liking in the relationship					1 2 3 4 5
H39	Mutual respect in the relationship					1 2 3 4 5
H40	Mutual trust in the relationship					1 2 3 4 5
H41	Perceived similarity between client and therapist					1 2 3 4 5

Section I: Demographics

I-1. What is your gender? 1. Male 2.Female

I-2. Your age? _____ Years

I-3. With which ethnic group do you most identify? *(Please circle one option)*

1. African-American
2. Asian-American
3. European-American/Caucasian
4. Hispanic/Latino
5. Native-American
6. Pacific Islander
7. Other (specify) _____

I-4. What is your highest earned academic degree/credential? _____

I-5. In what professional discipline/area is your highest academic qualification? *(Please circle one option)*

1. Child/Adolescent Therapy
2. Counseling
3. Marriage and Family Therapy
4. Medicine
5. Pastoral Counseling
6. Psychology
7. Social Work
8. Other (specify) _____

I-6. How long has it been since you earned your highest degree? _____Years

I-7. How many years have you been practicing couple and/or family therapy? _____Years

I-8. How many years have you been practicing any form of therapy? _____Years

I-9. What is your main employment setting? *(Please circle one option)*

1. College/ university academic
2. College/ university counseling
3. Managed care organization
4. Primary/ secondary school
5. Medical school setting
6. Private practice
7. Public hospital
8. Other (specify) _____

I-10. Which **one** orientation most accurately describes your **primary** theoretical orientation? *(Please circle one option)*

1. Systemic
2. Psychodynamic
3. Cognitive-behavioral
4. Postmodern
5. Experiential
6. Other (specify) _____

Please approximate the percentage of your annual caseload that would fit into each of the following therapy formats *(Please allow your approximations to total 100%)*

I13. Individual _____%
I14. Group _____%
I15. Couple _____%
I16. Family _____%

Please approximate the percentage of your annual caseload that would fit into each of the following categories *(Please allow your approximations to total 100%)*

I17. Infants _____%
I18. Children _____%
I19. Adolescents _____%
I20. Adults _____%
I21. Older Adults _____%

Thank you for your participation

Your contribution is greatly appreciated. Please mail your completed questionnaire as soon as possible in the reply paid envelope provided. If the envelope has been misplaced, please return your questionnaire Dr. Frank M. Dattilio, Dept. of Psychiatry, Harvard Medical School, Suite 211-D, 1251 S. Cedar Crest Blvd, Allentown, PA 18103

Appendix D

Follow-up prompt letter

Dear Colleague,

Recently, we wrote to you seeking your opinion about the use of between-session activities in your practice as a marital and family therapist. If you have already completed and returned your questionnaire, please accept our most sincere thanks!

We are writing to you again because of the significance each questionnaire for the study. We are hoping to represent the experiences and opinions of large random sample of the American Association of Marriage and Family Therapists, so it is important that your response is included. If you have not had an opportunity to complete the questionnaire, we would appreciate if you could do so today.

If you did not receive the questionnaire, or it has been misplaced, you are encouraged to e-mail Dr. Frank M. Dattilio at [redacted] or call him at [redacted] Your contribution to the success of this study will be greatly appreciated. We thank you for your time and attention.

Sincerely,
Frank M. Dattilio, Ph.D. (*Harvard Medical School*)
Nikolaos Kazantzis, Ph.D. (*Massey University*)

Appendix E

Feedback Questionnaire

May 17, 2005

Your Reaction/Feedback to The Questionnaire

1. How did you feel about completing this questionnaire? Please select one or more of the answers below:

   A. It was too long
   B. It was long, but manageable

   C. I thought it asked too many of the same questions and it was tedious
   D. Questions were repeated, but this was acceptable

   E. It didn't really pertain to my work at all
   F. It was relevant to my work

2. If you had received this questionnaire as part of the main survey mail out, would you have been as inclined to complete the questionnaire?

   A. Yes
   B. Maybe
   C. I don't know
   D. No

3. Is there any other aspect of the questionnaire that was annoying to you? Please select one or more of the answers below:

   A. Some of the language involved.
   B. Grammatical errors or misspellings.
   C. Layout or format of the questionnaire.
   D. Other _____

4. I would appreciate any suggestions that you have for the questionnaire. Please feel free to speak your mind and be as candid as possible. Once again, your feedback will be very helpful to us in refining this project.

