

Investigating the Relationship Between the Therapeutic
Alliance and Treatment Outcome in Violent Offender
Treatment

By

Elizabeth C. Ross

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Corrections.

Declaration

I hereby declare that this thesis has not been submitted, either in the same or different form, to this or any other university for a degree:

Signature: _____

Publications

Data and literature from this thesis have been reported in the following formats and been published or submitted for publication:

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Conventions Used in this Thesis

Numbering Studies

The four studies in this thesis are numbered independently from the chapters in which they appear.

Numbering Tables and Figures

All tables and figures are numbered according to the chapter in which they appear. They are numbered as figure or table *x.y* with *x* referring to the chapter and *y* referring to the order in which they appear in the chapter.

Abbreviations

Although all abbreviations are explained in the text, the following list are the common abbreviations used that may be helpful to refer to in reading this thesis:

TA	Therapeutic Alliance
WAI	Working Alliance Inventory
RVPU	Rimutaka Violence Prevention Unit
CBT	Cognitive Behavioural Therapy

Abstract

The role of the therapeutic alliance (TA) has largely been ignored in the field of high-risk violent offender treatment. The focus on effective manualised treatment that reduces recidivism has led to improvements in treatment programme delivery, but at the cost of examining the therapy process. Considering previous research has consistently linked levels of alliance with treatment outcome in clinical and community treatment settings, it is imperative to investigate the role of the TA within high-risk violent offender treatment, because of the particularly challenging group that they represent.

The aim of this thesis was to examine the relationship between the TA and treatment outcome, and the various factors that influence this relationship, within a violence prevention setting. To achieve this aim, a longitudinal study was conducted at the Rimutaka Violence Prevention Unit (RVPU) in Wellington, New Zealand, with a cohort of 70 men in treatment and their therapists, examining the TA, treatment outcome and associated variables over four time points throughout the eight month treatment programme. The results of this research are reported as four related studies.

Study One explored the structure and patterns of the Working Alliance Inventory (WAI). Study One Part A was a Confirmatory Factor Analysis of the WAI, which tested the competing models of the factor structure of the WAI and explored whether rater perspective (client, therapist, observer) had an effect on the structure. It was found that a two-factor structure was the best fit for the WAI, and that all rater perspectives shared this structure. Study One Part B explored the pattern of the WAI over the four time periods of this study in order

to understand how the WAI changes over time, and whether this pattern differed by rater perspective. The results confirmed that changes in all rater perspectives showed a linearly increasing pattern of alliance over time.

Study Two explored the client factors that affect the initial formation of the TA and examined whether these factors were specific to an “offender” or “general” client profile informed by previous research. Two client factors specific to an offender profile — motivation to change and criminal attitudes — were found to be significantly associated with the initial formation of the TA.

Study Three examined the relationship between the TA and treatment outcome, and explored whether there were any factors that co-varied with or moderated this relationship. A small but significant association between alliance and outcome was found; however no significant co-varying or moderating factors were discovered.

Lastly, Study Four drew together the data from Study Two and Study Three and tested whether these results fit the Revised Theory of the Therapeutic Alliance (RTTA) model (Ross, Polaschek, & Ward, 2008), or other models previously reported in the literature. Several significant models were found that partly supported the RTTA. The best of these models incorporated client motivation to change, TA and treatment outcome as measured by change in risk of violent reoffending.

Overall, the results of this study support the importance of the TA and client motivation to change in violent offender treatment. The implications for these results and the clinical applications are discussed, limitations are outlined, and directions for future research are suggested.

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Chapter One: The Therapeutic Alliance

Introduction

The rehabilitation of offenders is a contentious issue here in New Zealand and around the world. As New Zealand society remains punitive in stance towards offenders, rehabilitation is considered to be an untrustworthy experiment that needs constant evaluation to determine its worth (Pratt & Clark, 2005). As such, psychological offender rehabilitation has become regimented and standardised in methodology, with a strict risk-needs manualised approach adopted by correctional rehabilitation programmes (Ogloff & Davis, 2002). Although this approach has led to consistent, structured rehabilitation programmes, it has meant that the therapeutic aspects of therapy have been somewhat overlooked. This oversight is significant considering current and past research and theory has found the process of therapy — and the TA in particular — to contribute significantly to the outcome of therapy (Horvath & Symonds, 1991).

This thesis seeks to address this oversight by examining the TA and its relationship to treatment outcome in a violence prevention programme. The introduction covers the relevant literature in both the TA and offender rehabilitation field, in order to set the research of this thesis in an appropriate framework. Chapter One explores the importance of process issues in therapy, and examines and defines the TA concept. Chapter Two sets the context of this thesis by exploring violence in New Zealand, and the emergence of violence

prevention programmes and their subsequent evaluation, and begins to merge these distinct fields together by examining the neglected role of the TA in violent offender treatment. Chapter Three explores the different factors that can affect the TA: client factors; therapist factors; possible interaction effects between therapist and client factors; and particular setting factors unique to a correctional environment that are theorised to affect the TA. Chapter Four then draws these factors together by outlining a proposed model of the TA in offender rehabilitation. Chapter Five moves on to look at the relationship between TA and treatment outcome and factors that can affect this relationship. Chapter Six aims to discover which measure of the TA is the best to use in this thesis, by exploring psychometric properties of popular instruments, and which instrument is best suited to the correctional setting. Lastly, Chapter Seven outlines the remainder of the thesis content, and the research questions and hypotheses that this thesis will address.

Process vs. content: The importance of process issues in psychotherapy

Process issues, as their name suggests, are those variables in psychological treatment relating to the *process* of therapy (Marshall, Fernandez et al., 2003). In essence, they describe how psychological treatment unfolds beyond just the content involved. Commonly used categories of process issues are the therapist's style, the client's perceptions of the therapist, and the client-therapist collaboration or *TA* (Marshall & Serran, 2004).

Process issues in therapy came to be examined because of the consistent finding in psychotherapy research that there are minimal differences in therapeutic gains of clients experienced under different schools of therapy, such as psychodynamic and Cognitive Behavioural Therapy: CBT (Horvath &

Luborsky, 1993). It was suggested by some researchers, that the reason for this common variance might lie in how the therapy was delivered. Thus, for a time there was a surge of interest in looking at the process of therapy and its relationship to therapy outcome (Horvath & Luborsky, 1993).

The TA is now seen as one of the most important process-related issues. The reason for this is that it accounts for a sizeable portion of variance in therapy outcome, with the most often quoted figure at around 25% (Horvath & Luborsky, 1993). Because of the significant role that the TA plays in treatment, and its relationship to treatment outcome, it is important to fully understand this concept, beginning with an overview of the history of the alliance and a clear definition.

The therapeutic alliance concept: Historical roots of the therapeutic alliance

The history of the TA started in the psychodynamic tradition, with Freud. The equivalent concept of a TA in psychodynamic terms was transference, specifically positive transference — an unconscious mental process of connection between therapist and client — which was thought to “clothe the therapist in authority” and help the client to believe in the therapist’s work (Freud, 1913, p. 122).

Psychodynamic theories continued to dominate the TA literature for some time with the influential work of Greenson. Greenson elaborated on Freud’s work, proposing that there were three components in the therapist-client relationship. These components were: transference; a working alliance; and the *real* relationship (Greenson, 1965).

Freud had already established the idea of a transference relationship, and the *real* relationship was the counterpart to transference; describing what actually

took place in the relationship, as opposed to the unconscious mental processes of transference. Greenson then coined the term “working alliance” referring to the reality-based conscious working collaboration between the therapist and the client (Greenson, 1965).

The concept of a TA was firmly rooted in psychodynamic theory until one seminal work extended it into a pan-theoretical construct that would apply not only to psychodynamic therapy, but also to CBT and all types of therapy. It was Bordin who came up with the most widely known conceptualisation of the TA. His *working alliance* consisted of three factors: goals, tasks, and a bond (Bordin, 1979). He proposed that a strong working alliance forms if a therapist and client have mutual agreement on the goals needing to be met in therapy, mutual agreement on the tasks needed to meet those goals, and a bond between therapist and client that will facilitate this process. If these factors are present in therapy and the resulting positive working alliance continues through therapy, then it should lead to a positive treatment outcome (Bordin, 1979). He argued that the concept of a working alliance should apply to all fields of psychology, and to all cases where there is a helping relationship, such as that between a teacher and pupil (Bordin, 1979).

Although there have been more theories and measures of the working alliance developed since Bordin, most owe their structure to his concept of a working alliance. As Horvath and Luborsky (1993) pointed out, the core aspects of personal attachments (bond) and collaboration and investment in the therapy process (goals and tasks), are common elements across working alliance instruments.

Since Bordin's seminal work there has been a dearth of theoretical research on the TA. In an attempt to correct this, my colleagues and I have recently proposed a theory that builds on Bordin's early ideas; the theory will be discussed later in this introduction. Recently, there has been more of a research focus on the relationship of the TA to outcome, the nature of the TA across therapies, and the various therapist and client variables thought to contribute to the TA. However, before reviewing this research, it is vital to clearly define the concept of a TA.

Defining the therapeutic alliance

The issue of how exactly to define the TA is a difficult one because it is a relatively unexplored construct, especially outside of psychodynamic literature. Despite this, the construct has generated differing theories, each with different definitions. The alliance is something of a paradox in this way, making it hard for researchers to pin down a concrete and conclusive definition. In a review of literature on process variables in the treatment of sexual offenders, Marshall and colleagues suggested that a TA is a product of the therapist's style and the client's perception of the therapist (Marshall, Fernandez et al., 2003). Yalom suggested that it is a relationship between the client and therapist that generates healing power (Yalom, 1980). Martin and colleagues state that a TA refers to the collaborative nature of the relationship, the emotional bond between the client and therapist, and their agreement about the goals of treatment (Martin, Garske, & Davis, 2000).

Despite the differences, most authors agree that an alliance generally consists of three factors. The first of these is an affective, relational, aspect; whether this is a *bond* - Bordin (1979), a *healing relationship* - Yalom (1980) or *positive*

transference - Freud (1912, cited in Horvath & Luborsky, 1993). The second factor refers to some sort of agreement on the goals of therapy; whether this is *goal agreement* - Martin et al. (2000), or simply *goals* Bordin (1979). The third factor refers to some sort of agreement on the best way to tackle the client's problems; whether this is *assignment of tasks* - Bordin (1979), *patient-therapist agreement on strategies*- (Fenton, Cecero, Nich, Frankforter, & Carroll, 2001), or *client involvement in a team effort with the therapist* - (Bachelor & Salamé, 2000). For the purposes of this thesis, a TA is defined as *a collaborative relationship between therapist and client that can facilitate positive change for the client*. While this definition is informed by a construct that grew from the psychodynamic literature, increasing awareness is given to the TA in other therapies, such as CBT.

The role of the therapeutic alliance in CBT

Bordin's conceptualisation of the TA was a welcome advance in alliance research, as it extended the TA from a purely psychodynamic concept to a pan-theoretical concept that applied across all forms of therapy and helping relationships. Bordin's conceptualisation has also been borne out by research into the relationship between TA and therapy outcome. The TA not only accounts for an average of 25% of variance in therapy outcome in *psychodynamic* psychotherapy, but it does so across all disciplines and regardless of the alliance measure used (Horvath & Luborsky, 1993; Horvath & Symonds, 1991).

Despite this and other similar findings, there are thought to be some differences between the alliances formed by clients and therapists in the psychodynamic and CBT traditions. Unfortunately, there has not been nearly as much research on the TA in the CBT field as there has been within the

psychodynamic field. This disparity could be due to the early behaviourists' attempts to steer away from anything psychodynamic, to the point where therapists were seen as social reinforcement machines, whose presence was unimportant in comparison to behavioural technique (Raue & Goldfried, 1994).

Marziali and Alexander (1991) have reviewed the role of the TA in CBT, reporting that the TA accounts for 20% of the variance in outcome measures in CBT. They concluded that a positive relationship between client and therapist maximises the chance of treatment success (Marziali & Alexander, 1991). The TA in CBT might even be stronger than its psychodynamic counterpart. Raue and Goldfried (1994) contend that a number of studies suggest that the quality of the working alliance in CBT is equal to, or even greater than, that in psychodynamic therapy. In fact, they describe one study in which CBT groups had higher alliance scores than psychodynamic and interpersonal therapy (a form of therapy focussing on interpersonal connections) groups (Raue & Goldfried, 1994). The authors suggest that these higher alliance scores could be due in part to the greater structure in CBT, which leads to the clear and explicit assignment of goals and tasks - a vital part of a TA according to Bordin's theory (Raue & Goldfried, 1994). Raue and Goldfried also found that while higher patient symptomatology lowered psychodynamic patients alliance scores, symptomatology was not significantly related to alliance in CBT. They hypothesised that in CBT one of the explicit goals set out by the therapist and client is to reduce symptoms, whereas psychodynamic therapists may focus on other internal issues which symptoms can interfere with, meaning the alliance is compromised (Raue & Goldfried, 1994).

Interestingly though — considering behavioural therapists’ historical focus on behavioural technique — the bond, as well as more technical elements, also helps to make the TA as effective in CBT as in psychodynamic therapy. The notion of the bond or personal relationship between the therapist and client is particularly linked to the idea of transference: a distinctively psychodynamic notion (Horvath & Luborsky, 1993). This connection may be why cognitive-behavioural therapists view the bond as more of a way to facilitate the application of specific techniques rather than a driving force of change in itself (Raue & Goldfried, 1994).

Despite this view, in a study comparing the process in psychodynamic and cognitive-behavioural therapies it was found that the more the CBT contained “psychodynamic factors,” the more it was associated with positive outcome (Jones & Pulos, 1993). In other words if the CBT therapist emphasised the importance of the therapy relationship as a unique, safe place to explore other relationships — a traditionally psychodynamic view — then their clients fared better. In fact, it was this relationship or bond factor that was most consistently related to favourable outcome for both therapy approaches, highlighting the importance of the bond factor in the TA across disciplines (Jones & Pulos, 1993). It seems that the power of the bond between therapist and client in CBT cannot be ignored.

As Marshall, Fernandez et al. (2003) point out, several findings have highlighted that it is the bond aspects of the TA that matter, especially to clients. In a series of cognitive-behavioural studies, clients reported that their relationship with their therapist was more helpful than any of the explicit techniques used in therapy (Marshall, Fernandez et al., 2003). It is also

interesting to note that many of the therapist variables that Marshall, Serran et al. (2003) have identified as most important in the CBT treatment of sexual offenders — such as empathy, warmth, genuineness, and respect — seem bond-oriented.

So far, this introduction has outlined and defined the therapeutic concept and its importance in therapy, particularly in CBT. Many of the violence prevention programmes around the world and in New Zealand use CBT with offenders, in an attempt to reduce their re-offending. The following chapter outlines the problem of violent offending in New Zealand and the literature on existing violence prevention programmes.

Chapter Two: Violence and Violence Prevention

Violence in New Zealand: Prevalence and proportions

Violence is a global phenomenon and New Zealand, like any other country in the world, experiences its share of violent crime (Connolly, 2004). In the latest New Zealand crime statistics for 2007, violent crimes made up 13.4% of the total number of crimes committed, the second largest category of criminal activity behind dishonesty offences at 52.7%, and well above sexual crimes at 0.8% (NZPA, April 2008).

New Zealand has a particularly bad record in terms of domestic or family violence, with 47.5% of recorded murders in 2005 categorised as family violence (NZFVC, July 2007). Our record of child violence is especially troubling as our reported rate of child deaths from maltreatment is one of the highest among OECD countries (NZPG, August 2005). A recent report into violence in New Zealand society recognised that “child abuse, bullying, and physical punishment are key safety issues for [New Zealand children]” (NZPG, August 2005, p. 13). New Zealand also has a strong gang culture which permeates our society, and gangs such as the Mongrel Mob and Black Power are known to use violence and intimidation in their dealings with other gangs, in their interpersonal relationships, and with the general public (Payne, 1997).

Violent offenders — unlike sexual offenders — tend also to be prolific offenders and it has been estimated that just 20-30% of all violent offenders are responsible for 80% percent of all crime (Andrews & Bonta, 2003). Prolific offenders like this are termed as “high-risk” and imprisonment alone does not

seem to have an impact on these offenders, as a recent New Zealand study of high-risk offenders found that all of the offenders had previously been in prison, but had continued to re-offend (Wilson, 2004).

Why should we care? The human and economic costs of violence

There is a large human cost to violence. Victims of violence and their families and friends often suffer not only physically but also mentally. For example, women and children who experience or witness violence are more likely to suffer from depression, substance abuse and chronic illness (NZPG, August 2005).

More pragmatically, violence costs New Zealand millions of dollars every year, with studies showing estimations of loss ranging from \$22.9 million per annum to \$1.2 billion per annum, depending on how costs are defined (NZPG, August 2005; Snively, 1994). The \$1.2 billion estimate included loss in earnings for victims and offenders, the cost of imprisonment of offenders, medical bills (including therapy/counselling), accommodation, legal costs, and welfare costs (Snively, 1994). Survivors of violence incur costs as they seek help, but a significant cost is also incurred when someone is killed in New Zealand. While a life cannot just be measured in economic terms, the estimated “statistical” value of a life in New Zealand is \$2 million dollars (Snively, 1994). These costs, whether they are humanistic or economic, mean that it is of vital importance to do everything we can to reduce violent re-offending, including psychological and rehabilitation work with offenders to reduce their re-offending.

The global emergence of violence prevention programmes

The decision to punish or rehabilitate offenders has long been debated, here in New Zealand and around the world (Pratt & Clark, 2005). In New Zealand

particularly, there is a tendency for “penal populism”, with government creating crime policy to reflect the views of the voting population (Pratt & Clark, 2005). Despite this view, currently the tide has turned from a “nothing works, lock them up” mentality, towards rehabilitation, as the preferred option for dealing with high-risk, recidivist violent offenders (Andrews & Bonta, 2003).

Countries around the world have trialled rehabilitation programmes with varying degrees of success. In England, therapeutic community treatment centres, such as HMP Grendon, have been trialled with high-risk violent offenders, and reconviction studies have shown that reoffending was reduced by 25% compared to offenders who were referred but did not attend the prison’s programme (Pakes & Winstone, 2007). Polaschek and Collie (2004) conducted a survey of violence prevention programmes in Canada, the US and New Zealand and reported on the effects of the programmes on recidivism, considering 10-15% as a small effect and anything above 15% as a large effect. Although a 15% reduction may not sound impressive, a common rule in the rehabilitation field is that programmes with effects above 10% are considered successful (Polaschek & Collie, 2004). In the forensic rehabilitation field, it is also important to keep in mind that each offender who is even partially “rehabilitated” is saving money, and more importantly, lives. Canada has trialled cognitive based interventions focussing on modifying thinking: the Cognitive Skills Training Programme was found to have a small impact on general recidivism. In the US the Cognitive Self Change programme had a large effect on both general and violent recidivism (Polaschek & Collie, 2004). Canada has also had success with their Anger and Other Emotions Management Programme, with large effects on both general and violent recidivism reported. However, a CBT based programme — the Intensive

Programme for Violent Offenders — was found to have no effect on either general or violent recidivism (Polaschek & Collie, 2004).

New Zealand has two violence prevention programmes: Montgomery House and the Rimutaka Violence Prevention Unit (RVPU). Montgomery House uses a social learning model embedded within a therapeutic community setting, and has a strong focus on Maori (indigenous New Zealanders) cultural needs. A preliminary evaluation found a large effect on violent recidivism, and a second evaluation after changes to the programme, found a small decrease in violent reconviction for completers (Polaschek & Collie, 2004). The RVPU is the main focus of this section however, as it is the setting for the research conducted in this thesis.

The Rimutaka Violence Prevention Unit (RVPU)

The RVPU therapy programme has run within a 30 bed, medium-low security unit at Rimutaka Prison near Wellington since 1998. It is an intensive group based 36-week programme that uses CBT to address the criminogenic needs of serious recidivist violent offender clients. The four-week assessment phase at the start of the programme uses risk assessment, social histories, offence chains and an extensive battery of psychometrics tests, to gain an accurate picture of an offender's risk and treatment needs before therapy commences. The 28-week treatment phase has seven specific modules: Introduction/Orientation; Offence Mapping; Changing Thinking; Distress Tolerance; Managing Feelings, Emotions and Impulses; Problem Solving in Relationships; and Safety Planning. Three treatment groups run at any one time, each with ten offenders and two co-therapists: a Psychologist and a Rehabilitation Worker. The Psychologist is responsible for psychological reports and assessment, and the rehabilitation

worker focuses on the reintegration needs of the clients; although they co-facilitate the treatment sessions. The sessions are three hours long and run on four days each week, and the men are expected to complete homework tasks outside of these hours. Within the generally coercive environment of the prison system, the programme is voluntary; men sign a consent form to take part in assessment and another at the commencement of the treatment phase. They can withdraw at any time, but in practice, doing so often has negative consequences, such as reduced likelihood of parole. The men are also expected to conform to a behavioural contract including no offending in the programme and no drug use. Breaches of these rules and disruptive group behaviour can lead to expulsion from the programme. Upon completion of the programme there is a four-week reassessment phase with men completing psychometric tests, addressing post treatment support and finalising reintegration plans.

Evaluating the RVPU

The RVPU has been evaluated twice, once in 2002 and once in 2005 and is currently undergoing evaluation. The first evaluation looked at 22 treated offenders compared to a matched treatment group over the first two years of the programmes operation and found that the programme had a small effect (13%) on general recidivism and a large effect (31%) on violent recidivism (Polaschek, Wilson, Townsend, & Daly, 2005). The 2005 evaluation found that offenders at the RVPU who completed treatment had a recidivism rate 11% percent lower in comparison to an untreated matched sample (Polaschek, 2006). Since then the RVPU has undergone extensive revision with a new manual introduced and a more integrated environment encouraged, with the aim of eventually creating a therapeutic community. Although an evaluation is ongoing, there has been no

outcome data since 2005. While evaluations like this are essential, they tend to only look at recidivism, and neglect to examine process issues like the TA.

The role of the therapeutic alliance in violence prevention programmes

A neglected area of research

Unfortunately, the TA in correctional work — involving psychological therapy with offenders — has largely been ignored. Marshall and Serran (2004) suggest that this neglect has occurred because work in this area is not only CBT based — which, as noted, has historically downplayed the role of the TA in therapy — but also can be very manualised as it rigidly adheres to the *risk management* principles of risk and need.

The risk management principles arose in an attempt to create consistent and effective treatment programmes, after several influential meta-analytic studies suggested treatment programmes were not working (Ward & Stewart, 2003). Essentially the doctrine argues that treatment of offenders needs to reduce risk of re-offending and that treatment levels should match treatment needs; for example, offenders with a high risk of re-offending need high levels of treatment (Andrews & Bonta, 2003). Although responsivity to treatment — looking at factors such as the TA — is a principle within this doctrine, it has largely been ignored (Ward, Day, Howells, & Birgden, 2004). Instead many programmes are very manualised according to these principles with a one-treatment-fits-all approach. While programmes can be effective without focussing on the TA, they may be improved by considering the alliance as an important factor in treatment.

Although the TA is an important part of all therapy, it is the offending treatment population for which responsivity issues and the TA are vital; offenders are often very distrustful of professionals once they have been through

the prison system, and as a result it is vital for therapists to overcome distrust by establishing a sound TA to facilitate treatment change (Marshall & Serran, 2004).

Current research

To my knowledge, at this point, there are no studies that have examined the TA in *general* violence treatment programmes. However, the few research studies that have examined the effect of alliance on outcome in treatment for *partner violent* men have linked the TA to positive treatment outcome. Brown and O'Leary (2000) examined the role of the TA between client and therapist in group treatment outcome in 70 husband-to-wife violent couples. They found that the strength of husbands' alliance with the therapist assessed at Session One was positively associated with treatment outcome, as measured by decreased husband-to-wife mild and severe psychological and physical aggression (Brown & O'Leary, 2000). However, strength of wives' alliance was unrelated to treatment outcome, and although alliance was related to treatment outcome, it was unrelated to treatment completion (Brown & O'Leary, 2000).

Taft, Murphy, King, Musser, and DeDeyn (2003) have also found that alliance predicts outcome in partner violent men. Taft and colleagues used multilevel modeling to examine the role of process and treatment adherence factors as predictors of partner reports of abuse following participation in a CBT group for partner violent men (Taft et al., 2003). They found that therapist ratings of TA predicted lower levels of physical and psychological abuse at the 6-month follow-up and were the strongest predictors of outcome (Taft et al., 2003). These studies illustrate that the TA in violent offender treatment shows promise as a predictor of treatment outcome. However, these studies have not looked at what

kind of factors may affect the TA. The TA as we have defined it, is a collaborative relationship between a client and therapist. Accordingly, the TA is likely to be affected by the different factors each client and therapist brings to therapy, as well as factors in the setting in which therapy takes place. The following chapter will address these factors, examining research with both offenders and the general outpatient treatment population.

Chapter Three:

Current Research on Factors That Can Affect the Therapeutic Alliance

Client factors that could affect the therapeutic alliance

Some therapeutic process researchers have focussed almost exclusively on therapist variables, seeing the client's role in the TA as merely perceiving the therapist in a certain way. I disagree though; while a therapist plays a large role in therapy, a client does not come into therapy *tabula rasa* - a blank slate - they bring their own personalities, experiences and motivations that must affect therapy.

Taft and colleagues have examined treatment adherence factors, client personality, and demographic predictors of the TA in CBT for partner violent men. Treatment adherence factors refer to factors that indicate a client is fulfilling the terms of their therapy: such as session attendance and homework compliance (Taft et al., 2003). Client personality and demographic predictors refer to factors in a client's personality and lifestyle, such as psychopathy, interpersonal functioning and marital status (Taft et al., 2003).

In terms of the TA and adherence factors, they found that TA predicted treatment change and that homework compliance partially mediated this association, but session attendance was not significantly associated with alliance or outcome (Taft et al., 2003). Group cohesion — arguably a client variable, if more of a multi-client one — also had a statistically significant association with TA and in general can be a significant factor in alliance measures in groups, as will be discussed later (Taft et al., 2003).

The client's personality and demographic factors were a stronger predictor of alliance than more procedural factors such as homework compliance and treatment adherence, as Taft and colleagues found in a similar study. Taft, Murphy, Musser and Remington (2004) reported that a number of factors were related to a positive working alliance; low psychopathy scores, low borderline personality traits, fewer inter-personal problems, self-referral, married status, and higher age and income. In particular, psychopathy emerged as a strong negative predictor of the working alliance, above and beyond the predictive value of Borderline Personality Disorder and other traits measured (Taft et al., 2004).

Client motivation can change across therapy and is itself an important treatment target both for offenders and general clients. However, both pre-treatment motivation to change, and treatment readiness can also be viewed as somewhat stable client characteristics, and they are associated with initial TA (Joe, Simpson, & Broome, 1998). In a study looking at transtheoretical model-based stages of change, which is related to motivation, a positive TA in early treatment was related to high Contemplation scores, which indicate a client is considering change (Derisley & Reynolds, 2000). Hiller, Knight, Leukefeld, and Simpson (2002), found small but statistically significant relationships between a client's desire for help and treatment readiness and level of therapy engagement.

Motivation to change is important for any client in therapy, but it is particularly important with offenders, who are often in semi-coerced or "pressured" treatment settings where they have not chosen to participate, but rather are attending to avoid negative consequences arising for non-participation, such as not gaining parole (Day, Tucker, & Howells, 2004). Taft et al. (2004)

found that motivation to change was the best predictor of TA for partner-violent offenders.

Wallner-Samstag and colleagues examined the characteristics of clinical outpatient clients in short-term cognitive therapy with poor and good alliances, and found that clients who were more submissive, isolated and friendly were more likely to develop strong alliances than hostile, aggressive and dominant clients (Wallner-Samstag, Muran, Zindel, Segal, & Schuman, 1992). Clients' relational capacities are also important as Mallinckrodt found; both clients' current level of social support and parental bonds influenced the quality of a working alliance (Mallinckrodt, 1992).

A meta-analysis of studies assessing the impact of client pre-treatment characteristics on the alliance, has also found that client factors — both intrapersonal and interpersonal — influence the TA, with statistically significant, moderate correlations of .30 reported (Horvath, 1994b). A study typical of the ones included in the meta-analysis found a link between clients' early object relations (attachments) and their ability to form a strong positive alliance (Piper et al., 1991).

While the studies examined here suggest that client factors — particularly personality and interpersonal factors — are related to the formation of a TA, therapist factors may also affect the TA.

Therapist factors that could affect the therapeutic alliance

Therapist variables or factors are the characteristics of the therapist that affect the TA and are related to the treatment progress of a client. Several variables are thought to be important in both alliance and outcome. In particular, some authors have examined the effect of *professional* versus *personal* therapist

variables. The professional therapist variables refer to the professional conduct of the therapist: such as their level of experience and professional training. Personal therapist variables refer to the personality and interpersonal skills of the therapist: such as attachment levels, interpersonal problems and warmth/coldness of personality (Hersoug, Hoglend, Monsen, & Havik, 2001).

Hersoug et al. (2001) reported that the level of a therapist's interpersonal problems predicted a less favourable working alliance as rated by patients, while therapists' memories of a caring mother did the opposite: leading to favourable stronger alliance scores (Hersoug et al., 2001). Surprisingly though, professional therapist measures such as longer experience, more professional training, and better skills had no impact on alliance scores, with results even showing a trend for a negative relationship, perhaps suggesting that newly trained therapists may find it easier to form a relationship with their clients (Hersoug et al., 2001).

Other researchers have replicated this finding. Dunkle and Friedlander found that therapist personal characteristics such as extent and quality of a therapist's social network, and ability to develop close relationships with others, were highly predictive of bond ratings and accounted for a third of variance in alliance ratings (Dunkle & Friedlander, 1996). Like Hersoug and colleagues, they also expected that the level of therapist experience would be predictive of the therapists' ability to negotiate goals and tasks with the client but, like Hersoug, they discovered no relationship.

From these studies it seems that the interpersonal skills and personality of the therapist - unlike qualities such as professional experience and training - are important to the formation of the TA, but what of their relationship to treatment outcome? The most systematic research to have been conducted on therapist

variables comes from Marshall and his colleagues in the field of sexual offender treatment. Essentially, they have uncovered and tested a common set of therapist variables that can be reliably identified in sexual offender therapy and affect the outcome of therapy (Marshall et al., 2002).

Marshall and colleagues found, after an extensive literature review and testing in a prison setting, what they call the “cardinal virtues” of therapists: empathy, warmth, directiveness, and rewardingness (Marshall et al., 2002, p. 403). On the other hand, a therapist can also behave in a manner that will negatively affect treatment outcome: such as being collusive, over-directive and using harsh confrontation (Marshall, Serran et al., 2003).

As well as identifying these variables, Marshall and colleagues have linked them to treatment outcome. Although, as is the case in this thesis, they did not assess recidivism; they measured outcome as change on specific treatment targets. In studies in U.K. prison sexual offender treatment programmes, they found that all combinations of the four “cardinal virtues” significantly predicted changes on outcome indices such as reductions in victim blame, reduction in minimisation of offence, and reduction in denial of responsibility (Marshall et al., 2002). More specifically, being rewarding and directive with sexual offenders had the greatest impact on reduction in attributing blame to the victims, and being empathic and warm strongly predicted reductions in minimising and denying responsibility for offending (Marshall et al., 2002).

While Marshall’s group linked therapist variables to outcome rather than TA, as noted earlier, Marshall views the alliance as a product of the therapist’s style and the client’s perception of the therapist (Marshall, Fernandez et al., 2003). Logically then, the TA should be higher when a therapist’s style displays the

positive features and lower when a therapist's style displays the negative features. This hypothesis will be tested in this thesis.

In terms of non-sexual offenders — including violent offenders — less research has been conducted on the effects of therapist variables on alliance and outcome, but current theory does address the role of the therapist in offender treatment. Andrews and Bonta (2003) discuss two underlying principles of behavioural influence in treatment settings for offenders: the *relationship* principle and the *structuring* principle. The *relationship* principle suggests that therapists who are open, warm, enthusiastic and non-blaming will promote learning and enhance their influence on offenders. The *structuring* principle suggests that therapists who actively communicate or model anti-criminal messages, will influence the direction of change an offender makes towards pro or anti-criminal behaviour (Andrews & Bonta, 2003). The qualities they discuss in the *relationship* principle are very similar to Marshall's therapist qualities, and suggest a core set of therapist skills are needed when dealing with offenders in order to create behavioural change. The two principles are also strikingly similar to Bordin's model, in that there is a strong working component and a relationship-oriented component to the model, suggesting that these principles could be related to the quality of a TA.

Considering the highly interactional nature of the TA, there seems to be a lack of studies that rigorously explore the impact of both therapist and client factors, the interactions between these parties, and the TA. Some studies though, have examined the interactions between therapists and their clients.

Interactional factors that could affect the therapeutic alliance

Considering that both therapists' and clients' variables affect the formation and strength of a TA separately, it is logical to assume that an interaction of patient and therapist variables will affect the TA in some way. One study examined patient-therapist similarity in personal characteristics on measures such as interpersonal problems, introjects (i.e., attitudes or feelings towards oneself), parental bonding memories, and values (Hersoug et al., 2001). They reported, in fact, that there were no associations between similarity of personal characteristics and alliance but that similarity of values did influence patient ratings of alliances (Hersoug et al., 2001). The idea that a therapist and client can be similar or indeed opposite in personality measures without it affecting their relationship, but need (at least from the client's point of view) to share values is an intriguing one. This idea is especially salient when considering correctional therapy, where the values of a violent offender may be far different from a therapist. I would venture that certain key values would be important in this process, such as values about harm to others and honesty, considering the aim of treatment is to reduce reoffending.

The authors suggest a "convergence of values" may operate in therapy, where treatment is experienced as effective when therapy members begin with differing values but close the gap as therapy progresses (Hersoug et al., 2001, p. 206). This concept again bears directly on offender treatment, where although therapists might define a module of learning respect for women as a goal rather than a value; in teaching tasks related to the goal they are essentially bringing an offender's values more in line with society's and their own.

Two studies have examined the interaction between therapist and client attachment styles. Mohr, Gelso, and Hill (2005) found that when a client had a preoccupied attachment pattern and a therapist had fearful or dismissing attachment, the therapist experienced hostile and distancing counter-transference. Rubino, Barker, Roth, and Fearon (2000) reported that more anxiously attached therapists were unempathic with fearful and secure clients, compared to dismissing and preoccupied clients.

Safran (1998) has hypothesised that the interpersonal schemas of a client in therapy — and the way that therapists interact with clients and their schemas — can have an effect on the TA. He argued that clients in therapy bring with them a set way of interacting in a relationship formed from early experiences in life: their inter-personal schemas (Safran, 1998). These schemas maintain relationships, and are activated and maintained by cognitive-interpersonal cycles in which people evoke schema consistent responses from others (Safran, 1998). For example, a client who has been shown coldness in their life and feels unlovable (interpersonal schema) may act to others in a way that elicits a cold or angry response (schema-consistent response), which then confirms the belief that they are unlovable (cognitive-interpersonal cycle). It is up to a therapist not to be “hooked” into a client’s negative cognitive-interpersonal cycle as this cycle confirms to the client that their beliefs about themselves are correct (Safran, 1998). Instead, through the therapeutic relationship, therapists need to identify these cycles and their own schema-consistent responses and consciously act in a different way than the client is used to, to help dispel the beliefs (Safran, 1998). If a therapist does not work against these schemas, Safran (1998) argued, then therapeutic ruptures — negative changes in the quality of the client-therapist

relationship — occur, which can damage the TA and lead to ineffective therapy sessions.

Although the work of Safran and others is promising, there is still a sizeable gap in our knowledge of how therapist-client interactions affect the TA. Even less is known about the potential effect of setting factors on the TA, which, considering the unfavourable setting of prison, could certainly affect the TA in the offender population.

Setting factors that could affect the therapeutic alliance

Having reviewed the major areas of existing research on individual factors implicated in the development and maintenance of the TA, I now turn to a series of factors reviewed by Ross, Polaschek and Ward (2008)¹ that have been almost totally ignored in research, and are thus currently only thought to be relevant on the basis of clinical observation.

If asked to describe a therapeutic context, most people might picture therapy taking place between a motivated, capable client and an understanding and skilled therapist, in a comfortable office; maybe even with a comfortable couch to lie down on. The client chooses to come to therapy with personal self-improvement in mind, and perhaps they enjoy warm support for change, but no personal coercion from the significant others in their lives. The relationship is a confidential one; the therapist is responsive to the client's concerns and they work collaboratively towards helping the client have a better life.

But the reality can be markedly different, and in settings where a number of these conditions are not met, it may be much harder to create a TA.

Rehabilitation in custodial correctional settings with serious offenders offers

¹ The following sections and Chapter Four are taken directly from Ross, Polaschek and Ward, 2008.

circumstances that deviate in a number of ways from this utopia, thus drawing attention to the importance of setting issues for the TA. I suspect that contextual factors can have direct and indirect effects on the TA. The factors I examine here include the physical and social environment in which therapy occurs, the level of systemic support for the programme, and programme characteristics.

Institutional environments may work to enhance or constrict the development of the TA, but again, research can shed little light on this assertion to date (Catty, 2004). The environment of an institution can be divided into two broad groups of factors: correctional system factors, and the immediate environment in which therapy is conducted.

System Factors

System factors are defined here as those outside of the control of client and therapist. System factors may also be outside of the control of programme management (e.g., legislative requirements). The circumstance under which an offender client is referred to, and enters therapy, is one example of the way in which system factors can affect the TA. Correctional policies and legislative rules often determine who is eligible for therapy, as well as who is required or expected to undertake it, and when it will be made available. Mandatory or coerced-voluntary treatment (i.e., where participation may accrue significant external reinforcement such as early parole) aligns therapy with the punitive aspects of a sentence, making it seem part of “the system”.

The essence of the TA is collaboration, and the client’s ability to negotiate the terms of the TA is inherent to TA theory (Hatcher & Barends, 2006), suggesting that a patient’s sense of autonomy may be a necessary condition for the formation of a TA. Autonomy is very limited in prison, making it a very

precious resource for prisoners. Perceptions of coercion negatively affect retention in treatment, so it is likely they have a similar effect on the TA (Maxwell, 2000; Young, 2002). Requirements to attend therapy are another violation of this basic need (Deci & Ryan, 2000). Taking away the opportunity for a client to choose to enter therapy, and when, will engender psychological reactance against the requirement. This reactance is likely to be transferred to the therapist—clients in these situations don't necessarily separate the therapist from “the system”—affecting the ability to form a bond, and to agree on tasks and goals. Inside therapy can be the safest place to express reactance (by not doing assignments, or being oppositional about goals), because therapists with a client-focused ethos may retain the client in therapy despite poor progress. Thus psychological reactance theory (Brehm & Brehm, 1981) would predict a poor TA from anyone in coerced or mandated therapy. Yet non-compliant or reactant behaviour—if not understood as partly system-generated—may lead to negative therapist attributions, thus further damaging the TA.

