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The Therapeutic Alliance in Sex Offender Treatment: The Juxtaposition of Violence and Care

by

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Abstract

Group psychotherapy is the most widely utilized treatment modality for convicted sex offenders, and the therapeutic alliance is considered a fundamental concept in virtually all applications of psychotherapy. However, empirical examination of how the therapeutic alliance impacts upon treatment effectiveness for sex offenders has been neglected. In a prospective design, a sample of 95 consecutive admissions to an inpatient treatment program for convicted adult male sex offenders was studied with regard to their experience of the therapeutic alliance with treatment staff, with their copatients, and with the overall treatment program. Patients of the Phoenix Program (Alberta Hospital Edmonton) rated their sense of alliance at monthly intervals. The therapists who worked with them (n = 21) also completed monthly evaluations of their own emotional responses toward these same patients. Pre- to post-treatment comparisons on personality tests, interpersonal distress, and interpersonal functioning showed a number of statistically significant changes consistent with treatment goals. Patients' self-report over time in treatment showed a gradual, consistent increase of large effect size on all three alliance targets. Sex offenders in this sample were able to experience positive alliance with therapists and peers and the sense of alliance was shown to grow stronger over time. Staff ratings revealed that positive *and* negative affect increased as patients' time in treatment increased. Significant associations between patient-rated alliance and outcome were found to be positive and in desired directions. The growth rate in alliance toward therapists was positively and significantly associated with the growth rate of "conflict within oneself" among female therapists. Male therapists also reported significant growth in "conflict within oneself" but this was independent of patient-rated alliance growth

rates. Thus, female therapists experienced heightened affect in the face of greater patient alliance, while male therapists also experienced heightened affect but for reasons unrelated to patient alliance. There was virtually no reduction in negative affect toward patients despite moderate increases in positive affect toward patients. This study represents an important endorsement of a treatment model that seeks to improve general adjustment and ameliorate risk factors associated with recidivism, via positive changes in interpersonal relationships.

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Scott Aylwin

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Chapter 1: Introduction and Background

The healthy man does not torture others - generally it is the tortured who turn into torturers.

Carl Jung

In the last 20 years, there has been a great deal of empirical research examining sexually deviant (criminal) behavior. Researchers have made increasingly sophisticated efforts to understand the motivation for such behavior and many studies have been undertaken to explore what factors are associated with offence and re-offence. Despite the increase in empirical study, it is still virtually impossible to reliably determine which members of our society will, or will not, commit sexual crimes. Even among the subset of the population who have already demonstrated that they are capable of committing sexual crimes, it is extremely problematic to identify who will recidivate. True, there has been some progress made in determining who is most likely to commit further crimes, but prediction remains a great challenge to authorities.

This difficulty has been partially addressed by the development of risk prediction instruments to predict re-offence based upon actuarial methods. These instruments are essentially algorithms which are combinations of variables found to be prevalent among members of a sample who have engaged in a target behavior during some determined follow-up period. In the case of sex offender risk prediction, the algorithms predict the likelihood of a member of that sample to recidivate during a proscribed period of time at risk. A number of instruments based on these methods have now been developed for assessing the risk of recidivism for sexual offenders. In fact, actuarially-based

instruments are now widely used and have been accorded a great deal of credibility by many decision makers (Walters, Knight, & Thornton, 2009).

Two broad categories of risk factors have been identified. These are static and dynamic factors (Hanson, 2000). By definition, static factors are historical in nature, and not readily altered by the offender (e.g., number of prior convictions, age at release). In contrast, dynamic factors can be altered. A poor work history is an example of a dynamic variable; an offender could take steps to alter this trend.

Actuarial instruments used in risk assessments rely almost exclusively on historical, static factors as the basis to predict future offences and while they have some proven ability to improve the accuracy of predicting recidivism (e.g., Boer, Hart, Kropp, & Webster, 1997; Hanson, 1997; Hanson & Thornton, 1999; Harris & Rice, 2003) they are far from definitive. To further complicate the issue, treatment has been shown to nullify the predictive ability of historical factors thought to predict recidivism. Studer and Reddon (1998) for example, found that successful in-hospital treatment was able to ameliorate the influence of "prior convictions" on recidivism. Prior convictions have shown the most consistent and robust association with general and sexual recidivism (Hanson & Bussière, 1998), so this apparent treatment effect is not trivial. Other studies have also found that treatment influences (in fact, ameliorates) the predictive validity of several static risk factors for sex offenders who successfully complete treatment (Studer, & Aylwin, 2008; Studer, Aylwin, & Reddon, 2005; Studer, Sribney, Aylwin, & Reddon, in press). These findings have important implications for risk prediction as it might be the case that treatment completion needs to be weighted more heavily by the algorithms that are currently being used.

Dynamic variables most important to risk prediction?

As many of the various risk assessment instruments include similar static factors in their scoring, one can cautiously conclude that static factors have been exploited fully in predicting risk (cf. Kroner, Mills, & Reddon, 2005). It is generally agreed, however, that dynamic factors, while much more nebulous and difficult to quantify, may have great untapped potential for the prediction of recidivism (cf. Hanson, 2002; Hanson & Harris, 1998). The reason for this is quite simple. Dynamic risk factors can be modified by the individual's efforts at change. That is, they are within reach of the individual (and the treatment program he may be involved in) while static factors, by their very nature, simply are not. For example, the number of previous convictions is unalterable, but the ability to form satisfying adult relationships can be modified with treatment.

Group therapy is the most commonly endorsed treatment modality for sex offenders (Becker & Murphy, 1998; Sawyer, 2000). Most treatment programs typically target: poor relationships, anger management, assertiveness, communication skills, victim empathy, cognitive distortions, understanding relapse sequences, coping responses to high risk situations, and deviant arousal (Association for the Treatment of Sexual Abusers [ATSA] 2004; Marshall & Laws, 2003). These all represent dynamic aspects of the person – moment to moment these are more or less salient. Implicit in this approach is that treatment benefit is demonstrable by change in dynamic factors. Further, it is implicitly assumed that positive change in these areas can mediate long-term outcome (i.e., recidivism). Indeed, it might ultimately be demonstrated that static risk factors only show reduced predictive ability post-treatment *because* of changes in dynamic risk.