Appendix F

Attitudes Towards Homework Barriers held by clinicians working with Children, Adolescents and Families

Table F1

Attitudes towards homework barriers held by respondents working with children

Barrier	n	Strongly disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly agree (%)	Mean	Range	Rank
Too many tasks	51	0.0	2.0	5.9	39.2	**52.9**	4.4	2 – 5	1
Task Difficulty	51	0.0	0.0	3.9	**52.9**	43.1	4.4	3 – 5	2
Client negative attitude	50	0.0	6.0	2.0	**50.0**	42.0	4.3	2 – 5	3
Non-specific tasks	51	0.0	7.8	3.9	**54.9**	33.3	4.1	2 – 5	4
Culture	51	0.0	7.8	5.9	**52.9**	33.3	4.1	2 – 5	5
Therapeutic relationship	51	0.0	7.8	11.8	**43.1**	37.3	4.1	2 – 5	6
Goals for therapy	51	2.0	7.8	9.8	**45.1**	35.3	4.0	1 – 5	7
Psychopathology	51	2.0	7.8	17.6	33.3	**39.2**	4.0	1 – 5	8
Lack of understanding task mechanics	51	0.0	3.9	17.6	**54.9**	23.5	4.0	2 – 5	9
Practical obstacles	51	2.0	3.9	13.7	**56.9**	23.5	4.0	1 – 5	10
Rationale	51	0.0	13.7	3.9	**60.8**	21.6	3.9	2 – 5	11
Lack of support from significant others	51	0.0	5.9	21.6	**51.0**	21.6	3.9	2 – 5	12
Dysfunction in family	50	4.0	6.0	16.0	**52.0**	22.0	3.8	1 – 5	13
Lack of understanding by significant others	51	1.4	7.8	29.4	**45.1**	17.6	3.7	2 – 5	14
Collaboration	51	0.0	19.6	23.5	**39.2**	17.6	3.5	2 – 5	15
Negative attitudes by family	51	0.0	15.7	33.3	**37.3**	13.7	3.5	2 – 5	16
Not providing a written summary	51	15.7	**37.3**	23.5	17.6	5.9	2.6	1 – 5	17

Percentages in **bold** show the highest percentage for each row.

Table F2

Attitudes towards homework barriers held by respondents working with adolescents

Barrier	n	Strongly disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly agree (%)	Mean	Range	Rank
Too many tasks	92	3.3	1.1	4.3	37.0	**54.3**	4.4	2 – 5	1
Task Difficulty	92	1.1	2.2	4.3	**51.1**	41.3	4.3	2 – 5	2
Client negative attitude	91	0.0	5.5	3.3	**51.6**	39.6	4.3	2 – 5	3
Non-specific tasks	92	0.0	6.5	6.5	**48.9**	38.0	4.2	2 – 5	4
Therapeutic relationship	92	1.1	6.5	10.9	38.0	**43.5**	4.2	1 – 5	5
Goals for therapy	92	2.2	5.4	9.8	**48.9**	33.7	4.1	2 – 5	6
Culture	92	2.2	7.6	13.0	**42.4**	34.8	4.0	2 – 5	7
Psychopathology	92	0.0	8.7	19.6	**35.9**	35.9	4.0	1 – 5	8
Lack of understanding task mechanics	92	1.1	4.3	15.2	**57.6**	21.7	3.9	3 – 5	9
Lack of support from significant others	92	0.0	5.4	15.2	**60.9**	18.5	3.9	1 – 5	10
Rationale	92	1.1	13.0	8.7	**48.9**	28.3	3.9	1 – 5	11
Practical obstacles	92	1.1	5.4	20.7	**53.3**	19.6	3.8	2 – 5	12
Dysfunction in family	91	2.2	9.9	14.3	**49.5**	24.2	3.8	1 – 5	13
Lack of understanding by significant others	92	0.0	13.0	25.0	**47.8**	14.1	3.6	2 – 5	14
Collaboration	92	2.2	19.6	22.8	**41.3**	14.1	3.5	2 – 5	15
Negative attitudes by family	92	1.1	17.4	32.6	**37.0**	12.0	3.4	1 – 5	16
Not providing a written summary	92	10.9	**38.0**	27.2	18.5	5.4	2.7	1 – 4	17

Percentages in **bold** show the highest percentage for each row.