Rehabilitation is often timed for the later part of the sentence, as the offender nears release, and this timing also may affect collaboration on tasks, and possibly goals. Rules about when an offender can undertake rehabilitation can also reduce the likelihood that there will be agreed-upon tasks and goals. Policies that have offenders entering treatment as they approach parole—often years after they committed their index offence—may lead clients no longer to agree on goals that clearly were relevant at the time they committed that offence (e.g., I need to drink less alcohol when I go back home), or to agree on the goal but no longer think they need to work to achieve it. Why? One possible explanation comes from temporal self-appraisal theory. Research on the relationship between self-

evaluation and autobiographical memory has demonstrated repeatedly that people believe that they have become better people simply because of the passing of time (Ross & Wilson, 2003). Furthermore, people typically attribute positive achievements to internal attributes and failure to situational factors (fundamental attribution error). It follows that in institutional environments where environmental constraints often reduce the possibility of demonstrating ongoing difficulties with offending-related needs (e.g., alcohol consumption, difficulties in relationships), offenders mistakenly attribute the absence of problems in these areas because of environmental restriction, as due to increases in personal self-control. Consequently, they see themselves as having undergone change merely by time passing and the absence of ongoing difficulties in an artificial environment. Although perhaps willing to form an initial bond with the therapist, these non-specific mechanisms are likely to seriously impede offenders and therapists' ability to collaborate on goals and tasks if they are not understood.

Therapists also are vulnerable to the negative impacts of system factors on their ability to form a TA with each client. Just as clients may benefit from being able to *choose* to be in therapy, when and with whom, so may therapists. But institutional policies and other systemic problems may force therapists to work with clients they judge unsuited to treatment. For example, they may perceive the client's needs to be a poor match to the programme, or perhaps the client is continuing to commit criminal acts while in the programme but poor institutional monitoring means that there is no official basis on which to remove him. Relatedly, therapy relationships with clients can be terminated by system needs unrelated to programme progress. Lack of control over these factors may well undermine commitment for therapists too.

More broadly, systemic policies often dictate therapist workloads, access to supervision and professional development, levels of training and so on. Thus “the system” has a key role in determining whether a therapist will have the necessary capacities to approach the TA with the necessary optimism, enthusiasm and commitment, or whether programmes’ human resources are inadequate, leading to staff burnout and turnover. The more difficult the client, and the circumstances, the more these factors are likely to compromise a therapist’s contribution to the formation of a TA.

Role conflict and confusion

Therapist and client roles are—at least in part—dictated by larger system policies and legislative considerations. If trust is one of the key determinants of the TA, then role requirements that limit confidentiality will have a distinctly detrimental effect on it. Therapeutic staff in correctional, and other custodial settings, often are forced to combine roles, some of which are incompatible with the TA. This role conflict also can cause confusion in clients about how they should behave as well. Therapists are apparently available to help clients make changes, yet often they also are expected to disclose information to prison management that may result in punishment for offenders. Clients are expected to develop trusting and self-disclosing relationships with therapists, without necessarily being able to predict what they can safely disclose, and what will lead a therapist to advise prison authorities or the police about previous offending or institutional infractions. Marshall and colleagues have found if a client does not trust their therapist it is difficult to establish a sound TA (Marshall & Serran, 2004). It is not only clients’ developmental histories that make extending that

trust difficult, but also the possibility of detrimental present-day consequences (Maden, Swinton, & Gunn, 1994).

Therapists often have to write reports for Parole Boards based on what is occurring or has occurred in therapy, which then become part of a prison file on record for other correctional staff to view. In other words, they have to switch hats from therapist to risk assessor. Even on dynamic risk scales, clients may make relatively small changes in risk over the course of therapy and may remain high risk even after successful treatment, forcing therapists to conclusions that may seem like betrayal to clients, causing a TA rupture, and the perception that the therapist is just part of the “system”.

In some programmes, therapists may be able to reduce their role confusion because the programme draws clear boundaries between therapy and custodial staff roles, and therapists attempt to be as explicit as possible from the beginning about what they will and will not have to disclose to outside agents. Sometimes one role, such as appraising treatment progress for parole boards, is taken by other staff, allowing the therapist to develop as subjective a relationship with the client as the term “alliance” implies. But therapists who appear to have no hand in how “the system” treats offenders—by taking no active role in their out-of-treatment management—may be perceived by offender clients as relatively powerless, and lacking in credibility.

In some rehabilitation, custodial officers themselves are the programme deliverers (e.g. Fox, 1999). Although this solution may minimise role conflict, does it sacrifice the possibility that a TA can develop? In other services, therapeutic staff has explicitly dual roles: both care and control. Skeem, Eno Louden, Polaschek, and Camp (2007) examined therapeutic relationship quality

between specialist mental health probation officers and their mentally disordered offender supervisees, who were mandated to attend mental health treatment. In this challenging context, the best TAs were associated with probation officers who demonstrated *relational fairness*: defined as a combination of caring, fairness, trust and authoritativeness. A key distinction for clients seemed to be between whether officers were seen to be carrying out their sometimes punitive job in a caring and genuinely interested way, or whether they used the control aspects of their role in a disinterested authoritarian manner to further a punitive agenda with clients. Authoritarian-style implementation of control not only predicted lower alliance ratings, but also officer confrontation of the offender in sessions, offender mistrust, treatment amotivation, and later non-compliance (Skeem et al., 2007).

Having therapy placed in a correctional setting poses its own risks and challenges to creating a TA with an offender or group of offenders. While it is difficult, it is possible to overcome them and create a therapeutic and nurturing environment for offenders to learn from.

Programme factors

The agenda of the setting can also have an impact on treatment gains and TA. The dominant ideology in corrections at the moment is risk reduction, and the main treatment goals tend to centre on criminogenic needs (Gendreau, Smith, & French, 2006). The predetermined nature of treatment goals has several effects. First, in many settings the TA is built on clients' abilities to negotiate their own treatment goals. Pre-determined goals serve to depersonalise clients, and again probably engender reactance, even if the client might have raised the goal himself in other circumstances. Furthermore, goals that clients might be

interested in such as greater wellbeing, better relationships with partners and so on, may be seen as illegitimate or at least irrelevant (Ward & Brown, 2004). This circumstance requires therapists to be skilled in incorporating client goals into their overall plan, or manoeuvring clients subtly into circumstances where their goals become the client's.

Risk reduction approaches also may enhance the client's sense of personal defectiveness and hopelessness, causing apathy about the whole therapeutic agenda, also leading to a less favourable TA (Lambert, 1992). In practice, traditional CBT, risk-reduction programmes have typically focused both on what clients should stop doing, and on building their capacity for meeting the same needs prosocially (Ward & Stewart, 2003). For example, sex offender treatment commonly has taught clients how to meet sexual and relatedness needs in non-offensive ways through skills instruction. Thus therapists and clients in risk-oriented rehabilitation programmes have been able—albeit in a more constrained manner than in ideal settings—to negotiate goals that each party wants, and tasks to be achieved.

Nevertheless, risk-reduction ideology may compromise the TA by its failure to adequately accommodate consideration of the kind of life an offender may want. An alternative approach, the Good Lives Model (GLM), offers a solution to these concerns, adopting a more holistic approach to offender rehabilitation. It is argued in the GLM that all human action is an attempt to achieve primary human goods that are intrinsically beneficial to humans and sought out by us, such as intimacy and mastery (Ward & Stewart, 2003). Unlike the risk-need model it is much more explicitly a strength based approach: aiming to reduce risk by equipping offenders with the capabilities to secure primary human goods in

socially acceptable and personally meaningful ways, when they have failed to do so themselves (Ward & Stewart, 2003). Although it is unknown how different treatment agendas would affect a TA, it is hypothesised that the more personalised, strength based approach of the GLM may be more appealing to clients than the risk management approach, and therefore they may be more willing to form an alliance with a therapist to work towards securing these goods.

From the client perspective, the TA can be affected by the programme's responsiveness in more prosaic ways. We suspect that clients who find a programme too intellectually demanding in terms of literacy or language barriers, are going to be more prone to therapeutic ruptures. Similarly, there is often an assumption that clients need to be motivated to change to benefit from programmes. It follows that a client who is not ready for action will not develop a strong TA with a therapist whose expectations are for an action-oriented intervention. So actually client motivation to change need only be a match to the current intervention for a TA to develop. A TA can be achieved at early change stages such as contemplation, or preparation, if the goals and tasks are also pitched at the stage where the client is. Indeed, such interventions may reduce reoffending risk without any further intervention (Anstiss, Polaschek, & Wilson, 2008).

Group treatment settings

Group treatment has become the favoured delivery method for offender rehabilitation. There are several advantages, including efficient use of scarce resources, and the involvement of offenders as change agents for each other (Frost & Connolly, 2004). But there are challenges too. Roback (2000) suggested that group therapists have to orchestrate the dynamics for a successful group - a

complicated task. Therapists who are too charismatic, too confrontational or too laidback can increase group tension, lower the groups self-esteem and lead to group breakdown (Roback, 2000). By contrast, a helpful and supportive leadership style was found in sex offender treatment to be important in creating an atmosphere in which effective therapy could take place (Beech & Fordham, 1997).

Although things can easily go wrong in a group setting and upset the therapeutic and group relationship, the group situation can also be beneficial for outcome and alliance, especially for offenders. In fact in a recent meta-analysis of group psychotherapy with incarcerated offenders, Morgan and Flora (2002) found positive treatment effects across a variety of outcomes. Frost and Connolly (2004) found evidence with sex offenders that groups can enhance members' engagement in goals and tasks in out-of-group time: they found that outside of therapy, offenders can consult with each other and actively help each other to change. Within sessions offenders can also reflect back to each other, show support and supportively challenge each other's behaviour. Yet few studies have systematically quantified group alliance. Beech and Fordham (1997) administered a measure of group atmosphere, the Group Environment Scale (GES), to members and leaders of 12 sexual offender treatment groups. Results suggested that the atmosphere of a group had an important influence on treatment change and a successful group that was highly cohesive, well organized and led, encouraged the open expression of feelings, produced a sense of group responsibility, and instilled a sense of hope in its members (Beech & Fordham, 1997). However, factors that contributed to high group cohesion, and

relationships between group factors and individual TAs with therapists were not examined.

So how does group cohesion interact with the TA? Taft and colleagues (2003) found significant correlations between client ratings of group cohesion and WAI ratings in a CBT group for partner violent men, and the two concepts are also clearly conceptually similar (Woody & Adessky, 2002). However it will be difficult to design a study that sheds light on *how* they are related.

Kivlighan and Tarrant (2001) suggested that in group therapy, therapists should de-emphasize their relationships with individual members and focus primarily on creating a therapeutic group climate instead. However, this may be a risky strategy, especially with offenders, and given the current poor understanding of how TA mediates therapeutic change (Catty, 2004). Groups can be highly cohesive without being in any way therapeutic. Strong TAs with at least some group members may protect against developing a cohesive group that decides to work against the goals and tasks of therapy as can happen in high-risk offender rehabilitation.

Individual clients can also harm a group environment. Severely narcissistic, borderline, and schizoid clients have been found to assume deviant group roles and disrupt both the TA of other group members, and treatment progress (Roback, 2000). Sometimes systemic factors leave therapists running groups that contain some members who are primarily unengageable, disruptive and criminogenic. In such a circumstance, the therapist may see the only option to be the formation of strong individual alliances with those group members who are open to such alliances, and containing the other members as much as possible. There is a need for research on whether retaining such individuals in groups

disrupts the TA for all, or whether other group members may be able to consolidate the alliance with their therapists, and still gain from intervention.

Recent therapy developments aimed at increasing integrity by rigorous standardisation of treatment sessions may actually be undermining outcome by damaging the TA. By specifying exactly what should be occurring in time intervals of a few minutes, policy makers destroy valuable opportunities to develop the TA that come from responding to the client's current concerns or circumstances. Relatedly, closed groups moving through modularised treatment usually require that all offenders complete all modules, which may also undermine the TA, as if the offender does not have needs in all areas of the programme they may not agree with the goals and tasks assigned in the module.

It is particularly difficult in group offender rehabilitation to achieve the right balance between treatment integrity and therapeutic responsiveness. Over-zealous standardisation and monitoring can have several potentially damaging effects on the TA. First, it requires clients undertake components of treatment they may not need, which may damage the credibility of the therapist, and cause difficulty in collaboratively agreeing with goals and tasks. Second, therapists can't easily respond either to individual clients' issues as they arise, or even to group crises. Therapists sometimes feel they are put in the invidious position of effectively having to say to clients "I know you are having a crisis but we need to cover the material in session 42 today". Clearly, the message is that the manual is more important than the client.

Immediate therapy environment

The immediate environment in which therapy occurs also has the ability to enhance or disrupt the formation of a TA. Prisons are intended to be cold and

punitive places, where offenders are continuously reminded that they are defective individuals whom society has shut away. Offender clients often come into a therapeutic relationship after months or years in mainstream custody environments: settings in which both other offenders and custodial staff have been uncaring or actively hostile. In such environments they are accustomed to living from day-to-day, to having little or no control over their living conditions and to maintaining a guarded and vigilant approach to others. Custodial staff monitors them only for evidence of rule infringement, in an impersonal and hostile way. Inmate cultures are predatory, brittle and dangerous environments where self-disclosure can lead to death at worst and low social status and routine predation by others at best. Valuable skills they learn in this environment include learning to keep quiet, and how to control relationships with others in an adversarial manner. Consequently the TA has to develop against clients' invariably negative attitudes to the criminal justice system (Baxter, Marion, & Goguen, 1995).

Does this backdrop make the TA a precious and valued oasis, or a role that demands a degree of openness and trust an offender is both incapable and unwilling to extend (Birgden, 2002)? This is not yet known. However, I suspect that in addition to offender individual differences, programme factors also may determine which happens. It may be easier if rehabilitation work occurs in specialist therapeutic units, and where other enrichment is also available (e.g., access to education, work, better recreation, enhanced access to family), and where the custodial staff are themselves trained carers (e.g., nursing staff) who will also attempt to develop a TA with the offender, who are capable of

encouraging and rewarding him for TA-related progress in the active part of the programme, and who can help bolster therapist credibility.

At the other end of the spectrum, inmates participate in therapy—sometimes for just a few hours a week—while embedded in a mainstream custodial environment. They spend most of their time with other inmates, who may ridicule and undermine their therapeutic endeavours, while actively promoting antisocial goals and tasks. In addition to other inmates, offender clients are potentially influenced by two other sources of social interaction: custodial staff, and friends and family “on the outside”.

A therapist might encourage and foster a therapeutic and calm environment in the therapy room that can be undone out in the yard in a single confrontation with a custodial officer (Quinsey, Harris, Rice, & Cormier, 1998). Research supports the contention that inmates are unlikely to see custodial staff as sources of support, especially for emotional problems (Dear et al., 2002; Hobbs & Dear, 2000). Custodial staff may have limited interpersonal skills, sometimes share both antisocial values with clients (e.g., trivialising violence), and suspicion about the intent of mental health professionals (“they’re just trying to mess with your mind”). Custodial staff may also express openly to clients their disbelief that clients can change, and to therapists, their suspicion that the therapist is being conned.

The final social environmental factor is the influence of other significant figures in the offender’s life. If an offender’s mother is saying to him “you can’t trust those therapists, son,” or “you don’t need to do what they say, it’s not your fault you’re in trouble”, how could his contribution to the TA not be affected negatively? Significant others, such as girlfriends, may even be jealous of the

influence a therapist may have on the client, feeling that their relationship is threatened by therapy.

Some correctional institutions have set out to ameliorate the potentially toxic effects of others by creating environments within prisons to nurture therapeutic change. Therapeutic Communities (TCs) specifically change the physical and staffing environment to be more accommodating and treatment friendly for clients. According to Serin (1994), a TC incorporates motivated clients and staff, confidentiality and modified traditional prison rules and physical setting. TCs ultimately aim to give clients supportive experiences across time and social interactions.

So, although there is no relevant research, I would predict that in TC's, clients have stronger TAs that have more impact on change, and that any of the negative social and environmental factors we have described should reduce the quality of the TA and ultimately, client gains.

Chapter Four:

A Proposed Model of the Therapeutic Alliance in Offender Rehabilitation

Drawing from the research discussed in this introduction, Bordin's theory of working alliance and extensive clinical experience with offender rehabilitation, Ross et al. (2008) have proposed a theoretical revision of the TA in offender rehabilitation. Overall, Bordin's (1979) original conceptualisation (agreement on goals, assignment of tasks, development of bond) is taken as a descriptive framework to be expanded with the additional research and theory we have reviewed. The Revised Theory of the Therapeutic Alliance (RTTA) gives to Bordin's original work a more elaborate conceptualisation of therapist and client variables and their interaction, as well as a new emphasis on the wider context in which therapy is implemented.

Some general points should be noted before outlining each part of the theory in further detail. Firstly, the TA is itself dynamic, being both a process and an entity, and implying that complex, and often reciprocal, interactions exist between variables, making it difficult to itemize potential cause and effect relationships. We have attempted to do this in Figure 4.1, which outlines the major variables in our theory, but accept that we have oversimplified the likely relationships in doing so. Second, the factors we propose to explain the development and maintenance of the alliance vary in their stability.

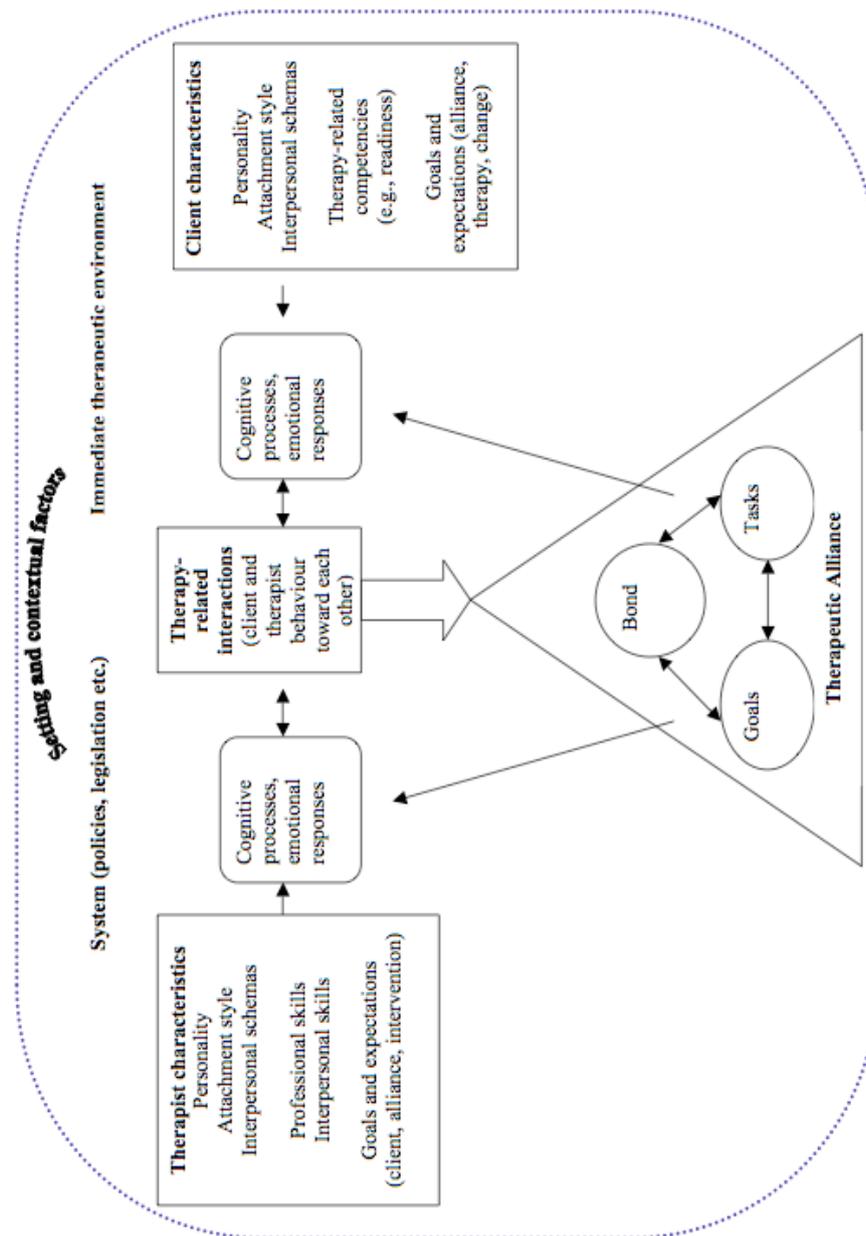


Figure 4.1. The Revised Theory of the Therapeutic Alliance (RTTA)

We have found the distinctions made by Hanson and Harris (2000) helpful in describing these differences. They suggest that alongside static factors, two categories of dynamic factors can usefully be distinguished. Stable dynamic factors are changeable—for example by individual effort in therapy—but more often than not remain relatively unchanged over weeks and months, whereas acute dynamic factors fluctuate over minutes, hours and days.

All three types of factors are represented in our theory, from relatively static and stable features (e.g., personality); through stable dynamic factors such as therapist professional skills, client competencies, and programme characteristics; through to very acute factors, such as the “on-line” cognitive, emotional and behavioral responses client and therapist experience and exhibit during a therapy session.

The first part of our theory (see Figure 4.1 for schematic summary) refers to therapist characteristics. As discussed, therapists bring to their interactions with clients a number of characteristics, some of which are a function of training, and others more of their own life histories. Firstly, therapists are likely to have individual personality and interpersonal styles that are relatively stable and that make interacting with them a distinctive experience for clients. These include factors such as warmth, conscientiousness, and agreeableness, and in particular their own attachment style, which we hypothesise to be directly relevant to the bond aspect of the TA in particular. Relatedly, therapists have interpersonal schematic templates that will affect how they set about trying to develop a bond with different types of clients, and the way in which they construe client behaviour as indicative of bond development. For example, if a therapist has an anxious attachment style and an interpersonal schema that dictates that if they are

rebuffed then they have been rejected, they may perceive the therapeutic bond to be damaged if their client gives them the cold shoulder in treatment.

Therapists also acquire a raft of professional skills from training, clinical experience and supervision. Generally, helping professionals' training emphasizes both the development and maintenance of a therapeutic relationship, and the acquisition of technical knowledge and skills that create therapeutic change for specific problems. Both types of skill are relevant to the development of the TA. As Hatcher and Barends (2006) note, "alliance cannot happen without technique" (p. 294) and the technical skills of a therapist include both those needed to establish goals and tasks together, and those involved in the development, maintenance and repair of the therapeutic bond. As noted earlier these skills are particularly salient in a correctional rehabilitation context where therapists need to manage difficult clients with a wealth of personality, educational and motivational difficulties. The next therapist variables in our model, and the ones that may be the most challenged when faced with an offender as a client, are goals and expectations. As we have seen existing research has little to say about therapists' goals and expectations with respect either to the TA or to intervention. We predict that overly high or low expectations can be detrimental with offenders; particularly the latter as there is very little hope in a custodial environment and inadvertently conveying an expectation of failure to a client is likely to undermine his motivation to form a TA.

In keeping with our review of the literature, we have broadly attributed the same classes of characteristics to clients as to therapists. However, there are some differences too, given the distinct nature of each role. First, there is likely

to be a more heterogeneous range of personality characteristics found among clients than therapists, because therapists are usually highly selected into training for personal characteristics.

In correctional settings, client characteristics such as irritability, anxiety, hostility, self-defeatedness, self-centeredness, callousness as well as constellations of characteristics that comprise personality disorders are likely to have a high base-rate. Numerous studies have shown that offenders are likely to have seriously abusive backgrounds and the accompanying attachment and interpersonal problems that come with these experiences which then negatively affect the TA (Hudson & Ward, 1997; Marshall, 1989; Ward, Hudson, & Marshall, 1996). It could be argued that the bond aspect of the alliance is a form of attachment. We speculate that if an offender has an anxious or avoidant attachment then this will affect how easily they can form a secure bond with a therapist. Anxiously attached clients may be too vigilant for rejection to be able to engage collaboratively in the process of setting tasks and goals. Dismissive or avoidantly attached individuals may disparage the bond, and the therapist who demonstrates an interest in developing it.

The next variable in our theory concerns client's therapy-related competencies. Although the need for therapist skill in the development of the TA is obvious in therapeutic endeavors, less obvious is the need for clients to have certain pre-conditions to be able to form a productive and collaborative relationship with the therapist. The most obvious of these competencies we have just discussed: the ability and interest to form a relational bond. However, other basic competencies also are needed, and these will vary as a function of the nature of the goals and tasks that are expected. Some of these characteristics have

recently been embodied in models of motivation, responsivity or readiness to change (Howells & Day, 2003; Ward et al., 2004). Motivation to change in our model is included within client goals and expectations, which we see as a stable dynamic factor. Readiness and responsivity models also allude to the way motivation interacts with other client characteristics. Aside from some capacity to form a bond, clients need basic levels of intellectual capability, literacy, mental stability, attention span, memory functioning and so on, in order to recognise important goals and be able to work on tasks.

Client goals and expectations, then, are very closely tied to therapy-related competencies. Client goals need to infer a realistic level of striving. For example, a client who has been accustomed to earning thousands of dollars each week through robbery or drug dealing, but who has no formal job qualifications, is not going to be able to achieve that income any time in the near future by legitimate means. Expecting the therapist to wave a “magic wand” will inevitably lead to a therapeutic rupture. Alternatively, believing that he is incapable of being safe unless he carries a knife everywhere may be aiming too low, leading to refusal to agree on tasks.

In addition, clients need to develop some level of belief that they are capable of change, or at least a preparedness to be persuaded of this by the therapist. Clients also need to be sufficiently open that they will at least try the tasks the therapist suggests may be effective in helping them achieve their goals. In fact, this preparedness to accept therapist influence is likely to be particularly crucial. With higher risk clients, the very process of setting mutually acceptable goals may represent a major portion of therapy, as they come to accept the need to change an entrenched lifestyle. As noted in Figure 4.1, offender goals and

expectations about the alliance, therapy and their own capacity for change are very closely linked, and reciprocally influence each other. For example, seeing the therapy as worthwhile will usually enhance the TA, and forming a meaningful bond with the therapist may increase their belief in their own capabilities. Offenders' expectations are often low: they too are jaded by the system by the time they enter a programme so they may not want to invest hope and effort again.

One of the most novel aspects of the RTTA, as can be seen in Figure 4.1, is the inclusion of external factors, such as the constraints of criminal justice system rules and regulations, and the characteristics of the current setting. Our theory suggests that these variables are sources of disruption or support for the development of the TA both directly and indirectly. Ultimately though, all of these external factors have their influence through offender and therapist cognitions, emotions and behavior. I have already discussed in depth the different ways that setting affects the TA but will reiterate the main points briefly. The criminal justice system sets policies that affect every level of offender experience from arrest to release. Systemic factors help decide level of resourcing to programmes, when offenders are referred and who gets released after programmes. Systemic factors probably often have a more indirect effect on the TA than therapeutic environment factors, but are still considered important, particularly since offenders often seem to view their therapists as part of "the system". Therapeutic environment and program characteristics are hypothesised to have a more day-to-day impact on the TA. Unpleasant therapy spaces, hostile custodial staff, lack of therapist supervision and a program that is pitched above

the literacy levels of inmates all are likely to impinge on all three aspects of the TA on an immediate basis.

Working in a group setting poses its own unique challenges to the TA as I have already discussed in depth. If these challenges aren't met, our model predicts that individual TAs could suffer especially if there is an unsupportive chaotic group atmosphere, or if therapists are perceived to have too little control over toxic group members.

The next factors in our model (which both client and therapist's characteristics feed into) are client and therapist cognitive processes and emotional reactions to each other and the therapy process. Briefly, everything that happens in the therapy room—and sometimes events outside of therapeutic sessions—can be viewed as behavior. Each party to therapy makes cognitive and emotional “sense” of that behaviour through the filter of their own characteristics. As Safran's (1998) work suggests, clients will often unconsciously set up situations in which therapists are invited to validate the client's dysfunctional or maladaptive beliefs about himself and his behavior, or about others. Such interpersonal cycles, born of interpersonal schemas, are most likely to affect the bond since they are primarily about maintaining relatedness to others. However, therapists have to constantly interpret and respond therapeutically to all manifestations of a client's goals and expectations in order to keep the TA on track. The active processing and formulating of a therapeutic plan for responding to clients is also particularly challenging in groups. Combined with our view that challenges to the TA are likely to unfold often in work with offenders, group contexts are likely to foster alliance ruptures, simply from therapist cognitive overload. Processing the sheer quantity of informative

behaviour being emitted by ten offenders in a room may be beyond the capacity of a single therapist, and ruptures could occur because the therapist has missed some vital behavioral cues from an offender.

As well as misinterpreting therapist behavior as confirming their own schemas, clients are often adept at accurately reading some therapist behavior. Consequently, clients may actually detect leakage of personal responses—especially in therapeutically demanding situations such as groups—and may confront the therapist. In this situation the therapist might utilize self-disclosure to avoid a rupture in the TA. In fact in this section we stress the importance for therapists of judging *when* to exhibit each of the specific behaviors described as important in this article. For example, too much directiveness at a time when the client is feeling ambivalent or insufficient rewardingness when the client has ventured something “risky” may result in withdrawal or disengagement.

Of course, client behavior will affect therapist behavior too. It is more difficult to be warm and rewarding if a client is pervasively hostile and critical, or refuses to do homework tasks. Negative client behaviors are common in offender therapy. Our theory predicts that these behaviors will affect the alliance in a number of ways, but the effects will also be mediated by therapist expectations and interpretations of the behavior.

Finally, therapist and client behavior then feed into the TA itself, consisting of Bordin’s three factors of agreement on therapy goals, agreement on the tasks needed to achieve these goals, and a bond which works to facilitate this process. The three factors of Bordin’s model are shown as three separate circles inside the TA triangle in our diagram and this reflects the nature of the TA as we see it. Arrows between each component and the others indicate the strong links we

think exist between them. Although we agree that the strongest TA will be formed when all three factors are strong we think that each factor is important in its own right and this has been reflected by our linking of specific variables to specific parts of the alliance. However, factor analyses based on psychometric measures of the TA have found that two components may be sufficient: the more technical aspect of agreement on goals and tasks and the more affective relationship-based aspect of the bond (Andrusyna, Tang, DeRubeis, & Luborsky, 2001). This two-factor conceptualization could be particularly salient to an offender-based model. For example, we hypothesised that when working with psychopathic offenders it may be preferable to concentrate on the goals and tasks of therapy rather than the bond. In terms of offenders in general who may enter therapy with low motivation and expectations it may also be possible for them to form a bond with the therapist before they agree completely with the goals and tasks of therapy. In fact evidence suggests that the bond is quite often formed first before the therapist and client are completely agreed on goals and tasks anyway (Horvath, 1994b). In reality, goals and tasks often undergo revision during the therapeutic course.

Finally, we have included arrows from the TA back to the acute dynamic “in therapy” factors because we hypothesise that the quality of the TA itself will alter clients’ and therapists’ perceptions and feelings about each other’s behavior. A strong TA may protect therapist and client from misinterpretation of ambiguous behavior by the other, but if the TA is not firmly established, the process of therapy is likely to be regularly disrupted by events that require its repair.

Although it is useful to lay out each segment of our model, in reality the process nature of the TA makes a structure like that shown in Figure 4.1 as frustratingly constraining as it is illuminating. A good example of the complexity of these interactions is to consider what happens with one client variable: interpersonal schemas. A client comes in with a particular schema of, for example, women. This view will affect their cognitions, emotions, perceptions and then their behavior in therapy. A therapist will then perceive this behavior and will generate cognitions and emotions about it and will react with their own behavior. This behavior will, in turn, be perceived by the client, who will then generate new cognitions and emotions about it and then react again with their own behavior, and so the cycle continues on. This single variable example generates complex interactions, which are difficult to illustrate in a static model structure.

In summary, the RTTA model proposes a revision to Bordin's theory that allows the inclusion of the client, therapist and setting factors likely to affect the TA with offenders in prison-based rehabilitation. The RTTA model is a positive step in addressing the theory of the TA with offenders but it stops short of addressing the link between TA and outcome, which the next chapter of this introduction will cover.

Chapter Five:

The Relationship Between Therapeutic Alliance and Treatment Outcome

As mentioned earlier, a strong TA makes an important positive contribution to outcome across many types of therapy (Horvath & Luborsky, 1993), accounting on average, for about a quarter of the variance in a meta-analysis of 24 studies (Horvath & Symonds, 1991). This outcome is generally measured in terms of symptom improvement and client satisfaction with treatment. While we know that the TA predicts outcome no matter which mode of treatment is used, and which problem is being treated, many other factors affect how the TA relates to therapy outcome. In a review of the factors explaining the success of TA measures in predicting psychotherapy outcome, Luborsky (1994) puts forward several factors that influence the level of the correlations of the alliance with treatment outcome.

Firstly, a positive rather than a negative alliance — that is a strong rather than a weak TA — is, not surprisingly, associated with positive outcome (Luborsky, 1994). Regardless of who makes the rating — client, therapist or observer — TA ratings predict outcome. Across all measures of the TA, Luborsky (1994) reported that the patient's view of the alliance predicts outcome better than the therapist's view, but some studies have reported a lack of relationship between all the perspectives and outcome. Similarly, in their meta-analysis, Horvath and Symonds (1991) found that clients' and observers' reports of the alliance appeared to be more predictive of outcome than therapists' judgements, with all perspectives highly reliable; but their results on the relationship between perspectives was inconclusive. Horvath (1994b) argued that

generally the three different perspectives do not necessarily coincide and that measures from different perspectives are not interchangeable. Based on empirical evidence therapist scores yield significantly poorer predictions of all type of therapy outcomes than clients' and observers' alliance assessments (Horvath, 1994b).

There is some overlap between current improvement and TA ratings, suggesting that the more a patient benefits from therapy, the better they rate an alliance, but the alliance has still been found to be predictive of outcome above this overlap (Luborsky, 1994). Contrary to other evidence reviewed, Luborsky found evidence that therapist-client similarities, especially demographic similarities (e.g., age, marital status, and religious activity), influence the correlation between alliance and outcome (Luborsky, 1994). Clients' mental health was also found to facilitate the TA and that definition of mental health included the quality of interpersonal relationships, which — as discussed earlier — is important for both therapists and clients in forming a TA (Luborsky, 1994).

Some factors were not found to influence the relationship between alliance and outcomes. As discussed, type of therapy has no predictive capacity. The time course of therapy was not found to influence correlations either (Luborsky, 1994). In a similar vein Horvath and Luborsky (1993) suggested that outcome measures can affect this correlation, with outcomes tailored to the specific client (e.g., an outcome of taking a flight for a flying phobic), predicted more by the alliance than broad range symptomatic change questionnaires. They also argued that alliance measures taken early in therapy are a more powerful prognosticator of outcome than later alliance with several different studies backing this claim (Horvath & Luborsky, 1993). The following sections look more closely at the

alliance measures themselves in order to decide which measure would be best for the current study.

Chapter Six:

Measuring the Therapeutic Alliance in the RVPU

The measures in use

It was the level of interest in the TAs positive link with outcome in therapy that led to the construction of measures that could reliably identify the strength and quality of a TA. This interest had a particular surge in the eighties and nineties, leading to the development of several alliance measures with around 11 becoming mainstream (Fenton et al., 2001). Of these 11, many come from one of the five original families of TA instruments, which were developed first and are used by the majority of TA researchers (Horvath, 1994b). According to Horvath (1994b) these instrument clusters are: the California Psychotherapy Alliance Scales (CALPAS), the Penn Helping Alliance Scales (Penn Helping Alliance Rating Scale: PENN /Helping Alliance Questionnaire: HAQ/Helping Alliance Counting Signs: HAcs /Helping Alliance Rating: HAR), the TA Scale (TAS), the Vanderbilt Psychotherapy Process Scale and Vanderbilt TA Scale (VPPS/VTAS), and the Working Alliance Inventory (WAI).

The CALPAS and WAI have had widespread popularity with researchers and consequently there is a large amount of data available about their properties. Due to this fact, these two instruments will be considered for the present study, with their theoretical origins under review first.

The theoretical origins of the therapeutic alliance measures

Despite attempting to measure the same phenomena, these two scales have different theoretical origins, with one originating directly from a specific theory and one stemming from an eclectic blend of theories.

The WAI is described as theoretically homogenous, as it tries to portray a specific theoretical perspective of the alliance (Horvath, 1994b). The WAI was developed by Horvath and Greenberg (1989) with the express purpose of measuring Bordin's three factors from his psychodynamic theory of the working alliance: Goals, Tasks, and Bonds, and consists of three subscales with 12 items each assessing these constructs (Horvath & Greenberg, 1989). A WAI-S short 12-item total, four-item each subscale version is also available (Tracey & Kotovic, 1989). The WAI can be rated by the therapist, client or an observer (Horvath, 1994a).

The CALPAS, developed by Marmar and Gaston (1998), is referred to as a *blended* scale as its theoretical origins are diverse and eclectic. It consists of 24 items in four subscales, which were developed to measure what the authors saw as four relatively independent alliance dimensions. Each subscale originated from different theories (Marmar & Gaston, 1988).

The CALPAS subscale of *Patient Commitment* reflects the therapeutic relationship as based on Freud's concepts of transference, involving attachment of the patient to the therapist (Gaston & Marmar, 1994). The second subscale, termed as the *Patient Working Capacity*, reflects a working alliance, and is informed by theory on ego alliance and working style. It is seen as different from the TA in that it measures the skillful aspects of the patient's collaboration on the tasks of therapy rather than their emotional attachment (Gaston & Marmar, 1994). The third subscale of *Therapist Understanding and Involvement* is informed by the work of people such as Bowlby and Rogers on the important role of the therapist in creating an alliance (Gaston & Marmar, 1994). The fourth subscale of *Working Strategy Consensus* reflects patient-therapist agreement on

goals and strategies and is, interestingly, based on Bordin's definition of the alliance, although only the goals and tasks factors are really represented in this scale (Gaston & Marmar, 1994).

The WAI has developed from one specific theory; and the CALPAS from an eclectic mix of theory; raising the question: is it better to have a measure derived from one specific theory, or from diverse theories? As the RTTA theory reviewed earlier is based on Bordin's theory, at this stage the WAI seems to be the best measure to use. However, while theoretical origins provide an important insight into the creation of these TA measures, it is their psychometric properties that will really inform us of how useful they are in TA research. Examining the psychometric properties should help to identify the best instrument for use in a correctional setting.

The psychometric properties of the therapeutic alliance measures

Although test-retest reliability is generally considered to be an important property to assess psychometric scales by, the TA naturally fluctuates in therapy causing low test-retest reliability, so it is not often utilised as a measure of reliability. However, researchers do often report internal consistency, allowing us to evaluate whether all items are making high levels of contribution to total scores.

Because the strength of a TA in therapy is positively related to psychotherapy outcome, predictive validity is also very salient for TA scales and easily established in process-outcome research. Therefore, the two TA measures will primarily be evaluated for their internal consistency and predictive/criterion validity. Inter-rater reliability, convergent validity and discriminant validity will be evaluated if the data are available for that measure.

Reliability

In a meta-analysis of TA and outcome in psychotherapy that included both the WAI and the CALPAS, the average internal reliability was found to be high (Cronbach's alpha = .86).

For the WAI (Working Alliance Inventory), internal consistency is generally reported as being high. Brown and O'Leary (2000) report excellent internal reliability for the WAI-O (observer rating) of $\alpha = .97$. As Cozby points out, high agreement between raters also indicates a reliable measure and inter-rater reliability data are available for the WAI (Cozby, 2001). Brown and O'Leary (2000) reported good inter-rater reliability for the total alliance score (intraclass correlation coefficient = .78). In another study using the WAI, an inter-rater reliability score of .78 was found for total alliance score, and scores of .71, .81 and .74 were found for Bond, Task and Goal subscales respectively using the intraclass correlation coefficient (Raue & Goldfried, 1994). Another study using the WAI-O-S (observer shortened version) reports a good reliability of $r = 0.81$ using a Pearson r interrater correlation coefficient, and the authors argue that research has shown strong support for the reliability of the WAI scales in general (Andrusyna et al., 2001).