Psychological variables such as belief systems or attitudes are considered as dynamic factors in that they have the potential for change (Beech, Friendship, Erikson, & Hanson, 2002). Among a sample of 140 sexual offenders it was reported that both dynamic and static factors made independent contributions to the prediction of sexual recidivism on a six-year follow-up (Hudson, Wales, Bakker, & Ward, 2002). Hudson et al. (2002) examined the relationship between recidivism and psychometric measures of: sexual attitudes, beliefs and behaviors; emotional functioning; and interpersonal functioning. Scale scores pre- and post-treatment were found to provide modest support for the notion that attitudinal shift can reduce the likelihood of recidivism. At this point, the influence of psychological variables on dynamic factors is not well understood, but this influence is potentially very important.

Regardless of the treatment offered, or the type of patient engaged in the endeavor, treatment can only impact directly upon dynamic variables. If static factors are influenced at all, it can only be through an indirect process or the internal appraisal of these events. Understanding the exact mechanisms of change, and the overall treatment process, then, would seem to be an obvious and important area of study.

Indeed, this has certainly been the case in the field of general psychotherapy. The literature examining the various modes of psychotherapy theory, clinical application, and outcome is nothing short of massive. Enter “psychotherapy” as a search term in a relevant database and one quickly sees just how much work has been done in this area. However, when the search is refined to seek research on therapy process variables conducted with samples of sexual offenders in treatment, there are remarkably few hits. The reasons for this paucity of research will be briefly discussed in Chapter 8. The absence of evidence

confirms that very little effort has been expended in trying to extend the general psychotherapy literature to therapy with sex offenders. This was the original impetus for the present study. Clinical experience working with this population suggested that sex offenders appear to be far more like other psychotherapy patients than they are different from them. Consequently, the findings in the general literature would seem highly relevant to work with this population. However, the parallel evaluation has simply not occurred.

Given the gravity of what can occur should a sex offender not have a successful treatment experience, one would think that treatment process variables would already be well understood for this patient group. Sadly, this has not been the case. The field has been slow to extend the learning obtained through work with non-criminal populations to a criminal one. The treatment experience and its impact on outcome for sex offenders has remained largely unexamined. Not until fairly recently has this concern even been raised in the literature (Drapeau, Körner, Brunet, & Granger, 2004; Garrett, Oliver, Wilcox, & Middleton, 2003; Marshall et al., 2003).

First they ignore you, then they laugh at you, then they fight you, then you win.
Honest disagreement is often a good sign of progress.

Mohandas Ghandi

What Accounts for Change in Therapy?

There are many elements of a therapeutic experience which could have an influence upon the participating individuals. These might include the therapists' years of experience, the type of interventions implemented by the therapist (the techniques), the physical setting, and/or the strengths and deficits the patient brings to the process. It has

now been well established that outcome in psychotherapy is not attributable to a single event, technique, or procedure. Rather, what has been clearly shown is that outcome is multi-determined (Miller, Duncan, & Hubble, 1997; Wampold, 2001). This should come as no surprise to most therapists who would agree that psychopathology is itself multi-determined.

A number of factors which are common to virtually all psychotherapies have been identified and studied by numerous researchers. These aptly-named "common factors" have been conceptualized in various but similar terms. One of the more useful views is offered by Miller, et al. (1997). They suggest the common factors fall into four interdependent groups: 1) patient factors, 2) relationship factors, 3) placebo, hope, and expectancy factors, and 4) technical factors. In a comprehensive review, Asay and Lambert (1999) determined that 30% of therapy outcome is attributable to the therapeutic relationship which exists between therapist and patient.

Gelso and Hayes (1998) remind us that the "unreal" relationship is that which is based in the transference, and the "real" relationship involves the very concrete and unambiguous interactions which occur between therapist and patient. Meissner (2007) holds that three elements subsume the entire therapeutic relationship. These are: the alliance, transference-countertransference, and the real relationship. He conceptualizes the alliance in a light such that it bridges the real and the unreal relationships present in the patient-therapist dyad. These might include the pleasantries that occur in the waiting room or the financial arrangements that exist in receiving the services provided.

The alliance and the effects of countertransference have been linked not only in the minds of many therapists, but also in empirical studies. In a study of 25 methadone

patients and 16 therapists, Bethea, Acosta, and Haller (2008) found that therapist-rated alliance to patients improved over number of sessions, but only for patients who had positive outcomes or who did not have substance abuse co-morbidity. It makes some rational sense that therapists might feel more positively toward "good patients," but when the alliance toward "bad" patients starts to degrade to a measurable degree, then the countertransference might well be expressing itself in the therapeutic relationship. It is indeed an intriguing question to explore how reduced therapist alliance and poor outcomes influence each other.

As it Relates to Sex Offenders

Of all the aspects of a therapeutic relationship which could have influence on a sex offender's experiences or on outcome, the therapeutic alliance holds the greatest promise of influencing treatment efficacy with this group. At the most fundamental level, the therapeutic alliance is defined as the relationship between the patient and therapist that facilitates the work of therapy. In virtually any psychotherapy setting the therapeutic alliance is considered a vital element of the process and to some degree a determinant of the outcome of therapy.

A widely cited meta-analytic review of the alliance-outcome literature revealed that the quality of the alliance is positively related to outcome (Bachelor & Horvath, 1999; Horvath & Symonds, 1991). In another recent review of therapist qualities found to promote a strong alliance, Ackerman and Hilsenroth (2003) reported that both personal attributes (e.g., flexible, experienced, honest, respectful, trustworthy) and qualities of

therapist technique (e.g., exploration, depth, reflection, supportive, affirming) are often reported in the literature as having a positive impact on the strength of the alliance.

For several reasons, the alliance may be particularly important as a mechanism of change for sexual offenders. There is a growing body of literature suggesting that intimacy deficits and disrupted attachment to parents play important roles in the etiology of sexually abusive behavior (e.g., Ward, Hudson, Marshall, & Siegert, 1995). Studies have found that sex offenders, especially child molesters, are lonely and have difficulty with intimacy (Elliot, Beech, Mandeville-Norden, & Hayes, 2009; Ward & Siegert, 2002). Additionally, they have been found to have disrupted attachment bonds with other adults (Seidman, Marshall, Hudson, & Robertson, 1994), lower self-esteem (Marshall & Mazzucco, 1995), and a greater experience of perceived maternal rejection (e.g., Ward, McCormack, & Hudson, 1997).