Table F3

Attitudes towards homework barriers held by respondents working with families

Barrier	n	Strongly disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly agree (%)	Mean	Range	Rank
Too many tasks	100	2.0	1.0	5.0	43.0	**49.0**	4.4	1 – 5	1
Client negative attitude	99	0.0	5.1	2.0	**51.5**	41.4	4.3	2 – 5	2
Task Difficulty	100	0.0	3.0	6.0	**54.0**	37.0	4.3	2 – 5	3
Therapeutic relationship	100	0.0	5.0	10.0	**45.0**	40.0	4.2	2 – 5	4
Non-specific tasks	100	0.0	5.0	6.0	**54.0**	35.0	4.2	2 – 5	5
Goals for therapy	100	1.0	4.0	12.0	**50.0**	33.0	4.1	1 – 5	6
Culture	100	1.0	5.0	12.0	**50.0**	32.0	4.1	1 – 5	7
Lack of understanding task mechanics	100	1.0	3.0	12.0	**62.0**	22.0	4.0	1 – 5	8
Psychopathology	100	1.0	10.0	17.0	35.0	**37.0**	4.0	1 – 5	9
Rationale	100	1.0	10.0	9.0	**53.0**	27.0	4.0	1 – 5	10
Practical obstacles	100	1.0	5.0	16.0	**55.0**	23.0	3.9	1 – 5	11
Lack of support from significant others	100	0.0	7.0	15.0	**57.0**	21.0	3.9	2 – 5	12
Dysfunction in family	99	3.0	11.1	13.1	**48.5**	24.2	3.8	1 – 5	13
Lack of understanding by significant others	100	0.0	12.0	26.0	**46.0**	16.0	3.7	2 – 5	14
Collaboration	100	0.0	21.0	21.0	**42.0**	16.0	3.5	2 – 5	15
Negative attitudes by family	100	0.0	19.0	32.0	**35.0**	14.0	3.4	2 – 5	16
Not providing a written summary	100	12.0	**35.0**	30.0	18.0	5.0	2.7	1 – 5	17

Percentages in **bold** show the highest percentage for each row.

Table F4

Attitudes towards homework barriers held by respondents working with adult clients

Barrier	n	Strongly disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly agree (%)	Mean	Range	Rank
Culture	28	0.0	3.6	7.1	42.9	**46.4**	4.3	2 – 5	1
Too many tasks	28	0.0	3.6	0.0	**57.1**	39.3	4.3	2 – 5	2
Lack of understanding task mechanics	28	0.0	0.0	3.6	**60.7**	35.7	4.3	3 – 5	3
Non-specific tasks	28	0.0	3.6	3.6	**57.1**	35.7	4.3	2 – 5	4
Task Difficulty	28	0.0	7.1	0.0	**53.6**	39.3	4.3	2 – 5	5
Client negative attitude	28	0.0	3.6	7.1	**50.0**	39.3	4.3	2 – 5	6
Rationale	28	3.6	0.0	7.1	**53.6**	35.7	4.2	1 – 5	7
Therapeutic relationship	28	3.6	0.0	10.7	**46.4**	39.3	4.2	1 – 5	8
Psychopathology	28	0.0	14.3	7.1	**42.9**	35.7	4.0	2 – 5	9
Goals for therapy	28	0.0	3.6	25.0	**46.4**	25.0	3.9	2 – 5	10
Practical obstacles	27	0.0	11.1	18.5	**55.6**	14.8	3.7	2 – 5	11
Lack of support from significant others	28	3.6	7.1	28.6	**50.0**	10.7	3.6	1 – 5	12
Lack of understanding by significant others	28	0.0	10.7	35.7	**46.4**	7.1	3.5	2 – 5	13
Dysfunction in family	28	0.0	21.4	28.6	**35.7**	14.3	3.4	2 – 5	14
Collaboration	28	0.0	32.1	17.9	**35.7**	14.3	3.3	2 – 5	15
Negative attitudes by family	28	7.1	17.9	**35.7**	**35.7**	3.6	3.1	1 – 5	16
Not providing a written summary	27	7.4	40.7	**40.7**	11.1	0.0	2.6	1 – 4	17

Percentages in **bold** show the highest percentage for each row.

Appendix G

Parallel Analysis

Parallel Analysis

There are three criterion values that are commonly used to determine the correct number of components to extract from a data set when using PCA (Costello & Osborne, 2005). These are, Catell's (1966) scree plot, Kaiser's Eigen value criterion (Pallant, 2001; Tabachnick & Fidell, 2001), and Horn's (1965) parallel analysis. Using the first two criteria, it was found that the scree plot or Kaiser's criterion did not support the two-factor construct proposed for the experience and attitude scales, as five factors showed Eigen values greater than one. However, as Pallant (2002) notes, often using the Kaiser criterion of including factors with Eigen values greater than one can result in too many components being extracted. Moreover, this is particularly so if there are Eigen values close to 1.0, as was found to be the case in the present study. A procedure that corrects for this over inclusion of factors is Parallel Analysis (Horn, 1965). Parallel analysis involves comparing the magnitude of the Eigen values obtained from the sample data with those obtained from a randomly generated data set. The data set generated for comparison is always of the same size and must contains an equivalent number of variables as the original sample. Using this procedure, only those factors whose Eigen values exceed the corresponding values from the random data set are retained (Pallant, 2002; Tabachnick & Fidell, 2001). It has been suggested that this approach to identifying the number of components to retain in a PCA is the most accurate methodological option, with both Kaiser's criterion and Catell's scree test tending to overestimate the number of components to be extracted (Hubbard & Allen, 1987; Zwick & Velicer, 1986).