Horvath also presented evidence for the WAI's (original client and therapist version) internal reliability. Estimates for the whole instrument vary between Cronbach's alpha .84 to .93 (Horvath, 1994a). Reliability estimates for the subscales are lower but in a similar range (α 's = .68 to .92), and Horvath argued that taken together, the results support the scale's reliability (Horvath, 1994a). Similarly Taft et al. (2003) found the internal consistency of the WAI and WAI-S

client and therapist versions to be excellent (client α 's = .92-.96; therapist α s = .96 -.98). Overall then, the WAI seems to have excellent internal consistency reliability, and encouraging inter-rater reliability.

The California Psychotherapy Alliance Scales (CALPAS) seems to be less reliable, with one study in a series of studies by Gaston and colleagues finding that for the CALPAS-P patient rated version, Cronbach's alpha for the four alliance subscales varied from .43 to .73, considerably lower than the WAI (Gaston & Marmar, 1994). However, these coefficients are related to the number of items; and the subscales of the CALPAS have generally fewer items than the WAI. In another study, this time using the CALPAS-R observer-rater version, the Cronbach's alphas were notably better with coefficients for the subscales ranging from .95 to .97 (Gaston & Marmar, 1994). This indicates that the observer rater version is more reliable than the patient rated version. The CALPAS-R also achieved good inter-rater reliability in a second study, with intraclass coefficients ranging from .89 to .97 (Gaston & Marmar, 1994).

For the total CALPAS -P scale Gaston (1991) reported satisfactory internal reliability ($\alpha = 0.83$). Bachelor and Salame's (2000) study found good internal consistencies for the CALPAS therapist-rated scale (α s = 0.66 to 0.91) and client-rated scale (α s = 0.69 to 0.93). Overall then the CALPAS-R version seemed to be more reliable than the CALPAS-P. There is some question about how reliable the subscales are, which is important considering the scale purports to be made up of four distinct alliance subscales, and therefore each needs to be free from random error and contribute to the overall score (Gaston & Marmar, 1994).

The WAI and CALPAS both show at least good and sometimes excellent reliability. Although it is necessary first to establish that the scales are consistent and stable, their predictive validity is just as important, as the measures were developed for the purpose of empirical exploration of the relationship between strength of alliance and therapy outcome (Horvath & Symonds, 1991).

Validity

Predictive validity tests whether a predictor variable is related to the future behaviour of a criterion variable (Cozby, 2001). Accordingly, predictive validity in the TA research field is generally measured by the strength of the effect size of the TA measure (predictor variable) on some form of psychotherapy outcome (criterion variable).

The WAI is the most often used measure in TA research and as such we know a good deal about its predictive validity. One study which investigated the relationship between the initial WAI and CALPAS patient/client versions (WAI-C and CALPAS-P) and several outcome measures in cognitive therapy found that for the WAI-C, large positive correlations emerged between patient ratings of global success and the WAI-C: $r(22) = .64, p < .001$, and for therapist global success ratings and the WAI-C: $r(22) = .50, p < .05$ (Safran & Wallner, 1991). This means that high patient rated scores on the WAI are associated with high levels of global success as rated by patients and therapists. The WAI-C was also significantly predictive of change in mean target complaint ratings from the therapist perspective, with a medium positive correlation ($r(22) = .42, p < .05$), indicating that higher WAI-C ratings lead to more change on therapy targets or goals identified by the therapist (Safran & Wallner, 1991). In contrast the WAI-C did not predict changes in ratings of symptom change from the patient

perspective and did not predict change on more specific outcome measures such as anxiety scales and depression scales on the Millon Clinical Multi-Axial Inventory, or Beck Depression Inventory (Safran & Wallner, 1991). This could mean that the WAI-C may be more successful at predicting target outcomes measured by therapists rather than clients and that the WAI is also not predictively valid with specific outcome measures but is more suited to global measures of therapy success.

Another study comparing the predictive validity of six instruments in CBT and Twelve Step Facilitation (TSF) treatment of cocaine and alcohol dependence found that correlations between the WAI-C (Client) and WAI-T (Therapist) and outcome of abstinence from cocaine were non-significant (Fenton et al., 2001). There were moderate correlations between the WAI-O (Observer) and all treatments ($r(46) = 0.39, p < .001$) and with the TSF ($r(25) = .048, p < .01$) but not with the CBT treatment (Fenton et al., 2001). The outcome measure was very stringent in this study though, compared to the more global and flexible outcomes employed by most TA studies. One study did find predictive validity for the WAI in CBT treatments though, finding robust associations between the WAI-T and the outcome of levels of physical and psychological abuse 6 months rated by partners after treatment in group CBT for partner violent men (Taft et al., 2003).

Horvath (1994a) presented a meta-analytic synthesis of research results comparing the relationship between WAI client ratings and outcome. He reported an effect size (ES) of .33, a medium sized correlation. The procedure used to estimate the ES was conservative—a 95% confidence interval was used—which,

he argued, suggested a robust link between the client's estimate of the working alliance and out come of therapy (Horvath, 1994a).

Horvath (1994a) also offered information on the content (does the content reflect relevant theory), convergent, and discriminant validity of the WAI. On the basis of content rating procedures—the measure was continually refined until it fit Bordin's definitions—Horvath argued that there is reasonable evidence that the WAI fairly represents the alliance construct proposed by Bordin (Horvath, 1994a). Convergent validity as measured by correlations with other alliance measures, also seems good with correlations between the CALPAS and the WAI of .84, .79, and .72, for the Goal, Task and Bond subscales respectively, and significant but slightly lower correlations found between the WAI and PENN and VPPS scales (Horvath, 1994a). Discriminant validity was measured against an instrument that measures theoretically distinct aspects of the TA (Horvath, 1994a). The Counselor Rating Form (CRF; LaCrosse, 1980)- based on an interpersonal influence model - was compared to the WAI (LaCrosse, 1980) . The correlations between them were found to be significantly lower than the relation between WAI and other similar measures, indicating good discriminant validity (Horvath, 1994a).

From the literature reviewed, the WAI generally has good predictive validity across all therapies including CBT. It is much better at predicting global measures of therapy success and target complaints from the therapist, than target complaints from the client and more stringent and specific outcome measures. The CALPAS is often compared with the WAI, so its predictive validity will be an interesting contrast.

Safran and Wallner (1991) compared the CALPAS patient rated measure (CALPAS-P) with the WAI-C on a number of measures and the CALPAS-P was found to be predictive of change across a wider spectrum of measures than the WAI-C. Like the WAI-C, large correlations emerged between patient ratings of global success and the CALPAS-P: $r(22) = .77, p < .001$ and for therapist global success ratings and the CALPAS-P: $r(22) = .55, p < .01$ (Safran & Wallner, 1991).

Like the WAI-C, the CALPAS-P was also significantly predictive of change in mean target complaint ratings from the therapist perspective ($t(22) = .45, p < .05$), but did not predict changes in mean target complaint ratings from the patient perspective or from self report anxiety scales (Safran & Wallner, 1991). Unlike the WAI-C the CALPAS-P did predict outcome as measured by the MCMI Major Depression scale ($r(19) = .45, p < .05$), and the BDI ($r(19) = .45, p < .05$), both medium strength correlations (Safran & Wallner, 1991).

In the Fenton et al. (2001) study comparing the predictive validity of six instruments in CBT and Twelve Step Facilitation (TSF) treatment of cocaine and alcohol dependence, there were differences in the way the CALPAS observer version (CALPAS - O) and the WAI predicted change (Fenton et al., 2001). As noted earlier, the WAI-O was the only WAI version that significantly predicted change in this study and it wasn't predictive for CBT treatments. In comparison the CALPAS-O was moderately correlated to change in all treatments ($r(46) = 0.37, p < .001$), showed a strong correlation for CBT outcome ($r(21) = 0.56, p < .001$) but no relationship to TSF outcome (Fenton et al., 2001). This finding suggests that the CALPAS may be better suited to measuring the TA in CBT treatments and the WAI to others. However, as the authors suggest, the outcome

measure was different than the ones used in most studies where outcomes tend to be subjective assessments from the patients' perspectives, not a highly objective outcome measured by urinalysis, as in this study. This outcome is also a dichotomous variable, which will have led to a loss of statistical power.

Gaston and Marmar (1994) offer evidence for the CALPAS's convergent, discriminant and predictive validity. Moderate to high correlations have been reported between the CALPAS-P and PENN Helping Alliance-P ranging from .37 - .60, between the CALPAS-P and WAI-P at .83, and between the CALPAS-R and VPPS at .80, supporting good convergent validity (Gaston & Marmar, 1994). Discriminant validity was investigated using exploratory factor analysis with oblique rotation against a related construct, again the Counsellor Rating Form, and found that each item of the scales loaded onto separate factors correlated at .41, indicating good discriminant validity (Gaston & Marmar, 1994).

Gaston and Marmar (1994) have concluded that findings on the CALPAS and its subscales consistently provide empirical support for the predictive validity of this TA scale. One study using the CALPAS-P reported medium to large correlations between alliance score on each subscale and estimates of patient satisfaction with psychotherapy in various modalities as Patient Commitment (PC): $r(145) = .43, p < .05$; Patient Working Capacity (PWC): $r(145) = .39, p < .05$; Therapist Understanding and Involvement (TUI): $r(145) = .65, p < .05$; and Working Strategy Consensus: $r(145) = .65, p < .05$ (Gaston, 1991). Another study with the CALPAS -P found that alliance scores were strongly negatively associated with symptomatology in cognitive therapy ($r(20)$

= - .73, $p < .01$ but not in dynamic or behavioural therapy (Gaston & Marmar, 1994).

Based on the information available the CALPAS does seem to show good predictive validity, particularly again on global dimensions such as patient satisfaction and global success. In comparison to the WAI it also predicts across a wider outcome field, and, like the WAI, is capable of predicting outcome for CBT treatments, but is not as predictive for others such as TSF, cognitive or brief psycho-dynamic psychotherapy.

Conclusions on reliability and validity

Overall, examination of the reliability of both of these scales shows they have good to excellent reliability with most values in the high .80's to .90's meaning there is little difference between them in regard to reliability. With validity there are a few differences among the scales. The WAI showed good convergent and discriminant validity but was only predictively valid for global outcomes, with only the WAI-O able to predict more specific outcome measures. It did have validity across various therapies though, such as TSF, cognitive, psychodynamic and CBT. The CALPAS in contrast seems to validly predict across a wider spectrum of outcomes, although it seems to be best at predicting outcomes for CBT and cognitive therapy.

It seems that these scales cannot be so easily differentiated purely based on their reliability and predictive validity. In order to choose the best measure for this study, it is necessary to look deeper into the composition of the scales themselves to decide if there are other important psychometric differences between them.

Exploring the differences and similarities between the measures

The WAI is often seen more as a global scale because its three dimensions of Bond, Goal, and Task are strongly correlated. Horvath (1994) reports strong scale inter-correlations ranging from the low .60s to the high .80s. Brown and O'Leary (2000) also found the subscales to be highly inter-correlated ($r = .80$ for Bond and Agreement on Tasks, $r = .85$ for Bond and Agreement on Goals, and $r = .89$ for Agreement on Task and Agreement on Goals, all p 's $< .01$). Raue and Goldfried (1994) report similar findings with inter-correlations of .81 for Bond and Task, .82 for Bond and Goal and .93 for Task and Goal. Taken together these findings suggest that the WAI taps into a global dimension of the TA made up of bond, goal and task rather than each scale representing a different construct within a TA.

Some authors disagree with this global structure however, arguing that factor analysis shows at least a two-factor structure for the WAI rather than a global construct. Tracey and Kotovic used a bi-level confirmatory factor analysis on the WAI to illustrate a general alliance factor and three-second level factors corresponding with Bond, Goal, and Task subscales (Tracey & Kotovic, 1989). The four best items from each scale were then used to develop the WAI-S 12 item short version (Tracey and Kotovic, 1989).

Andrusyna et al. (2001) disagree with this finding however, arguing that Tracey and colleagues' confirmatory factor analysis resulted in only adequate fits at best and did not look at the alliance in CBT. In contrast their exploratory factor analysis of the WAI-O in CBT clearly suggested that the WAI had a two-factor structure with an excellent fit with Goals and Task loading on to one factor and the Bond factor loading on to another (Andrusyna et al., 2001). Not only is their

fit more empirically sound it also fits in with the inter-scale correlations previously mentioned, as the Goals and Tasks correlations were the highest reported. Logically Goals and Tasks would also seem to fit together as they are more practical, technical aspects compared to the more process and attachment oriented Bond dimension.

In contrast to the WAI, the CALPAS is seen as representing four distinct aspects of the TA. Gaston and Marmar (1994) designed it specifically this way and, as previously mentioned, each subscale comes from a distinct theoretical perspective. In support of this, each subscale was found to be tapped by alliance measures when those measures contained items reflecting the respective subscales (Gaston & Marmar, 1994). Inter-scale correlations also support separate subscales, as they are considerably lower than those of the WAI, ranging from .37 to .62 (Gaston & Marmar, 1994). The greatest differentiation was found between the PWC scale –which represents the *working alliance* - and other subscales suggesting that this subscale at least is tapping a different construct from the others (Gaston & Marmar, 1994). Also supporting the view that the CALPAS reflects separate dimensions, a confirmatory factor analysis showed that a bi-level model was a good fit for the data where four alliance factors were embedded within a general alliance factor (Gaston & Marmar, 1994).

The scales appear to be different in their structures; the factors that make up the WAI - although all subscales are highly inter-correlated – appear to measure at least two distinct dimensions in a TA which makes it a useful measure for global and separate subscale use. The CALPAS does seem to be superior as its inter-scale correlations and factor analyses indicate that it measures four different dimension of the alliance as well as a general global dimension. Despite this

difference, the CALPAS and the WAI are still remarkably similar in their other psychometric properties. Considering the chosen TA measure will be used in a correctional setting, it is important that it is suitable for that setting and this may help differentiate the WAI and the CALPAS.

Corrections friendly – which measure best suits the context of this thesis?

For a TA measure to be useful in a corrections setting it needs to be able to do two things: suit a group setting under time pressure, and if the offender's point of view is sought, then the measures need to be suited to the offenders level of education.

Correctional settings commonly use treatment groups both for cost-cutting, efficiency and for therapeutic benefit. As such, a TA measure used in this setting needs to be brief and easy to fill out, as a therapist or outside observer would have to fill out a rating form for all offenders in their group. The CALPAS uses a 24-item 7-point scale for the therapist rating form (Gaston & Marmar, 1994). The WAI in contrast is a 36-item scale but has a short form of only 12 items that also has excellent psychometric properties (Bachelor & Salamé, 2000; Taft et al., 2003; Tracey & Kotovic, 1989). The short form of the WAI takes less time to fill out than the CALPAS making it ideal for group work, and this is attested to by its used in CBT group studies (Brown & O'Leary, 2000; Taft et al., 2003; Taft et al., 2004)

As well as therapists needing to be able to easily utilise the TA measure, offenders' comprehension of measures also need to be taken into consideration. In general offenders can have low levels of literacy so the client form of a TA needs to be short, concise and easily understandable. Although to my knowledge data doesn't exist as to the level of education needed to understand the CALPAS

and WAI, items from each form give a picture of the overall level of comprehension needed to understand them.

The CALPAS asks the client to rate goal agreement as follows: “do you feel your therapist agrees with you about what could be valuable goals for therapy?” The WAI: “my therapist and I agree about the things I will need to do in therapy to help improve my situation”. The WAI uses a simple statement with concrete words, where as the CALPAS asks about feelings and places the adjective “valuable” in the statement, which is quite subjective and abstract in comparison to the WAI and requires the offender to make a value judgement.

It is clear that the WAI is more suitable for use in the offending field. It is suited to group work, as it is available in a short form and is popular in this field already. The WAI is easier to understand than the CALPAS, which is vital as offenders may be using rating forms and need to be able to easily understand each question for their ratings to be valid. With the theory, psychometric properties and practical suitability of the measures covered, this only leaves the decision as to the overall best measure to be utilised in the current research.

I propose that the WAI seems to be the superior measure to use in this thesis compared to the CALPAS. Firstly, it was explicitly developed from a recognized theoretical perspective adopted by the RTTA, which gives it weight, but it was also designed to apply across all modalities of therapy, which gives it good utility. In terms of psychometric properties it has excellent reliability, convergent validity, discriminant validity and more than adequate predictive validity, attested to by its popularity with TA researchers. Looking in depth at the scale, through inter-scale correlations and factor analyses, it was found to have a sound global and two-factor subscale structure. Last, and perhaps most

importantly, it is well suited to the corrections field as evidenced by its superior utility in CBT and group settings, and the brevity and comprehensibility of the scale.

The WAI does have some weaknesses though. It seemed to work best with global outcome measures such as overall client success in treatment and not with specific measures such as dichotomous variables or behaviour change, which could be used in the current study. In comparison to the CALPAS the WAI also lacked breadth with some studies suggesting the CALPAS may capture parts of the TA that the WAI does not. This could mean that some aspects of the TA could be missed by the WAI in the present study.

Looking at client, therapist, observer and multiple perspectives of the WAI – which perspective is the most predictive?

Most TA measures including the WAI have versions for clients/patients, therapist and observer/raters. It is important to know which perspective or combination of perspectives is the most reliable, valid and useful for the present study to obtain the best results. As previously discussed, research has suggested that clients and observers rating the alliance give ratings that are more predictive of outcome than therapists. This section looks specifically at which perspective is the most predictive for the WAI.

Fenton and colleagues investigated the predictive validity of six TA instruments - including the WAI - from the three different perspectives and found some interesting results (Fenton et al., 2001). There were significant correlations between alliance and outcome for all observer-rated instruments but therapist and client-rated measures showed comparatively poor predictive validity (Fenton et al., 2001). Their outcome measures were very stringent though, based on cocaine

and alcohol abstinence detected by urinalysis, which may be why the predictive validity was so poor (Fenton et al., 2001).

Further supporting the predictive validity of the WAI-O, Brown and Leary (2000) investigated how the WAI-O predicted continuance and success in group treatment for spouse abuse and found that the WAI-O was significantly correlated with several measures of treatment success.

In contrast to this, and to the general finding that therapist ratings of the TA are not as predictive as client ratings, one study reported that therapist WAI ratings were the strongest predictors of outcome in all of their analyses, compared to client ratings, which did not significantly predict any outcome (Taft et al., 2003). The study examined CBT group treatment for partner violent men, which is close to what this thesis will be examining at so this finding is quite important. The outcome of the study was also specific, not global, as it was the levels of physical and psychological abuse rated by partners during the 6 months after treatment, which also lends weight to the finding.

One earlier study assessing the relationship between the WAI client version and several outcome measures in cognitive therapy reported significant correlations emerged between client ratings of global success and the WAI-C and therapist global success ratings and the WAI-C (Safran & Wallner, 1991). The WAI-C was also significantly predictive of change in mean client symptom ratings from the therapist perspective at (Safran & Wallner, 1991). This illustrates that the client ratings also have some predictive validity.

From the literature reviewed, it is apparent that each perspective on the WAI seems to have demonstrated predictive validity in at least one study. A related question is whether these perspectives of the WAI are in agreement. In a study

assessing therapist variables and patient/therapist similarity as predictors of quality of the working alliance, the correlations between patient-rated and therapist rated WAI scores were only low to moderate (Hersoug et al., 2001). This is in line with previous research, and it confirms that patients and therapists have somewhat independent evaluations of the working alliance (Hersoug et al., 2001). Similarly, Bachelor and Salame (2000) found that although at the group level in their study therapist and clients held generally similar views of the alliance, within particular dyads therapists and clients did not have similar opinions about their relationship. Taft et al., (2003) also found low to moderate correlations between early and late patient-rated and therapist-rated WAI scores ($r(107) = .34 - .41, p < .01$, indicating differing perspectives.

Overall then the results regarding the predictive validity of different perspectives are inconclusive. While generally observer and client ratings of the TA are more predictive of outcome than therapist ratings, there is evidence that for the WAI at least, each perspective is predictive of outcome to some degree. Agreement between perspectives does seem to be moderate both in the general literature and in studies using the WAI. In terms of the study under proposal, which will use the WAI, it seems salient considering the evidence to look at each perspective, as they may be independent of each other.

In saying that, the evidence is strongest for the predictive validity of observer ratings of the WAI. Observers also are uniquely placed to look at interactions between the therapist and a client, which may not be as evident to a therapist or client involved in the interaction. While it is important to capture the TA from different perspectives, the timing of the assessments is also important to gain a full picture of the TA.

The frequency and timing of measurement using the WAI

Most authors are in agreement about when and how often to measure the TA in therapy. The consensus is that TAs begin to form very early on in therapy, with several researchers using the third therapy session as their starting point from which to first measure the TA, and finding ratings at this point to be predictive of outcome (Bachelor & Salamé, 2000; Fenton et al., 2001; Hersoug et al., 2001; Safran & Wallner, 1991; Taft et al., 2003; Taft et al., 2004).

However, TA researchers are not in consensus as to the path of the TA over the course of therapy. Some authors have found a linear pattern of the alliance across the course of therapy (Horvath & Marx, 1990; Kivlighan & Shaughnessy, 1995) while others have found a u-shaped pattern for the data (Golden & Robbins, 1990). Despite differences in the pattern of the alliance over time, all authors agree that the alliance is a dynamic construct, and most researchers seem to measure the TA at least five times, from the third to the last session (Bachelor & Salamé, 2000; Fenton et al., 2001; Hersoug et al., 2001; Safran & Wallner, 1991; Taft et al., 2003; Taft et al., 2004). Therefore, this thesis will measure the TA at different time points starting early in the programme.

Which measure of treatment outcome should be used in this thesis?

Preferably the outcome to test in a correctional setting would be recidivism (rate of reconviction), given that this is the aim of treatment in the current risk-reduction climate (Ogloff & Davis, 2002; Polaschek & Dixon, 2001). However, given that the offenders in this study would not be released long enough to follow up on re-offending during the course of this thesis, other outcomes would need to stand as proxies such as changes in psychometric scale scores, treatment completion and most importantly, estimated risk.

Psychometric scales are used as estimates of change in many correctional facilities including the RVPU (Polaschek, 2006). However to use them as a proxy for outcome they must be empirically linked to recidivism outcomes, there must be a significant change from pre-programme to post-programme, and if they are self-report the client must be honest in answering for scores to validly represent change (Mills & Kroner, 2006).

Treatment completion or non-completion is not a measure of change but is assumed to be necessary for change to occur (Polaschek et al., 2005). The inference here is that completing the programme itself is an indicator that an offender has benefited in some way from the programmes content and therefore is less likely to recidivate (Polaschek et al., 2005).

Risk is the likelihood of recidivism. There are many risk measures currently in use in correctional facilities in New Zealand such as the Static 99, RoC*RoI, and more recently the Violence Risk Scale (VRS; Wong, 2000). Static risk factors are generally historical factors in the offender's life that cannot be changed — criminal history, age at first offence — whereas dynamic risk factors are changeable aspects of the individual — employment, antisocial attitudes (Ogloff & Davis, 2002). The VRS is used in the present study as an outcome measure, as it contains both static and dynamic factors, allowing a more complex picture of estimated risk to emerge, with greater potential for predictive validity with respect to reoffending (Wong & Gordon, 2006). This chapter has outlined the measures of alliance and outcome most suited to the research addressed by this thesis. The information from this chapter and the research and theory about the TA and offender treatment outlined so far in the introduction, will inform the present study, which I will now outline.

Chapter Seven:

The Present Study

Research questions

My overall aim is to explore the relationship between the TA and treatment outcome in a violence prevention setting, including the factors that influence the formation of the alliance and mediate the relationship between alliance and outcome.

The main research questions driving the analysis are:

1. What factor structure does the WAI take in this study? Does the factor structure change by rater perspective?
2. Do alliance levels shift over time? What pattern do they create (e.g. linear, u-shaped)?
3. Do client, therapist and observer ratings differ in their pattern across time?
4. Which client, therapist, interactional and setting factors affect the TA?
5. Does TA affect treatment outcome? Which measure of outcome is the most affected?
6. Which time point of the WAI is the most predictive of outcome? Which rater perspective is the most predictive of outcome?
7. Is the relationship between alliance and outcome mediated by other factors such as group cohesion, or client and therapist behaviour?
8. Do the overall findings form a model and is it supportive of the RTTA model?

Thesis structure

All the data analysed in this thesis are from a single longitudinal study of seven treatment cohorts at the RVPU. A general method section follows this introduction to outline the data collection and procedure for this longitudinal study. The write-up of the results has been split up into four separate studies, using the data set to examine the progressive series of research questions outlined above. Each of the four studies is structured with a study objective, background research, specific method and data analysis, results, and discussion section.

Study One explores the structure and patterns of the Working Alliance Inventory (WAI) as it is the main measure in this study and has not been utilised in prison-based violent offender rehabilitation previously. Study One Part A is a Confirmatory Factor Analysis of the Working Alliance Inventory and aims to test the competing theories about the factor structure of the WAI, and to explore whether rater perspective has an effect on the structure. Study One Part B explores the pattern of the WAI over the four time periods of this study in order to understand how the WAI changes over time and whether this pattern differs by rater perspective.

Study Two explores the client factors associated with the strength of the initial TA and examines whether these factors are specific to an “offender” or “general” client profile in line with previous research.

Study Three examines the relationship between the TA and treatment outcome, and explores whether there are any factors that co-vary with or moderate this relationship.

Study Four draws together the results from Study Two and Study Three and tests whether these results fit the RTTA model (Ross et al., 2008), or whether another model is suggested by the results.

A General Discussion section then examines the overall findings from the thesis and explores the limitations and clinical implications of these results.

Chapter Eight:

Method

Participants

There are three categories of participants in this study: the men in treatment “clients”, the therapists and the observers.

Men in treatment: Clients

Men from seven treatment groups were approached to participate in this research. Although all men were rated by the other two participant groups, their active participation as raters themselves was voluntary. Of the 70 men who were approached, 50 consented to take active part in the research and 20 others declined to participate. The median age of these 70 men was 31 years old. 54.3% of the men were of Maori ethnicity, 17.1% Pacific Island, 24.3% European and 4.3% Asian. Years in education were averaged at 10 years, the average number of general convicted offences was 37, and the average number of violent convicted offences was seven. The average age at first conviction for any offence was 17 and the average age at first conviction for violent offences was 18. Average length of sentence for current conviction was 8.7 years. 52% of the men qualified as psychopathic on the PCL-SV, scoring above the cut off score of 18. Three men who initially consented later withdrew their active participation from the research but remained in the programme. Twelve others withdrew from the research because they left or were removed from the programme.

Therapists

Across the seven treatment groups 11 therapists took part in the research: five clinical/forensic psychologists and six rehabilitation workers. The

psychologists either had clinical psychology training or forensic training and most of the rehabilitation workers had social work backgrounds. The average age for therapists was 36 years. The ethnicity of most of the therapists was European with only three identifying as Maori. The average level of education for therapists in years was 18.5, and the average level of years in practice for therapists was 5.2. Due to therapy staff turnover some groups experienced one or more changes in therapist. A diagram is attached in Appendix One to explain these dynamics.

Clinical Supervisor Observers and Research Observers

Four observers took part in the research: two were also trained clinical supervisors of the therapist teams on which they also provided data, and two additional non-supervisor observers were trained to collect the observation data in the current research². Observers were all trained prior to making ratings of therapist behaviour using the Therapist Features Scale. Initially, one clinical supervisor and the main research supervisor (DP) piloted the scale by observing several sessions, making independent ratings and then discussing ratings. As a consequence some changes were made to the original Marshall reference form, to improve clarity (see Appendix Five for copy). When their ratings were reliably the same or within 1 point of each other for each item, data collection began. The main research supervisor also trained me and the other clinical supervisor observer.

² I acted as one of the observers in most of the data collection. The other non-supervisor observer was Devon Polaschek.

Measures: RVPU psychometrics test battery

A battery of tests is given to the clients of the RVPU programme in the pre and post assessment phases of treatment, to assist in formulation, treatment planning, and evaluation of treatment progress. Appendix Two shows which tests are completed and when they are completed. The measures listed below were chosen from the psychometric battery for use in this study.

Spielberger's State-Trait Anger Expression Inventory - 2 (STAXI-2)

Spielberger's STAXI-2 is a revision of his original STAXI (Spielberger, 1999). STAXI-2 subscales are (a) state anger, referring to the respondent's current experience of anger (maximum score = 60); (b) state anger: feeling angry (maximum score = 20); (c) state anger: feel like expressing anger verbally (maximum score = 20); (d) state anger: feel like expressing anger physically (maximum score = 20); (e) trait anger, maximum score = 40; (f) trait anger: angry temperament (maximum score = 16); (g) trait anger: angry reaction (maximum score = 16); (h) anger expression—in (maximum score = 32); (i) anger expression—out (maximum score = 32); (j) anger control—in (maximum score = 32); (k) anger control—out (maximum score = 32); and (l) anger expression index (maximum score = 96) is the total (Spielberger, 1999). Versions of the STAXI have been used in New Zealand Corrections for some years.

Aggression Questionnaire (AQ)

The Aggression Questionnaire is a full revision of the Buss-Durkee Hostility Inventory, a widely-used measure assessing hostility and aggression (Buss & Warren, 2000). Each of the AQ items describes various characteristics related to aggression (*e.g.* "If someone hits me, I may hit him/her back"). The respondent simply rates each item on a 5-point scale ranging from "Not at all like me" to

"Completely like me." Its 34 items are scored on the following five scales: Physical Aggression, Verbal Aggression, Anger, Hostility, and Indirect Aggression. A Total score is also provided, along with an Inconsistent Responding Index (a form of a validity scale). Standardization is based on a sample of 2,138 individuals, aged 9 to 88, and norms are presented in three age sets: 9 to 18, 19 to 39, and 40 to 88 (Buss & Warren, 2000). A large number of data on the AQ with students has been collected using the 1992 version. One thesis sample from Nichols-Marcy (2000) found the mean AQ total score for 185 students was 77.8 ($SD=15.1$). For offenders incarcerated for violence ($n=67$) the mean score was 91.4 ($SD=18.0$) and for 42 non-violent offenders the mean was 85.6 ($SD=18.5$; Nichols-Marcy).

Criminal Attitudes to Violence Scale (CAVS)

This 20-item scale was developed and cross validated using two New Zealand prisoner samples: one from Rimutaka and the other from Waikeria (Polaschek, Collie, & Walkey, 2004). By design it is highly correlated with the physical aggression subscale of the AQ, and items were chosen that had the lowest relationships with socially desirable responding. It was also found to correlate moderately with the RoC*RoI risk assessment measure in the Waikeria Prison sample, and with a measure of criminal attitudes. The maximum score on the CAVS is 100.

Criminal Sentiments Scale Modified (CSSM)

The Criminal Sentiments Scale is a modification of an earlier attitude scale. It has been found to have good reliability, validity and is predictive of general and violent recidivism (Andrews & Wormith, 1984). The CSSM contains five sub-scales that measure the following criminogenic attitudes: *Attitudes*

toward the Law - ten items related to law-abiding behavior; *Attitudes toward the Court* - eight items related to courts and the inmate's sentence; *Attitudes toward the Police* - seven items related to law enforcement officers; *Tolerance for Law Violations* - ten items related to the tendency to rationalise or excuse criminal behavior; *Identification with Criminal Others* - six items related to affiliation and sympathy with other offenders

Millon Multi-Axial Clinical Inventory Version III (MCMI-III)

Based on Millon's theory of personality and psychopathology, the Millon Clinical Multiaxial Inventory-III (MCMI-III) instrument provides a measure of 22 personality disorders and clinical syndromes for adults undergoing psychological or psychiatric assessment or treatment (Millon, Davis, & Millon, 1997). The MCMI-III consists of 10 clinical personality pattern scales, three severe personality pathology scales, six clinical syndrome scales, three modifier indices, and one validity index. Subjects answer 175 statements on a true/false scale (e.g. "I've gotten into trouble with the law a couple of times" - Scale 6A *Antisocial*).

In terms of reliability the MCMI III generally has been sound, with the Axis II scales showing the highest stability as predicted by Millon (Millon et al., 1997). Based on part of his normative sample, Millon reported quite high internal consistencies. The average of 22 clinical scales is .89, and the range is from .81 to .95. Norms for the MCMI-III instrument are based on a national American sample of 1,292 male and female clinical subjects representing a variety of DSM-III and DSM-III-R diagnoses. The subjects included inpatients and outpatients in clinics, hospitals, and private practices. The MCMI-III manual

describes the distribution of gender, age, marital status, religion, and other factors within the sample (Millon et al., 1997).

Experiences in Close Relationships Inventory (ECRI)

The Experiences in Close Relationships Inventory developed by Brennan, Clark, and Shaver (ECRI: 1998) is a 36-item self-report measure of adult romantic attachment which yields average scores on two dimensions of orientation to close relationships: adult attachment avoidance and adult attachment anxiety. Raters rate how much they agree or disagree with the statement using a 7-point Likert scale. The items are a series of positive and negative statements about the raters anxious (e.g., *I worry about being abandoned*) and avoidant (e.g., *I tell my partner just about everything*) feelings towards close romantic partners.

Psychopathy Checklist: Shortened Revised (PCL: SV)

Two versions are in widespread use with offenders: the PCL-R designed by Hare (1991; 2003) and the PCL: SV (Hart, Cox, & Hare, 1995). The PCL: SV originally was intended as a simpler screening instrument to identify those at risk of psychopathy who required more detailed assessment. However, New Zealand research has established the PCL: SV to be a useful risk assessment in its own right. Wilson (2003) established a cut-off score of 16 that provided acceptable predictive accuracy statistics in identifying those at high risk of serious violent or imprisonable offending.

Self-Appraisal Questionnaire (SAQ)

Of the self-report psychometric scales used in the RVPU the Self-Appraisal Questionnaire (SAQ) is perhaps the most interesting, given its strong ability to predict reconviction (Loza, 2003). There are now 14 published studies on the

predictive validity of the SAQ with recidivism across many different samples, and types of offending (Loza & Loza-Fanous, 2001, 2003; Loza, Loza-Fanous, & Heseltine, 2007).

*Treatment Readiness, Responsivity, and Gain Scale: Short Version
(TRRG:SV)*

Serin, Kennedy and Mailloux (2005) developed a three-part scale of treatability and treatment gain, using 265 male Canadian prisoners entering a cognitive skills programme. Ratings on treatment readiness (8 items) and responsivity (8 items) are made before and after treatment by staff. Treatment gain ratings (8 items) are made only after treatment. In this pilot, the evaluator made all of the ratings in conjunction with VRS scoring. Treatment readiness refers to how motivated the offender is in engaging in the process of treatment itself: the extent to which he believes he has difficulties that require changes and the extent to which he is prepared to make those changes. Examples include problem recognition, and treatment interest (Serin et al., 2005). Treatment responsivity items deal with interpersonal factors that may obstruct treatment change, but are not specific either to this programme or programmes in general. Examples are pro-criminal views, and problem-solving rigidity. Finally, treatment gain items cover general offender performance in programmes, such as degree of disclosure, application of knowledge, and increased skills (Serin et al., 2005). Predictive validity for this scale has not yet been examined.

The Violence Risk Scale (VRS)

The Violence Risk Scale is a 26-item scale designed to be rated by appropriately trained and supervised programme staff (Wong & Gordon, 2000). There are six static risk items, and 20 dynamic risk items pertinent to violent

offenders. The VRS was based on the authors' design of their own treatment programme at the Regional Treatment Centre in Saskatchewan, and the items do reflect distinctive characteristics of that programme to some extent. Validation data have only recently been published and no data are yet available that link the change scores to outcomes (Wong & Gordon, 2006).

Scoring of the VRS pre-programme is simply a matter of scoring each item on a four-point scale. Scoring post-programme however is the pre-item rating minus the amount of change an offender has made on that particular item to reflect their progress. This change is scored on a stage of change continuum; pre-contemplation/contemplation, preparation, action and maintenance (pre-contemplation/contemplation are assigned the same value as they are not distinguishable behaviourally).

As this thesis is interested in how pre-programme stage of change may affect the TA as well as how TA affects behavioural change, I have created a new stage of change scale for this study that measures the difference between pre and post-programme stage of change independent of the item rating.

The VRS Stage of Change scale I have created is similar to the post-programme VRS score minus the pre-programme item rating. I decided to separate out pre-contemplation and contemplation however, and assign them different values, so the change from one to the other is assigned the same value as changing from Contemplation to Preparation or Preparation to Action or Action to Maintenance. Assigning importance to this shift recognises the clinical importance of a shift from not acknowledging a problem to acknowledgement. This shift is not recognised in the VRS scoring because it is not considered desirable to reduce risk level based only on self-reported change in disposition

toward the item concerned. However in a research context (i.e., in this thesis) I did not have to constrain myself only to considering changes that are demonstrated in actual behaviour.

Measures: Therapy rating forms

The tests below were administered specifically for the purposes of this study to capture aspects of the group process, therapy relationship and in-therapy behaviour.

Working Alliance Inventory – Short Form (WAI-S)

The Working Alliance Inventory shortened form was used to measure the TA formed between each therapist and client in treatment (WAI-S: Tracey & Kotovic, 1989). In this study each client, each therapist and each Clinical Supervisor Observer completed the WAI-S. The WAI-S client and therapist versions were developed by Tracey and Kotovic from the longer 36 item Working Alliance Inventory of Horvath and Greenberg (WAI: Horvath, 1994a). Following Tichenor and Hill (1989), who developed a WAI observer version by altering the pronouns of the WAI, I adapted the WAI-S to create a WAI-S observer version (a copy can be found in Appendix Five). The WAI-S uses 12 items to assess Bordin's concept of the working alliance between a therapist and client (Bordin, 1979; Horvath, 1994a).

The WAI-S has three subscales rated on a 1-7 Likert scale: Agreement on Goals (e.g. *The therapist and client are working towards mutually agreed upon goals*); Agreement on Tasks (e.g. *What the client is doing in therapy gives him new ways of looking at his problem*); Bond (e.g. *The therapist and client have confidence in each other's abilities*).

As covered in Chapter Seven, the reliability and validity of the WAI in both long and short form has been repeatedly proven and it remains the most well-used measure of TA (Horvath, 1994a; Tracey & Kotovic, 1989).

Moos Group Environment Scale (GES)

The Moos Group Environment Scale was used to measure aspects of the group environment (GES: Moos, 2002). This instrument is considered to have acceptable reliability and validity and contains 10 standardised subscales of nine items each that describe the overall climate of a group using a true/false scale (Moos, 2002). For this study, each client and therapist rated the group environment using the Cohesion subscale: (e.g. *There is a feeling of unity and cohesion in this group*)

Client Attributes Scale (CAS)

Therapists rated 25 attributes of clients' behaviour in group, using the Client Attributes Scale (Simpson, 1998). Raters rate how much they agree with each of the 25 items on a 7-point Likert scale, (e.g. *easy to talk to, manipulative, motivated to change*). This scale is taken from the Texas Christian University (TCU) data collection forms for methadone outpatient treatment, and was intended for use in a clinical rather than research setting, so its reliability and validity have not been established (Simpson, 1998). However, many of the other TCU rating forms have been established as reliable and valid, and a self-report client scale has been developed and validated for use with an offender population (Garner, Knight, Flynn, Morey, & Simpson, 2007).