Experiences of childhood abuse or family violence have a major impact upon attachment and upon subsequent "interpersonal schemas" (Bowlby, 1988). Evidence clearly indicates that sex offenders experience higher rates of childhood abuse than the general population (Aylwin, Studer, Reddon, & Clelland, 2003; Hanson, 1991; Peters, Wyatt, & Finklehor, 1986). Given the negative effects of childhood abuse that have been identified across a host of interpersonal and psychological domains, it seems entirely reasonable to expect sex offenders to have attachment problems, intimacy deficits, and poor relationships with others. In fact, it is probably a more interesting question to investigate how some men with similarly abusive backgrounds end up with positive relationships *in spite* of their past experience. Indeed, factors associated with resilience to

abuse are being studied (e.g., Efta-Breitbach & Freeman, 2004; Lambie, Seymour, Lee, & Adams, 2002; Liem, James, O'Toole, & Boudewyn, 1997).

The Value of a Strong Alliance

Adult patients frequently act out themes and patterns of behavior in their daily lives that are reminiscent of experiences from childhood (Yalom & Leszcz, 2005). For sex offenders, this often means feeling victimized, ignored, inadequate, or helpless, just as a child might feel in the presence of unpredictable or threatening adults, and acting in response to this. A strong alliance can enhance a patient's willingness to take therapeutic risks (Bowlby, 1988). For example, with a strong alliance, a patient may feel safe and supported enough to be assertive with their therapist, thereby symbolically confronting a domineering parent. Also, being exposed to authority figures (therapists) who are accepting and compassionate while also being able to provide structure without collusion may be unfamiliar. A strong alliance is thought to foster an environment where threatening material can be experienced, confronted, and integrated in the here-and-now (cf. Bowlby, 1988)

The process elements of an interpersonal, psychodynamic therapy group are theoretically well suited to meet the needs of this population. Transference is a central concept in the psychodynamic model. Freud identified this phenomenon early in the development of psychoanalysis. Initially he considered it to be an obstacle to therapy, but soon recognized it was the most integral aspect of the analytical process (Sandler, Dare, & Holder, 1970). Although much more elaborate descriptions of transference can be found, there is general agreement that it is the process whereby the patient ascribes to the

therapist qualities of a previously important figure in the patient's life and affectively responds accordingly. In individual psychotherapy, this often takes the form of the patient seeing the therapist as a parental figure, but in a group therapy situation, all members of the group become potential sources of transference. In group therapy, transference is the process which fuels the recapitulation of the primary family group. Yalom and Leszcz (2005) remind us that the replication of family dynamics in a group therapy setting is virtually inevitable. The corrective recapitulation of the family unit is, in fact, one of the "therapeutic factors" of therapy (Vinogradov, Cox, & Yalom, 2003).

As so many patients have been exposed to ineffective or abusive parent-figures, it seems apparent that what the group process can offer resonates well with what many sexual offenders need most. That is not to suggest that only offenders who have been abused in childhood would expect to reap benefit from this program and this style of therapy. Indeed, the universality of the human experience is underscored for participants.

The Role of Therapists

Countertransference is another central concept borne out of the psychoanalytic school. As with transference, Freud viewed it as an obstacle to be overcome, but in contrast to transference, he never came to realize the utility of the phenomenon (Sandler, Holder, & Dare, 1970). Generally, countertransference is seen to encompass the affective experiences – conscious and unconscious – of the therapist in response to the patient. These feelings can be overtly negative (e.g., outright hostility toward patient) or they can be manifestly positive (e.g., over-invested, or protective). There is agreement among clinicians that countertransference needs to be monitored and managed lest it interfere

with the work being done with the patient (Gelso & Hayes, 2002). Nevertheless, countertransference is seen as very informative to therapists should they have the skill and willingness to use their internal experiences as information about how relationships unfold with that particular patient.

Not surprisingly, strong countertransference reactions are likely to make it difficult for a therapist to demonstrate the qualities/techniques that Ackerman and Hilsenroth (2003) found were alliance-promoting (e.g., flexible, honest, respectful, trustworthy, reflective, supportive, affirming). Countertransference that moves from therapists' internal experience to being acted out in-session will undoubtedly replicate dynamics reminiscent of past experiences for the patient. For example, the patient may feel threatened by a therapist who begins to respond to the patient in a manner reminiscent of an indifferent mother, or a never-satisfied father.

Society, generally, holds a very negative view of sex offenders and their crimes. Their crimes are sometimes brutal and almost always disturbing in their details. Due to professional training and clinical experience, there is good reason to presume that therapists might be more willing than the average person to see the patient beyond the offence, but there is no reason to presume that therapists would not find the offences just as disturbing as anyone else. Although it may reflect a theoretical ideal, it is naïve to believe that therapists can maintain a non-judgmental, accepting position with patients at all times. This may be particularly true of therapists working with sexual offenders, and truer still when working with an inpatient population with whom therapists have a great deal of interaction (Lea, Auburn, & Kibblewhite, 1999). Sex offenders frequently cling to distorted ideas (Dawson, Barnes-Holmes, Gresswell, Hart, Gore, 2009) and have

difficulty empathizing with their victims (Covell & Scalora, 2002). They sometimes struggle in seeing the benefits of change, and can demonstrate a startling capacity for minimizing horrific behavior. All this conspires to create a therapeutic atmosphere where countertransference may be heightened and ripe for examination.

Rosenberger and Hayes (2002) report being unaware of any empirical study examining countertransference phenomenon in a group setting. The need for understanding the influence that countertransference might have on the alliance therefore appears self-evident. The ability to observe and quantify its influence might be particularly critical in work with sex offenders.

Life is relationships; the rest is just details.

Gary Smalley

Process Variables and Other Measures of Outcome

Given the number of programs and therapists providing sex offender treatment and the growing body of outcome literature supporting its efficacy (e.g., Hanson et al., 2002), it is apparent that treatment of sexual offenders is a worthwhile endeavor. Reduced recidivism is one positive outcome, and is obviously the outcome of greatest interest to evaluators and to the general public. It is unfortunate that other benchmarks of positive treatment response pale in comparison to recidivism, as it likely hampers the way the field evaluates its success and failures. One struggles to think of any other area of mental health or of psychotherapy where the demand for treatment response is so high, or the expectation so great. In most other areas of psychotherapy (e.g., addictions, depression), the norm is to see patients "relapse" and recommit repeatedly before changes are fully integrated. Sex offenders simply do not have that option. Nevertheless, that does not

mean the field should not look for other, less dramatic indicators of positive therapy response – outcomes that contribute to a lower risk of recidivism. Other possible positive outcomes include improved interpersonal health and/or a shift in personality traits toward greater maturity, and these may in turn be related to reduced likelihood of recidivism. Yet, little is known about the experience of therapy from the offender/patient's perspective, what particular aspects of the experience contribute to positive outcomes generally, or even what they themselves consider to be positive outcome (Sribney & Reddon, 2008).