Appendix H

AMOS Output 1 – Correlational Model

Analysis Summary

Date and Time

Date: Monday, 15 April 2006
Time: 2:40:31 PM

Title

correlations: Monday, 15 April 2006 02:40 PM

Notes for Group (Group number 1)

The model is recursive.
Sample size = 144

Variable Summary (Group number 1)

Your model contains the following variables (Group number 1)

Observed, exogenous variables

USE
QUAL
COMP
ATT
EXP

Variable counts (Group number 1)

Number of variables in your model:	5
Number of observed variables:	5
Number of unobserved variables:	0
Number of exogenous variables:	5
Number of endogenous variables:	0

	Weights	Covariances	Variances	Means	Intercepts	Total
Fixed	0	0	0	0	0	0
Labeled	0	0	0	0	0	0
Unlabeled	0	10	5	5	0	20
Total	0	10	5	5	0	20

Number of distinct sample moments:	20
Number of distinct parameters to be estimated:	20
Degrees of freedom (20 – 20):	0

	Estimate	S.E.	C.R.	P	Label
USE	3.693	.157	23.499	***	
QUAL	3.221	.061	52.689	***	
COMP	2.973	.045	66.702	***	
EXP	2.448	.054	45.098	***	
ATT	3.961	.062	64.301	***	

	Estimate	S.E.	C.R.	P	Label
USE <--> QUAL	.294	.094	3.126	.002	
QUAL <--> COMP	.123	.028	4.344	***	
COMP <--> ATT	-.023	.026	-.899	.369	
QUAL <--> EXP	-.090	.032	-2.807	.005	
USE <--> EXP	-.171	.081	-2.126	.034	
ATT <--> EXP	.068	.032	2.133	.033	
USE <--> COMP	.113	.066	1.724	.085	
USE <--> ATT	-.013	.090	-.147	.883	
COMP <--> EXP	-.024	.022	-1.051	.293	
QUAL <--> ATT	-.020	.035	-.581	.561	

	Estimate	S.E.	C.R.	P	Label
USE	2.078	.321	6.483	***	
QUAL	.315	.049	6.484	***	
COMP	.166	.026	6.448	***	
ATT	.326	.050	6.558	***	
EXP	.246	.038	6.447	***	

Iteration		Negative eigenvalues	Condition #	Smallest eigenvalue	Diameter	F	Ntries	Ratio
0	e	1		-.142	9999.000	56.857	0	9999.000
1	e	0	209.546		.547	10.203	18	.881
2	e	0	262.650		.287	1.954	1	1.099
3	e	0	425.377		.203	.131	1	1.146
4	e	0	486.928		.075	.001	1	1.061
5	e	0	520.129		.008	.000	1	1.007
6	e	0	515.033		.000	.000	1	1.000

Model Fit Summary

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	20	.000	0		
Saturated model	20	.000	0		
Independence model	5	56.857	15	.000	3.790

Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	1.000		1.000		1.000
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Parsimony-Adjusted Measures

Model	PRATIO	PNFI	PCFI
Default model	.000	.000	.000
Saturated model	.000	.000	.000
Independence model	1.000	.000	.000

NCP

Model	NCP	LO 90	HI 90
Default model	.000	.000	.000
Saturated model	.000	.000	.000
Independence model	41.857	22.424	68.862

FMIN

Model	FMIN	F0	LO 90	HI 90
Default model	.000	.000	.000	.000
Saturated model	.000	.000	.000	.000
Independence model	.646	.476	.255	.783

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Independence model	.178	.130	.228	.000

AIC

Model	AIC	BCC	BIC	CAIC
Default model	40.000	42.927		
Saturated model	40.000	42.927		
Independence model	66.857	67.589		

ECVI

Model	ECVI	LO 90	HI 90	MECVI
Default model	.455	.455	.455	.488
Saturated model	.455	.455	.455	.488
Independence model	.760	.539	1.067	.768

HOELTER

Model	HOELTER .05	HOELTER .01
Default model		
Independence model	39	48

Minimization:	.070
Miscellaneous:	.691
Bootstrap:	.000
Total:	.761