Therapist Features Scale (TFS)

Therapist behaviour in therapy was rated using the Therapist Features Scale designed by Marshall et al. (2002): a series of positive and negative behaviours

and qualities that therapists display in therapy (e.g., *warm tone of voice, confident, confrontational challenging*). Observers rate the presence of the behaviour on a 5-point Likert Scale from “Not at all” to “Very” or “Not applicable” if the behaviour was not present during the observation period (e.g., for the item *appropriateness of humour*, N/A was used if no humour was used). Marshall and colleagues developed the scale for use in rating the behaviour of individual therapists working with groups of sex offenders (Marshall et al., 2002). I adapted it for use with therapist teams in this study by adding 8 items that assessed how each therapist behaved toward the other (e.g. *Co-operates with the co-therapist, Disagrees openly with the co-therapist.*) A copy of the revised scale is included in Appendix Five.

Procedure

Informed Consent

Ethical approval for the study was obtained from the Victoria University of Wellington School of Psychology Ethics Committee, and the Department of Corrections. I approached each therapist in the study about a month before the commencement of each treatment group either to gain consent, or in the case of therapists who had participated in the study with their previous group, checking to see they wanted to continue participation in the study. For each potential therapist participant I gave them a brief overview of the research and my background and then gave them the information sheet to read (see Appendix Four). After they had read through I gave them the opportunity to ask any questions about the research, and also showed them copies of the measures they would be filling in. After all questions were explored they read through the consent form (see Appendix Four) and either consented by signing or declined.

Those who consented were also given the opportunity to leave a contact address to which a results summary could be sent on completion of the research. A similar approach was taken with the observers who were taking part.

With the clients, I generally approached them either singularly or in groups of two or three. I explained who I was and gave a brief overview of my research. As many of them have some trouble reading and comprehending I generally read through the information sheet with them. As with the therapists I gave them the opportunity to ask any questions they had and gave them a chance to look at the measures they would be filling in before they filled in the consent form. I particularly stressed confidentiality with them, as in prison this can often be compromised and I wanted to reassure them that the therapists would not see their ratings so they could be honest. (For information and consent forms see Appendix Four).

Demographics

Prior to the start of each group, consenting therapists completed a brief form that asked for their age, their ethnicity, their years of education and their years in clinical psychology/rehabilitation worker practice (see Appendix Five).

Therapists were asked to read the instructions carefully and answer as honestly and accurately as possible.

The demographic data for clients were collected from files held in the RVPU. The client's age, ethnicity, years of education, number of offences in general and number of violent offences, as well as age at first general conviction, and age at first violent conviction was collected. The clients' age, offence information, and ethnicity were garnered from their most recent conviction

histories, and their years of education were garnered from social histories completed as part of their pre-assessment for the RVPU.

Pre and post-programme psychometric scales

The men in treatment completed the self-report psychometrics tests shown in Appendix Two in the assessment phases at the beginning and end of the programme under supervision from staff either alone or in small groups. They were instructed to answer as honestly and accurately as they could and to read all instructions before they filled out each form. If they required help the staff member supervising could assist by reading out the questions, explaining definitions of words, and deciphering difficult questions. The supervisors did not answer for them or offer guidance on which answer to choose. All of the scales in Appendix Two are completed routinely as part of the programme's operation, and their results are used by their therapists, and recorded on their Corrections Psychological Service File, as opposed to the measures completed for my thesis, which were confidential to my research.

VRS and TRRG:SV ratings are done by the programme evaluator, and PCL:SVs in this sample were completed either by psychologically qualified therapists, during or after the programme, or by suitably qualified third parties (where original therapists were not available).

Therapy rating forms

The WAI-S; Group Environment Scale; Client Attributes Scale and Therapist Features Scale were administered approximately every four weeks for each group, around Week 2, Week 10, Week 18, and Week 26 of the programme, as shown in Appendix Three. The therapists also completed the *Experiences in Close Relationships Inventory* at the first time point. Exact timing varied due to

variation in programme length caused by interruptions to progress (e.g. security lockdowns, holidays, staff changes).

Each therapist was given copies of the WAI-S and the Client Attributes Scale to complete for each client, as well as a copy of the three subscales of the Group Environment Scale (only Cohesion was used in analysis however). They were given these packs at the start of each week in which data were collected and the completed forms were collected at the end of that week. They were asked to focus on the nature of the relationship with each client since the last measurement, to read the instructions carefully and to answer as honestly and accurately as possible. For ease of rating each WAI-S and CAS had the client's name on them when given to the therapists, and the order of the names was different each time.

Each client who consented to take part in the research was given a pack of tests at each time period containing two WAI-Ss (one for each therapist) and the Group Environment Scale. They completed the scales in supervised groups of three or four on one afternoon after therapy in the week in which data was collected and given as much time as they needed to complete the forms. They were asked to think about how the relationship with each therapist had been over the time since the last questionnaires, to read the instructions carefully and to answer as honestly and accurately as possible. They were also reminded of the confidentiality of these ratings (i.e. that the data were not available to the programme staff).

Each clinical supervisor-observer ("Observer 1") was given a pack of WAI-S rating forms at the start of each week in which data was collected and given that week to complete the forms. The observers were asked to read the

instructions carefully and to answer as honestly and accurately as possible based on their observations of the group since the last measurement. For ease of rating each WAI-S had the clients and therapists name on them when given to the observer and these were rotated each time.

The Therapist Features Scale was also rated at each time point. Both Observer 1 and Observer 2 (one of the raters who was not also the group's clinical supervisor to counteract bias) observed a group session in the data collection week. This was either done by live viewing through a one-way screen, by live viewing of the TV screen attached to the video camera during group or by later viewing of videotape of group session³. Three ten-minute intervals were selected for rating from the beginning, middle and end of the therapy session. However, the rating period commenced only when the two raters agreed that there was sufficient interaction from both therapists to make it likely that each feature would be seen during the 10-minute period (e.g., ratings were usually not undertaken during a period when clients were working individually on exercises, or only one therapist was leading that portion of the session). After each interval each observer independently filled in a Therapist Features Scale form for each therapist.

³ The variation in methods of observation resulted from management-led changes in the operational procedures for monitoring treatment at the unit during the research.

Chapter Nine:

Study One Part A – Examining the Structure of the Working Alliance Inventory

Study Objective

The structure of the WAI has been researched quite comprehensively (Andrusyna et al., 2001; Corbiere, Bisson, Lauzon, & Ricard, 2006; Hatcher & Barends, 1996; Hatcher & Gillaspay, 2006; Tracey & Kotovic, 1989). There are several reasons to investigate the structure of the WAI-S for the present study however. Firstly, as I will discuss, the research has not come to a satisfying conclusion with studies finding differing factor structures. Secondly, the WAI is the main measure in this study and as such, investigating the structure will help determine the best way to utilise the WAI-S in further data analysis. Thirdly, all three raters of the WAI-S (therapist, client and observer) are not often utilised within one study, so I want to test if the structure differs by these different raters.

Background Research

Previous Findings

In an early study, Tracey and Kotovic (1989) had 84 clients and 15 therapists complete the WAI after the first treatment session of outpatient psychotherapy. They then used confirmatory factor analysis to test whether a model with one general factor, a model with three specific factors, or a bi-level model was the best fit. They found that the bi-level factor structure, with a General Alliance factor as its primary factor and three secondary specific factors, fit the data best (Tracey & Kotovic, 1989). They also used this study to create the 12-item short form WAI-S used in this thesis, by selecting the items most indicative of the three specific factors (Tracey & Kotovic, 1989).

However, in a similar study with 231 patients completing the WAI and using Principal Components Analysis (PCA), Hatcher and Barends found support for a model with two independent factors: Goals and Task items grouped on one factor and Bond items grouped on the other (Hatcher & Barends, 1996). It is notable that unlike the current study, both of these studies were looking at psychotherapy as opposed to CBT treatments.

Andrusyna et al decided to address this gap in their study which used an observer rated WAI-S with a sample of 70 therapist-client dyads in CBT treatment for depression (Andrusyna et al., 2001). They used PCA and reported support for Hatcher and Barends results: finding a two-factor model fit best. Their results differed slightly however, as one of the bond items loaded onto the Goals and Tasks factor — labeled Agreement/Confidence — while the remaining three loaded onto a general Bond factor -labeled Relationship (Andrusyna et al., 2001). Interestingly, the bond item that loaded onto the first factor addressed a client's confidence in their therapist, which could arguably be seen as a measure of competence and more connected to goals and tasks than the relationship anyway.

More recently, different forms of the WAI have been constructed and tested using exploratory and confirmatory factor analysis. After evaluating the factor structure of both the WAI and WAI-S, Hatcher and Gillaspay (2006) did not find a satisfactory model fit. However, a two-factor structure seemed to be suggested as Goals and Tasks were found to be highly correlated. They then created a revised shortened version the WAI-SR and found a three-factor structure had adequate fit (Hatcher & Gillaspay, 2006). A French version of the WAI-S has also been recently tested by Corbiere, Bisson, Lauzon and Ricard (2006), using

therapist and client versions. They concluded that a uni-dimensional structure was the best fit for the data; however this was after statistical adjustment and notably a two-factor structure was not tested (Corbiere et al., 2006).

Hypotheses

When these results were summarised, there was support for one, two and three factor models, meaning I could not assume one structure would fit my data above all others. Andrusyna et al.'s (2001) study, although it looked at depression, was arguably closest to mine in terms of treatment modality, sample size and the WAI version used, so I hypothesised that overall I would find a two-factor structure fitted my data best. This also makes theoretical sense as both Goals and Tasks form the “working” aspects of the TA and are arguably separate from the “relationship” oriented Bond factor.

Most of these studies looked at only one rater's perspective at a time (e.g. Andrusyna et al., 2001; Hatcher & Barends, 1996; Tracey & Kotovic, 1989), and those that looked at client and therapist ratings found no clear differences between raters (e.g. Corbiere et al., 2006; Hatcher & Gillaspay, 2006). However, none have looked at three perspectives at once within one study, and none were placed in a correctional setting so I hypothesised that I would find some differences by rater. I hypothesised that clients may rate globally due to their predispositions to see things in black and white terms and more prosaically, to pay less attention to the relationship in general (Howells & Day, 2006). This would be in contrast to the therapists and observer rater's perspective as they are trained to distinguish the bond from the quality of the working relationship. This skill is especially important in a prison environment where therapists may find themselves working with people who may be hostile, aggressive and the

perpetrators of morally repulsive crimes (Galloway & Brodsky, 2003).

Therapists may not form a bond as readily but will endeavour to produce change in the client through a collaborative working relationship focusing on goals and tasks (Galloway & Brodsky, 2003).

Specific Method and Data Analysis

This study used the Time 1 WAI-S data for the seven treatment groups; specifically the Therapist, Client and Observer ratings of the TA between therapist and client. For brevity, the WAI-S will be referred to as the WAI for the remainder of this thesis in relation to my data analysis. Time 1 data was chosen both to capitalise on a larger data set before attrition and because the Time 1 ratings will be used as the primary measure in further analysis. I wanted to investigate the factor construction of the WAI to determine if it follows a global structure, a structure with three subscales – Goals, Task, Bond, or a two-factor structure – Goals and Task, Bond. I also investigated if the factor structure differed by the perspective of the rater. To do this I used Confirmatory Factor Analysis: a method of testing different structures within a set of variables. So in this study the set of variables were the items of the WAI, and I examined the structures found with past research (e.g. Global/Two-factor/Three-factor), and chose the best structure based on my results.

As the data set had some missing data due to absences, attrition and non-participation of clients, any missing cases were removed from the SPSS dataset. There were two therapists in each treatment group who have equal active participation in therapy. For ease of data collection the clients and observers rated each therapist in a group individually, and therapists rated separately from each other, as it would have been difficult for the therapists to rate themselves as

an entity. However averaging the therapists post data collection was always intended as it enables a joint perspective of the TA and increases the size of the dataset, which will help with statistical power. After investigation it was found that correlations between each therapists pairs WAI scores were good enough from each raters' perspective so that it also made statistical sense to average the scores together (therapists: $r = .42, p < .01$, clients: $r = .68, p < .01$, observers: $r = .69, p < .01$).

I used the AMOS programme to run nine CFAs as I tested each of the three hypothesised structures within each of the three rater perspectives. After preliminary testing item four (*“My therapist/client does not understand what I am trying to accomplish in therapy”*) was removed, as it was found to have a low inter-item correlation coefficient, with its removal resulting in a substantial increase in the overall reliability of the scale.

Consistent with general CFA guidelines a mix of fit indices were used to test each model; the chi-square goodness of fit, the chi-square/degrees of freedom ratio, the goodness of fit index (GFI), the comparative fit index (CFA), the root mean square residual (RMR) and the root mean square error of approximation (RMSEA) (Thompson, 2004). A chi-square value tells us whether its possible to reject the null hypothesis that the model is not a good fit and so ideally this should be low and non-significant, with a value no more than double the degrees of freedom (Byrne, 1989). The GFI measures the amount of variance and co-variance accounted for by the model and this should be as close to one as possible in a good fitting model. The CFI compares the existing model fit with a null uncorrelated model and a score greater than .90 indicates a very good fit (Mueller, 1996). Lastly there is the RMR and RMSEA. These indices measure

the size of the residuals in the model and the discrepancy between observed and estimated covariance per the degrees of freedom and these should be below .15 and between .05 and .10 respectively (Mueller, 1996). Practical utility was assessed using Cronbach's alpha to test the reliability of each factor. Using these multiple criteria of fit ensure each model is tested thoroughly.

Results

Figures 10.1, 10.2 and 10.3 illustrate the models, with the items shown in order of their subscale groupings. Table 10.1, 10.2 and 10.3 show the fit indices for the models. Across all three rater perspectives a one-factor structure was clearly the poorest fit, with high chi-square (102.28 -270.06), RMR (.08 - .20), and RMSEA (.17 - .28) values across all perspectives, along with low CFI (.70 - .87), and GFI (.57 - .70).

The two-factor structure gave an equally acceptable fit for observer and client data, with chi-squares just over double the degrees of freedom (83.13 and 88.88 respectively), relatively high GFI's (.83 and .75 respectively) and good CFI (.96 and .89 respectively) values. The RMSEA and RMR values were acceptable for observers (.12 and .04 respectively) but the values for clients (.15 and .18 respectively) suggest a lack of fit in some part of the model for clients.

The therapist rated two-factor structure was generally a poor fit, based on these indices. As Table 10.3 illustrates, the performance of the three-factor structure was similar to the two-factor model both in terms of the values of the fit indices, and the superiority of the observer and client models above the therapists.

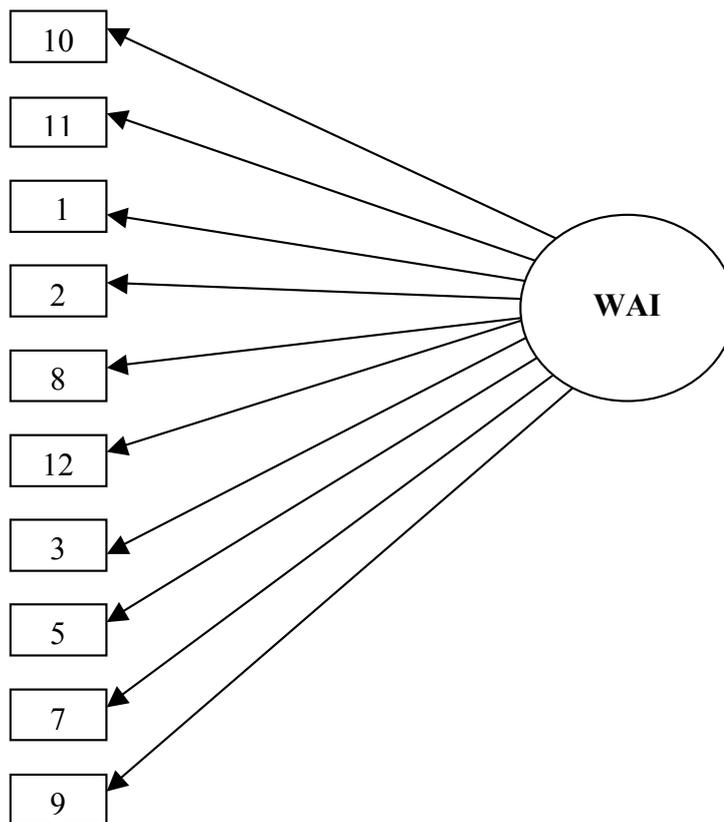


Figure 10.1. One factor model of the WAI

Table 10.1.

Results from the CFA of the 1-factor model for client ($N = 49$), therapist ($N=68$), and observer ($N=68$)

Fit Indices	Client	Therapist	Observer
χ^2	102.28	270.06	227.46
df	44	44	44
p	.00	.00	.00
GFI	.70	.57	.57
CFI	.87	.70	.79
RMR	.20	.28	.08
RMSEA	.17	.28	.25

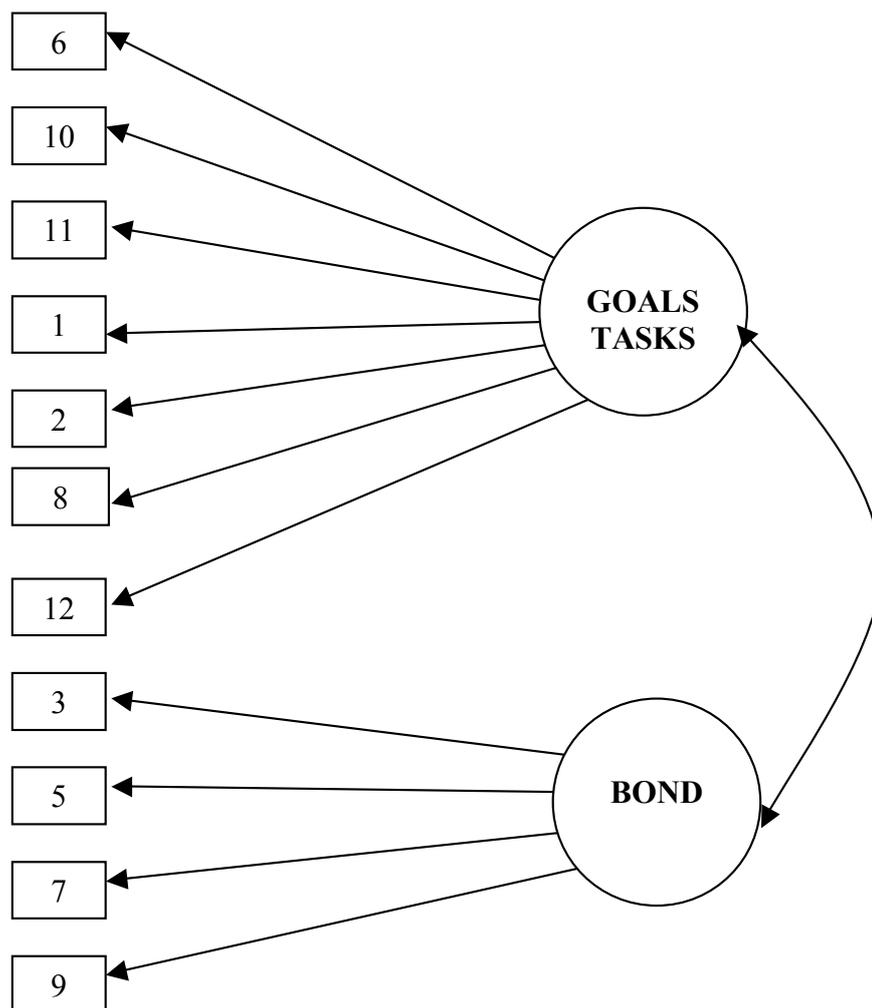


Figure 10.2. Two factor model of the WAI

Table 10.2.

Results from the CFA of the 2-factor model for client ($N = 49$), therapist ($N=68$), and observer ($N=68$)

Fit Indices	Client	Therapist	Observer
χ^2	88.88	181.49	83.13
df	43	43	43
p	.00	.00	.00
GFI	.75	.70	.83
CFI	.89	.82	.96
RMR	.18	.28	.04
RMSEA	.15	.22	.12

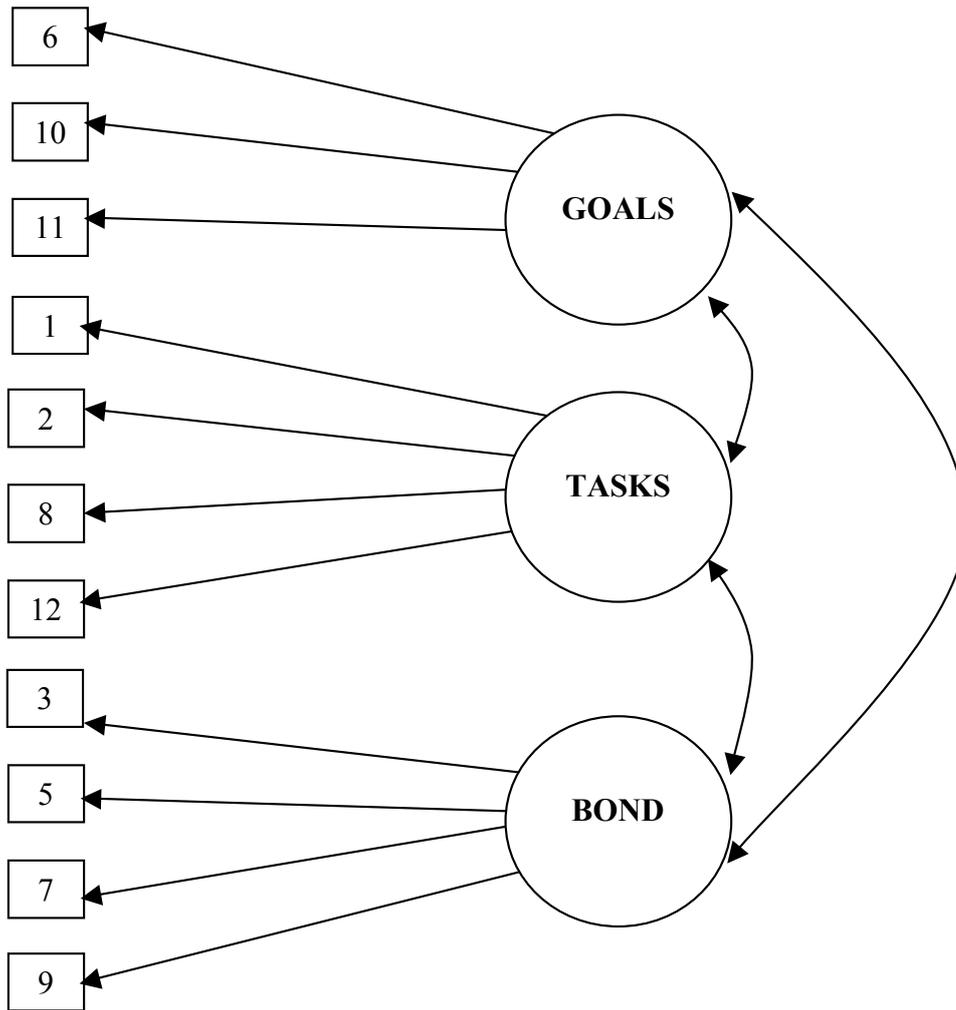


Figure 10.3. Three factor model of the WAI

Table 10.3

Results from the CFA of the 3-factor model for client ($N = 49$), therapist ($N=68$), and observer ($N=68$)

Fit Indices	Client	Therapist	Observer
χ^2	86.37	174.38	82.41
df	41	41	41
p	.00	.00	.00
GFI	.76	.70	.84
CFI	.90	.82	.95
RMR	.18	.27	.04
RMSEA	.15	.22	.12

Table 10.4

Results from the reliability analyses of the proposed models for client (N = 49), therapist (N=68), and observer (N=68)

Factors	Client	Therapist	Observer
Goals	.46	.71	.89
Tasks	.91	.86	.93
Bond	.78	.88	.96
Goals/Tasks	.86	.89	.95
Global	.89	.91	.96

The reliability analyses displayed in Table 10.4 complement the results for each model. Using conventional criteria for alpha interpretation, individual factor coefficients ranged from acceptable to excellent, with one exception (George & Mallery, 2003). The alpha for the goal factor from the client perspective was unacceptable ($\alpha = .46$). The need to reduce the scale to three items may have been a likely contributing factor to this problem but the average item-total correlation was $\alpha = .53$, suggesting that the scale is not viable. When these three items were combined with the Task scale items, reliability was good ($\alpha = .86$). Overall reliability was highest for the global factor, reflecting its relatively large number of items.

The observer perspective demonstrated the highest reliability across all models and factors (Table 10.4), followed by therapists and then clients. This ordering is in contrast to the CFA findings, where the therapist model performed the most poorly.

Discussion

The CFA results give fairly equal support to a two or three factor structure for the WAI. However, none of the model fits could be described as excellent, which may in large part, be due to the small sample size of the data set. Most authorities on factor analysis suggest a sample size of at least 100 to create a viable model (Hau & Marsh, 2004). However I feel these results are still relevant as this is a neglected population and quite possibly the first study to look at all three rater perspectives at once. On the basis of my results then, I would lean towards a two-factor structure, as this differentiates the relationship oriented bond factor from the more technically orientated goals and tasks. This is backed by previous research that points to a two-factor model as being superior or at least a viable structure (Andrusyna et al., 2001; Hatcher & Barends, 1996). The reliability analyses also support this assumption, as reliability was better for the combined Goals and Tasks scale than for the separate scales – particularly the 3-item Goal scale. Although the reliability was also good for the overall global factor, this is likely due to the increased number of items in the factor.

In terms of the different raters, the finding that the therapists had the worst model fits overall could indicate that the therapists aren't rating as consistently as the clients and observers. It could also indicate that they simply approach the TA differently – perhaps they have a more nuanced view that the WAI inadequately captured. As I have averaged the therapists' ratings, this could also indicate some underlying differences between the individual therapists, which could be explored in further analysis. The observers seem to be rating the most consistently and this may reflect the fact that they are the most reliable raters - a hypothesis that is supported by previous research (Andrusyna et al., 2001; Brown

& O'Leary, 2000; Fenton et al., 2001). The reliability analyses also support this contention, as observers had the most reliable factor structures. Interestingly, despite the therapists having unacceptable factor structures their reliability was high suggesting they are rating somewhat consistently.

What is worthy of note however is how all three raters, despite their differences, followed the same general pattern of a one-structure being the worst fit and two and three structures both being much more viable. Although I hypothesised that the clients may rate globally they did not, suggesting perhaps that the clients are picking up on the differences between liking their therapists and working together on tasks towards mutual goals. This may also reflect the fact that this is the first rating and perhaps too early for a bond to be formed.

The consistency across raters gives strong support at least to disregard a global factor, in marked contrast to the French study (Corbiere et al., 2006). It also suggests that, despite the limited sample size, my results have some substance and could produce a superior fit with a larger population. If this were possible it would also be interesting to see if a clear difference arose between two and three factor structures in this case, and if the therapist-rated data could produce an adequate model fit. Overall, it appeared that a two-factor structure was the best fit for the WAI with this data and that although there are differences in terms of quality of fit between raters, the structure of the WAI does not differ between raters as I hypothesised. In terms of the more complex analyses to be performed in later studies, which require one WAI rating, the reliability analyses suggest that the WAI total could be utilised, especially using the observer perspective, which was highly reliable.

Chapter Ten:

Study One Part B – Examining the Pattern of the Working Alliance Inventory Over Time

Study Objective

The TA is a measure of the relationship between a client and therapist over the course of therapy. Relationships can change over time so therefore the TA is naturally a dynamic phenomenon that will shift and change across and even within therapy sessions (De Roten et al., 2004). This dynamic quality has allowed researchers to theorise and test the patterns that the TA forms over time in therapy. In this study I examined the TA across time, looking for differences between time periods and comparing the patterns between rater perspectives.

Background Research

Early alliance researchers theorised about the pattern of TA across time. Gelso and Carter (1994) proposed that in successful time-limited therapy the alliance would show an initial positive growth, then weaken, then increase again to earlier high levels. This U-shaped pattern of growth was also reinforced by Bordin and his supporters who theorised a similar pattern; an initial positive alliance, a challenging period of therapeutic rupture, and positive growth upon resolving the ruptures (Bordin, 1980; Horvath et al., 1993). In contrast Greenberg challenged the classic U-shaped argument and instead suggested that a linear pattern would be found with either a steady consistent value or a steadily rising pattern (Greenberg, 1994).

The actual research findings have been mixed in their support for these theories. In an early study Golden and Robbins (1990) used an intensive case-

analysis approach, with two clients and one therapist in psychodynamic therapy using both the therapist and client ratings of the WAI. They found that patterns of alliance differed by rater, and found that while the clients fitted the classic U-shaped pattern, the therapists' scores increased in a steadily rising linear pattern, giving support to both theoretical camps. Horvath and Marx (1990) also used the WAI in a session-by-session measurement of the alliance with four clients and two therapists, and found a cyclical development for the therapist ratings but a steady linear increase for clients ratings.

Kivlighan and Shaughnessy (1995) used hierarchical linear modelling to investigate the therapeutic relationship in 21 therapist-client dyads in counselling using the WAI-S as rated by therapist and client. They found linear patterns for both the therapist and client, but while the therapist's scores increased in a steadily rising linear pattern, the client had a flatter steadily high pattern. Stiles et al. (2004) attempted to replicate these findings using cluster analysis, and while they found two clusters of clients who fitted a flat steadily high pattern of alliance, they also found a cluster of clients who rated steadily downwards, and another cluster who rose more markedly and then plateaued. Interestingly similar results to Kivlighan and Shaughnessy were found in a more recent study using the Helping Alliance questionnaire, with cluster analysis revealing a pattern of stable alliance and a linear growth pattern (De Roten et al., 2004).

Bachelor and Salamé (2000) attempted to look at patterns of alliance across time and participant for a number of alliance measures. While they found a steadily increasing pattern of alliance for therapist raters with some measures, the WAI study did not yield any significant increases across time for either clients or therapists suggesting a stable pattern (Bachelor & Salamé, 2000). In terms of

differences by perspective, few differences were found between therapists' and clients' average ratings, but within each dyad the relationship was perceived somewhat differently, with results indicating low agreement on aspects of the relationship, regardless of the assessment period (Bachelor & Salamé, 2000).

Overall, these results give support to a number of patterns but particularly to a U-shaped pattern, a steady linear growth pattern, and a high stable pattern. These results also suggest that clients and therapists may display different patterns of alliance growth, consistent with their differing views on the relationship.

Specific Method and Data Analysis

Data analysed

This study used the Working Alliance Inventories total data from Time 1 to Time 4 for the seven treatment groups, specifically the Therapist, Client, and Observer-ratings of the TA between therapist and client. As with Study One Part A, the data are averaged across the two therapists. The WAI is the key measure in this thesis and as it holds such a central role it is crucial to investigate the nature of the data produced by this measure. Although it is a widely used measure and is regarded to have sound psychometric properties, the unique corrections setting and use of three different rater perspectives may challenge the nature of the data. Therefore, before the Repeated Measures ANOVA was conducted I tested the normality of the data within the three different rater perspectives – therapist, client, and observer.

Normality of data

To test for normality I used the frequencies function in SPSS and focussed on the skewness and kurtosis statistics as they are indicators of the normality of

the distribution of the data (Tabachnick & Fidell, 1996). In a completely normal distribution both skewness and kurtosis should be at zero, and at a maximum, the z-scores of the skewness and kurtosis should not exceed 2.58, as anything above this is considered significant in a sample of this size (Field, 2005). However, I found a moderate range of skewness across all three raters (skewness z-score = -2.67 — -5.18) and also a moderate range of kurtosis across the client and observer raters (kurtosis z-score = 3.13 —5.13). These results suggest a tendency for the raters to rate consistently in the moderate to high range on the WAI, potentially indicating a ceiling effect in the data.

As the skewness and kurtosis appeared to deviate significantly from normal, a transformation was carried out in an attempt to restore the normality. The observer data were used to investigate the effect of the transformation, as this perspective may be used in subsequent analysis, due to reliability and a larger sample size. Following Tabachnick and Fidell's (1996) procedure for transforming moderate negative skewness, a computation was carried out to reflect and square-root the data. However, this transformation showed only limited success, as there was still significant skewness at Time 2 (skewness z-score = 3.70); which brings the utility of the transformation into question. Although Tabachnick and Fidell are generally supportive of transformations, they do point out that they are not universally recommended and are only useful if the variable is normally or near-normally distributed after transformation (Tabachnick & Fidell, 1996). Another reason they give for avoiding a transformation is that transformed variables can make further analyses hard to interpret. Considering the WAI is the main measure in this thesis and will be used in several different analyses including the Repeated Measures ANOVA, this

is a valid reason to leave the variables untransformed. Further to this argument, all the data are moderately skewed in the same direction, which means that improvements of analysis with transformation are often marginal anyway (Tabachnick & Fidell, 1996). Also, for each rater, not all of the scores reach the total of 84, and the standard deviations are above zero, which means there is not a complete ceiling effect. As Table 10.5 demonstrates, this is true even for the client raters who tended to rate high on the WAI.

Table 10.5

Means and Standard Deviations for Client rated WAI Time 1-4

	WAI Time 1	WAI Time 2	WAI Time 3	WAI Time 4
Mean	68.88	73.12	74.87	75.00
SD	12.45	10.96	11.25	9.88

Note: Minimum score = 12, maximum score = 84

Ideally all the WAI data would be normal for all time periods and for all raters, but this is not the case in this data set. It is likely that the unique research setting and use of different rater perspectives has impacted on this. This finding could reflect a number of factors; for clients I speculate that a desire to rate highly could arise because of their predispositions to see things in black and white terms, and also because the prison environment encourages them to respond in a positive light for fear of sanctions, despite being told their responses would remain confidential (Howells & Day, 2006). Therapists' views of the relationship may be influenced by the positive change occurring in therapy with what can be a difficult and challenging clientele (Serin, 1994). Observers are

interesting, as it would seem that they should have a more balanced, neutral and objective view of therapy yet they had consistent skewness across time. This could possibly reflect a lack of knowledge of the “true” relationship and therefore a tendency to blanket-rate all dyads positively – the observer is only rating the relationship from a limited number of observations and so therefore may be missing a complete view. Alternatively the observers may appreciate the therapists’ and clients’ effort to form a relationship despite working in a difficult setting and the personality issues that arise when working with violent offenders, and is therefore rating highly as a consequence of this admiration.

While a transformation did produce some improvements, using Tabachnick and Fidell’s protocols I came to the conclusion that in this instance a transformation is not recommended. Not only does transformation not result in correction of non-normality, it still has the problem of interpretation. As a consequence of leaving the data as they are, some of the further analyses may need to be interpreted with caution as they depend on an assumption of normality; including the Repeated Measures ANOVA (Tabachnick & Fidell, 1996).

Analysis and hypotheses

Several Repeated Measures ANOVAs were conducted using SPSS on the untransformed data. The within-subjects variable was the four time periods the WAI was assessed in and ANOVAs were conducted for the overall sample by time and by rater perspective. An ANOVA was also conducted using transformed data to confirm the impracticality of the transformation. Lastly a one-way ANOVA was conducted to test for linearity of the WAI ratings. Based on the normality findings and background research I predicted a linear pattern of

growth across raters, with a slight dip after Time 2 as the “work” of therapy kicks in and therapeutic ruptures occur. I also predicted that the patterns would be relatively similar across rater perspectives but clients would show a steadier higher pattern than therapists and observers.

Results

A one-way repeated measures ANOVA was conducted to compare scores on the WAI at Time One (week two), Two (week 10), Three (week 18) and Four (week 30) and for perspective (therapist, client, observer) and for time by perspective. For Time, Mauchley’s test indicated that the assumption of sphericity had been violated ($\chi^2(5) = 19.22, p < .05$); therefore degrees of freedom were corrected using Greenhouse-Geisser estimates of sphericity $\epsilon = .70$ (Field, 2005).

The results showed that there was a significant effect for time $F(3, 33) = 27.03, p < .001$. Repeated Measures Pairwise Comparisons of mean differences showed there were significant differences between Times 1 and 2 (mean difference = $-6.21, p < .05$), Times 1 and 3 (mean difference = $-8.80, p < .05$), Times 1 and 4 (mean difference = $-9.93, p < .05$), Times 2 and 3 (mean difference = $-2.60, p < .05$) and Times 2 and 4 (mean difference = $-3.73, p < .05$). No differences were found between Times 3 and 4. Figure 10.4 displays the pattern of the combined perspectives across time.

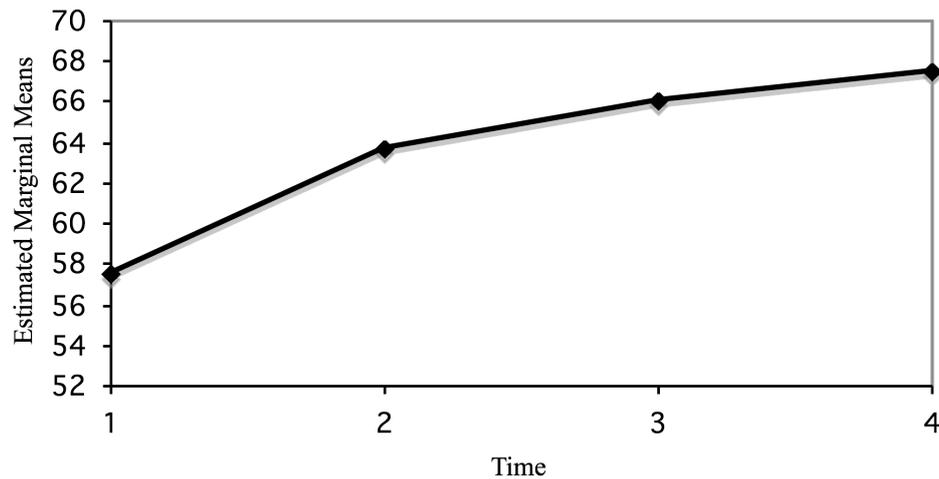


Figure 10.4. The pattern of the combined perspectives of the WAI across time

A significant effect was also found for perspective $F(2, 33) = 52.00, p < .001$. Repeated Measures Pairwise Comparisons of mean differences showed there were significant differences between the therapist and client perspectives (mean difference = $-12.09, p < .05$), the therapist and observer perspectives (mean difference = $2.78, p < .05$), and the client and observer perspectives (mean difference = $14.87, p < .05$). Figure 10.5 displays these results. No significant interaction was found between time and perspective $F(6, 33) = 3.04, p = .09$.

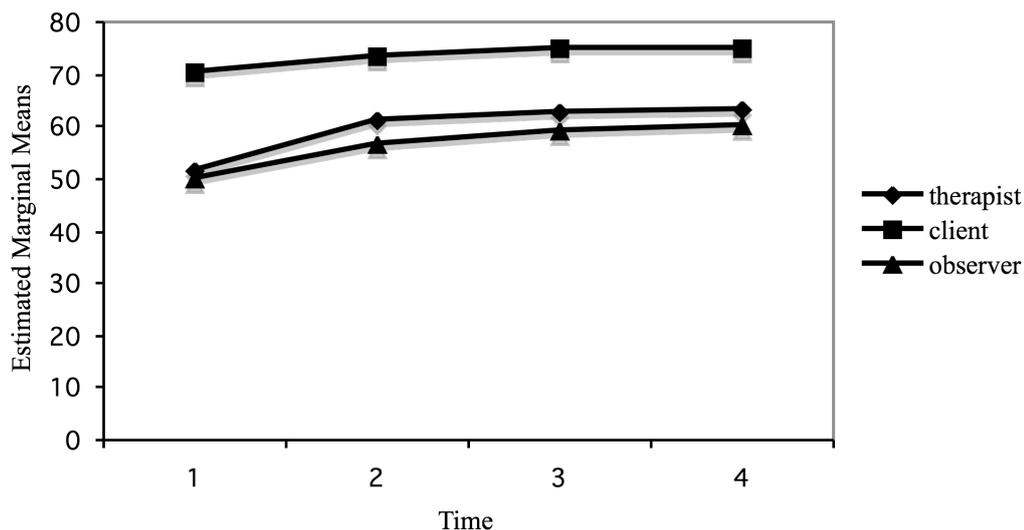


Figure 10.5. The pattern of differences by rater perspectives of the WAI across time

Earlier in the study it was found that the data were not normally distributed and a transformation was conducted. As the results were mixed for the effects of the transformation, a one-way repeated measures ANOVA was conducted to compare scores on the WAI at Time 1 (week two), 2 (week 10), 3 (week 18) and 4 (week 30) for the observer perspective using the transformation, to see if the transformed data produced an interpretable result that met the assumption of sphericity.