The widespread adoption of cognitive behavioral therapy (CBT) as the favored approach to sex offender treatment has meant that priority has been assigned to skills-acquisition, relapse prevention, crime cycles, behavioral chains, and similar psychoeducational tasks (Association for the Treatment of Sexual Abusers; ATSA, 2004). Consequently, much less importance has been placed on the generation and maintenance of interpersonal relationships and work in the affective domain (Kear-Colwell & Boer, 2000). Some investigators have begun to rediscover that group process issues are indeed relevant in the treatment of sexual offenders (e.g., Beech & Fordham, 1997; Margalit, 2000; Marshall, 1996; Marshall et al., 2003; Reddon, Payne, & Starzyk, 1999; Sawyer, 2000). But while process issues may be regaining favor among some clinicians, few attempts have been made to obtain the perceptions of sex offenders regarding their subjective experiences in treatment. In one of the few studies to examine data provided by sex offenders on this subject, Day (1999) reported that offenders in his sample found the most helpful elements of treatment were those related to interpersonal factors. Day concluded that inter-group relationships might play a more significant role in predicting

outcomes than the content of the program itself. Such findings seem to confirm Bordin's (1979) position that relationships, not techniques, are the key agents of change.

The relationship between alliance and outcome has been examined for patients partaking in individual therapy. Consistently, a positive correlation has been reported (e.g., Martin, Garske, & Davis, 2000). For those participating in group therapy, however, the alliance-outcome relationship is less clear (Gillaspy, Wright, Campbell, Stokes, & Adinoff, 2002; Rosenberger & Hayes, 2002). The relationship between alliance and outcome among sex offenders in group oriented treatment is virtually unknown. Stukenberg (2001) provides a valuable clinical perspective on the importance of the alliance in the treatment of sex offenders. Given that these patients are frequently found to have disturbed attachment styles (Marshall & Marshall, 2000), have experienced high rates of childhood abuse (Adams, 2003; Aylwin, Studer, Reddon, & Clelland, 2003; Hanson, 1999), and often expect treatment staff to be punitive (Stukenberg, 2001), the alliance would seem to provide an opportune vehicle by which offenders can experience a wealth of new transferential learning. Given the overwhelming evidence that the therapeutic alliance itself can be healing, and that alliance strength is positively related to outcome (Horvath & Symonds, 1991; Martin, Garske, & Davis, 2000), it is imperative that the role of the alliance (and indeed all processes of therapy) not be overlooked for this patient group.

The rationale for the present study can be summarized as follows. A review of the sex offender literature and knowledge of the field clearly indicates that predicting recidivism is a priority not only among researchers, but also for decision makers and the general public. An actuarial approach with an emphasis on static predictor variables has

been utilized to help achieve this. Yet, the correlations obtained with the static factors seldom exceed .3. This means that up to 90% of the variance is unexplained by any particular static variable. While actuarial methods have some utility in identifying some offenders at higher risk to recidivate than others, these methods have limitations. Because dynamic variables can be modified by an offender's efforts at change/treatment, dynamic variables may provide the greatest opportunity to predict recidivism.

Despite an emerging literature suggesting that static variables can be ameliorated by therapeutic intervention (e.g., Studer & Aylwin, 2008; Studer, Aylwin, Clelland, Reddon, & Frenzel, 2002; Studer, Aylwin, & Reddon, 2005), treatment can only directly influence dynamic variables. Therefore, the study of the treatment process with sex offenders may reveal important mechanisms associated with reduced risk of recidivism. However, in order to be open to the evidence, one must be willing to at least consider that sexual offenders are not so dramatically different from other psychotherapy patients. Many non-sex offender patients come to therapy with a host of negative childhood experiences. The therapeutic alliance and the influence of clinician countertransference are likely as crucial for the effective treatment of sex offenders as they are for others.

Research Questions

The present study uses empirical data to answer a number of research questions:

1) What is the nature of the therapeutic alliance between convicted adult male sex offenders and their therapists, their co-group members, and their treatment program?

2) Is there change on outcome measures among this population over the course of treatment?
3) How is the therapeutic alliance associated with changes in outcome?
4) What is the nature of emotional responses by therapists, to this forensic sample?
5) How do the emotional responses to these patients differ between male and female therapists?
6) Are there relationships between emotional responses of therapists and ratings of the therapeutic alliance by patients?
7) Are there meaningful relationships between therapist affect and outcome?

Structure and Organization

The reader will note that Chapter 1 provides background on the rationale for undertaking this study and sets the stage for understanding why we examined things as we did. Very general research questions are provided above, and the study proceeds with the expressed intention to shed light on these issues. Chapter 2 provides a somewhat closer examination of how the study was set up, but more importantly, provides the context in which the study was conducted. This is particularly important, given that a fundamental facet to understanding alliance in any psychiatric setting resides in understanding the ethos of the program where the treatment is occurring.

In Chapter 3, the mechanics of the study are explained. Descriptions of the patient and the therapist samples are provided. Descriptions and psychometric data for all the instruments used in the study are also presented. Also in Chapter 3, specific hypotheses

are articulated. Chapter 4 briefly describes how the subjects go from admission through to participation in the study and on to data collection.

Descriptive results of the study are reported in Chapter 5. These results describe how the treatment completer group differed from the non-completer group at the outset of the study, and also how the groups changed over time, based on the measures we used. Independent samples t-tests, paired samples t-tests, multivariate analysis of variance, and one-way analysis of variance were the statistical tests used in the analyses reported in this chapter.

Chapter 6 contains descriptive and graphical data on how the in-group variables changed over time. Chapter 7 is restricted to patient-focused results. Relationships between patients' sense of Alliance, demographics, and outcome measures are reviewed here. At this point in the analysis multi-level modeling procedures are introduced to obtain slope coefficients of the in-group process variables.

Chapter 8 focuses on the therapists and the growth patterns of their affective response to these patients. The relationships between patient-rated Alliance and therapist-rated affect are explored in Chapter 8.

The overall results are summarized and compared against the stated hypotheses in Chapter 9. This chapter contains a discussion on interpretation of the present results and a discussion on the limitations of the study. Consideration is given to how these limitations might have been minimized and how the present study guides other researchers in terms of next steps and future research.

Chapter 2: The Present Study

Everything that irritates us about others can lead us to an understanding of ourselves.

Carl Jung

Overview

The present study has two distinct aims. The first arm of the study examines the therapeutic alliance reported by adult male sexual offenders participating in an inpatient group therapy treatment program. The role of the therapeutic alliance in psychotherapy of various theoretical orientations has been examined extensively. Moderate but positive correlations between alliance and outcome have consistently been reported (e.g., Martin, Garske, & Davis, 2000). It is the consistency of this finding that is most compelling. However, research on the therapeutic alliance has, to date, mainly focused on *individual* psychotherapy. This study is contributory in that alliance has not been extensively investigated in a group psychotherapy setting. More to the point, however, the import of the alliance in work with sex offenders has been severely neglected despite the significant potential it may hold as a powerful change mechanism with this population. Using a prospective design, this study assessed changes in the strength of the alliance as reported by patients over the course of many months of treatment in the Phoenix Program at Alberta Hospital Edmonton. Studies of this type typically focus on short-term psychotherapy. The fact that treatment completers in this sample are in therapy for at least a year and often longer is somewhat novel for North American studies, and is more typical of studies generated from European centers (Lorentzen, 2008).

The present study also examined the relationship between alliance (patient to therapist, patient to copatient, and patient to program) and various outcome measures.

Outcome measures included: changes in personality traits (values and needs), changes in interpersonal competency and relationship maturity, and changes in perceived interpersonal problems. Some of these outcome measures are novel in consideration with this population. In fact, much of the present work is novel and in many respects exploratory.

In the second arm of the study, the experience of therapists working with this sample is considered. This aspect of the research investigates treatment staff's repeated assessments of their own emotional responses to these same patients over the same time in treatment. The affective responses of staff are intended to *approximate* the countertransference phenomenon. In reviewing the empirical literature on countertransference, Gelso and Hayes (2001) reported that exhibiting countertransference reactions in session was injurious to therapy, and cited tentative evidence that this weakens the alliance when unmanaged. As very little empirical data has been gathered on countertransference thus far with any patient population, the present study offers a potentially valuable contribution to a small body of literature.

The therapist's affective state must certainly influence countertransference behavior to some degree. Indeed, therapist affect has been characterized as a main conduit to understanding countertransference (Najavits, 2000). Support for this assumption was demonstrated by McClure and Hodge (1987). Using multiple ratings to gather therapists' views of patients, therapists' perceptions of themselves, and clients' perceptions about themselves, they concluded that strong therapist affect and countertransference "march hand in hand" (McClure & Hodge, 1987, p. 335). They also suggested that therapist affect is generally contributory to the therapeutic relationship,

until some sort of threshold is reached. Beyond this threshold, therapist affect becomes detrimental to the process. Therefore, it seems clear that an examination of therapist's affective responses provides a more sophisticated understanding of the interactions which take place during therapy.

It is noted in Chapter 1 that countertransference phenomena have been under-examined with empirical measures. The present study makes an attempt to rectify that problem by measuring therapists' emotional reactions to patients. This is very close to being a proxy for countertransference, but in the present work we refrain from formally extending the definition. The phenomenon of countertransference was originally conceptualized as an entirely unconscious process on the part of the therapist (Freud, 1910; Rosenberger & Hayes, 2002; Sandler, Holder, & Dare, 1970). This is the so-called classical definition of countertransference, and is most closely associated to the tenets of the psychoanalytic school. As the decades have passed, the working definition of countertransference has evolved to a point where some clinicians consider virtually any experience of affect on the part of the therapist (unconscious, subconscious, or conscious) to constitute countertransference – the totalistic definition (McClure & Hodge, 1987). A third perspective, the moderate perspective, not surprisingly bridges these two. The moderate position holds that countertransference reactions can be conscious, but are the result of unresolved issues within the therapist (Rosenberger & Hayes, 2002).

Najavits (2000) cautioned researchers not to presume that countertransference is at the root of what therapists are aware of in terms of their own affect. She noted that since countertransference is at least partially subconscious by most definitions, it is potentially problematic to equate therapist emotion to countertransference. Rosenberg

and Hayes (2002) concur in general, but they also find it disconcerting that so little empirical work has been done on this process and actively encourage researchers to use novel approaches to continue examining countertransference reactions. In addition, given their observation that essentially no empirical research has been conducted in the group therapy realm, they would likely accept the use of affective responses as proxy measures of countertransference. In the interest of conservatism, we will stop short of making that assertion. One other issue provides reason for cautious interpretation. Although the REACT appears to be the best available instrument for a study such as this, there is a possibility that the forced choice Likert format does not capture true therapist affect. This possibility was presented by one of the program therapists who stated that she felt her opinion rather than her affect was being captured.

This study examined the strength of the alliance reported by patients, and the degree of affect reported by treatment staff, as predictor variables of outcome. The association between the strength of the alliance and affective responses in therapists was also examined. The present research represents one of the first outcome reports of an ongoing longitudinal study examining relationships between alliance strength, therapist reactions, immediate treatment outcome, and predictors of sexual offence recidivism in the long term.

Depth of Analysis

There are two distinct types of analysis being undertaken in the present study. The first is primarily descriptive. Chapter 5 describes the changes that patients reported in their alliance with peers and staff over time. This is important normative data as there are

no comparable reports available. Likewise, the emotional responses of therapists to this type of patient over time is important for establishing some sort of normative data to which future studies might compare results. To date, there are no such data published with a sex offender population. Descriptive analysis is also applied to the pre-post measures used in the study. Changes (or stability) in personality variables and other psychological constructs are also presented in Chapter 5.

The second type of analysis to examine more sophisticated research questions demanded more complex procedures to fully exploit the available data. HLM procedures were used to capture the trajectory of changes in alliance ratings and REACT ratings. These trajectory variables (slope estimates) were then examined to determine if they were associated with outcome.

I never teach my pupils. I only attempt to provide the conditions in which they can learn.