As with the untransformed data, with the transformed observer data Mauchley's test indicated that the assumption of sphericity had been violated ($\chi^2(5) = 22.7, p < .05$); therefore degrees of freedom were corrected using Greenhouse-Geisser estimates of sphericity ($\epsilon = .77$). The results show that there was a significant effect for time $F(3, 57) = 30.35, p < .001$. Repeated Measures Pairwise Comparisons of mean differences showed there were significant differences between Time 1 and 2 (mean = .64, $p < .05$), Time 1 and 3 (mean =

.87, $p < .05$), Time 1 and 4 (mean = 1.07, $p < .05$), and Time 2 and 4 (mean = .42, $p < .05$). No differences were found between the other times. Figure 10.6 displays the pattern of the observer perspective for WAI across time.

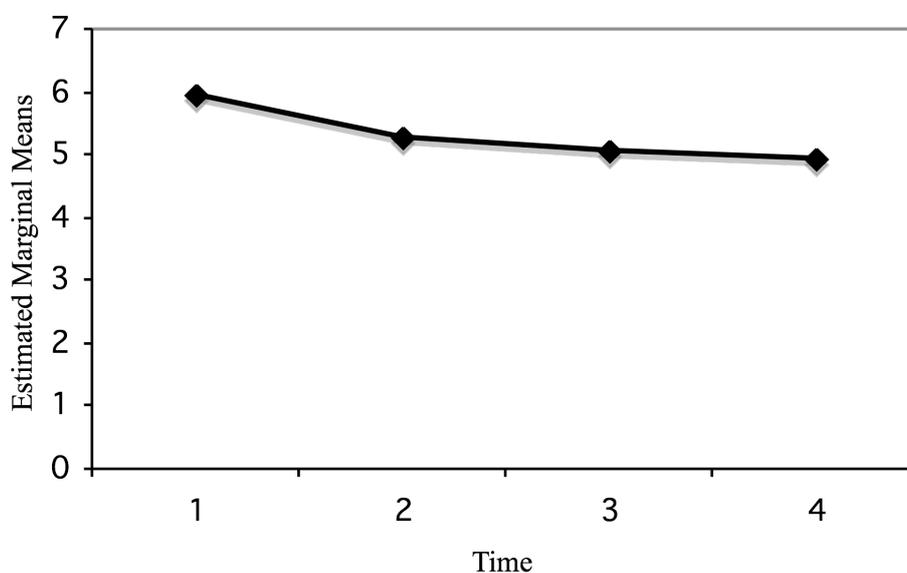


Figure 10.6. The pattern of the transformed observer WAI across time

Lastly a one-way ANOVA was used to test the linearity of the client, therapist and observer WAI total data. For the client data the ANOVA revealed a significant linear relationship between the data points ($F(3, 170) = 7.34, p < .01$); with no significant deviation from linearity. The ANOVA also revealed a significant linear relationship between data points for the therapist ($F(3, 239) = 17.55, p < .001$) and observer ($F(3, 249) = 45.95, p < .001$) data with no significant deviations from linearity.

Discussion

The results show that there are clear differences between time periods for the WAI ratings. As hypothesised the pattern is clearly linear and increasing across

all perspectives with a significant jump from Time 1 to 2 and a slight plateau effect at Time 3, particularly for clients. This linear growth pattern confirms Greenberg's theory and much of the previous research using the WAI, particularly Kivlighan and Shaughnessy's pattern of linear growth (Greenberg, 1994; Kivlighan & Shaughnessy, 1995).

A linear growth pattern also makes sense for this particular data set. Firstly when I looked at the shape of the data for normality, there was a clear skew to the right that increased with time, suggesting a tendency among raters to rate highly and increasingly so throughout therapy. Figures 10.4 and 10.5 clearly show an increasing linear shape in line with this finding, and the linearity test confirmed this. Secondly, considering the context of this therapy is with difficult clientele in a less than therapeutic environment, it makes sense that the alliance will start off lower as clients and therapist have not yet established trust and a relationship, and increase at Time 2 when they are more settled in.

Although it was hypothesised that there may be a dip after Time 2 as the "work" of therapy becomes more central this wasn't the case. There is somewhat of a flattening off to the shape at this point however and no significant differences were found between Time Three and Four; suggesting a plateau effect as ratings stay up but do not increase.

It was also hypothesised that there would be a difference by perspective. This was found to be the case in the second Repeated Measures ANOVA as Figure 10.5 illustrated, with clients rating the highest, followed by therapists and observers. However, it is interesting to note that despite the differences between perspectives, they all follow the same pattern as can be seen in Figure 10.5. This suggests that each rater shares the same general perspective of the pattern of the

TA across time, which, considering their different backgrounds, is quite an anomaly. This is also in contrast to much of the research in this field where consistent differences were found by perspective in terms of growth pattern (Bachelor & Salamé, 2000; Golden & Robbins, 1990; Horvath & Marx, 1990; Kivlighan & Shaughnessy, 1995).

As considered earlier, it is likely that the unique research setting has contributed towards these anomalous results. As was speculated with the normality results, perhaps for some clients the prison environment may encourage them to respond in a positive light for fear of sanctions (Howells & Day, 2006). However it may just be that all of the raters are aware that they are taking part in a difficult process and may simply be appreciative of the therapists and clients' effort to form a relationship despite working in a difficult setting. Considering the difficult personalities and low motivation that characterises a lot of these clients, it makes sense that if a client is still in the programme at Time 2, this fact alone may affect ratings of alliance. Also, although I took multiple measures of the alliance, this is an eight-month therapy programme and it may be that measures would need to be taken more regularly to reflect therapeutic ruptures and the subsequent changes in alliance levels. Another limitation of my data was the problems with skewness and kurtosis. Although a transformation was trialed, as our results showed, the Repeated Measures ANOVA it produced still violated the assumption of sphericity and made interpretation difficult. Therefore, in line with my earlier findings I will leave the data untransformed in further analyses.

Chapter Eleven:

Study Two - Client Factors that Affect the Formation of the Therapeutic Alliance

Study Objective

A client does not come into therapy *tabula rasa*: a blank slate. They bring their own personalities, experiences and motivations that can affect therapy. Unfortunately when clients are offenders, they are likely to have seriously abusive backgrounds and the accompanying interpersonal problems, which could then negatively affect the TA (Hudson & Ward, 1997; Marshall, 1989; Smallbone & Dadds, 1998). The objective of this study was to examine which client factors affect the formation of the TA in this data set and in particular whether these factors are specific to an “offender” profile (i.e., specific characteristics associated with offenders) or a “general” profile (i.e., characteristics associated with clients in clinical settings). While the research discussed and data analysis is divided into these two categories, this is not to say that general client factors would not be present in offenders, or that offender factors would not be present in general clients; rather it is used as a way of recognising factors that are of importance in offender populations and organising the research and data analysis in a coherent and logical way.

Background Research

General population

Research has been conducted both on the non-offending “general” community outpatient client population and the offender population. In terms of the general client population, demographic variables (e.g., age, gender, marital and employment status) have not been found to predict TA (Meier,

Barrowclough, & Donmall, 2005). Interestingly, neither do several plausible disorder-related factors, such as drug use, severity of psychiatric disorder or symptoms (Meier, Barrowclough et al., 2005).

A meta-analysis of studies on the impact of client pre-treatment characteristics on the alliance, has confirmed that client factors — both intrapersonal and interpersonal — influence the TA, with a statistically significant moderate correlation of .30 found overall (Horvath, 1994b). A study typical of the ones included in the meta-analysis found a link between clients' attachment and their ability to form a strong positive alliance (Piper et al., 1991). Attachment refers to a fundamental personality trait, developed early in infancy in response to an emotional connection to a caregiver, that is thought to hugely impact a person's development through life, and their subsequent relationships in adulthood (Bowlby, 1988).

Wallner-Samstag and colleagues examined the characteristics of clients in short-term cognitive therapy for depression with poor and good alliances and found that clients who were more submissive, isolated and friendly were more likely to develop strong alliances than hostile, aggressive and dominant clients (Wallner-Samstag et al., 1992). Clients' relational capacities are also important as Mallinckrodt found; both clients' current level of social support and parental bonds influenced the quality of a working alliance (Mallinckrodt, 1992).

Meier, Donmall, Barrowclough, McElduff and Heller (2005) found that clients who reported better motivation, coping strategies, social support and a secure attachment style were more likely to develop good alliances. Others too have found that secure vs. insecure attachment style predicted the quality of the therapeutic relationships (Eames & Roth, 2000; Mallinckrodt, Porter, &

Kivlighan, 2005). Comfort with intimacy, a trait associated with secure attachment is also correlated with the TA (Kivlighan, Patton, & Foote, 1998; Mallinckrodt, Coble, & Gantt, 1995; Satterfield & Lyddon, 1995), as is past relationship quality (Hersoug, Monsen, Havik, & Hoglend, 2002).

Offender populations

Attachment has also been researched within offender groups and sexual offenders in particular have been found to have significant attachment related problems (Marsa et al., 2004; Ward, Hudson, Marshall, & Siegert, 1995). Violent offenders have been found to have a dismissive attachment style (Hudson & Ward, 1997). Although there is no current research linking violent offender attachment and TA, clients with a dismissive attachment style may transfer this to the TA, undervaluing this relationship and paying it little attention (Howells & Day, 2006).

As mentioned earlier, Taft and colleagues have examined client personality and demographic predictors of the working alliance in CBT for partner-violent men. Client personality and demographic predictors refer to factors in a client's personality and lifestyle: such as psychopathy, interpersonal functioning and marital status (Taft et al., 2003).

In their study with partner-violent offenders it was found that a number of factors were related to a positive working alliance including low psychopathy scores, low borderline personality traits, fewer inter-personal problems, self-referral, married status, and higher age and income (Taft et al., 2004). In particular psychopathy emerged as a strong negative predictor of the working alliance and demonstrated a consistent and strong association above BPD and other traits measured (Taft et al., 2004).

The extent and chronicity of interpersonal symptoms in many of the diagnostic criteria for personality disorders support the contention that these diagnoses will challenge the development and maintenance of the TA for all client groups (Strauss et al., 2006). With high risk violent offenders, personality disorders are common; especially psychopathy, paranoid personality disorder, and borderline personality disorder (Wilson, 2004). Although it is a self-evident truth to most clinicians that having high levels of psychopathy and some other personality disorders will have a very detrimental effect on the TA, there is surprisingly little evidence to support this view, apart from what I have reviewed here.

Good alliances can be achieved with personality disordered patients such as borderlines, but the process can be more difficult for Cluster A patients in particular, who find it difficult to relate to and trust others (Gunderson, Najavits, Christoph, Sullivan, & Sabo, 1997). Therapists generally report more negative alliances than their personality-disordered patients, especially for Cluster B disorders (Lingiardi, Ludovica, & Baiocco, 2005).

Client motivation can change across therapy and is itself an important treatment target both for offenders and general clients. However, as mentioned, both pre-treatment motivation to change, and treatment readiness can also be viewed as semi-stable client characteristics, and they do predict initial TA (Joe et al., 1998). In a study looking at transtheoretical model- based stages of change, which is related to motivation, a positive TA in early treatment was related to high Contemplation scores (Derisley & Reynolds, 2000). Hiller, Knight, Leukefeld, and Simpson (2002) reported small but statistically significant

relationships between a client's desire for help and treatment readiness and level of therapy engagement.

As also noted, motivation to change is particularly important with offenders, in "pressured" treatment settings where they have not chosen to participate, but rather are attending to avoid negative consequences arising for non-participation, such as not gaining parole (Day et al., 2004). Taft et al. (2004) found motivation to change to be the best predictor of TA for partner-violent offenders.

Risk has also been theorized to affect TA, and it is a commonly expressed belief that high-risk offenders are hard to treat; however this is not equivalent to the alliance and the research evidence linking alliance and risk is lacking (Serin & Kennedy, 1997). The high-risk nature of my sample makes this variable worth looking at however.

Another client variable that has been theorized to affect engagement in therapy is attitudes towards criminality, as they can result in offenders viewing others in a negative and cynical fashion, making it hard for them to trust therapists and thus form an alliance (Ward et al., 2004). It is also likely that if an offender holds strong positive attitudes about criminality, they will be less motivated to agree to work on the goals and tasks associated with reducing their offending. Criminal attitudes about violence have not been specifically researched in relation to TA yet, but they are a common target in violence prevention programmes and a series of meta-analyses has shown that criminal attitudes are one of the key components of programmes that reduce recidivism (Andrews & Bonta, 1998).

Summary

Overall, the research reviewed paints a picture of factors found to affect the formation of the alliance that can be organized into a “General Client” profile and an “Offender Client Profile.” In the “General Client” profile resilience based factors such as attachment, levels of hostility, aggression, isolation, and submissiveness are associated with the alliance while demographic factors are not. In the “Offender Client Profile” risk based factors such as aggression, psychopathy, borderline personality, motivation and readiness to change, attitudes to violence, and risk level, are associated with TA. Again, these are not stringent categories; some factors such as attachment and motivation are arguably applicable to both profiles. However, attachment has not been specifically linked to the TA in violent offender research, whereas motivation to change has been explored with both profiles but, as argued, is paramount in pressured offender treatment settings.

Specific Method and Data Analysis

This study used the Time 1 WAI data for the seven treatment groups; specifically the Observer ratings of the TA between therapist and client. The observers have been found to be reliable raters so far, and also contribute the largest sample of WAI ratings, increasing statistical power. Therefore, in this and the two following studies the observer ratings will be used. To examine pre-existing client factors I used pre-treatment data from the psychometric battery and from file information. Based on the previous research I tested two competing hypotheses; the first that the client data would fit a resilience-based “General Client” profile informed by previous research with outpatient populations, and the second that the client data would fit a risk-based “Offender Client” profile

informed by previous research with offender populations. The data used to test each hypothesis are displayed in Table 11.1. To test the hypotheses I used correlations, regressions and structural equation models, to investigate the relationship between each profile and the WAI scores. Using these different techniques allowed me to break the data down in steps, until the most predictive client variables were left. I predicted, that as the clients in this sample are offenders, they would generally fit the “Offender Client Profile” better than the “General Client” profile, with more significant higher correlations, more predictive factors in regressions and better fitting structural equation models arising from the variables in the “Offender Client Profile.”

Table 11.1

Measures used to test an “Offender Client” profile and a “General Client” profile and the variables they measure

Offender Client Profile	General Client Profile
Psychopathy Checklist Revised – PCL Factor 1, Factor 2 and Total (Psychopathy)	Treatment Age (Age)
MCCI-III Scale C – (Borderline Personality)	Years of education (Level of Education)
Client Attributes Scale item 13 – MTC (Motivation to Change)	Experiences in Close Relationships Inventory (Anxious & Avoidant Attachment)
Criminal Attitudes to Violence Scale – CAVS (Criminal Attitudes to Violence)	MCCI-III Scale 1- (Schizoid – Isolated and submissive traits) Scale 6a-(Antisocial) Scale 6b-(Aggressive)
Criminal Sentiments Scale Modified – CSSM (General Criminal Attitudes)	
Violence Risk Scale – VRS static, dynamic, total, (Risk of Violent Reoffending) Stages of Change (Behavioural)	

Results

Correlations

In the first step of investigating the two hypotheses, two sets of bivariate correlations were carried out to test the competing hypotheses that the working alliance scores would be correlated with either a “General” or an “Offender Client” profile. No significant correlations were found between any of the general client variables and the WAI time 1 data, as illustrated in Table 11.2. Table 11.3 displays the results for the offender client profile.

Table 11.2

Bivariate correlations between “General Client” profile variables and WAI Time 1

General variables	Goals	Tasks	Bond	WAI total
Age	-.10	-.02	.07	-.02
Education	-.03	-.06	-.15	-.09
Anxious	.13	.06	-.02	.05
Avoidant	-.01	-.05	-.06	-.05
Schizoid	.13	.16	.06	.12
Antisocial	.07	-.07	.05	.01
Aggressive	.16	-.04	-.02	.03

Table 11.3.

Bivariate correlations between “Offender Client” profile variables and WAI

Time 1

Offender variables	Goals	Tasks	Bond	WAI Total
Psychopathy Factor 1	-.28*	-.21	-.22	-.26*
Psychopathy Factor 2	-.15	-.24	-.15	-.19
Psychopathy Total	-.30*	-.30*	-.26*	-.31*
Borderline	.07	-.04	-.05	-.01
Violent attitudes	-.08	-.24*	-.27*	-.22
Criminal attitudes	-.20	-.30*	-.25*	-.28*
Treatment Readiness	.04	.05	.22	.12
Motivation	.53**	.48**	.46*	.53**
Stages of Change	.13	.06	.12	.11
Violence Risk Static	-.01	-.10	.01	-.04
Violence Risk	-.01	-.13	-.13	-.12
Dynamic				
Violence Risk Total	-.06	-.14	-.09	-.11

N= 58-69

* $p < .05$; ** $p < .01$

The results showed that three variables in particular displayed significant medium to large correlations with the WAI, using Cohen’s criteria (Hox, 1995).

The psychopathy total score displayed significant medium sized effects in the

negative direction with all WAI subscales, indicating that as psychopathy scores increase the TA decreases. The criminal attitudes total score also displayed small-medium effects in the negative direction with the WAI, indicating that as positive attitudes towards criminality increase (as evidenced by endorsement of criminal sentiments), the TA decreases. Lastly the motivation to change item displayed a large significant correlation with all subscales and the total of the WAI in the positive direction indicating that as a client's motivation to change increases, the TA increases.

As the significance of correlation coefficients is affected by sample size, it is useful to look at variance explained by a variable to ensure that relationships are not overlooked (Field, 2005). None of the coefficients in the general profile were significant, but the largest coefficient was between the tasks subscale of the WAI and the Schizoid personality scale of the MCMI-III, corresponding to 2.56% variance value in common between these variables, which means at least 97% of the variance is unexplained by this relationship. As this was the largest coefficient, this means all other variables in this profile would account for even less variance. In contrast the largest and significant variable in the offender profile is motivation to change and explains 25% of the variance, meaning only 75% of the variance is unexplained by this relationship.

Multiple Regressions

Correlations only indicate a relationship between pairs of variables, but multiple regressions seek to predict an outcome from several predictor variables (Field, 2005). Multiple regressions were carried out to further investigate the variables in the "Offender Client" profile that were correlated with the WAI

Time 1 data, the hierarchical method was used as the order of entry of variables was based on theoretical considerations and the previous correlational results.

Using the hierarchical method a regression was conducted between the outcome variable WAI Time 1 total score and the three predictor variables of motivation to change (MTC), psychopathy total (PCL), and criminal attitudes total (CSSM). These three predictor variables were selected, and entered hierarchically as they were the most significant variables from the correlation results. A significant model emerged (Adjusted R square = .29; $F(1,55) = 24.04$, $p < .00$). MTC was the only significant variable ($\beta = .55$, $p < .00$). These results indicate that a client's motivation to change accounts for 29% of the variance in WAI total scores for Time 1.

This regression was repeated using the WAI subscales as outcome variables, the rationale for this regression is that in my earlier results, significant low to moderate correlations were found between subscales and the predictor variables and Study One Part A indicated a three factor structure was a better fit for the WAI. Significant models emerged for each subscale and are shown below in Table 11.4. Again MTC was the only significant predictor variable for all models.

Table 11.4

Multiple Regression between the predictor variables of MTC, PCL-SV total and CSSM total and the outcome variables of WAI Time 1 subscales

Subscales	Significant Model	β
Goals	MTC*	.55
Tasks	MTC**	.50
Bond	MTC***	.49

All p 's < .005

* Adjusted R square = .289; $F_{1,55}=23.767$, $p < .001$; ** Adjusted R square = .239; $F_{1,55}=18.630$, $p < .001$; *** Adjusted R square = .224; $F_{1,55}=17.146$, $p < .001$

These results suggested that clients' motivation to change accounts for 29% of the variance in the Goals subscale scores for Time 1, 24% of the variance in the Tasks subscale scores for Time 1 and 22% of the variance in the Bond subscale scores for Time 1. The similarity between the variance for each subscale and the total suggested that an overall WAI score could also have utility for use in data analysis.

Structural Equation Models

Following the regression results I ran a structural equation model between the WAI Time 1 total and the predictor variables of motivation to change (MTC), psychopathy total (PCL) and criminal attitudes total (CSSM.) Although only MTC predicted WAI in the regression models, I expected that psychopathy

would be associated with the WAI considering past research, so it may be that there are some mediation interactions between the PCL and CSSM on the WAI that a structural equation model can uncover (e.g., perhaps PCL is mediated by CSSM). The AMOS programme was used to trial three SEM models. Model 1 tested the theory that the variables contribute independently to the WAI score as the regression results suggest. Model 2 tested the theory that the PCL score is mediated by the CSSM. Lastly Model 3 tested the theory that CSSM and MTC alone contribute to the WAI score, in case psychopathy is not associated the TA in this data set. Figures 11.1, 11.2 and 11.3 below illustrate each model and the pathway coefficients and Table 11.5 displays the fit characteristics.

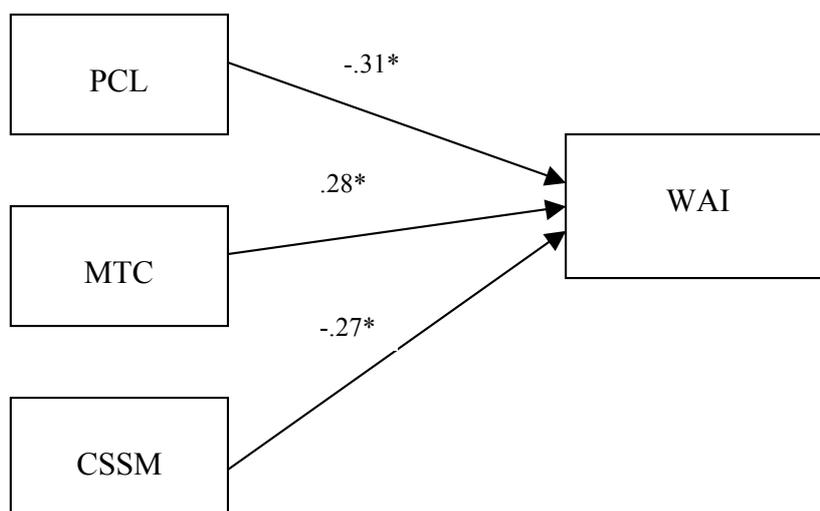


Figure 11.1. Structural Equation Model 1: Independent association

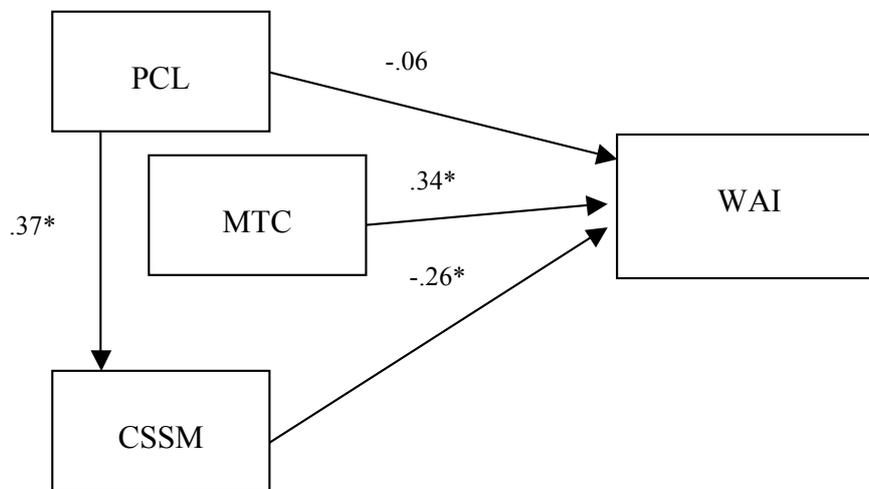


Figure 11.2. Structural Equation Model 2: Mediation

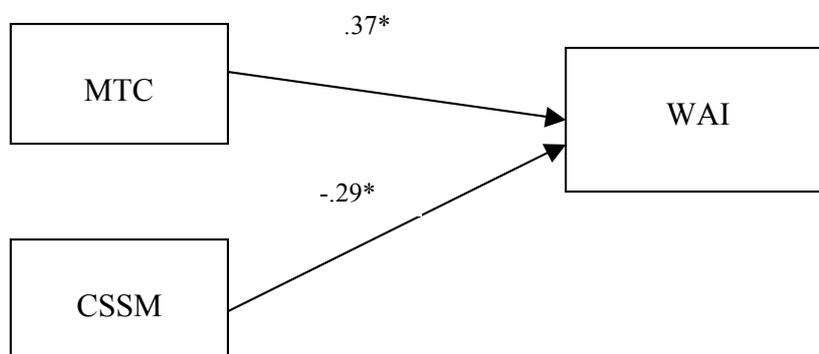


Figure 11.3. Structural Equation Model 3: Removal of PCL

Table 11.5.

Fit characteristics for Models 1-3

Fit Indices	Model 1	Model 2	Model 3
χ^2	48.78	35.38	20.73
df	24	23	12
p	.00	.04	.05
CFI	.90	.95	.96
RMSEA	.11	.08	.09

As in Study One Part A of this thesis, the fit indices utilised to test each model were the chi-square goodness of fit, the comparative fit index (CFI), and the RMSEA or root mean square error of approximation (Thompson, 2004). A chi-square value tells us whether we can reject the null hypothesis that the model is not a good fit and so ideally this should be low and non-significant, with a value no more than double the degrees of freedom (Byrne, 1989). The CFI compares the existing model fit with a null uncorrelated model and a score greater than .90 indicates a very good model fit for the data (Mueller, 1996). Lastly, the RMSEA value measures the discrepancy between observed and estimated covariance per the degrees of freedom and this should be between .05 and .10 respectively (Mueller, 1996).

The fit indices in table 11.5 indicated that models 1 and 2 showed an acceptable fit, however model 3 had the best fit as it has the lowest chi-square less than double the degrees of freedom, the highest CFI at .95 and an RMSEA of less than 0.1. While this model appeared to be a superior fit to model two, the removal of the PCL meant the parameters of the model changed, which affected

the chi-square fit index. To test the difference between the models, the difference between chi-squares (and their associated degrees of freedom) was calculated. There was a non-significant improvement in the goodness of fit of the model minus PCL compared to the PCL-inclusive model ($\chi^2_{\text{diff}}(12) = 14.65, p = .26$). This meant the models could not be differentiated based on the chi-square value.

The coefficients of the paths in model 1 indicated significant small associations between the three variables and the WAI, negative for the PCL and CSSM, and positive for MTC, consistent with the previous results from the correlations. For model 2, the coefficient between the PCL and WAI decreased and became non-significant when the mediation path through the CSSM was added, and the mediation path's coefficient was positive and moderately sized, suggesting mediation is occurring between PCL and CSSM. For model 3 the coefficients between MTC and CSSM and the WAI were significant and of a moderate size, and were the largest coefficients for these variables across of all the models. The coefficients and fit index results taken together indicate that psychopathy may be associated with the TA via mediation by the CSSM, but removal of the PCL also results in an equally good model and suggests that motivation to change and criminal attitudes are the most strongly associated with the TA.

Discussion

This study examined whether the client characteristics of my sample that were associated with the TA, fit into the resilience-based research profile of the general client population or the risk-based research profile of the offender population. The results confirmed my hypothesis that these data would fit an offender profile better than a general client profile. Firstly, the correlation results

found client variables from the “Offender Client” profile correlated significantly with the WAI scores with small to large significant correlations for psychopathy, motivation and criminal attitudes, while there were no significant correlations with any of the “General Client” variables and the WAI. Overall this makes sense considering the clients in the sample are violent offenders, and are expected to display these characteristics. However, I would have expected that some of the general client variables would have also been significantly correlated. Attachment in particular has been linked to the alliance for both general and offender clients (Daniel, 2006). Sexual offenders have been found to have a range of attachment-related problems that affect their relationships with others, which I would have expected to also see in the violent offender sample (Marshall, 1989). These results could mean violent offender clients have no attachment problems, the scale used did not capture the problems, or attachment does not significantly correlate with the WAI in this sample. Considering the literature and the nature of this sample, it seems most likely that the Experiences in Close Relationships scale may not have captured the client’s attachment problems, either because it was not sensitive enough, or because it was not used correctly. Most likely, the offenders may have had trouble reflecting accurately on their romantic attachment style due to idealising their relationships, forgetting how they actually act in relationships or consciously downplaying problems in order to appear stable. These are just possible explanations however and none of this is examined in this study; further reflection on these ideas is in the General Discussion of this thesis.

Some of the other offender variables that didn’t reach significance and had small coefficients that would not have explained much of the variance were also

interesting considering past research, particularly the borderline scale of the MCMI-III and treatment readiness. Taft and colleagues found that borderline personality disorder predicted quality of TA, so I expected their finding to be replicated with my data (Taft et al., 2004). However, psychopathy remained a strong predictor over and above BPD in their sample and psychopathy was also related to the alliance in my sample. Psychopathy and anti-social personality type traits may be more prevalent in this sample than borderline traits as also found by Wilson (2004) in his sample of high-risk offenders. Past research indicated that stages of change would be related to alliance (Derisley & Reynolds, 2000; Joe et al., 1998). In my study however, pre-treatment stage of change was not significantly correlated with WAI and again has small coefficients that would not have explained much of the variance. Motivation to Change (MTC) was the most highly correlated variable with all subscales and the total score of the WAI. MTC and stage of change are moderately significantly correlated with each other ($r = .32, p < .01$), suggesting they are somewhat associated but are also different constructs. It may be that motivation to change is related to the pre-contemplation and contemplation parts of the stage of change, however perhaps initial alliance is related to the behavioural aspects of change (action, maintenance) which are not present in pre-treatment stage of change ratings. The clients' risk level, both for general and violent reoffending, was also not linked to alliance in the correlations, which casts doubt on previous assertions that high risk offenders are not amenable to treatment (Hare, 1998). If this assertion were true, I would have expected a strong negative relationship between risk and alliance.

The regression results further refined down the variables affecting the formation of the TA. These results showed that therapist-rated motivation to change was the only client variable that explained any variance in the formation of the alliance as measured by the WAI. While it is not surprising that motivation to change has a strong relationship with alliance considering the coercive nature of correctional treatment; it is surprising that psychopathy did not have a stronger relationship. Although the PCL was significantly correlated with the WAI, the correlation coefficient only explained 9.6 % of the variance and when other predictors were included it was not a significant predictor in the regressions. Taft and colleagues have indicated that both motivation and psychopathy are linked to the TA and I expected to find this here, considering the high proportion of psychopaths among high risk violent offenders, with over 50% of the current sample qualifying as psychopaths (Taft et al., 2004). A potential consequence of this is a ceiling effect, and that there is not enough variance in psychopathy among the sample to allow a significant finding.

To establish that Motivation To Change was really the only predictor of the WAI and to rule out possible mediating effects, a series of Structural Equation Models were carried out. While the model with PCL mediated by the CSSM was viable, the model that had only MTC and the CSSM acting directly on the WAI scores was an equally good fit for the data. Again, it is not surprising that Motivation To Change was related to the alliance considering the previous research with violent offenders (Taft et al., 2004). The role of the CSSM was an interesting finding; attitudes towards violence have been theorized to affect alliance, but this has not been empirically validated (Ward et al., 2004). However, considering the main aim of the RVPU treatment is to address

violence, it makes sense that if a client still holds positive attitudes towards criminality then they will find it hard to agree that they need to change their lifestyle, will be less likely to work on the tasks needed to achieve this, and be less inclined to form a bond with the individuals promoting these goals. The mediating role of the CSSM between the PCL and the WAI also suggests that criminal attitudes may explain how psychopathy is associated with the TA; psychopaths hold and express antisocial attitudes, which then affect their TA with their therapists.

Overall this study has illustrated that as clients, offenders bring specific challenging aspects to the therapy room, different to the outpatient treatment population, which are related to the formation of an initial TA with their therapists. This does not mean that it is futile to try and establish an alliance with a client who has a high level of criminal attitudes, or low levels of motivation to change, but these variables could be a red flag to look for when a therapist feels that they are struggling to establish an alliance. Clients may need to be selected into treatment only when they have some motivation to change and are willing to challenge their attitudes towards criminality, or at least this may be something that needs to be worked on early in the therapy process. The following study will look at how client factors as well as therapist and group factors may interact with the TA to affect treatment outcome.

Chapter Twelve:

Study Three - Testing the Relationship Between the Therapeutic Alliance and Treatment Outcome

Study Objective

The reason that the TA has gained so much prominence in psychological research and literature is that it has been found to have a significant impact on treatment outcome across therapy modalities and with clinical and offender populations (Brown & O'Leary, 2000; Horvath & Symonds, 1991; Marziali & Alexander, 1991; Raue & Goldfried, 1994; Taft et al., 2003). The previous study examined the link between client factors and the alliance. The objective of this study was to examine the relationship between the TA and treatment outcome in this sample, and any factors that co-varied with or moderated this relationship including client, therapist and group factors.

Background Research

Relationship between therapeutic alliance and outcome

Over the last two decades there has been a surge of interest in looking at the process of therapy and its relationship to therapy outcome, as researchers sought to explain the common variance across different schools of therapy such as psychodynamic and CBT (Horvath & Luborsky, 1993). As pointed out earlier, researchers have found, in fact, that a strong TA makes an important positive contribution to outcome accounting, on average, for about a quarter of the variance in a meta-analysis of 24 studies (Horvath & Symonds, 1991). As predicted, the TA has also been found to be a source of common variance across many therapies; the TA accounts for an average of 25% of variance in therapy outcome across all disciplines and regardless of the alliance measure used

(Horvath & Luborsky, 1993). Marziali and Alexander for example, reported that the TA accounted for 20% of the variance in outcome measures in CBT, and they concluded that a positive relationship between client and therapist maximises the chance of treatment success (Marziali & Alexander, 1991).

In research with violent offenders, the strength of the alliance has also been linked to positive treatment outcome. As noted earlier, Brown and O’Leary (2000) reported that the strength of husbands' alliance assessed at Session 1 was positively associated with treatment outcome, as measured by decreased husband-to-wife mild and severe psychological and physical aggression in a partner-violence programme (Brown & O’Leary, 2000).

As also mentioned, Taft et al. (2003) have found that alliance predicts outcome in partner-violent men. Taft and colleagues used hierarchical linear modeling (a multi-level modeling technique) to examine the role of process and treatment adherence factors as predictors of partner reports of abuse, following participation in a CBT group for partner violent men (Taft et al., 2003). Their results showed that therapist WAI ratings predicted lower levels of physical and psychological abuse at the 6-month follow-up, and were the strongest predictors of outcome above cohesion, homework compliance and session attendance. Greater group cohesion during treatment, assessed using the GES Cohesion subscale (Moos, 2002), also predicted lower physical and psychological abuse at follow-up (Taft et al., 2003).

Factors that affect the relationship between therapeutic alliance and treatment outcome

While we know that the TA generally predicts outcome no matter which mode of treatment is used and which problem is being treated, many other factors

affect how the TA relates to therapy outcome (Brown & O'Leary, 2000; Horvath & Symonds, 1991; Marziali & Alexander, 1991; Raue & Goldfried, 1994; Taft et al., 2003).

The growth of alliance across time may affect the strength of the relationship between alliance and outcome, as the change process of the alliance may affect outcome as well as individual time points. Using hierarchical linear modelling, Kivlighan and Shaughnessy (1995) reported that a linear model was the best fit for the growth of the WAI-S therapist rated scores across time, and that this linear growth was associated with positive change on a measure of interpersonal problems rated by clients.

Previous research has also suggested that the type of outcome measured can affect this correlation. The WAI for example is more predictive of outcomes based on a global measure of client success in treatment than specific symptomatic change questionnaires (Horvath & Luborsky, 1993; Safran & Wallner, 1991). It has also been argued that alliance measures taken early in therapy are a more powerful prognosticator of outcome, with several different studies backing this claim (Bachelor & Salamé, 2000; Fenton et al., 2001; Hersoug et al., 2001; Safran & Wallner, 1991; Taft et al., 2003; Taft et al., 2004).

Although my earlier studies have looked at client and therapist factors associated with the strength of an *initial* TA, some client and therapist factors are also thought to influence the relationship between TA and outcome. As discussed previously, Marshall and colleagues (Marshall, Serran et al., 2003; Serran, Fernandez, Marshall, & Mann, 2003) have investigated how therapists' behaviors within group therapy sessions with sex offenders correlate with offenders' in-treatment changes on treatment targets assessed by therapists during treatment.

Factors associated with good client progress included warmth, empathy, rewardedness and directiveness. Aggressive —rather than collaborative— confrontation had a significant negative effect on clients' progress (Serran et al., 2003). Although this research focused on the direct effect of therapist behaviour on client outcome, empathy and warmth have also been linked to a positive TA and may play a mediating or moderating role in the relationship between alliance and outcome (Saunders, 1999).

The way a client behaves in therapy may also mediate the relationship between the TA and treatment outcome. As discussed in Study Two, Wallner-Samstag, et al. (1992) found that clients who were more submissive, isolated and friendly were more likely to develop strong alliances than hostile, aggressive and dominant clients. Similarly, Puschner, et al. (2005) found that overly hostile patients reported poor initial alliances compared to more friendly patients. Although Study Two did not link these variables with the initial strength of alliance, they may mediate the relationship between alliance and outcome, in that an alliance affects behaviour in therapy, which then subsequently affects treatment outcome. Client treatment adherence factors, such as motivation and participation, which can be viewed as relating to goals and tasks in Bordin's terms, also are likely to mediate between the TA and outcome (Taft et al., 2003), and will also be explored in this study.

Group cohesion has also been linked with TA and outcome (Beech & Fordham, 1997; Johnson, Burlingame, Olsen, Davies, & Gleave, 2005; Taft et al., 2003; Woody & Adessky, 2002). As mentioned previously, the results of a study with sexual offenders in treatment suggested that the atmosphere of a group had an important influence on treatment change and a successful group

that was highly cohesive, well organized and led by therapists, encouraged the open expression of feelings, produced a sense of group responsibility, and instilled a sense of hope in its members (Beech & Fordham, 1997). A helpful and supportive therapist leadership style was found to be important in creating an atmosphere in which effective therapy could take place; but over-controlling therapist leaders were seen to have a detrimental effect upon group climate (Beech & Fordham, 1997).

The next relevant question is how does group cohesion interact with the TA? Research indicates that these two constructs are related, with Taft and colleagues finding significant but moderately low inter-correlations between client ratings of group cohesion and WAI ratings in their study of CBT for partner violent men (Taft et al., 2003). The fact that these correlations were quite low, and there was a differential pattern of association between these constructs and other variables, led the authors to contend that the two constructs reflect distinct aspects of the group treatment experience (Taft et al., 2003).