Albert Einstein

Treatment Context

The Phoenix Program is the first phase of a fully integrated three-phase program for treating convicted adult male sex offenders. Typically, patients who complete the inpatient phase will reside in hospital for at least one year. Phase two (Step-Out Program) operates out of the Forensic Assessment and Community Services (FACS) program in Edmonton, Alberta. The Step-Out Program provides treatment to Phoenix Program patients after they have completed inpatient treatment and are making the transition back into the community. After anywhere from 4 to 10 months of positive transition (depending on how well the individual is progressing), patients move to a weekly Follow-Up group. Patients can attend the Follow-Up group for as long as they wish

provided they have not re-offended. Staff promotes the notion that patients have a lifetime membership to this group, if they should want it. The entire program is overseen by a single clinical team and is operated under the auspices of Alberta Health Services (formerly Capital Health).

The first phase of the Phoenix Program is operated in a 19-bed unit located in a medium security forensic facility at Alberta Hospital Edmonton. Overall, the hospital provides acute and long term care to adult, geriatric, and forensic psychiatric patients primarily from the northern Alberta region. Approximately 135 forensic patients are housed in the Helen Hunley Forensic Pavilion.

Treatment on the Phoenix Program consists almost exclusively of group psychotherapy. Some patients receive medication for mild to moderate symptoms of depression and/or anxiety (e.g., SSRI's, SNRI's) As well, experience has shown that some of these patients appear to gain benefit from very low doses of anti-psychotic medications (e.g., 0.25-mg Risperidone) but these are prescribed infrequently. Otherwise, there is virtually no other psychopharmacological treatment. This includes anti-androgens, which are typically discontinued if patients are taking them upon arrival to the hospital. The rationale for this long-standing treatment approach has been that anti-androgens have a significant and unpleasant side effect profile inducing such conditions as obesity, osteoporosis, and gynecomastia (Giltay & Gooren, 2009). Consequently, there is a strong motivation to discontinue medications upon completion of court mandated sanctions. Therefore, it is thought to be more advantageous for patients to learn how to manage their deviance without the aid of anti-androgens.

Many other sex offender treatment programs employ group therapy and augment with individual therapy periodically. In the Phoenix Program model, individual therapy is not provided. Instead, patients are repeatedly referred to the group for feedback and support. Patients attend a number of multimodal group therapy sessions throughout the day. Some of these groups are structured and skills-oriented and include anger management, communications, assertiveness training, substance abuse groups, Goal Attainment Scaling, cognitive restructuring, and high risk recognition. Others are unstructured, interpersonal, and insight oriented. This type of unstructured group is best represented by the small-group psychotherapy sessions which occur daily for all patients. The patients are assigned to one of two small groups (arbitrarily named A and B) and remain with this group for their entire time in treatment. To facilitate transference reactions, to recapitulate familial dynamics, and to simply provide continuity and familiarity, there are consistent group facilitators assigned to these groups. It has been reported by both patients and staff that the small psychotherapy group is where the most "work" gets done.

Over the course of a week, there are approximately 35 hours of programming. The bulk of this time is reserved for group therapy sessions. There are about 6 hours of recreational time built into the schedule, but this is conducted in a group format as well. The program operates very much as a therapeutic milieu. Consistent with this approach, the patient group is expected to set its own norms and exercise control over decisions on the unit. The types of norms the group set can range from what is appropriate television programming, to meal planning and preparation on weekends, to appropriate conduct in therapy sessions. By having permission to openly challenge the experiences and beliefs

of many other sex offenders (Stukenberg, 2001), the group is given a great deal of legitimate power over some very important decisions. The group is expected to make judgments regarding privilege levels, passes off hospital grounds, and occasionally, the suitability of a member's ongoing participation in the program.

Although there are many elements of the program which borrow from CBT these are subordinate to an interpersonal here-and-now focus (Yalom & Leszcz, 2005). For example, the group members are expected to do a variety of written assignments addressing issues such as crime cycles or substance abuse relapse chains. Such assignments delineate the thoughts, feelings, and behaviors which precede an offence or substance relapse, and are considered standard in other sex offender treatment programs (Drapeau, Körner, Granger, & Brunet, 2005; Marshall & Laws, 2003). Assignments such as these are prototypically CBT in orientation. What is considered *more* essential, however, are the relationship dynamics which develop on the unit (see Studer & Aylwin, 2006b). Also considered fundamental are transference issues that arise for patients in their work with the staff.

A great deal of energy is spent ensuring that few prison values are brought into the hospital. Historically, the program has had continual intake of patients so that at any given time there are patients at various stages of treatment (i.e., newly admitted, at about mid-point, close to discharge). An important point about the Phoenix Program is that the unit staff are also the clinical staff. In contrast to some other programs which see the patients reside on a unit, but go off unit for programs, the care-giving and supervisory staff are also the group therapists. This is possible due to our utilization of a skilled nursing complement augmented by the other multi-disciplinary professionals who spend

the bulk of their time on the unit facilitating groups. While the treatment team tries to work as a unified team with parole and probation authorities, the patients are candidly told that the reporting requirements under a doctor-patient relationship are significantly different than the reporting requirements mandated for parole and probation officers. Therefore, patients are usually much more candid with treatment staff about past conduct than they are with parole/probation officers that are involved in their case management from a correctional perspective. While the Phoenix Program has existed in roughly its current form for over twenty years, we actually have in place virtually all the recommendations put forth by Ross, Polaschek, and Ward (2008) as a model to maximize facilitation of a therapeutic alliance with offender populations. This serendipitous situation might, in the future, allow for a formal test of the revised attachment model these researchers recently put forward.

The nature of psychotherapy is such that the therapist holds a unique position in the patient's life while they are in therapy. Co-members also hold significant status. Yalom and Leszcz (2005) describe how the family structure is recreated in any small psychotherapy group. Consequently, there are repetitive themes that emerge. Themes of sibling jealousy, anger toward parents (either sublimated or directly expressed), abandonment, rejection, and adoration frequently arise. In therapy, patients are encouraged to recognize the ways that longstanding and often unproductive interpersonal responses still occur for them in the present. The tenor of the treatment practiced on the Phoenix Program is very much in line with Bowlby's (1988) five therapeutic tasks for therapists. Paraphrasing Bowlby (1988, pp 138-139), he described these tasks as: 1) to provide the patient with a secure base from which he can explore unhappy and painful

aspects of his life, past and present; 2) to assist the patient in his exploration by encouraging him to reflect upon the ways he engages in relationships with significant others in his current life; 3) to encourage the patient to examine the relationship that he has with the therapist (and other group members); 4) to encourage the patient to understand how current affect, expectations, and perceptions might be influenced by past experiences; and 5) to encourage patients to get clear on how current perceptions of self and others are misleading, unhelpful, or simply wrong.