Specific Method and Data Analysis

This study utilised the WAI Observer data, across all four time points, as the main predictor of outcome. A measure of WAI change was also created as a predictor by subtracting the original WAI score at time 1 from the last WAI score for each client in treatment (e.g., a client who dropped out at Time 2 will have Time 2 minus Time 1). As discussed in Chapter Seven of the Introduction, ideally I would measure recidivism as the outcome, but in this study, intermediate measures of treatment outcome were used (e.g. changes in psychometrics, treatment completion) in place of recidivism. Multiple regressions were conducted to select the psychometric variables that had changed

significantly from pre to post-programme, and then the change scores for psychometrics were calculated by subtracting the pre-treatment scores from the post-treatment scores.

Treatment completion or non-completion was left as a categorical variable. Covariate variables were chosen on the basis of the research discussed in the introduction of this study, and as such, includes client behavioural variables rated by therapists from the Client Attributes Scale, therapist behavioural variables rated by observers from the Therapist Features Scale, and client and therapist rated group cohesion from the Group Environment Scale. The outcome and covariate variables used are summarised below in Table 12.1.

Hierarchical Linear Modelling (HLM) was chosen as one of the methods to analyse the relationships in question. HLM is a relatively new statistical technique and is specifically designed to cope with complex data sets such as this one; as it can work with nested variables (variables within groups), variables across time, mediating/moderating variables, missing data and a mixture of discrete and continuous variables (Raudenbush & Bryk, 2002). At its simplest level, HLM analyses hierarchical data structures where there are variables describing individuals, but the individuals are also grouped into larger units, and those units may in turn be grouped (Raudenbush & Bryk, 2002). Educational settings provide a good example: A student can be described at an individual variable level, but they can also be grouped into their class, and then that class can be grouped into the school (Raudenbush & Bryk, 2002).

Table 12.1

Outcome and covariate variables used in Study Three

Outcome Variables	Covariates
STAXI change	Average therapist warmth
AQ change	Average therapist empathy
CAVS change	Average therapist rewardingness
CSSM change	Average therapist directiveness
SAQ change	Average client warmth
VRS change	Average client hostility
VRS-Stage Of Change Scale change	Average client motivation
Treatment Completion	Average client participation
	Average group cohesion

In my data, there are individual variables for each offender (e.g. their psychometric change scores and WAI scores), but they are also in treatment groups, and these groups may vary by levels of cohesion and the behaviour of the therapists and clients. In order to create models for HLM, separate data sets must be created for each level of the model. HLM can work with either two or three levels, but as my data has two levels — individual and group — two data sets were created. The first contained all the individual level variables: WAI and outcome data. The second contained all the group variables: cohesion and therapist and client variables by group.

The basic equation for the models was:

Level-1 Model

$$\text{Outcome variable} = P_0 + P_1(\text{OWAI1}) + P_2(\text{OWAI2}) + P_3(\text{OWAI3}) + P_4(\text{OWAI4}) + E$$

Level-2 Model

$$P_0 = B_{00} + B_{01}(\text{Covariate}) + R_0$$

$$P_1 = B_{10}$$

$$P_2 = B_{20}$$

$$P_3 = B_{30}$$

$$P_4 = B_{40}$$

Where P_0 = Level 1 intercept, $P_1 - 4$ = slope, B = Level 2 intercept and OWAI is the observer rated WAI score.

Logistic regressions were carried out to investigate the effect of alliance on the dichotomous outcome variable of treatment completion/non-completion (Field, 2005). Lastly, a moderated regression (Baron & Kenny, 1986) was carried out to investigate whether the change in WAI scores across time predicted outcome, as found by Kivlighan and Shaughnessy (1995).

Results

Hierarchical Linear Models

A series of HLMs were carried out to investigate the effect of the WAI at each time point on the outcome variable of psychometric change scores, using the therapist variables as covariates at level 2 and using the client variables as covariates at level 2. No statistically significant models were found, meaning there were no direct effects of WAI on the outcome variables in these models,

and no mediation of the therapist or client variables between WAI and treatment outcome.

A series of HLMs were carried out to investigate the effect of the WAI at each time point on the psychometric change scores, using the therapist rated and client rated group cohesion scores as covariates at level 2. A statistically significant model was found for the amount of change on the VRS Stage of Change Scale (SOC-change) outcome and client-rated group cohesion. The results are reported in Tables 12.2 and 12.3 below.

Table 12.2

Random coefficients regression model for SOC-change outcome and client-rated cohesion covariance: Final estimation of fixed effects

Fixed Effect	Coefficient	Standard error	<i>t</i> -ratio	<i>p</i> -value
WAI intercept	0.66	0.08	8.30	0.00
Client cohesion	0.02	0.12	0.15	0.88
WAI 1	0.01	0.01	0.91	0.37
WAI 2	0.01	0.00	2.71	0.01
WAI 3	-0.02	0.01	-2.26	0.03
WAI 4	0.01	0.01	1.87	0.07

Table 12.3

Random coefficients regression model for SOC-change outcome and client-rated cohesion covariance: Final estimation of variance components

Random effect	Standard Deviation	Variance Component	Chi-square	<i>p</i> - value
INTRCPT1, R0	0.20	0.04	14.39	0.01
Level-1, E	0.40	0.16		

Note: Statistics for current covariance components model: deviance =95.46; number of estimated parameters = 2

A statistically significant model was found for change in the VRS Stage Of Change Scale (SOC-change) outcome and therapist-rated group cohesion and the results are reported in Tables 12.4 and 12.5 below.

Table 12.4.

Random coefficients regression model for SOC-change outcome and therapist-rated cohesion covariance: Final estimation of fixed effects

Fixed Effect	Coefficient	Standard error	<i>t</i> - ratio	<i>p</i> -value
WAI intercept	0.67	0.07	10.24	0.00
Therapist cohesion	0.08	0.04	1.95	0.11
WAI 1	0.01	0.01	0.86	0.39
WAI 2	0.01	0.00	2.92	0.01
WAI 3	-0.01	0.01	-2.32	0.02
WAI 4	0.01	0.00	1.56	0.13

Table 12.5

Random coefficients regression model for SOC-change outcome and therapist-rated cohesion covariance: Final estimation of variance components

Random effect	Standard Deviation	Variance Component	Chi-square	<i>p</i> -value
INTRCPT1, R0	0.16	0.03	11.00	0.04
Level-1, E	0.40	0.16		

Note: Statistics for current covariance components model: deviance =96.80; number of estimated parameters = 2

The significant t-ratio score in Table 12.2 for the WAI Time 2 slope illustrates that the WAI score at Time 2 has a significant association with change in the VRS Stages of Change Scale. This association is small as the change coefficient indicated that the VRS Stages of Change Scale only increases at a rate of .01 scale points per point increase in the WAI at Time 2. The significant t-ratio score in Table 12.2 for the WAI Time 3 slope illustrates that the WAI score at Time 3 has a significant association with change in the VRS Stages of Change Scale. This association is again small but this time negative as the change coefficient indicated that the VRS Stages of Change Scale decreases at a rate of .02 scale points per point increase in the WAI at Time 3. Table 12.4 illustrated much the same results but with a decrease of .01 scale points per point increase in the WAI for the WAI Time 3 slope. Neither client-rated nor therapist-rated cohesion contributed significantly to the models, suggesting that group cohesion was not associated with outcome as measured by change on the VRS Stage of Change Scale, in contrast to previous literature. Although the final estimation of variance components shown in Table 12.3 and 12.5 indicated that both of these

models were significant, they only accounted for 4% and 3% of the variance in the change on the VRS Stage of Change Scale respectively. This result means that most of the variance in the change of this outcome score is accounted for by factors outside of the TA and group cohesion.

Logistic Regressions

Stepwise logistic regression was used to test the likelihood of treatment completion/non-completion as predicted by change in the WAI. The results for this regression are displayed in Table 12.6.

Table 12.6

Logistic Regression of WAI change and treatment completion/non-completion

	β	S.E.	p
Constant	1.22	.35	.00
WAI change	.08	.03	.01

Note: $R^2 = .12$ (Cox & Snell), $.20$ (Nagelkerke). Model $\chi^2(1) = 9.03$, $p < .05$.

These results illustrate a significant effect of WAI change (change in WAI from first to last measurement) on the likelihood of treatment completion. For every 1-unit increase in WAI change (1 scale point) we can expect a .08 increase in the log odds of a client completing treatment. In other words, as the TA increases, so does the chance of a client completing treatment. This regression also correctly classified 83% of clients into completion and non-completion categories (compared to the 70% expected by chance).

As with the HLMs, client variables and cohesion were also added to this model to test for interactions with WAI change or direct effects of these variables

on the odds of completing treatment. Therapist variables could not be added due to sample size restrictions. Only client motivation to change added significantly to the model and in fact replaced WAI change at Step 1 as the most significant predictor, and the results are displayed below in Table 12.7.

Table 12.7

Logistic Regression of WAI change, motivation and treatment completion/non-completion

	β	S.E.	p
Constant	3.54	1.56	.02
Motivation	1.19	.36	.00

Note: $R^2 = .21$ (Cox & Snell), $.37$ (Nagelkerke). Model $\chi^2(1) = 16.18$, $p < .05$.

These results illustrate a significant association between client motivation to change and likelihood of treatment completion. For every 1-unit increase in motivation to change (1 scale point) we can expect a 1.19 increase in the log odds of a client completing treatment. In other words, as therapist-rated client motivation to change increases so does the chance of a client completing treatment. The regression correctly classified 90% of clients into completion and non-completion categories (compared to the 70% expected by chance). This is a bigger increase than WAI change, which explains why WAI change was not included in this model when the motivation variable was added.

Moderated Regression

The previous results illustrated that both individual WAI scores and WAI change scores are associated with treatment outcome but that these relationships are small at best. Therefore a moderated regression was conducted to determine if there was an interaction between WAI change and WAI at an individual time point (Time 1 in this regression) that may be accounting for some of the unexplained variance in treatment outcome. A moderated regression is a common method for assessing the influence of a third variables on the relationship between two other variables (Baron & Kenny, 1986). In this case the third variable is WAI change and it may be influencing the relationship between WAI at Time 1 and treatment outcome. The only significant result found was with the outcome variable of change on the CSSM, and that was after removing two outlying cases, suggested by SPSS case analysis. The results are displayed below in Table 12.8.

Table 12.8

Moderated Regression of WAI 1 by WAI Change on CSSM change

	B		β	R
WAI1	.60	(.22)	.44*	
WAIchange	.26	(.16)	.25	.08
WAI1xWAIchange	-.02	(.01)	-.29*	.07*
Constant	-15.49	(1.87)		

Note: Multiple $R = .39$, $R^2 = .11$

* $p < .05$

Overall the regression was significant ($F(3, 55) = 3.19, p < .05$). Table 12.8 illustrates that there is a significant interaction effect of WAI change by WAI 1 on CSSM change. Overall the model accounts for 11% of the variance in CSSM change scores. The interaction of WAI change by WAI Time 1 on CSSM cannot be easily interpreted from these statistics so a graph was used to model the effect of this interaction. Figure 12.1 displays the WAI Time 1 by WAI change moderation of CSSM change.

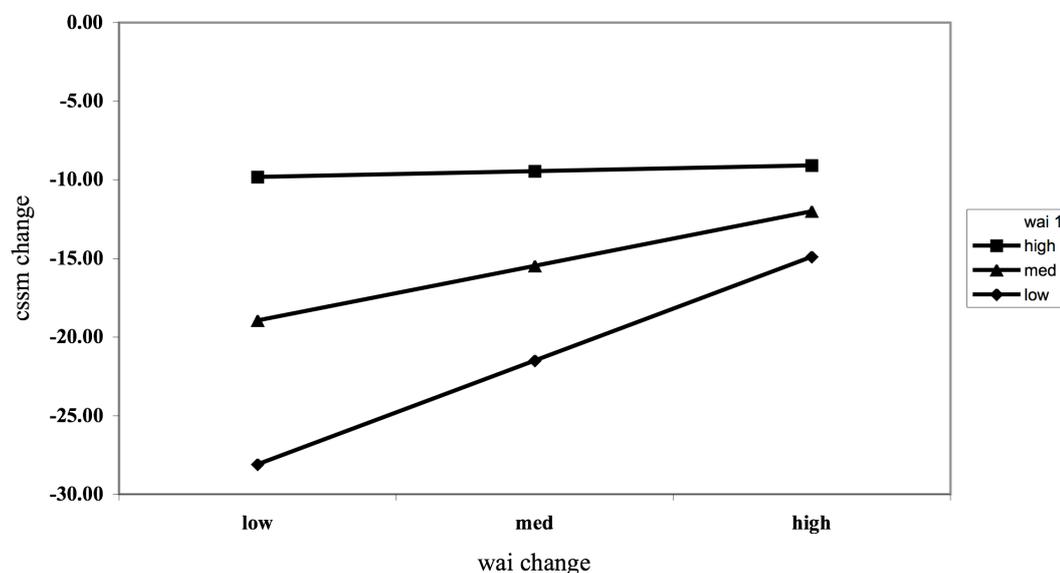


Figure 12.1. The moderating effect of WAI1 by WAI change on CSSM change

Figure 12.1 illustrates several points about the moderation effect. Firstly, the lower a client's initial WAI score the more change they make on the CSSM as evidenced by the low WAI 1 group (diamond) making the most change on the CSSM compared to the medium (triangle) and high (square) groups. Bear in

mind at this point, that we want clients to make negative change on the CSSM as this means decrease in criminal attitudes. Secondly the less change a client makes on the WAI the more change they make on the CSSM as evidenced by all of the WAI 1 score groups displaying linear slopes with the lowest point at the greatest CSSM change. Notably however, the high (square) WAI Time 1 group is only slightly increasing, indicating that for clients with high WAI scores at Time 1 there is little moderation of their CSSM change scores by their change in WAI scores. This could be a result of a ceiling effect in that they have little room to change their scores upwards. Lastly there is a unique interaction between these such that the lowest score on WAI Time 1 (diamond) coupled with the lowest amount of WAI change leads to the most change on CSSM overall.

Discussion

Significant findings from Hierarchical Linear Model analysis

The results of this study could best be described as mixed in their support of previous research linking the alliance to outcome. Most of the HLMs run did not result in significant models, suggesting that ratings of the WAI were not related to treatment outcome as measured by change in psychometrics from pre-programme to post-programme. Although two of the HLMs were significant, the actual effects were very small and suggest that something other than the TA is accounting for most of the variation in change on the VRS Stage of Change Scale. However, despite the size of the effects, a significant model was created suggesting that the TA at Time 2 and 3 has an effect on the progress a client makes on the Stage of Change scale of the VRS.

This result is encouraging as the Stage of Change Scale measures the amount of behavioural change offenders have made pre to post treatment on dynamic

variables of risk (Wong & Gordon, 2006). Considering that the VRS change score incorporates the change in the stage of change score, it is surprising that the VRS change score was not part of a significant HLM. This result may reflect the fact that I included pre-contemplation and contemplation as separate values in my Stage of Change variable, whereas they are given the same value in the VRS meaning a change from one to the other does not change the VRS score. It may be that most of the offenders are only changing from pre-contemplation to contemplation and it is this change that is predicted by the TA.

Time 2 had a positive effect; meaning that higher scores on the WAI at this time increased the amount of change on this scale. Conversely, Time 3 had a negative effect, suggesting that higher scores at this time point lead to a decrease in change on this scale. This is a puzzling finding considering that we know from Study 1b that the alliance increases from Time 2 to 3 and so we would expect that the positive effect of the alliance on outcome would continue from Time 2 to 3. This may reflect a sample size issue as more clients have dropped out by Time 3, decreasing the sample size and possibly affecting the statistical power. It is important to remember that the effects in question are small and therefore influenced by sample size.

Unsupported findings from Hierarchical Linear Model analysis

The lack of support for the role of alliance in predicting outcome in this study is in sharp contrast to the often quoted 25% variance in the general therapy literature (Horvath & Luborsky, 1993). Both of the studies that examined the effects of the TA for partner-violence treatment also found significant results, which I expected to replicate (Brown & O'Leary, 2000; Taft et al., 2003). Notably, although the study of Taft and colleagues especially was

methodologically similar to mine, both of these studies had larger samples and more concrete outcomes based on actual recidivism rates. Other studies with the general client population that find relationships between alliance and outcome often use more subjective outcomes such as client satisfaction and global client success (e.g., Safran & Wallner, 1991; Fenton et al., 2001), rather than change in selected treatment targets (e.g., change in criminal attitudes) like this thesis.

The HLMs also examined the role of client variables, therapist variables and cohesion, as possible covariates of the alliance and outcome and as direct predictors of outcome. None of these variables were found to have direct effects on any of the outcome variables, or to contribute to a significant model. Marshall and colleagues had previously found that the therapist variables of warmth, empathy, rewardingness and directiveness affected the in-treatment progress of sex offenders (Marshall et al., 2002).

In this study however, this finding was not replicated; no models including therapist variables were significant. Although client variables have mainly been linked to the alliance rather than directly to outcome, Study Two did not find support for many of these variables having an association with initial alliance and so these variables were also examined in an HLM. Furthermore, in these HLMs there were no significant effects for client variables on treatment outcome; a surprising finding considering that motivation — which was included as a client variable — was strongly predictive of alliance in Study Two, and was a predictor of treatment completion in the logistic regression in this study. The lack of significant findings may reflect the fact that the specific variables examined do not affect the alliance or outcome, but it doesn't rule out the possibility that other unexplored variables may have an effect. Sex offenders and violent offenders do

differ in their profiles, and it may be that warmth and empathy don't work with violent offenders in the same way they do with sexual offenders (Ward et al., 1996). In fact there is research to suggest that detachment is actually the best way to work with offenders with a high prevalence of psychopathy and other personality disorders as represented by this sample (Galloway & Brodsky, 2003).

Realistically the lack of findings overall in this study may also reflect the small sample size. Although HLM purports to be able to deal with small samples with missing data such as my data set, in reality HLM requires a certain number of cases to produce significant results, particularly at the group level of analysis. Hox suggested that for HLM regression models, the higher level sample size be at least 20, preferably 50, and if variance components are important, preferably 100 (Hox, 1995). My data had only seven groups at the higher level of analysis and 70 clients at the most, in HLMs that had several co-varying components. The method that HLM uses to function with missing data is actually to delete it at different levels, further reducing sample size (Raudenbush & Bryk, 2002).

Although cohesion was a covariate in the significant models, there were no significant direct effects, suggesting that cohesion does not affect treatment outcome in this study. This is in contrast to the study of Taft et al. (2003) who found that greater group cohesion during partner-violence treatment predicted lower physical and psychological abuse at follow-up. Sample size again may be an issue here, however cohesion would have only explained up to 4% of the variance based on the coefficients anyway. One reason that cohesion may not be related to treatment outcome is that a cohesive group is not necessarily a positive entity. It may be the case that in violent offender treatment, groups work

cohesively together against their therapists and the programme goals and thus cohesion is unrelated to alliance or outcome.

Significant findings from Logistic Regressions

The logistic regression indicated a stronger effect for the role of the TA in predicting treatment completion than the HLMS. Although it was a relatively small effect, the alliance was found to increase the odds of a client completing the programme, which is in itself a good result as it means the client has the full benefit of a programme that has been found to be successful at reducing recidivism (Polaschek, 2008). Motivation to change was found to increase the odds of a client completing, with an effect that was twice as large as the effect of the TA. As motivation to change was found to be significantly associated with initial alliance in Study Two, this result is not in itself surprising, and may indicate that it has both a direct effect on treatment outcome and indirect effect via the TA. The possibility of the mediating role of motivation and the alliance will be explored further in Study Four.

Significant findings from Moderated Regression

The moderated regression provided very contradictory results regarding the moderating effect of WAI change on the relationship between Time 1 alliance and the outcome measure of CSSM, which measures beliefs in criminality. These results suggested — contrarily — that the lower a clients initial alliance and the less change they make on their score the more negative change they make on the CSSM. Considering that we want clients to decrease their CSSM score this is a puzzling finding, and the inverse of what we would expect. This finding could reflect a genuine situation meaning that there is something positive in having in a low and unchanging TA that leads to a decrease in a client's belief about

criminality. Perhaps they focus strictly on the programme and aren't distracted by their relationship with their therapist? This explanation could make sense except that the TA is measured by the WAI, and we would expect that even if they ignored the bond, they would still score highly on their focus on goals and tasks. A more likely scenario is that the clients who form a weak TA, and do not improve on this throughout therapy, are more likely to fake their progress on self-report scales like the CSSM. Further analysis indicated that the average scores of all clients on an impression management scale increased from pre to post programme and certainly supports this contention. The CSSM specifically was significantly moderately negatively correlated with impression management ($r = -.32, p < .01$) showing that as impression management increases, the CSSM ratings decrease, indicating less of a problem with criminal attitudes.

In contrast, those clients with high scores at Time 1 on the WAI seemed to remain consistent across the low, medium and high change on WAI, having the same amount of change on the CSSM no matter their level of change on the WAI. This suggests that there is something about having this initial high alliance that negates the effect of change on the WAI. This could reflect the fact that there isn't much room to improve after this initial high alliance rating. Notably however, this high group did still register a 10-point change in the CSSM, indicating that they are reporting change in their beliefs in criminality, and this may be a "true" result of their positive TA. Or, more cynically, this change may reflect that they are also engaged in impression management.

Summary

Overall this study provided somewhat mixed support for the effect of the TA on treatment outcome. As discussed, several factors could account for these

findings. It could be that for this sample the TA does not affect outcome and that there are other client, therapist, or group variables unmeasured that account for this variance instead. It may be that my outcome measures are fatally flawed by being (for the most part) self-report, and therefore susceptible to clients “faking good” when using the scales. Prior analysis did find significant differences pre and post for all the measures used, but this can’t tell us whether this significant difference is the result of actual change or faked change. Perhaps there would be greater variance in scales if they truly reflected client change. My sample size is small and may be affecting the significance of the results.

One last explanation worth further consideration, may be that the TA sets up the context for a client to be able to change, but does not drive the change itself. Perhaps the TA is more of a facilitative process, necessary for change to occur but not sufficient alone to cause change (Horvath & Luborsky, 1993; Raue & Goldfried, 1994)? This explanation will be reflected on further in the General Discussion in Chapter Fourteen. On a positive note however, it was change on the VRS Stage of Change Scale that was associated with the alliance in the HLMs, and this is a measure of change on risk-related items rated by interview and file information, and is therefore a good outcome measure. Treatment completion also is simply an observed variable that cannot be faked and this was predicted in part by the TA, as was motivation.

Overall, these findings suggest that the alliance should not be completely discounted in violent offender treatment, and, along with motivation to change, should be attended to in therapy to ensure offenders get the most out of their treatment.

Chapter Thirteen:

Study Four - Modelling the Relationship Between Client Factors, the Therapeutic Alliance and Outcome

Study Objective

So far, this thesis has examined the factors that influence the establishment of the TA, the relationship between the TA and outcome, and the factors that may mediate this relationship. The objective of this study is to draw together the data from Study Two and Three and examine if the data form a viable model, and if this model fits with the results of my previous studies and the models in the TA literature.

Background Research

Bordin's theory of the working alliance between a therapist and client, made up of agreement on the goals of therapy, collaboration on the tasks needed to address these goals and a bond which facilitates this process, has been the dominant model in the TA literature (Bordin, 1979). Models of the therapeutic process have been constructed in the family therapy field. Karver, Handelsman, Fields and Bickman (2005) put forward a theory of common process factors in family therapy, incorporating client and therapist pre-treatment characteristics, client and therapist reactions and perceptions, and therapist skills, as contributors to TA and treatment outcome in their model. The model was grounded in previous theory and research from the family therapy literature. The authors then tested this model and found a number of significant relationships between these variables that were consistent with their theorised relationships, indicating preliminary support for this model (Karver, Handelsman, Fields, & Bickman,

2006). Hilliard, Strupp and Henry (2000) evaluated an interpersonal model of psychotherapy which linked client and therapist developmental history, therapeutic process and outcome. They found initial support for the model with a direct effect of client and parental relationships on process, a direct effect of process on outcome, and indirect effects of parental relationship on outcome, mediated by the process (Hilliard et al., 2000).

Research in the correctional field has been less forthcoming in terms of complete theories and models, but parts of the therapeutic process have been modelled, particularly with sexual offenders. Andrew Frost and colleagues have explored sexual offender client and treatment group factors thought to affect the engagement process, such as disclosure strategies and “out-of-group” reflection, finding tentative support for the role of these factors in explaining treatment engagement (Frost & Connolly, 2004; Frost, Daniels, & Hudson, 2006). Other researchers have looked at the minutiae of the therapy process, tracking emotional experience and cognitive mastery in sessions, linking experience and mastery to therapist-rated treatment targets, and finding support for a relationship between process and outcome (Pfäfflin, Böhmer, Cornehl, & Merhenthaler, 2005). The multifactor offender readiness model proposed by Ward et al. (2004), asserts that offenders require certain internal and external readiness conditions in order to engage in a programme (TA is part of this engagement) and to perform well in a programme, but remains untested.

As discussed in my introduction, Ross et al. (2008) have proposed a revised theory of the TA with offenders (RTTA). Briefly, the theory suggests that therapist, client and setting factors feed into the behavioural interactions in therapy, which then affect the TA as informed by Bordin’s theory. The theory

stops short of addressing the link between the alliance and treatment outcome, but as discussed previously, there is well-documented evidence that connects the alliance and treatment outcome in both clinical and offending populations (Brown & O'Leary, 2000; Horvath & Symonds, 1991; Taft et al., 2004). The results of Study Two of this thesis indicated that certain client characteristics, such as motivation and criminal attitudes, are associated with the TA. Study Three of this thesis found a small but significant association between alliance and treatment completion, and change in risk of violence. This study is intended to draw these results together to establish the best-fitting model of the relationships between client factors, the TA and treatment outcome.

Specific Method and Data Analysis

Data analysed

The data used in this study came directly from the data analysed in Studies Two and Three. Study Two results indicated that motivation as measured by the item Motivation to Change (MTC) at Time 1 and criminal attitudes as measured by the Criminal Sentiments Scale-Modified (CSSM) pre-treatment, were associated with the strength of an initial alliance as measured by the WAI at Time 1. Study Three results indicated that the WAI at Time 2 was associated with positive change on the Stage of Change Scale (SOC) taken from the Violence Risk Scale (VRS) and that the WAI change score predicted the odds of a client completing treatment, as did Motivation to Change. Structural Equation Modelling was used with these data to test different relationship pathways between variables and determine if they formed a statistically significant model.

I decided to also use the change in Violence Risk Scale (VRS) as an outcome measure. Although the VRS was not predicted by the alliance in Study

Three, change in the Stage of Change Scale was. The VRS Stage of Change scale is similar to the post-programme VRS score minus the pre-programme item rating. This means that the VRS change score incorporates the stage of change score. Therefore, it's reasonable to think that if alliance predicts change on the Stage of Change scale it may also be associated with overall change on the VRS.

Questions and hypotheses

The different models tested using the AMOS programme were informed by the results from Studies Two and Three, and the underlying questions that arose from these studies: Which time point of the WAI —Time 1, 2 or WAI change across therapy —produces the best structural equation model? Which client variable(s) — motivation or criminal attitudes or both — produce the best structural equation model and are their effects on outcome mediated by the WAI or vice versa? Which outcome produces the best structural equation model; change on the Stages Of Change Scale of the VRS, the Change on the VRS itself or treatment completion?

Based on the current results from Studies Two and Three, and theory, I expected that motivation to change would be associated with the outcome of change on the VRS and change on the SOC and that in the best model, WAI at Time 2 would act as a mediator between these variables. I predicted that criminal attitudes would also be associated with outcome, but motivation alone would be the best predictor.

Results

Models and fit indices

A series of Structural Equation Models (SEMs) were run to test the conceptual pathways between the client variables of motivation to change at

Time 1 (MTC) and pre- treatment belief in criminality (CSSM); the alliance at Time 1 (WAI1), Time 2 (WAI2) and the change in alliance (WAICHANGE) and the outcome variables of change in the Violence Risk Scale (VRS), change in the subscale of Stage of Change in the VRS (SOC) and treatment completion (COMPLETE). After treatment completion models failed to reach significance, I decided to create a variable of time to drop out (DROPOUT). By doing this, I changed the variable from a binary one that was restricting variance as it was heavily skewed (as there were 50 completers versus 20 non-completers), to a set of ordinal values that has greater shared variance (1 = dropout after time 1, 2 = dropout after time 2 etc).

As in Study One Part A and Study Two of this thesis, the fit indices utilised to test each model were the chi-square goodness of fit, the chi-square to degrees of freedom ratio, the comparative fit index (CFI), and the root mean square error of approximation (RMSEA) (Thompson, 2004). A description of these indices can be found on page 152.

Which time point of the therapeutic alliance produces the best model?

The first pathways modelled tested the influence of the different time points of the WAI, and showed client variables affecting outcome through full mediation of the TA. The pathway modelled reflected the findings from Study Two that linked MTC and CSSM to the WAI at Time 1, and Study Three that linked the WAI at Time 2 and WAI change to change in the SOC. Effectively the client variables and the outcome were held constant and the time point of the WAI was varied. Figures 13.1, 13.2 and 13.3 illustrate these models. The fit indices are displayed in Table 13.1. All figures are shown with standardised coefficients and the error terms are not pictured but were calculated.

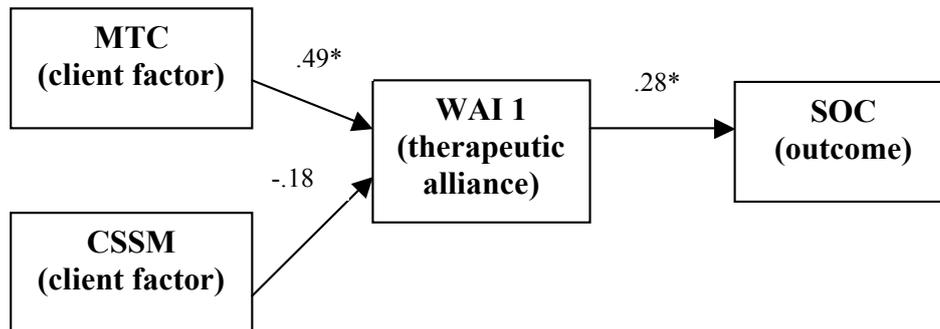


Figure 13.1 Pathway model showing client characteristics affecting treatment outcome, mediated by the TA at Time 1

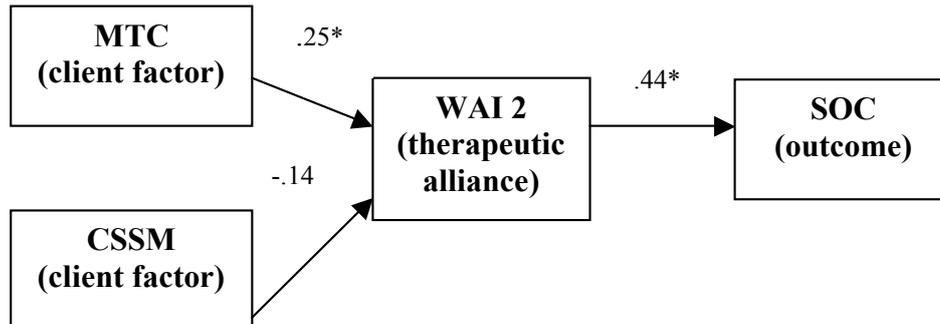


Figure 13.2. Pathway model showing client characteristics affecting treatment outcome, mediated by the TA at Time 2

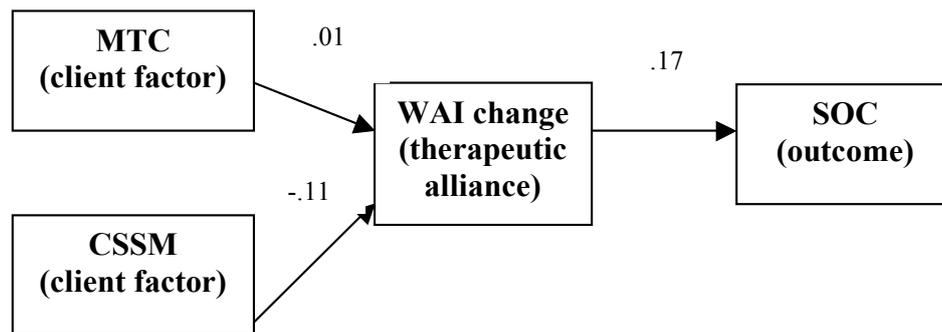


Figure 13.3. Pathway model showing client characteristics affecting treatment outcome, mediated by the change in the TA over therapy

Table 13.1.

Fit characteristics for Models 1-3 testing WAI1, WAI2, and WAICHANGE as mediators of client variables and outcome

Fit Indices	WAI1	WAI2	WAICHANGE
χ^2	4.06	3.63	6.26
df	3.0	3.0	3.0
p	.26	.31	.10
CFI	.95	.95	.00
RMSEA	.06	.04	.10

The indices in Table 13.1 show the best fit for the model was using WAI2 as the time point. This model had an excellent fit using the criteria discussed earlier; the chi square is non-significant and the chi square to df ratio is less than three, indicating that the model accounts for the variance within the covariance matrix of the model (Byrne, 1989). The CFI also indicates an excellent fit as it should be

.90 or above and this model is at .95, and lastly the RMSEA is below .05 within the “good” range for this measure (Mueller, 1996). As Figure 13.2 shows, the coefficients in the model indicated a small significant positive association between MTC and WAI2, no significant association between CSSM and WAI2 and a positive medium significant association between WAI2 and SOC.

Table 13.1 also shows that WAI1 also produced a good model, however the chi-square was larger and the RMSEA would fall within the reasonable range, indicating that it is not a superior fit to Time 2 (Mueller, 1996). The coefficients in the model in Figure 13.1 indicated a moderate significant positive association between MTC and WAI1, no significant association between CSSM and WAI1 and a small significant positive association between WAI1 and SOC.

WAICHANGE produced the worst model fit, with the largest chi-square, low CFI and an RMSEA value that would be classified as poor in Table 13.1 (Mueller, 1996). As Figure 13.3 shows, none of the coefficients in the model reached significance, suggesting no significant association between the variables. Taken together these indices and coefficients indicated that using WAICHANGE as a mediating variable produces a poor fitting model.

Which client factors produce the best model?

Having established that Time 2 was the best time point to use the WAI as a mediating variable within the pathway model, the WAI was held constant in the next series of models and I examined whether removing CSSM as a variable improved the model fit. The non-significant coefficients associated with the CSSM suggested it would be best to remove it from the model. As I had already tested the effect of both the variables, a model was run to test the effect of having

MTC as the only variable. Figure 13.4 displays this revised model and the two fit indices are displayed in Table 13.2, for visual comparison.

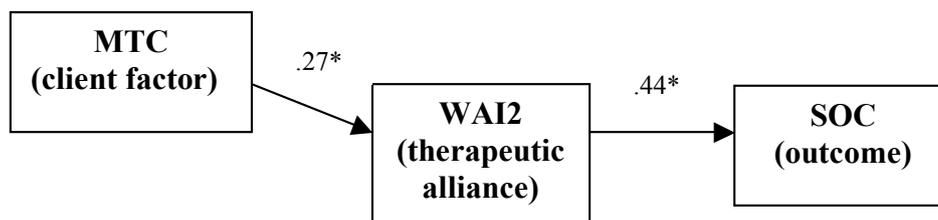


Figure 13.4. Revised pathway model with motivation to change affecting SOC treatment outcome mediated by the alliance at Time 2

Table 13.2.

Fit characteristics for the original and revised pathway model

Fit Indices	MTC and CSSM	MTC only
χ^2	3.63	.01
df	3	1
p	.31	.91
CFI	.95	1
RMSEA	.04	.00

Table 13.2 shows that removing CSSM from the pathway substantially improved the model fit. The chi-square is lower and less significant, the CFI is at 1, which is a perfect score for that index and the RMSEA is below .01, all indices indicating the model overall is an excellent fit and superior to the original. While this model appeared to be a superior fit, the removal of the CSSM variable meant the parameters of the model changed, which affected the chi-square fit index. To test the difference between the models, the difference between chi-squares (and

their associated degrees of freedom) was calculated. There was a non-significant improvement in the goodness of fit of the model minus CSSM compared to the CSSM-inclusive model ($\chi^2_{diff}(1) = 3.62, p = .06$). This meant the models could not be differentiated based on the chi-square value. However, as Figure 13.4 shows, the coefficients are significant in this model and the coefficient of the path between MTC and WAI2 is slightly larger than the coefficient in the CSSM-inclusive model.

Which outcome measures produce the best model?

So far, an excellent pathway model has been constructed with WAI2 and MTC, so the next step was to hold constant the client variable and the time period of the WAI and to vary the outcome. Three additional pathway models were constructed using the outcome of change on the VRS, treatment completion and time to dropout. The models are displayed in Figures 13.5-7 below. The original model using SOC is included again in Table 13.3 for visual comparison.

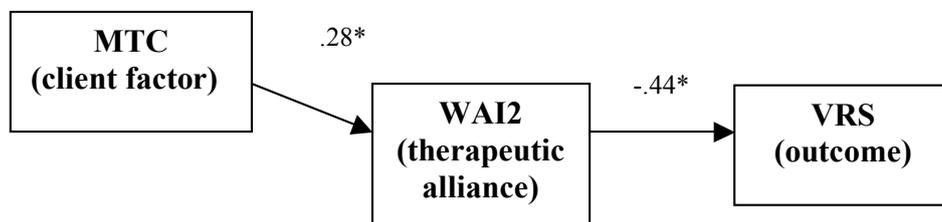


Figure 13.5. Revised pathway model with motivation to change affecting VRS treatment outcome mediated by the alliance at Time 2

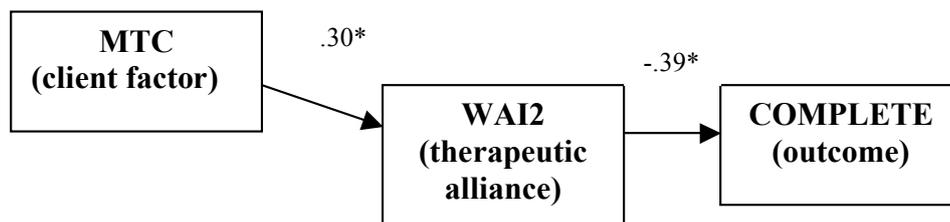


Figure 13.6. Revised pathway model with motivation to change affecting treatment completion outcome mediated by the alliance at Time 2

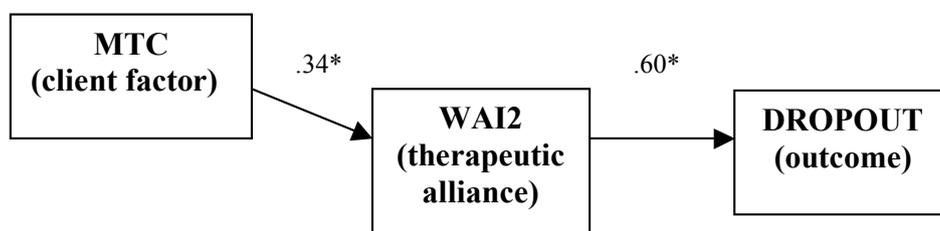


Figure 13.7. Revised pathway model with motivation to change affecting treatment dropout outcome mediated by the alliance at Time 2

Table 13.3.