A very illustrative clinical example occurred early in the course of this study. The author, who is married, was having his wedding ring repaired. As a consequence, he did not wear it for several days. This small detail was immediately noticed by some group members who first ignored the fact. After a day and a half of ignoring this, the author engaged a patient about his apparent preoccupation over the last couple of days. The patient abruptly stated that he hoped the therapist was doing OK since he was not wearing his ring. Once acknowledged out loud, group members expressed a great deal and a great range of affective response over the therapist's personal situation. For many members, the absence of the ring indicated that the therapist was involved in a failed relationship. For them, this "fact" provoked great anxiety and a reduction of confidence in his ability to help them in their own relationships and therapeutic struggles. Others were concerned for the therapist's personal welfare. Some felt closer to him as he somehow seemed more human and fallible, and still others seemed to resent the fact that he could be as vulnerable to life's vagaries as anyone else. In most cases the responses of patients were borne out of experiences in the past, most often exposure to parental discord.

Various analyses have been conducted on the Phoenix Program patient cohort, and most of these have been published. An examination of offense severity in this sample was reported by Aylwin, Clelland, Kirkby, Reddon, Studer, and Johnston (2000). The discrepancy between what these patients have been convicted of and what they actually report having done has been examined, especially as it relates to having incestuous victims (Studer & Aylwin, 2006c; Studer, Clelland, Aylwin, Reddon, & Monro, 2000). Post-discharge reliability of known risk factors have been addressed by Studer and Aylwin (2008), Studer et al. (2002), Studer and Reddon (1998), and Studer, Sribney, Aylwin, and Reddon (in press). Endocrine studies of this cohort have been reported by Studer and Aylwin (2006a), Studer et al. (2005), and Studer, Reddon, and Siminoski (1997). General outcome in terms of recidivism have been reported by Studer, Reddon, Roper, and Estrada (1996), and advocacy for the importance of a treatment program which moves beyond the typical CBT/Relapse Prevention Model has also been published (Studer & Aylwin, 2006b).

Chapter 3: Methods

The truth is cruel, but it can be loved, and it makes free those who have loved it.

George Santayana

Participants

Patients.

The patient sample was composed of 95 adult males convicted of committing sexual crimes and who also attended treatment at the Phoenix Program. Traditionally, almost any crime of a sexual nature has been considered for treatment in this program. That includes a full range of sexual crimes from hands-off offences such as voyeurism or exhibitionism, to invasive offences against children (intrafamilial or extrafamilial), to what is loosely called rape against adult victims. Recently, the program has treated quite a number of offenders with internet-based offences such as luring for sexual purposes, or procuring and/or distributing child pornography. It has been established that offenders in this program admit to having committed many more offences than those for which they were convicted, and against more diverse victims (Studer & Aylwin, 2006c; Studer et al. 2000). For this reason, the index (or referring) offence is a somewhat unreliable descriptor. Nevertheless, the present sample was comprised of approximately 58% child molesters, 16% adult hands off or rape offenders, 5% mixed category offenders, 4% internet offenders, 5% with a non-sexual index offence, but past sexual convictions, and 15% with missing data in this category.

There are three exclusionary criteria for people seeking treatment at the Phoenix Program. First, patients need to have sufficient cognitive ability to participate in and benefit from a verbal, group therapy-based treatment. Experience has shown that patients

with a full scale IQ of less than approximately 80 points struggle in this setting and find it frustrating. The second exclusionary criterion involves psychological stability. An effort is made to exclude patients who have a history of a psychotic episode or major mental illness. Again, taking a cue from experience, it has been found that the stress and intensity of this type of treatment causes patients to de-compensate and exacerbate symptoms that in some cases have been dormant for many years. Issues of depression or anxiety are common and not an obstacle to successful treatment. The third criterion for exclusion involves outright denial of the crime for which they are convicted. Virtually any admission of responsibility for having committed the crime and having a sexual problem is sufficient. It is routine for patients to begin treatment endorsing an array of distorted beliefs that serve to abdicate various aspects of responsibility. It is a different matter to seek treatment for a problem that categorically does not apply to an offender.

Typically, patients admitted to this program are transferred from correctional facilities in Western Canada. The program is voluntary in the sense that patients are not mandated by the courts to attend the Phoenix Program for treatment, nor are they committed under mental health legislation. In all cases, these men are competent and culpable in the eyes of the court. At any time, patients can request to be discharged, but this usually results in a transfer back to the prison system. From the start of the project, all new admissions to the Phoenix Program were invited to participate in the study. Additionally, patients already in treatment at the beginning of the study were asked to participate. Therefore, they could (and did) contribute at least partial data. The Patient Consent Form and the Patient Information Form used in the study are reproduced in Appendices A and B respectively.

Immediately, a self-selection bias is introduced as not all convicted sex offenders seek to attend treatment in this or any other program. This will be addressed further in discussion of the study's limitations. Further, not all patients who are admitted to the program choose to, or are permitted, to finish the program. Approximately 40-50% of patients do not complete phase one of treatment for various reasons such as poor motivation, unacceptable behavior, patient request, or change in legal status. A demand for "full and active participation" is most often where patients falter. The attrition rate for this study was expected to reflect the treatment non-completion rate. Given a review of several previous years, that was expected to be approximately 50%.

Patients were included in the study if they were discharged between July, 2002 and October, 2008. During this time frame, 97 patients were discharged. At the conclusion of data collection there were 18 patients still in treatment at various stages, but their data were not included in analysis. There were no patients who formally withdrew participation once they had started participating. A low refusal/withdrawal rate was anticipated because experience with this patient group has shown them to be very cooperative with requests to participate in opportunities to assist the program. As it turned out, the expectation was well founded as only 1 individual refused participation outright. This particular patient requested to leave the program shortly after arriving. This represented only 1% of the patient pool potentially available for participation, and 2% of the treatment non-completer group, of which this patient was a member. A second patient asked to be transferred back to prison very shortly after arriving, and was never invited to participate. Out of the 97 patients available to participate in the study, 95 actually did.

This represents a 97.5% participation rate. Breaking this down further, 53 (55.8%) completed the inpatient phase of treatment and 42 (44.2%) did not complete treatment.

In past analyses of Phoenix Program patients, comparisons between treatment completers and treatment non-completers have revealed few group differences. There has traditionally been higher IQ scores and, not surprisingly, more years of education among completers. While this difference has been statistically significant in past analyses, the actual differences have been rather slight. A comparison of the completers and the non-completers in the present sample is presented in Table 1 with regard to demographic and offense variables.