Fit characteristics for the models varying treatment outcome measures

Fit Indices	SOC	VRS	COMPLETE	DROPOUT
χ^2	.01	.04	4.17	2.47
df	1	1	1	1
p	.91	.83	.04	.12
CFI	1	1	.68	.87
RMSEA	.00	.00	.18	.13

Table 13.3 shows that using the VRS change variable produced an excellent model fit, suggesting that the alliance is mediating the relationship between motivation to change and change in a client's level of risk estimated by the VRS. Figure 13.5 shows that the coefficient is significant between WAI2 and the VRS and the same size as the SOC, but it is in a negative direction: as scores on the WAI increase, the client decreases their risk of violent reoffending. Treatment completion did not produce an adequate fit, with a significant chi-square, a low CFI and a poor RMSEA index. The coefficient in Figure 13.6 between WAI2 and COMPLETE was medium and significant however, suggesting an association. The fit was improved when time to dropout was used instead of treatment completion. However the result could only be described as adequate, rather than a good fit for the data. As Figure 13.7 illustrated, this improvement was mirrored with the coefficient between WAI2 and DROPOUT, as this was large and significant suggesting a strong association between these two variables.

What is the causal direction of this model?

The results so far have suggested that a conceptual pathway can be modelled between a client's motivation to change at Time 1, and the outcomes of change on the VRS and change on the Stages of Change Scale associated with the VRS, and that this relationship is mediated by the TA at Time 2. However, the pathway model infers associations rather than causality and it is not possible to establish whether motivation is predicting alliance or whether alliance is predicting motivation. The benefit of this dataset is that measures were repeated across time and so it was possible to construct a pathway model to examine the effect of the alliance at Time 1 on outcome as mediated by motivation to change at Time 2.

Figure 13.8 displays this converse directional relationship. Table 13.4 compares the existing model examined in Table 13.3 with the converse model displayed in Figure 13.8.



Figure 13.8. A pathway model of motivation to change at Time 2 mediating the relationship between alliance at time 1 and VRS change

Table 13.4

Fit characteristics for the original and converse pathway model

Fit Indices	Original	Converse
χ^2	.04	.98
df	1.0	1.0
p	.83	.32
CFI	1.0	1.0
RMSEA	.00	.00

Table 13.4 shows that the converse model does work and the fit for this model is almost as good as the original, although the chi-square is higher and the p-value lower, suggesting the original is superior on this index of fit. The coefficients for the model in Figure 13.8 are small to medium and significant and suggest that the TA at Time 1 had a significant moderate effect on motivation to change at Time 2 and that motivation at Time 2 had a significant small effect on

change in risk of violent reoffending, decreasing level of risk. This result indicated that motivation to change may be mediated by alliance, but it may also be a mediating factor for the alliance as well.

Discussion

Therapeutic alliance time point

The results of this study are promising as they show several pathway models with excellent values on the fit indices used to test the models. The results illustrated that the alliance at Time 2 was the best mediating factor in the models. This result fits with the results from Study Three and adds to the evidence so far, suggesting that the alliance at Time 2 in the programme is most strongly associated with outcome. This finding is in contrast to the dominant view that the earliest alliance ratings are the most predictive (Horvath, 1994b). Study One Part B showed the alliance increased significantly from Time 1 to Time 2 in this sample, and it may be that violent offenders, who can be mistrustful of authority figures, take longer to trust their therapists and hence longer to form an alliance (Taft & Murphy, 2007). The change in WAI scores did not produce a good fitting model, suggesting that individual time points, such as Time 2, are more related to outcome and client variables than the alliance change process. Again, this result could reflect that at Time 2 some clients catch up with those who begin treatment with a high initial alliance. Although Study Three did find that the change in WAI predicted treatment completion, this was only a small effect. Again, Study One Part B may shed some light on this finding, as apart from the large increase from Time 1 to 2, the alliance did not make much change over the next time points, and was also uniformly high. This finding may reflect a lack of variance

in change, which would explain why change did not contribute significantly to the models and to outcome.

The role of motivation

The present study also illustrated that therapist ratings of client motivation to change plays a significant role in the relationships between alliance and outcome. Motivation to change was also the most significant predictor of outcome in Study Two so this result is not surprising. As discussed previously, motivation has been found to play a role in the alliance in various other studies, including those looking at the treatment of partner violent men (Hiller et al., 2002; Taft & Murphy, 2007; Taft et al., 2004) and has been theorised to be an important predictor of change for offenders (Ward et al., 2004).

It was hypothesised that alliance at Time 2 would mediate the relationship between motivation and treatment outcome; but the converse model was also an excellent fit suggesting that motivation may act as a mediator between alliance and outcome. Considering that both motivation to change and TA change through therapy (which is why they were measured at different time points) this result is not surprising. It seems from these results that a reciprocal relationship exists between these factors and this could be further tested in future studies, using a cross-lag correlational model. In the first case, if a client is motivated to change before they begin therapy they are more likely to form a good alliance as they view the goals and tasks as worth pursuing, and see the value in forming a relationship with a therapist in order to pursue the goals and tasks, and this then affects the change in their risk of reoffending. Therapists will also find it easier to form a relationship with a client who wants to reduce their reoffending, and is willing to work hard in therapy to achieve this goal. In the second case, a less

motivated client may form a positive initial alliance, which then facilitates their motivation to change and leads to change in their risk of reoffending.

The role of criminal attitudes

Although the model was improved when CSSM was removed, this variable did still produce a good fitting model. As discussed in Study Two, less is known about the effects of criminal attitudes on alliance, but they are linked to the recidivism of high-risk offenders (Andrews & Wormith, 1984; Wilson, 2004). It is also logical to conclude that if a client enters therapy with attitudes supportive of criminality, they may be less inclined to form an alliance with a therapist whose role is to dissuade them of these attitudes and be less inclined to make positive changes in their level of risk.

Outcome measures

The results illustrated that this model could be applied to different categories of outcomes: the SOC and VRS, and treatment completion and dropout. The fact that change in the VRS scores also fit this model is logically valid. As mentioned, although the stage of change scale is separate from the VRS in that it removes the pre-treatment item scores, the stage of change is a part of the VRS post-treatment score (Wong & Gordon, 2006). Therefore I expected that if alliance were associated with the SOC it would also be associated with the VRS. Essentially, these results mean that motivation to change and the alliance are associated with behavioural change on variables in the VRS and with change in risk of violent reoffending. This change in risk of reoffending is closely connected to recidivism, as the VRS is a violence risk assessment tool (Wong & Gordon, 2006). This is the ideal outcome measure to find an offender making changes on in relation to their alliance, as it can act as a proxy for recidivism, and

therefore it is possible to speculate that alliance may have an effect on recidivism in this sample.

Treatment completion did not help to create a viable model, although, as discussed, this is likely due the variable being skewed due to a low number of non-completers. Using time to drop out as an ordinal variable did increase the fit of this model, and the coefficient between the alliance and this outcome was large and significant, suggesting that time to drop out (and hence completion/non-completion) may be associated with motivation and the alliance. This was still not a “good” fitting model though, reflecting either that motivation and the alliance are not associated with dropout, or more likely, that there are still not enough dropouts in this sample to make this association significant.

Comparing results with the RTTA and other models

In comparison to the RTTA theory proposed by Ross et al. (2008) the pathway models produced in this study are somewhat simple and lacking in depth. Most notably absent are the therapist personality and professional variables, the behaviours displayed by clients and therapists in therapy, and setting factors. Unfortunately the therapist’s attachment and their level of experience in therapy were unable to be tested at all in this thesis due to sample size and so could not be included in these models. As Study Three displayed, neither the therapists’ or the clients’ behaviours in therapy co-varied with the relationship between alliance and outcome and so these were also not included in the model. Although cohesion was measured as a setting factor, this variable too has not been a significant factor in my previous studies and so was also not included in this study.

These results do not disconfirm the model proposed by Ross et al. (2008) however, but rather can be seen as supporting part of the theory. Essentially this study confirms the importance of a client's personal attributes in relation to the working alliance, in particular their level of motivation to change, and the strength of their belief in criminality. Motivation particularly is mentioned as an important client factor in this model, and is argued to affect the formation and maintenance of a TA in offender therapy (Ross et al., 2008). The results also support other models proposed in the literature. Karver et al. (2005; 2006) incorporated client characteristics in their model and willingness to participate in treatment. The direction of the models found in this study mirror the direction of Hilliard et al.'s (2000) model with indirect effects of client characteristics on treatment outcome mediated by process variables. The models found in this study also reflect part of Ward et al.'s (2004) model in that client attitudes and motivation are theorised to affect the TA and programme performance.

Summary

The objective of this study was to draw together the data from Study Two and Three and examine if the data formed a significant model, in line with previous studies and the existing models in the TA literature. The models produced by this study lend weight to my previous findings and the RTTA model proposed by Ross et al. (2008). These results suggest that motivation to change is an important client characteristic that deserves attention in relation to the effect it has on the TA and outcome. These results also support the results from Study Three that linked the TA and outcome. The General Discussion that follows will further examine the implications of the results from this study.

Chapter Fourteen:
General Discussion

Thesis aims and objectives

The objective of this thesis was to address the current lack of attention paid to therapy process in the treatment of violent offenders, by examining the TA and its relationship to treatment outcome in a violence prevention programme, including the factors that influence the formation of the alliance and mediate the relationship between alliance and outcome.

As stated in the introduction, the main research questions driving the analysis were:

1. What factor structure does the WAI take in this study? Does the factor structure change by rater perspective?
2. Do alliance levels shift over time? What pattern do they create (e.g., linear, U-shaped)?
3. Do client, therapist and observer ratings differ in their pattern across time?
4. Which client, therapist, interactional and setting factors affect the TA?
5. Does TA affect treatment outcome? Which measure of outcome is the most affected?
6. Which time point of the WAI is the most predictive of outcome? Which rater perspective is the most predictive of outcome?
7. Is the relationship between alliance and outcome mediated by other factors such as group cohesion, or client and therapist behaviour?
8. Do the overall findings form a model and is it supportive of the RTTA model?

Study One explored the structure and patterns of the WAI. Part A was a Confirmatory Factor Analysis of the WAI, which tested the competing models of the factor structure of the WAI and explored whether rater perspective had an effect on the structure. Part B explored the pattern of the WAI over the four time periods of this study in order to understand how the WAI changes over time and whether this pattern differed by rater perspective. Study Two explored the client factors associated with the strength of the TA early in treatment, and examined whether these factors were specific to an “offender” or “general” client profile informed by previous research. Study Three examined the relationship between the TA and treatment outcome, and explored whether there were any factors that co-varied with or moderated this relationship. Study Four drew together the data from Study Two and Study Three and tested whether these results supported the RTTA model (Ross et al., 2008), or other models previously reported in the literature. Although not all of the questions posed in the introduction have been answered completely, the studies that addressed these questions have produced significant results worthy of further scrutiny.

Conclusions and contrasts: Significant results from the studies

Similarities of rater perspectives

Several themes emerged from the results of these studies. The first of these was the strong similarities between the client, therapist and observer perspectives of the WAI. In Study One Part A the results revealed support for a two-factor model of the WAI. This result was consistent with previous research, (Andrusyna et al., 2001; Hatcher & Barends, 1996) and was easily accommodated theoretically; the WAI can be viewed as consisting of two distinct constructs: one reflecting the “work” of therapy, and the other, the relationship or “bond”

between a therapist and client. What was surprising about this study was that data from all of the rater perspectives, reflected the same pattern, favouring a two-factor structure over a one-factor structure.

This result suggests a perspective of the TA that is shared by offenders, their therapists, and an observer of this relationship. A shared perspective of the TA is in contrast to a raft of research pointing to differences between therapists' and clients' views of the alliance (Bachelor & Salamé, 2000; Hersoug et al., 2001; Taft et al., 2003), though some researchers have also failed to find differences by rater perspective in factor structure (Corbiere et al., 2006; Hatcher & Barends, 1996). As discussed in Study One Part A, there are certain personality characteristics of offenders that I hypothesised would lead them to have a more global view of the alliance, such as a tendency for "all or nothing" thinking (Howells & Day, 2006). However, my results suggest that offenders view the alliance construct the same way as their therapists, separating the work of therapy from the pure "relationship" factors.

The results of Study One Part B added weight to the evidence that the raters from different perspectives are sharing the same view of the alliance. In this study the time course of the alliance across therapy was examined. Raters from all three perspectives were found to be rating consistently highly and showed the same pattern of changes across time. This result confirms that all of the raters are not only experiencing the alliance as the same general construct, but are also agreeing on the way that the TA progresses through time. This finding was in contrast to the previous research of Golden and Robbins (1990) and Horvath and Marx (1990) who found a different course described by therapists and clients. Although in my study there was a significant difference by perspective, this was

reflective of the level of the scores rather than the pattern over time. As expected, clients gave the highest ratings overall and although they did not reach a ceiling effect, client ratings were notably higher than the therapists and observers. This difference may reflect the offender's fear of sanctions for rating low, a "rose-tinted glasses" scenario whereby they are proud of the work they are doing and reflect this on to the alliance ratings, or a straightforward acknowledgement that they felt they had great relationships with their therapists. Observers had the lowest alliance scores, but still in the high range, reflecting a more balanced outsider view, perhaps reflective of their objective stance outside the TA. Therapists' ratings were close to the observer raters, perhaps reflecting the fact that they are able to hold a more neutral view of the relationship because of their training and experience.

A linear pattern of WAI across time

The pattern of the WAI across time, for all rater perspectives, was linear, with a noticeable jump between Time 1 and 2 and a slight plateau effect at Time 3. This pattern has been replicated by other researchers (Horvath & Marx, 1990; Kivlighan & Shaughnessy, 1995) while others have found a U-shaped pattern for the data (Golden & Robbins, 1990). The pattern of my results made sense in the context of the programme and the programme participants. As discussed in the study, offenders often have deep-seated trust issues that can affect how they view professionals in a helping role (Taft & Murphy, 2007). Added to these issues, it is worth considering the nature of the programme they are entering into. The subjects in this study are violent, often psychopathic men who have spent an average of eight years in prison. When they enter the RVPU suddenly they are expected to sit in a room with nine other violent men, and listen to the advice of

(on average) two younger women telling them they need to drastically change their way of thinking and behaving. Not only that, they have to work in therapy and out of therapy, in what is essentially a school-like learning environment, which many have not encountered since the age of 15 or earlier. Considering this context, it makes sense that the initial alliance ratings are lower (although still relatively high) in what is only their sixth session of therapy, before they get used to the setting, their group, their therapist and a whole different model of thinking about their violent offending.

The power of the “Time 2” therapeutic alliance rating

What was surprising about this study however, and in contrast to predictions, is that the alliance was rated so highly at the Time 2 rating point, which occurred after what is generally considered by the offenders and therapists to be the most difficult part of violent offender therapy; the offence chain module. This module requires the offenders to examine their latest current violent offence in detail, to break down and lay out all their emotions, thoughts and behaviours around that incident, strip away their rationalisations and then present this “chain” to the treatment group and hear critical feedback. This module finishes just before the second ratings and so I would have expected some therapeutic ruptures to occur at this point amidst this challenging environment. These ruptures could be caused by therapists needing to challenge clients who are not used to being challenged, by the high levels of emotion aroused by examining their offence, or by therapists’ negative reaction to these offences. However, the opposite seems to happen at this point with high ratings of the alliance. It may be that at this point of the programme, when they have to face up to their crimes, the offenders start to realise that they need to work on their offending (goals and tasks) and that the

therapists are here to help them do this (bond). This realisation may result in a stronger alliance, which is then recognised by the offenders, therapists and observers and rated accordingly. Offenders who would have experienced therapeutic ruptures may also have dropped out by this point, or drop out during this module, meaning only those with a positive alliance remain in the programme. However, out of the sample of 70 clients, only two men overall dropped out during this module, and nine before the module, which probably would not have significantly affected the results.

The current recommendation among TA researchers is to examine the alliance early, and research has found early alliance is predictive (Bachelor & Salamé, 2000; Fenton et al., 2001; Safran & Wallner, 1991). However, this was not the case with my data. In fact, Time 2 was the most predictive time point of the TA. In Study Three, Time 2 ratings formed significant models, accounting for (albeit) a small amount of variance in the Stage of Change scale on the VRS. Therefore, WAI ratings at Time 2 were the most strongly associated with change in the Stage of Change data. In fact at other time points the WAI seemed to have a negative association with outcome. Time 3 and Time 1 WAI were negatively linked to change, with Time 3 WAI associated with a significant but slight decrease in change on the Stage of Change measure, and a low score at Time 1 interacting significantly with low change on the WAI to be associated with the most negative change on criminal attitudes (the desired direction of change on this measure). Only WAI change scores were associated with positive outcome, with WAI change associated with the odds of a client completing treatment.

Time 2 also seemed to also be the “magic” time point in Study Four for WAI ratings, producing significant, well fitting, mediation models between Motivation

To Change and change on the VRS. Although ratings of alliance were still relatively high at Time 1, there was a significant increase at Time 2. As mentioned, perhaps after Time 2, the client and therapist have had time to “settle” in to the work of therapy, working on tasks to achieve the agreed upon goals of therapy, and liking the other enough to form a bond.

The significant role of a client’s motivation to change

Another recurrent theme of this thesis was the predictive power of the therapists’ ratings of the clients’ motivation to change. In Study Two Motivation To Change was the most strongly associated with the strength of an initial TA at Time 1. It was the only predictive factor in the regressions and was accounting for between 22% and 29% of the variance in WAI ratings at Time 1, in both the subscales and the total, suggesting motivation is not only associated with a client’s and therapist’s ability to work together on goals and tasks, but their ability to form a bond.

Study Four confirmed this result and found that the variable Motivation To Change measured at Time 1 also affected the WAI at Time 2: MTC’s effect on change in an offenders risk level was mediated by WAI ratings at Time 2. Study Four added to this result by confirming that the effect of alliance on change in an offender’s risk is also, in turn, mediated by a client’s level of motivation. This kind of bi-directional relationship has not previously been explored in this area, with most studies finding baseline motivation predicted the strength of early alliance, rather than alliance predicting later motivation (Taft et al., 2004), however it does make sense for this data set. Firstly, both the alliance and a client’s motivation to change are dynamic factors likely to change throughout therapy and likely to influence each other. As discussed earlier, if a client comes

into therapy motivated to change and address their problems, they are more likely to agree with their therapists that they need to change their offending, work on the tasks laid out in the programme that help to reduce their re-offending, and are more inclined to view their therapists favourably, as someone who can help them make this change. This is the idealised version of this relationship perhaps, but one that is consistent with the results of Study Two.

It is important to keep in mind though that this kind of correctional treatment programme is “semi-pressured” and often a client will enter therapy more motivated to get parole than motivated to change (Day et al., 2004). In this case, perhaps they are not motivated to change at first, but easily form a bond with their therapists and come to realise they need to work on reducing their reoffending and start to work on these tasks. This positive alliance that develops then positively influences the client’s motivation to change their offending behaviour. Many other studies have found that motivation affects the alliance in clinical and community violence treatment settings (Derisley & Reynolds, 2000; Hiller et al., 2002; Joe et al., 1998; Taft et al., 2004) but none have looked at violence treatment in a correctional setting, so this is a significant finding in this field, with important clinical implications that will be discussed shortly.

The role of a client’s criminal attitudes

Although not as powerfully predictive as motivation, the role of an offender’s criminal attitudes was also a recurring theme in the results of my studies. In Study Two, the CSSM scores, which measure how much a client endorses criminal sentiments, were correlated with the initial working alliance scores, and formed a significant model along with motivation in the structural equation model. The CSSM is a well-established measure that has been found to

predict violent recidivism (Andrews & Wormith, 1984). The theoretical idea behind the scale — that an offender’s level of antisocial cognitions affects recidivism — is well established and empirically supported (Andrews & Bonta, 2003). In fact, along with antisocial associates, personality and history, antisocial cognitions are known as one of the big four dynamic predictors of risk for a client (Andrews & Bonta, 2003; Andrews & Wormith, 1984; Wilson, 2004). Antisocial cognitions have also been linked to a clients “readiness” for treatment, so perhaps it is not surprising that they seem to work in tandem with motivation in correlating with an initial alliance (Ward et al., 2004). Considering a large part of treatment at the RVPU is targeting attitudes and thinking (Changing Thinking is the second treatment module of this programme), it makes sense that the pre-treatment level of criminal attitudes will affect a clients willingness to agree on goals that purport to change these beliefs, and those with high levels of criminal attitudes may find it harder to agree on this goal and be less likely to work on tasks that address it.

Outcome measures associated with the therapeutic alliance

While, realistically, the results of Study Three were equivocal in their support for the TA as a predictor of outcome, taken together with Study Four, two outcome measures stood out as at least having a strong association with the TA. The first of these was the Violence Risk Scale (Wong & Gordon, 2000) . This is a recently developed scale, but it is already showing promise as a predictor of violent recidivism (Wong & Gordon, 2006). What is exciting about finding a relationship between the WAI and the VRS is that in the absence of actual recidivism outcome data, the VRS is a good proxy for both violent and general recidivism (Wong & Gordon, 2006), making it a good outcome measure

to use with a violent offender population. I did use change in the VRS however, and a change in the VRS has not been linked to recidivism yet. Study Four, while not employing a causal design, did find a strong association between alliance and change on the VRS with alliance mediating the relationship between motivation and change on the VRS.

The Stage of Change Scale that was separated out from the VRS was also a significant outcome measure both in Study Three and Study Four. This scale is a separate measure of the stage of change a client is at (e.g. pre-contemplation, contemplation, action, maintenance) on a particular dynamic variable in the VRS, based on Prochaska and DiClemente's (1983) theory. A client's stage of change has previously been linked to the formation of initial positive alliance (Derisley & Reynolds, 2000). Although in Study Three the WAI only led to a small increase in the Stage of Change Scale change scores, this is still a promising finding as it suggests that the alliance can affect a client's progress in changing their offending-related risk factors.

Treatment completion and time to drop out were also predicted by, or associated with, the TA. Treatment completion is a good indicator of client progress as, by completion of the programme, they have eight months worth of work behind them, and a safety plan for release, both targeted at preventing them from reoffending. In Study Three the change in WAI over time was found to predict the odds of a client completing treatment. This result suggests a positive alliance can act as a protective factor for clients throughout therapy, stopping them from doing the things that either get them kicked out of the programme (drug-taking, assaults, stand-over tactics), or lead to them choosing to leave the programme (being bored, being dissatisfied with programme content, disliking

their group or their therapists). In this way, not only are clients able to learn more from the programme by staying longer, but by forming a good TA they are getting the chance to actively practice the skills they need to avoid violence in the programme and upon release. Previous research has also linked a positive alliance to treatment completion for partner-violent men, particularly agreement on the goals of therapy (Taft & Murphy, 2007). The implications of the TA as a protective factor will be further examined later in this discussion.

In Study Four however, treatment completion did not form a good fitting model. I hypothesised that the binary nature of the variable may have led to a skewed distribution due to the small number of non-completers, so I created the time to dropout variable. Operationalising completion as a time to dropout variable did improve the model and an adequate model was created, suggesting that motivation may affect the time a client takes to drop out, mediated by the alliance at Time 2.

Modelling the therapeutic alliance

In relation to the RTTA theory proposed by Ross et al. (2008) the pathway models produced in Study Four were somewhat simple and lacking in depth, and much of the theory remains to be tested, as will be discussed shortly. Briefly, the theory suggests that therapist, client and setting factors feed into the behavioural interactions in therapy, which then affect the TA as defined by Bordin's theory (Ross et al., 2008). The results did not disconfirm the model proposed by Ross et al. (2008), but rather can be seen as supporting part of the theory. Essentially this study confirmed the importance of a client's stable dynamic features in relation to the working alliance, in particular their level of motivation to change, and the strengths of their belief in criminality (Ross et al., 2008). The results also

supported other models proposed in the literature, as discussed in Study Four. Karver et al. (2005; 2006) incorporated client characteristics in their model and willingness to participate in treatment. The direction of the models found in this study also mirrored the direction of Hilliard et al.'s (2000) model with indirect effects of client characteristics on treatment outcome mediated by process variables. The models found in this study also reflected part of Ward et al.'s (2004) model in that this model theorises that clients' attitudes' and motivation affect the TA and programme performance.

Summary

In summary, the studies provided a small but powerful set of significant results, suggesting that all raters share the same general view of a two-factor, linearly progressing alliance; that an initial alliance is affected by a clients motivation and level of criminal attitudes; and that this alliance, along with motivation, has a small but significant association with outcome as measured by change in the VRS, change in the Stages of Change Scale and treatment completion.

Collecting "real-world" data: Limitations and challenges of the data set

Benefits

Collecting real world longitudinal data like these has many benefits; the data are "live" and an immediate reflection rather than a second hand account of events. The results have real value and worth in their application (e.g. do not need to theorise about how a result from a student would look in an offender setting), the results are across time so we can look at changes and treat variables in a dynamic rather than a static way, and the database is rich with information for future analysis (Weiss, 2005).

Operational challenges

There are also inherent challenges to this kind of data collection though, and the first of these is really an operational challenge. In experimental data, groups of subjects can be run to be as close as possible to each other in their group make-up, running time, and attrition (Weiss, 2005). However, at the RVPU, each of the groups in the programme were run at a different time throughout the year, to a different schedule and with their own timetable and staff changes. This meant that the timing of ratings would sometimes have to be changed because the group was not running that day, there would be a security lock-down, or a group session would be changed to an individual session. This uncertainty led to me only being able to target the time points in weeks, rather than exact session numbers for example.

Sample challenges: Size, attrition and normality

The most significant challenge that has been a recurring theme in this thesis is sample size. Although I collected data for almost three years, the sample size was still relatively small, and this was mainly due to systems factors beyond my control. Over the time-line I collected data, technically there should have been nine groups, but groups ran late, or needed to be pushed back to the next funding round, or started late because of staff shortages. These factors meant there were only seven groups in that time and therefore 70 men at the most.

Attrition is also a problem with real-world data and contributed to the sample size. Therapists leaving the unit during the programme were a potential problem as this meant that the individual ratings from that person were not complete, but averaging therapist ratings dealt with this problem as there was always one therapist rating at all times. Client attrition was a more serious

concern, as an alliance cannot be rated when a client leaves the programme, and this reduced the sample size, particularly with ratings taken late in the programme. The client subject pool willing to rate the alliance was small in the first place with only two thirds agreeing to be “active” raters of the alliance. It was sometimes difficult to engage offenders to take part in the study for a range of reasons; often they were not motivated to begin therapy and so weren’t motivated to take part in the study, they were suspicious of the “real” motive behind the study, or they felt the study would detract from their focus on the programme and on attaining parole. The main strategy used in this thesis to counteract these limitations was to use the observer data, as this was the most complete set of data, due to no attrition of the observers.

Ideally a sample should also produce normally distributed data, but Study One Part B illustrated that this was not the case with my data. Normality of data is also difficult to guarantee with real-world data as it relies on a representative sample of participants providing a range of responses, to produce enough variance across the sample to follow a normal distribution (Tabachnick & Fidell, 1996). In my data, there was significant skew and kurtosis as many participants, particularly the clients, rated the alliance uniformly highly. A transformation was trialled, but as this made little difference to the skewness and kurtosis, and would have made analysis complicated, it was decided to leave the data untransformed (Tabachnick & Fidell, 1996). This lack of normality may have affected some of the results that rely on an assumption of normality such as the repeated measures ANOVA, and a normally distributed set of data may possibly have led to more significant results in some studies. In saying this, the reality may be that for this type of sample, the data produced is “normal.” The studies reviewed in this thesis

have not reported normality of distribution to be an issue, but this does not mean that it has not been an issue; perhaps they are simply choosing not to comment on it.

Self-report measures

For the most part, the outcome measures used in this study were self-report and came from the battery of tests the men routinely fill out before and after the programme, the results of which are part of their parole report. Although this provided a rich database, it meant that men were filling out measures which they knew were going to affect their parole chances, therefore, men may have exaggerated their scores in a pro-social direction at pre or post testing. As noted, in support of the possibility of exaggerated responses, the Impression Management scale, which measures the amount an offender is being dishonest in order to look good, increased from pre to post programme (Paulhaus, 1984). This may be why the significant results we did find were with non-offender rated measures like the VRS and treatment completion. Although the debate continues over whether offenders consistently “fake good” as they are presumed to do, a recent study with violent offenders did find that offenders high on impression management reported lower antisocial attitudes suggesting that this does occur among violent offenders (Mills & Kroner, 2006). Impression management was also significantly correlated with the criminal attitudes measure in my thesis, mirroring this result.

Also, after so long in prison, the men are used to putting on a good front for professionals, and they may have seen me in this light. I did supervise some of the pre and post-programme psychometric measures as a way of gaining rapport, before approaching them to take part in this study. Despite reassurance that the

WAI ratings were not connected to the programme, I may still have appeared as a person of authority, which could have inflated WAI ratings for example, affecting normality and the validity of my results. It may have been beneficial at the time to ask the offenders if this was the case and is something to bear in mind for future research.

Self-report scales also rely on these men having the cognitive capacity to understand the questions, to self-analyse and to quantify their responses using a numerical scale. As noted earlier most of the men have ten years or less of formal education, meaning it is likely they may struggle with these tasks and thus be unable to accurately complete these scales.

After so long in prison, away from the temptations in the outside world, men can also feel they have made changes to their lives simply because they have not had access to these temptations. This is known as temporal self-appraisal theory; people believe they have become better simply because of the passing of time, attributing success to internal factors and failure to situational factors (Ross & Wilson, 2003). This misattribution could mean that men overestimate the amount of change they have made before they even begin the programme.

Summary

Ideally this study would have had at least 90 men, there would have been less self-report measures or at least measures taken separately from the programme and administered by someone unconnected to the programme, and groups would have run with the same therapists and along the same time line. The challenges and limitations outlined may have affected the results of the studies, particularly the results I expected to find in this thesis that were not evident in the analysis.

Unanswered questions: Expected results and directions for future research

The weak relationship between therapeutic alliance and outcome

While significant associations were found between the TA and some measures of treatment outcome, these results were not comparable to the strength of relationships found in previous studies. So why was this relationship not as strong in this thesis? The alliance was rated highly across rater perspectives, suggesting that therapists and clients formed strong positive alliances with each other. There was also positive treatment change in this sample as evidenced by significant change in scales from pre- to post-treatment. Leaving aside issues of sample size, use of self-report and other limitations; these results could suggest that there is no relationship between these variables, or perhaps the relationship is just not as straightforward as a direct association.

The TA is seen as a *facilitative* process by many theorists, particularly in terms of the role of the TA in CBT (Horvath & Luborsky, 1993; Raue & Goldfried, 1994). In other words, the TA may not be sufficient in itself to engender change in therapy, but it is a necessary condition in which change takes place. Raue and Goldfried (1994) use the analogy of therapy as surgery, and the alliance as anaesthesia; the success of the surgery is not dependent on the anaesthesia, but it cannot happen without it. Perhaps this is the case in this thesis; the TA is setting up the environment in which offenders are able to make change, but does not directly cause this change. The way in which the alliance may act to facilitate change has been theorised in terms of reinforcement, modelling, motivation and rupture resolution (Raue & Goldfried, 1994; Safran & Muran, 1996).

The concept of reinforcement refers to the strength of a positive TA giving therapists an increased ability to influence client behaviour and engagement in therapy (Raue & Goldfried, 1994). Perhaps, in settings like the RVPU, the TA may help to give a therapist status or “mana” in a treatment group. Many of the men in treatment may have gained a sense of status through prison hierarchies or through their gang affiliations; so a therapist gaining their respect as a leader could be key in persuading them to change.

Another key process may be modelling; the therapist models behaviour through the alliance, which then leads the client to make positive change (Raue & Goldfried, 1994). Ironically, opportunities for modelling may actually be facilitated by the TA becoming strained or ruptured (Safran & Muran, 2000). In Chapter Three of the introduction I discussed the concept of a client’s interpersonal schemas, and the therapist’s role in disconfirming these, to avoid ruptures in the alliance (Safran & Muran, 1996). If a therapist can recognise when ruptures are occurring, and actively work against these schemas, they can model a positive and constructive interpersonal interaction to the client, which can help the client to modify their schemas (Safran & Muran, 1996). In the RVPU, changing core beliefs or schemas is a key goal of the programme, so the alliance may be working in this way. Further to this, in a group setting like the RVPU, the therapist could also use ruptures with a client as a talking point to discuss how to resolve disagreements in a pro-social, constructive way. This may help clients to interact pro-socially with other clients in the programme, preventing misconducts that lead to dropout. Earlier results connecting alliance and time to dropout support this idea.

The TA may also help to foster change through motivating clients and helping them to overcome resistance (Raue & Goldfried, 1994). In the RVPU especially, many clients are resistant to the idea of therapy, they do not choose to be there, rather they are there because they need to be there to gain parole. The TA may smooth out their resistance and motivate them to engage in therapy. If they see the therapist as a trusted, likeable person with status, they may be more open to the idea of therapy. In this thesis, the role of motivation was certainly associated strongly with the therapeutics alliance, which supports this idea. Initial TA predicted motivation later in treatment, and motivation itself was associated with a positive change in outcome, suggesting a facilitative role for the alliance. This thesis also suggested this may work the other way around, with initial motivation facilitating a stronger TA. Those clients who do not see themselves as choosing to be in therapy, may also feel forced into a relationship with the therapist. Motivation to change may lead them to realise the benefits of this relationship in facilitating change.

This thesis focused on a positive alliance promoting positive change, and if a positive alliance is a necessary condition for positive change, then of course we will see positive treatment change when this condition is met. What would be useful to examine in further research, is if the *absence* of alliance is more important, and leads to negative change or no change. In a larger more variable sample, clients with strong alliances and clients with weak alliances could be separated into samples, and their relative levels of treatment change examined. If the group with weak alliances made little or no positive change, then this theory of the alliance as a necessary — but not sufficient — condition for change would be supported.

Attachment

This thesis had some noticeable non-significant results, which are worth examining, considering previous research and theory. Attachment is a fundamental personality trait that is thought to hugely impact a person's development through life, and their subsequent relationships in adulthood (Bowlby, 1988). There is compelling research and theory regarding the attachment styles of sexual offenders (Hudson & Ward, 1997; Smallbone & Dadds, 1998; Ward et al., 1996; Ward et al., 1995), and research with non-offending clinical populations have linked attachment style to the TA, and treatment outcome (Daniel, 2006 ; Horowitz, Rosenberg, & Bartholomew, 1993; Satterfield & Lyddon, 1995; Sauer, Lopez, & Gormley, 2003). While there is less research with violent offenders, there is some research showing that domestic violence offenders are likely to have insecure attachment styles that are displayed as excessive interpersonal dependency in their intimate relationships (Buttell, Muldoon, & Carney, 2005). Other studies have found that violent offenders are likely to have a dismissive attachment style, characterised by a disinterest in close relationships (Hudson & Ward, 1997).

Study Two looked at the relationship between attachment and the formation of an alliance, but there were no significant correlations at all between attachment and the working alliance. Although not reported in the thesis, other preliminary tests also found no connection whatsoever between attachment and the alliance using a range of statistical tests. This is surprising considering the previous research and theory just discussed. Does this mean that the violent offenders in this sample do not have attachment issues? The average scores on the anxious and attachment scales were very low, but considering that their

backgrounds were invariably a mix of abuse, neglect and emotional deprivation at the hands of their caregivers, this scenario seems very unlikely. Or, does this mean that attachment issues have no effect on the alliance? Again, considering the research, and that the alliance is a form of relationship involving placing trust in another individual, this scenario also seems unlikely. What seems more likely is that the measure used was either not capturing attachment problems, or was not completed accurately.

The attachment measure used was the Experiences in Close Relationships Inventory and it does measure an offender's *romantic* attachment, rather than their parental or "peer" attachment (Brennan et al., 1998). Other attachment studies have used more general close relationship inventories (Ward et al., 1996). My decision to use this scale was based on the well-established argument that attachment is relatively stable, and attachment style is transferred from the parental relationship to a romantic one (Bartholomew, 1990). But, perhaps this is not the case with these offenders, and therefore this is tapping a relationship-based form of attachment, separate from parental or other significant attachment and not likely to affect the alliance? The ECRI has also recently been revised due to the creators finding that the secure dimension was not adequately measured and so this revised version may have been a better tool to use (Fraley, Waller, & Brennan, 2000). The way this scale was utilised may also have led to non-significant results. Following the advice of Chris Sibley (personal communication April 2007) who has extensively investigated the ECRI (Sibley, Fischer, & Liu, 2005), I scored this scale on two dimensions of attachment; anxiety and avoidance. Perhaps these dimensions were too narrow to explore the

dismissive or dependent attachment styles theorised to affect violent offenders (Buttell et al., 2005; Hudson & Ward, 1997).

Another plausible explanation is that this measure was not used as it was intended to be. As I have already alluded to, self-report scales can be faked and this measure is a self-report scale. Faking could have happened consciously, with the offender wishing to seem like they had a good relationship, perhaps particularly if the offender (as many had) had been convicted of domestic abuse. The offenders have also been in prison for at least five years at this point, and may simply be idealising either their last relationship or their current one due to loneliness, or forgetfulness of how they actually behave in relationships. Lastly, I am assuming that these men have the cognitive and emotional capacity to be able to examine their way of interacting in a relationship, this is not a simple task for men who are largely poorly educated, and often struggle with understanding their emotions (Howells & Day, 2006; Ward et al., 2004; Wilson, 2004).

The therapist's attachment was also measured, but unfortunately, the small sample size of therapists meant that this could not be further examined. What I wanted to do was to not only look at the role of attachment of therapists and clients on how they rate alliance individually, but to see if there were any interactions between attachment styles that affected the TA as well.

It would be a valuable research direction to find a scale that taps the underlying attachment style of offenders, but does so in a simple, easily understandable way. However, attachment is known to be an extremely difficult concept to adequately assess (Cassidy & Shaver, 1999). This measure would need to be separated from any system influences so as to avoid clients faking good. A large sample of therapists and offenders would enable an exploration of

the interactional effects of attachment styles. If attachment was found to significantly affect the alliance, then more relationship oriented modules that address the effects of early relationships may need to be included in violence prevention programmes. If a therapist and client's attachment style interacted in some way, then therapists and clients could possibly be matched to ensure the best alliance is formed in therapy.

Psychopathy

Psychopathy is another construct that holds great promise in the field of offender rehabilitation as a way to predict risk, and to predict how an offender will react to therapy and to their therapists. Psychopaths have a notorious reputation as untreatable, difficult therapy subjects, adept at manipulating their therapists and incapable of forming a strong, genuine alliance with their therapist and achieving a positive treatment outcome (Skeem, Monahan, & Mulvey, 2002). Researchers have found mixed support for the assertion that psychopaths cannot be treated, or can be made worse by treatment (Skeem et al., 2002). Less research has linked psychopathy to the alliance, but some researchers have found that psychopaths are more likely to form negative TAs with their therapists (Taft et al., 2004). Knowing that half of this sample was classed as psychopathic then, I expected to find a strong relationship between psychopathy and the alliance and hoped to look at the relationship between types of psychopath and the alliance.

Although initially Study Two seemed promising, with significant small to moderate correlations between the total psychopathy score and the subscales and total of the WAI, the PCL:SV did not significantly predict the alliance in a regression. What was interesting was that in the structural equation model, the model fit was improved when the PCL:SV was mediated by the CSSM. This

suggests that an offender's level of psychopathy may be expressed by their attitudes towards the positive aspects of criminality, which then affects the TA. As only Factor 1 of the PCL:SV, which measures the personality aspects of psychopathy, was correlated with the WAI, this also suggests that it is primarily the interpersonal dimension reflecting a selfish, callous and remorseless use of others that is related to the TA, rather than the antisocial behaviour items of Factor 2 (Hart et al., 1995). The effect of Factor 1 on the WAI is logical considering that the TA is an interpersonal construct and hence would be affected by the interpersonal style of an offender.

However, I did expect that psychopathy would be more than a significantly correlated variable, and would be a strong predictor of the formation of the alliance. Perhaps psychopathy is not an important factor in the TA in this setting? There is a high proportion of psychopathy in the sample, and it may be that there was a "ceiling" effect, such that there wasn't enough variance in psychopathy scores to allow a significant relationship to emerge with the alliance (Field, 2005). This finding could also reflect the prevailing view that psychopaths are adept at manipulating the relationship and the observers were fooled into thinking psychopaths had a good relationship with their therapists. However, this should have led to a significant relationship, with psychopathy having a positive predictive effect on alliance. It may also be the case that this is a true finding and that in this setting; psychopathy does not play a role in the relationship between a client and their therapists. This conclusion was also reached by Skeem and colleagues in their study, where they found that psychopathic patients were as likely as non-psychopathic patients to benefit from adequate doses of treatment, which then affected the outcome of violence reduction (Skeem et al., 2002).

Further research is needed to look at the role of psychopathy and the alliance. The results here hinted at the possibility of a differential effect between Factor 1 and 2 of the PCL:SV, and perhaps a larger more diverse sample (e.g., high and low risk) of participants would allow an in-depth exploration of the effects of different factor types of psychopathy on the TA.

Client and therapist behaviour

In the model proposed by Ross et al. (2008), a client and therapist's personality affected their in-session behaviour, which in turn affected the TA. However in this thesis, client and therapist in-session behaviours did not seem to have any relationship with the TA. The model was informed by research on client behaviours likely to affect the alliance (Taft et al., 2004; Thomas, Werner-Wilson, & Murphy, 2005) and primarily the research of Marshall and colleagues on therapist behaviours affecting outcome in sexual offender research (Marshall, 2005; Marshall et al., 2002).

In Study Three, none of the HLM analyses that used therapist and client behavior as covariates reached significance, and no direct effects were found. This lack of significant results could reflect several underlying causes. First and most likely is sample size; as already mentioned although HLM purports to be able to deal with small samples, a sample above 70 is still recommended (Hox, 1995), and missing variables are dealt with by deleting them (Raudenbush & Bryk, 2002), thereby reducing sample size further. Other researchers in this field using HLM have had sample sizes of at least 100, or had less covariates per model (Kivlighan & Shaughnessy, 1995; Taft et al., 2003). The client and therapist behaviours were looked at as group variables and there were only seven groups in the sample, but there were at least four behaviours used as covariates in

each model. Notably, the only significant result also only used one covariate (cohesion), which could reflect the fact that the sample size needed to be bigger for the model to cope with four covariates as the client and therapist behaviour HLMs were attempting to do.

Secondly, the behaviours rated may not have been the right ones for this setting. In terms of the therapist behaviours, Marshall's scale was used and this has been developed for use with therapists working with sexual offenders (Marshall et al., 2002). It may be that therapists who work with violent offenders have a very different set of skills that were not detected by using this scale. Likewise, the therapist-rated client behaviour scale came from the drug-abuse treatment population and is not validated for use with this setting (Simpson, 1998). However, item 13 of this scale, "motivation to change," has been the single most predictive factor in this entire thesis, so this scale seems to have some merit. A final potential cause is that these behaviours may not affect the alliance at all. Perhaps it is only underlying traits that really affect the development of the alliance and session-to-session behaviour is not as important. More likely, session-to-session behaviours may influence the alliance on a session-by-session basis. As behaviour was only rated four times throughout the programme, and the same with alliance, it may be that this study missed the minutiae of session behaviour, and the daily rupture and repair cycles of the alliance (Safran & Muran, 2000).

Further research could counteract these analysis and measurement problems. It would be worthwhile to take the same approach as Marshall (2005) and actually develop a form for specific use with violent offender therapists based on observations of recurrent features in therapy. The client rating scale used does

hold some promise, based on the predictive power of the motivation item and it would be worth conducting a factor analysis of this scale at some point and validating its use with offender populations. Lastly, more intensive observations of behavior and alliance may be needed to properly explore the effect of session behaviour on the rupture and repair cycles of the TA, with a large sample to ensure adequate statistical analysis could be carried out.

Cohesion

The RVPU is a group based programme, and therefore I also expected group processes would have an effect on the alliance, or outcome. Previous research had undoubtedly linked cohesion to the alliance and to treatment outcome, both with the clinical, sexual offending and violent offending population (Beech & Fordham, 1997; Johnson et al., 2005; Taft et al., 2003; Woody & Adessky, 2002). In Study Three however, although the main model reached significance, cohesion was not found to predict the alliance or any outcome, whether the therapists or the clients rated cohesion. This measure of cohesion is well known and used in most of the studies mentioned, and so it is not likely to be a result of an unsuitable scale or misuse of the scale.

Instead, it is likely that as with the other HLMs sample size affected this study. This is likely to be particularly true with the client ratings of cohesion as there were only 47 of these. In the HLM, cohesion was looked at as a group variable also, and so there may not have been enough variance as there were only seven groups. Another explanation is that groups may be cohesive, but this may not be affecting the alliance, which is of course an individual relationship. This could be particularly true in this sample as offenders may form a cohesive group

but are cohesive against the therapists; although this result should have been reflected in cohesion working significantly against the alliance.

A future research goal would be to look at cohesion and alliance with a bigger sample. It would also be interesting to look at offenders' out-of-group interactions (Frost & Connolly, 2004). Examining how offenders interact outside of sessions, could inform us as to whether they are forming a cohesive group against the therapists, or whether this out-of-group interaction is a positive learning experience that may help with the alliance and treatment outcome.

Unanswered questions: Directions for future research

The richness of this data set meant I had a wide choice of questions to answer, and as with all research, it was not possible to look at all of these. One question I would have liked to answer, is which rater perspective is the most predictive of outcome. Other researchers have found clear differences between raters, with support for the predictive validity of client, therapist and observer ratings in different studies (Brown & O'Leary, 2000; Fenton et al., 2001; Safran & Wallner, 1991). This question is especially significant considering my results showed very similar perspectives of the WAI that seemed to be shared by all raters. It would be worthy to see if this similarity meant that they were all equally predictive of outcome. Due to sample constraints, this was not possible and one of the main reasons the observer ratings were used was that they were the most complete ratings. In further research with a larger sample this may be a possible research question to investigate, and perhaps other rater perspectives would lead to a more significant effect of the alliance on treatment outcome.

I was also faced with a wide choice of different techniques to use to analyse my data, and different techniques may produce different results in further studies.

For example, in Study One Part B, the time pattern of the alliance could have been analysed for each individual therapist-client dyad as other studies have done (Golden & Robbins, 1990), and cluster analysis could also be performed to see if there are separate “types” of alliance pattern in the data (Stiles et al., 2004). Hierarchical Linear Modelling, although a well-established technique, is relatively new to me and I could have used this in a different way if I had been more familiar with the technique, exploring the rate of change of alliance over time for example, and examining if this predicts outcome, as found in other studies (Kivlighan & Shaughnessy, 1995).

The logical next step of this research is to examine the recidivism rates of the offenders in the sample. This is an achievable aim, as time is simply needed to allow the offenders to be released and then followed up (generally over a five-year period). The outcome measure would then simply be recidivism and time taken to recidivate, and this could be varied by offence type. In this further study I would predict that those offenders with a higher TA recidivate at a lower rate, particularly in terms of violent offences, or at least take longer to recidivate than clients with a lower TA.

The Revised Theory of the Therapeutic Alliance with offenders (RTTA) model discussed in the introduction, contains many elements that were not addressed at all in this study, and they are a rich source of future research directions (Ross et al., 2008). In terms of client and therapist factors, the entire area of emotional processes remains unexplored in the area of violent offender treatment and the alliance. There is theoretical evidence to suggest that emotional processing can be affected in offenders (Howells & Day, 2006), and this could affect the alliance, as offenders may not be able to resolve therapeutic ruptures if

they are unable to identify or to regulate the emotions they feel about their therapist (Ross et al., 2008).

Cognitive processes are also included in the model, but arguably, looking at criminal attitudes has addressed this somewhat. Cognitive factors can also include cognitive distortions, which are theorised to hamper treatment engagement (Chambers, Eccleston, Day, Ward, & Howells, 2008). Primary cognitive distortions are self-centred attitudes, thoughts, and beliefs, that can lead offenders to take a “know it all” attitude in treatment and disregard the need to change in therapy (Chambers et al., 2008). Secondary distortions relate to minimising, justifying and rationalising processes that can stop offenders from taking responsibility for offending and hence stop them from believing they need to change (Chambers et al., 2008). If an offender feels they have no need to change than they are also likely to disregard a TA aimed at facilitating this change process. The level of cognitive functioning an offender needs to form a TA is also an unexplored area. A future study could measure emotional processes and cognitive processes, perhaps through an Intellectual Quotient and Emotional Quotient test, and a cognitive distortions scale, and see if these processes affect the TA.

Goals and expectations of the therapists and clients would also be an interesting area to explore. Although goals would overlap somewhat with the alliance if using the WAI, it would be fruitful to investigate what a therapist and client are expecting from therapy, if there are differences between these expectations, and if these differences affected their relationship. Related to this, it could be worth exploring the idea of the “convergence of values” proposed by Hersoug et al. (2001), whereby therapists and clients have differing values, but

they become more similar as therapy progresses, and to see if this affects the TA. In this setting particularly, the idea of a therapist shifting their values towards an offender is interesting, and perhaps it would be more a case of a therapist having an awareness and understanding of a client's value system.

Other factors in the RTTA model were the setting and system factors (Ross et al., 2008). Although I looked at cohesion, other factors like the physical setting of the prison, and the coercive nature of the treatment may have been affecting the alliance. Future studies could compare the RVPU with a therapeutic community in prison, and a violence treatment community setting, to investigate the effects of the setting and system in the alliance.

Summary

This thesis did not find strong support for some expected results, particularly concerning the TA and outcome, attachment, psychopathy, client and therapist behaviours, and cohesion. While this thesis addressed a wide range of research questions, the richness of the data set means there are many possible future avenues for research.

How we can use these data: Clinical applications of the research

Assessing and managing client motivation

The results of this thesis are not only fruitful in opening up avenues of research; they are also applicable to the running of the RVPU and other violence treatment settings. Perhaps the biggest implication of this thesis is the role of motivation in treatment. Clearly motivation is a client factor that must be taken into consideration in a very real way as it affects the alliance and treatment outcome. It is firstly clearly worth assessing a clients motivations before treatment begins, perhaps even before selecting clients into a group. If a client is

found to be lacking motivation to change, motivational interviewing (using therapy techniques that facilitate motivation) may be needed to get them to the point where they are motivated to attend the programme (Murphy & Baxter, 1997).

Motivational interviewing has already proven to be very successful in addiction treatment, particularly in fostering a positive alliance (Boardman, Catley, Grobe, Little, & Ahluwalia, 2006). Motivational interviewing also has great potential with violent offenders, particularly at the beginning of treatment in enhancing engagement and overcoming resistance to therapy and change (Chambers et al., 2008). Motivational interviewing may work in this way by supporting self-efficacy, emphasising choice and providing empathy for violent offenders (Neighbors, Walker, Roffman, Mbilinyi, & Edelson, 2008). In fact, a recent New Zealand study found that motivational interviewing alone led to a decrease in offending for violent and other offender clients (Anstiss et al., 2008).

The strong role of motivation in this thesis also gives support for the type of programmes already in place in New Zealand prisons, which aim to boost motivation, such as the short motivational programmes designed to “get offenders to a point where they are willing to accept that they need to change” (“Programmes for offenders,” information sheet, accessed 02.11.08). Although there has been some debate over the effectiveness of motivational programmes, it may be that they are not successful alone at reducing offending but are a good precursor for programmes like the RVPU (Anstiss, 2003). It may also be worth monitoring motivation throughout the treatment programme, considering it has a bi-directional relationship with alliance, and making sure offenders continue to want to change.

Assessing and managing criminal attitudes

Another factor that is clearly linked to alliance in this research is criminal attitudes. It may be worth using the CSSM in programmes, and working on attitudes towards criminality early in the programme to ensure that a positive alliance can be formed. Short attitude-based programmes already in place in New Zealand prisons may be useful as they begin to work on an offenders attitudes and thoughts about crime before offenders undertake other more intensive treatments (Anstiss, 2003).

The use of self-report scales

Self-report scales are the norm in measuring treatment change, but this thesis cast doubt on the reliance on self-report. Instead, measures like the VRS, which use file information, interviews and are rated by a neutral third party are important tools to use to assess change. The disadvantages of these measures however is that they tend to be time-consuming for therapists already overloaded with work.

Monitoring and enhancing the therapeutic alliance

Although only small effects were found for the alliance and treatment outcome, this was a small sample, the effects were significant, and the changes were in risk and treatment completion; valid and stringent outcome measures. Further to this, as discussed, it may be that the alliance is not directly affecting outcome but is a necessary environmental component, without which change cannot occur. Following this argument, I conclude that the process of therapy should be examined as rigorously as the content in violence prevention programmes. The TA between an offender and their therapists can be easily monitored by an observer as we have seen, and this monitoring may be as simple

as a therapist's clinical supervisor using the WAI in their observations and giving advice to therapists on what they can do to smooth out alliance ruptures.

Therapists could also be trained not just in the treatment manual, but in being more aware of the process and openly discussing what is happening with the offender; not only could this mend ruptures in the alliance but it could model good relationship skills to the offender, leading to better progress in the programme (Safran & Muran, 1996).

As the alliance predicted treatment completion, and thus may be a protective factor for clients leaving the programme, it is vital that the alliance is monitored in this way to prevent dropout. Dropout means a huge investment of time and money in an offender is wasted, and may leave the offender feeling like change is not worth it and put them off further treatment (Chambers et al., 2008).

Summary

The overall aim of this thesis was to explore the relationship between the TA and treatment outcome in a violence prevention setting, including the factors that influence the formation of the alliance and mediate the relationship between alliance and outcome. This thesis produced a strong argument for the role of motivation and the TA in violence prevention treatment. If even a small amount of an offender's progress can be attributed to their motivation or the TA, then these factors should be monitored throughout therapy and worked on as valid treatment goals. After all, the progress here is not really measured by a score on a test in the end; it is measured by a man changing his life, by having one less number in the overcrowded prison system, and by the public being safe from violent crime.

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Appendix One

Method: Therapist and Observer Group Dynamics

Group	Therapist 1	Therapist 2	Observer 1	Observer 2
25	a	b	1	3
26	c	d*	1	4
27	e	f	1	4
28	a	b+/d	1+/2	4
29	j*+/i	h	1	4
30	e	g+/j*	2	4
31	k	l	2	4

Group = Treatment group

Therapist 1 = Psychologist

Therapist 2 = Rehabilitation Worker

Observer 1 = Clinical Supervisor

Observer 2 = Trained Observer

Letters a through l represent different Therapists

Numbers 1 through 4 represent different Observers

* Non-participant in study

+ Left group

/Replaced

Example –Group 29 Therapist 1 (j) was a non-participant in the study who left group and was then replaced by another Therapist (i)

Appendix Two

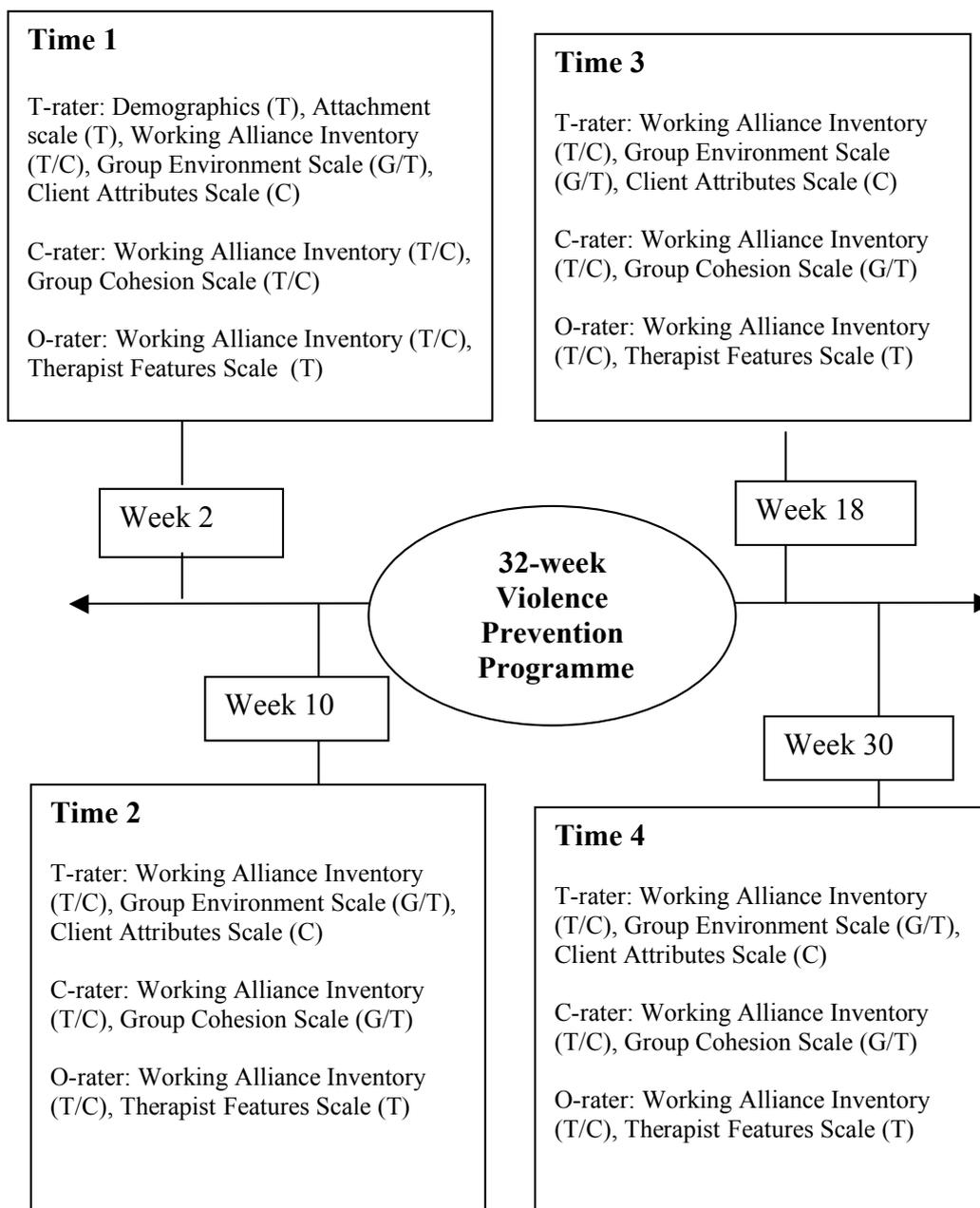
Method: RVPU Psychometric Battery

Domain	Scale	Timing of measurement
Violence	Aggression Questionnaire (AQ)*	Pre- and post-prog.
Anger	State Trait Anger Expression Inventory (STAXI-II)*	Pre- and post-prog.
Violent and criminal attitudes	Criminal Attitudes to Violence Scale (CAVS)* + Criminal Sentiments Scale-Modified (CSSM)*	Pre- and post-prog.
Personality and psychopathology	Millon Clinical Multi-axial Inventory-III (MCMI-III)*	Pre-prog only.
Motivation/readiness	Treatment Readiness, Responsivity and Gain Questionnaire: Short Version Revised (TRRG:SV)	Pre- and post-prog.
Attachment style	Experiences in Close Relationships Inventory (ECRI) *	Pre- and post-prog.
Violent/non-violent recidivism risk	Self-Appraisal Questionnaire (SAQ)*	Pre- and post-prog.
Psychopathy	Psychopathy Checklist: Short Revised Version (PCL:SV)	Pre- prog only.
Risk	Violence Risk Scale (VRS)	Pre- and post-prog.

*Self-report

Appendix Three

Method: Data Collection Timeline



Key: T=Therapist C=Client O=Observer G=Treatment Group

Appendix Four

Method: Information and Consent Forms



Treatment processes and treatment outcome in a violence prevention programme

Information Sheet for therapists:

Elizabeth Ross
PhD Student

Email: rosseliz@student.vuw.ac.nz

Devon Polaschek, PhD, DipClinPsyc
Senior Lecturer

Devon.polaschek@vuw.ac.nz

What is the purpose of this research?

- We aim to investigate the relationship between client and therapist factors, and treatment outcome in the violence prevention programme at Rimutaka Prison to determine if they are related. Previous research in general treatment settings and with sex offenders suggests that therapist and client characteristics, the alliance between therapists and clients, and group cohesion may predict treatment outcome for clients. We are interested in whether these findings generalise to treatment with violent offenders in a custodial setting.

Who is conducting the research?

- Elizabeth Ross is a PhD student at Victoria University. Dr. Polaschek is supervising this project. This research has been approved by the Victoria University Human Ethics Committee, and will run for 2 to 3 years.

What is involved if you agree to participate?

- If you agree to participate in this study to begin with you will be asked to fill out a questionnaire about your experiences in close relationships and to participate in a brief interview to ascertain demographic information such as your age, education level, years of practice as a therapist and ethnicity.
- You will also be asked to fill out questionnaires throughout each treatment group that you run. These relate to group environment, TA, and client attributes. The TA and client attributes scale will need to be filled out for each client at each time point.
- Lastly observer raters will also observe some treatment sessions that you run throughout each treatment group to rate the level of TA and the expression of therapist features.
- We anticipate that your total involvement will take no more than 5 hours total for each treatment group.

Privacy and Confidentiality

- We will keep your consent forms and data for at least five years after publication.
- You will never be identified in my research project or in any other presentation or publication. The information you provide will be coded by number only. We will not be discussing your data with any other party.
- Your coded data may be used in other, related studies conducted by Devon Polaschek.
- A copy of the coded data will remain in the custody of Elizabeth Ross and Devon Polaschek

What happens to the information that you provide?

- The data you provide may be used for one or more of the following purposes:
- The overall findings may be submitted for publication in a scientific journal, or presented at scientific conferences.
- The overall findings may be given to the Department of Corrections as part of the evaluation of the VPU but you will not be personally identifiable at any point and the data will not be used as a personal staff evaluation.
- The overall findings may form part of a PhD thesis, Masters thesis, or Honours research project that will be submitted for assessment.
- Your individual data will not be made available to the Department of Corrections, will not be viewed by your manager and will not be used for any purpose other than in grouped form for the research.



Therapist Consent Form

If you wish to take part in the proposed study, please read the following carefully and sign in the space provided.

I have read the information concerning the proposed study and I am aware of the type of information that is required from me as a participant. I understand that the above study is voluntary and that I don't have to take part in it. If I want to stop at any time, I can, and my questionnaires will be destroyed and not included in the study.

I understand that the information I give is confidential and will be used only for the purposes of the proposed study, and that I will not be identified.

I have had the chance to ask questions about the research and have those questions answered to my satisfaction.

I agree to take part in this study.

Name

Signature

I would like a copy of the summary of the results of this study YES / NO

Please send the summary to the following address (please write address below)



Treatment process and treatment outcome in a violence prevention programme

Information Sheet for VPU clients:

Elizabeth Ross

PhD Student

Email: rosseliz@student.vuw.ac.nz

Devon Polaschek, PhD, DipClinPsyc

Senior Lecturer

Devon.polaschek@vuw.ac.nz

What is the purpose of this research?

Researchers have found out that when people do a therapy programme the relationship that they have with their therapist is very important. For example if they get on well with their therapist they can get better faster than if they don't. But we don't know if this is true in a violence rehabilitation programme like the one you are doing.

So in this project we want to see if how you get along with your therapists affects how you do in the programme. We will also look at what you think your group is like (good or bad), and see if that affects how you do.

Who are we?

We are researchers from the School of Psychology at Victoria University of Wellington: Elizabeth Ross is a student and Devon Polaschek is a staff member.

What happens if you agree to take part?

We will ask you to fill out two questionnaires. This will happen about once every two months during the programme. Each time will take about 30 minutes. The questionnaires will ask you questions about what you think of your therapists and what you think your group is like. There is no right or wrong way to answer any of the questions: we are just interested in what you think.

We also need to know how you are doing in the programme, in this research. So we will look at some of the information that is in your programme file too.

What happens to the information you provide?

Prison staff, therapists and other inmates will not know your answers to any of the questions. We are the only people who will see the questionnaires you fill in. We will take your answers, turn

them into numbers and put the numbers in a computer. Your name will not be in the computer. Your paper questionnaires will be kept in a locked cupboard, at the university.

Liz is studying at the university for her PhD. Over the next 2-3 years she will put together the research information of 6-8 groups of men into a big research report for her PhD. Your information will be in there, but no one will be able to tell which information is yours. We also hope to publish the research and talk about it at conferences. If you would like to know what we found out, we can send you a letter about it, when it is finished.

This study is independent of the VPU programme. Doing this research, or not, will have no effect on how well you do in the programme, or anything else to do with your sentence. If you wish to contact Elizabeth Ross or Devon Polaschek about the research you can write to us at the *School of Psychology, Victoria University. PO Box 600, Wellington.*



Client Consent Form

If you wish to take part in the proposed study, please read the following carefully and sign in the space provided.

I have read the information sheet or had it read to me and I am aware of the type of information that I will be giving if I choose to take part in the study. I understand that the study is voluntary and that I don't have to take part in it. If I want to stop at any time, I can, and my questionnaires will be destroyed and not included in the study.

I understand that the information I give will be used only for this study, and that I will not be identified. I also understand that doing this research, or not, will have no effect on how well I do in the programme, or anything else to do with my sentence.

I have had the chance to ask questions about the research and have those questions answered to my satisfaction.

I agree to take part in this study.

Name

Signature

I would like a copy of the summary of the results of this study YES / NO

Please send the summary to the following address (please write address below)



Treatment processes and treatment outcome in a violence prevention programme

Information Sheet for clinical supervisor:

Elizabeth Ross

PhD Student

Email: rosseliz@student.vuw.ac.nz

Devon Polaschek, PhD, DipClinPsyc

Senior Lecturer

Devon.polaschek@vuw.ac.nz

What is the purpose of this research?

- We aim to investigate the relationship between client and therapist factors, and treatment outcome in the violence prevention programme at Rimutaka Prison to determine if they are related. Previous research in general treatment settings and with sex offenders suggests that therapist and client characteristics, the alliance between therapists and clients, and group cohesion may predict treatment outcome for clients. We are interested in whether these findings generalise to treatment with violent offenders in a custodial setting.

Who is conducting the research?

- Elizabeth Ross is a PhD student at Victoria University. Dr. Polaschek is supervising this project. This research has been approved by the Victoria University Human Ethics Committee, and will run for 2 to 3 years.

What is involved if you agree to participate?

- If you agree to participate in this study you will be asked to observe some treatment sessions for each treatment group to rate the level of TA and the expression of therapist features. Two observers are needed to rate the therapist features so Elizabeth Ross will also observe some sessions with you and you will need to work together to achieve adequate rater reliability.
- We anticipate that your total involvement will take no more than 8 hours total for each treatment group

Privacy and Confidentiality

- We will keep your consent forms and data for at least five years after publication.
- You will never be identified in my research project or in any other presentation or publication. The information you provide will be coded by number only. We will not be discussing your data with any other party.
- Your coded data may be used in other, related studies conducted by Devon Polaschek.
- A copy of the coded data will remain in the custody of Elizabeth Ross and Devon Polaschek

What happens to the information that you provide?

- The data you provide may be used for one or more of the following purposes:
- The overall findings may be submitted for publication in a scientific journal, or presented at scientific conferences.
-

- The overall findings may be given to the Department of Corrections as part of the evaluation of the VPU but you will not be personally identifiable at any point and the data will not be used as a personal staff evaluation.
- The overall findings may form part of a PhD thesis, Masters thesis, or Honours research project that will be submitted for assessment.
- Your individual data will not be made available to the Department of Corrections, will not be viewed by your manager and will not be used for any purpose other than in grouped form for the research.



Clinical Supervisor Consent Form

If you wish to take part in the proposed study, please read the following carefully and sign in the space provided.

I have read the information concerning the proposed study and I am aware of the type of information that is required from me as a participant. I understand that the above study is voluntary and that I don't have to take part in it. If I want to stop at any time, I can, and my questionnaires will be destroyed and not included in the study.

I understand that the information I give is confidential and will be used only for the purposes of the proposed study, and that I will not be identified.

I have had the chance to ask questions about the research and have those questions answered to my satisfaction.

I agree to take part in this study.

Name

Signature

I would like a copy of the summary of the results of this study YES / NO

Please send the summary to the following address (please write address below)

Appendix Five

Method: Devised and Revised Measures

Therapist Demographics

Name:

Age:

Ethnicity:

Years of Education:

Years in clinical psychology/rehabilitation worker practice:

Therapist Features Scale

Coder _____
 Date of session _____
 Group No. ____
 Therapists _____

THERAPIST CHARACTERISTICS

Therapist 1. _____

Interpersonal Style

Amount of talking

1	2	3	4	5	N/A
Not enough		Somewhat		Too much	

Open, interested body language

1	2	3	4	5	N/A
Not at all		Somewhat		Very	

Warm tone of voice

1	2	3	4	5	N/A
Not at all		Somewhat		Very	

Empathic

1	2	3	4	5	N/A
Not at all		Somewhat		Very	

Warm and friendly

1	2	3	4	5	N/A
Not at all		Somewhat		Very	

Confident

1	2	3	4	5	N/A
Not at all		Somewhat		Very	

Appropriate use of humour

(If the therapist used humour, was it appropriate, if no humour used rate N/A)

1	2	3	4	5	N/A
Not at all		Somewhat		Very	

Integrity

Sincere/genuine

1	2	3	4	5	N/A
Not at all		Somewhat		Very	

Respectful to clients

1	2	3	4	5	N/A
Not at all		Somewhat		Very	

Rewarding/encouraging

1	2	3	4	5	N/A
Not at all		Somewhat		Very	

Specific therapist techniques**Confrontational challenging**

(Highly directive, head on, aggressive challenging of clients)

1	2	3	4	5	N/A
Not at all		Somewhat		Very	

Non-confrontational challenging

(Collaborative, questioning approach using gentle suggestion and offering options)

1	2	3	4	5	N/A
Not at all		Somewhat		Very	

Appropriately self-disclosing

(If therapist self-disclosed, was it appropriate, if no self-disclosure then rate N/A)

1	2	3	4	5	N/A
Not at all		Somewhat		Very	

Asks open-ended questions

1	2	3	4	5	N/A
Not at all		Somewhat		Very	

Directiveness (non-reflective)

(The extent to which the therapist actively directs group, ideal score would be in middle of range)

1	2	3	4	5	N/A
Not at all		Somewhat		Very	

Encourages active participation

1	2	3	4	5	N/A
Not at all		Somewhat		Very	

Non-collusive

1	2	3	4	5	N/A
Not at all		Somewhat		Very	

Encourages pro-social attitudes

1	2	3	4	5	N/A
Not at all		Somewhat		Very	

Deals appropriately with frustration difficulty

1	2	3	4	5	N/A
Not at all		Somewhat		Very	
Communicates clearly					
1	2	3	4	5	N/A
Not at all		Somewhat		Very	
Spends appropriate time on issues					
1	2	3	4	5	N/A
Not at all		Somewhat		Very	
<u>Co-therapist relationship</u>					
Co-operates with the co-therapist					
1	2	3	4	5	N/A
Not at all		Somewhat		Very	
Shows respect for the co-therapist					
1	2	3	4	5	N/A
Not at all		Somewhat		Very	
Follows the direction/lead of the co-therapist					
1	2	3	4	5	N/A
Not at all		Somewhat		Very	
Presents a united front with the co-therapist					
1	2	3	4	5	N/A
Not at all		Somewhat		Very	
Agrees with the decisions of the co-therapist					
1	2	3	4	5	N/A
Not at all		Somewhat		Very	
Supports the other therapist during conflict with the group					
1	2	3	4	5	N/A
Not at all		Somewhat		Very	
Undermines the co-therapist					
1	2	3	4	5	N/A
Not at all		Somewhat		Very	
Disagrees openly with the decisions of the co-therapist					
1	2	3	4	5	N/A
Not at all		Somewhat		Very	

Coder _____
 Date of session _____
 Group No. ____
 Therapists _____

THERAPIST CHARACTERISTICS

Therapist 2. _____

Interpersonal Style

Amount of talking

1	2	3	4	5	N/A
Not enough		Somewhat		Too much	

Open, interested body language

1	2	3	4	5	N/A
Not at all		Somewhat		Very	

Warm tone of voice

1	2	3	4	5	N/A
Not at all		Somewhat		Very	

Empathic

1	2	3	4	5	N/A
Not at all		Somewhat		Very	

Warm and friendly

1	2	3	4	5	N/A
Not at all		Somewhat		Very	

Confident

1	2	3	4	5	N/A
Not at all		Somewhat		Very	

Appropriate use of humour

(If the therapist used humour, was it appropriate, if no humour used rate N/A)

1	2	3	4	5	N/A
Not at all		Somewhat		Very	

Integrity

Sincere/genuine

1	2	3	4	5	N/A
Not at all		Somewhat		Very	

Respectful to clients

1	2	3	4	5	N/A
Not at all		Somewhat		Very	

Rewarding/encouraging

1	2	3	4	5	N/A
Not at all		Somewhat		Very	

Specific therapist techniques**Confrontational challenging**

(Highly directive, head on, aggressive challenging of clients)

1	2	3	4	5	N/A
Not at all		Somewhat		Very	

Non-confrontational challenging

(Collaborative, questioning approach using gentle suggestion and offering options)

1	2	3	4	5	N/A
Not at all		Somewhat		Very	

Appropriately self-disclosing

(If therapist self-disclosed, was it appropriate, if no self-disclosure then rate N/A)

1	2	3	4	5	N/A
Not at all		Somewhat		Very	

Asks open-ended questions

1	2	3	4	5	N/A
Not at all		Somewhat		Very	

Directiveness (non-reflective)

(The extent to which the therapist actively directs group, ideal score would be in middle of range)

1	2	3	4	5	N/A
Not at all		Somewhat		Very	

Encourages active participation

1	2	3	4	5	N/A
Not at all		Somewhat		Very	

Non-collusive

1	2	3	4	5	N/A
Not at all		Somewhat		Very	

Encourages pro-social attitudes

1	2	3	4	5	N/A
Not at all		Somewhat		Very	

Deals appropriately with frustration difficulty

1	2	3	4	5	N/A
Not at all		Somewhat		Very	

Communicates clearly

1	2	3	4	5	N/A
Not at all		Somewhat		Very	

Spends appropriate time on issues

1	2	3	4	5	N/A
Not at all		Somewhat		Very	

Co-therapist relationship**Co-operates with the co-therapist**

1	2	3	4	5	N/A
Not at all		Somewhat		Very	

Shows respect for the co-therapist

1	2	3	4	5	N/A
Not at all		Somewhat		Very	

Follows the direction/lead of the co-therapist

1	2	3	4	5	N/A
Not at all		Somewhat		Very	

Presents a united front with the co-therapist

1	2	3	4	5	N/A
Not at all		Somewhat		Very	

Agrees with the decisions of the co-therapist

1	2	3	4	5	N/A
Not at all		Somewhat		Very	

Supports the other therapist during conflict with the group

1	2	3	4	5	N/A
Not at all		Somewhat		Very	

Undermines the co-therapist

1	2	3	4	5	N/A
Not at all		Somewhat		Very	

Disagrees openly with the decisions of the co-therapist

1	2	3	4	5	N/A
Not at all		Somewhat		Very	

WAI-THERAPIST FORM

Below is a list of statements about your relationship with your client. Using the scale underneath consider each item carefully and indicate how much you agree with each of the items by circling the number that applies. Keep this page in front of you as a reminder of the scale.

1 = Not at all true

2 = A little true

3 = Slightly true

4 = Somewhat true

5 = Moderately true

6 = Considerably true

7 = Very true

1. My client and I agree about the things he will need to do in therapy to help improve his situation.

1 2 3 4 5 6 7

2. What my client is doing in therapy gives him new ways of looking at his problems.

1 2 3 4 5 6 7

3. I believe my client likes me.

1 2 3 4 5 6 7

4. My client does not understand what I am trying to accomplish in therapy.

1 2 3 4 5 6 7

5. I am confident in my client's ability to help himself.

1 2 3 4 5 6 7

6. My client and I are working towards mutually agreed upon goals.

1 2 3 4 5 6 7

7. I feel that my client appreciates me.

1 2 3 4 5 6 7

8. We agree on what is important for my client to work on.

1 2 3 4 5 6 7

9. My client and I trust one another.

1 2 3 4 5 6 7

10. My client and I have different ideas on what his problems are.

1 2 3 4 5 6 7

11. We have established a good understanding of the kind of changes that would be good for him.

1 2 3 4 5 6 7

12. I believe the way we are working with my client's problem is correct.

1 2 3 4 5 6 7

WAI-CLIENT FORM

Below is a list of statements about your relationship with your therapist. Using the scale underneath consider each item carefully and indicate how much you agree with each of the items by circling the number that applies. Keep this page in front of you as a reminder of the scale.

1 = Not at all true

2 = A little true

3 = Slightly true

4 = Somewhat true

5 = Moderately true

6 = Considerably true

7 = Very true

1. My therapist and I agree about the things I will need to do in therapy to help improve my situation.

1 2 3 4 5 6 7

2. What I am doing in therapy gives me new ways of looking at my problem.

1 2 3 4 5 6 7

3. I believe my therapist likes me.

1 2 3 4 5 6 7

4. My therapist does not understand what I am trying to accomplish in therapy.

1 2 3 4 5 6 7

5. I am confident in my therapist's ability to help me.

1 2 3 4 5 6 7

6. My therapist and I are working towards mutually agreed upon goals.

1 2 3 4 5 6 7

7. I feel that my therapist appreciates me.

1 2 3 4 5 6 7

8. We agree on what is important for me to work on.

1 2 3 4 5 6 7

9. My therapist and I trust one another.

1 2 3 4 5 6 7

10. My therapist and I have different ideas on what my problems are.

1 2 3 4 5 6 7

11. We have established a good understanding of the kind of changes that would be good for me.

1 2 3 4 5 6 7

12. I believe the way we are working with my problem is correct.

1 2 3 4 5 6 7

WAI-OBSERVER FORM

Below is a list of statements about the client and therapist's relationship with each other. Using the scale underneath consider each item carefully and indicate how much you agree with each of the items by circling the number that applies. Keep this page in front of you as a reminder of the scale.

1 = Not at all true

2 = A little true

3 = Slightly true

4 = Somewhat true

5 = Moderately true

6 = Considerably true

7 = Very true

1. The therapist and client agree about the things the client will need to do in therapy to help improve his situation.

1 2 3 4 5 6 7

2. What the client is doing in therapy gives him new ways of looking at his problem.

1 2 3 4 5 6 7

3. The client and therapist like each other.

1 2 3 4 5 6 7

4. The therapist and client do not understand what each other are trying to accomplish in therapy.

1 2 3 4 5 6 7

5. The therapist and client have confidence in each other's abilities.

1 2 3 4 5 6 7

6. The therapist and client are working towards mutually agreed upon goals.

1 2 3 4 5 6 7

7. The therapist and client appreciate each other.

1 2 3 4 5 6 7

8. The therapist and client agree on what is important for the client to work on.

1 2 3 4 5 6 7

9. The therapist and client trust one another.

1 2 3 4 5 6 7

10. The therapist and client have different ideas on what the client's problems are.

1 2 3 4 5 6 7

11. The therapist and client have established a good understanding of the kind of changes that would be good for the client.

1 2 3 4 5 6 7

12. The therapist and client believe the way they are working with the client's problem is correct.

1 2 3 4 5 6 7