As indicated in Table 1, there were almost no demographic differences between groups in this particular sample. The non-completers were significantly older (42.7 years versus 36.5 years, $p = .019$). If one were to assume that impulsive decision making might be related to leaving treatment prematurely, we might have expected that non-completers would be the younger sub-group. In lay terms, youth is often associated with impulsivity. In criminological terms youth is known to be associated with criminal recidivism. Demographically, the only other difference between groups was in the proportion of adult victim only offenders (i.e., rapists). Offenders with only adult victims were more prevalent among the treatment completer group than the non-completer group (23.3% and 5.9% respectively). This difference was unexpected, as our clinical impression had been that so-called rapists tend to be somewhat more difficult to keep engaged in treatment. This impression appears to have been inaccurate at least over the years of the current study.

Table 1

Comparison of 52 treatment completers and 43 non-completers of the Phoenix Program on demographic and offence variables

Variable	Treatment Completers (valid cases) value (S.D.)	Treatment Non-Completers (valid cases) value (S.D.)	p - value (two-tailed)
Age at admission	(51) M = 36.5 yrs (10.60)	(39) M = 42.5 yrs (13.81)	.023*
No. previous convictions (sexual)	(33) M = .76 (1.12)	(27) M = 1.15 (1.38)	.230
Male victims ever[a]	(10/43) 23.3%	(9/34) 26.5%	.745
Male victims only[a]	(3/43) 7.0%	(4/34) 11.8%	.468
Adult victim only[a]	(10/43) 23.3%	(2/34) 5.9%	.037*
Incestous offence[a]	(9/47) 19.1%	(3/34) 8.8%	.197
Extra-familial child victim[a]	(24/47) 51.1%	(20/34) 58.8%	.489
Mixed or other sex offence[a]	(14/47) 29.8%	(11/34) 32.4%	.805
Years of education	(42) M = 10.29 yrs (2.10)	(28) M = 9.82 yrs (2.97)	.477

Serum Testosterone[b]	(45) 17.77 nmol/ℓ (7.62)	(29) 18.97 nmol/ℓ (8.65)	.528
Severity of offence(s)[c]	(45) M = 3.18 (1.57)	(35) M = 2.89 (1.18)	.362
Sexually abused in childhood[d]	(23/45) 51.1%	(16/33) 48.5%	.819
Severity of childhood sexual abuse[e]	(46) M = .96 (1.12)	(32) M = 1.13 (1.26)	.533
Caucasian[f]	(40) 76.9%	(27) 62.8%	.235
Native American or Metis	(8) 15.4%	(7) 16.3%	.835
Black or Hispanic	(0) 0.0%	(2) 4.7%	.108
Married or common law[g]	(14) 26.4%	(12) 28.6%	.998
Single	(20) 37.7%	(12) 28.6%	.348
Divorced or separated	(6) 11.3%	(6) 7.1%	.666

Note. [a]based on combination of self-report and official record; [b]serum sample taken at admission, means not controlled for age, see Studer et al. (2005); [c]based on most invasive offence as per Aylwin et al. (2000); [d]based on combination of self-report and collateral confirmation; [e]based on clinical notes and scored as per Aylwin & Studer (2008); [f]race data missing in 11 cases; [g] data missing in 28

cases. Means compared with independent samples t-test. Using Levene's test for equality of variance, equal variance assumed in all cases except years of education. Proportions compared with z-test for proportions.

Table 2 contains the results of comparing completers and non-completers on risk variables. Scores on the Static-99 (Hanson & Thornton, 1999), Rapid Risk Assessment of Sexual Offence Recidivism (RRASOR; Hanson, 1997) and the Psychopathy Checklist – Revised (PCL-R; Hare, 1991) were compared and no significant differences were revealed across items, or on the overall scores. This result is noteworthy because offender risk level is often used as the basis for many treatment and offender management decisions in the Canadian correctional system (Studer et al. in press). In the Phoenix Program, a patient's risk level is not considered in determining treatment suitability. In fact, very few staff would typically even be aware of what the actual RRASOR or PCL-R scores would be for most patients. Insofar as this group psychotherapy program is concerned, actuarially derived risk level had no relationship to the likelihood to complete treatment.

Table 2

Comparison of treatment completers and non-completers of the Phoenix Program on risk level

Measure	Treatment completers Mean (S.D)	Treatment non-completers Mean (S.D)	p - value (two-tailed)
Static-99 items[a]	50 cases	35 cases	
1 – prior sex offenses	.24 (.43)	.31 (.47)	.454
2 – prior sentencing dates	.24 (.43)	.40 (.50)	.128
3 – non-contact sex off.	.22 (.42)	.14 (.36)	.377
4 – non-sex violent index off.	.72 (.45)	.77 (.43)	.599
5 – prior non-sex violence	.28 (.45)	.26 (.44)	.818
6 – any unrelated victims	.92 (.99)	1.29 (1.13)	.116
7 – any stranger victims	.18 (.39)	.17 (.38)	.920

8 – any male victims	.26 (.44)	.34 (.48)	.415
9 – age of offender	.40 (.50)	.51 (.51)	.303
10 – long term relationship	.12 (.33)	.09 (.28)	.618
Static-99 bin score	3.63 - Medium-high	4.29 - Medium-high	-
RRASOR items[b]	50 cases	35 cases	
1 - prior convictions	.90 (1.00)	1.29 (1.13)	.100
2 - age at release	.14 (.35)	.09 (.28)	.451
3 - victim gender	.24 (.43)	.31 (.47)	.454
4 - victim relationship	.72 (.45)	.77 (.43)	.599
RRASOR bin score	1.70 - Medium-Low	2.03 - Medium-Low	-

PCL-R[c]	53 cases	33 cases	
Total score	19.96 (6.37)	21.09 (7.24)	.451
Factor 1	8.66 (3.16)	9.09 (2.54)	.511
Factor 2	8.96 (4.05)	9.21 (4.42)	.789

Note. [a]Static-99 (Hanson & Thornton, 1999); [b]RRASOR (Hanson, 1997); item 2 coded as 0 = >25 yrs. and 1 = <25yrs.; item 3 coded as 0 = female, 1 = male; item 4 coded as 0 = familial victim, 1 = stranger victim; [c]PCL-R (Hare, 1991); means compared with independent samples t-test. Bin scores not compared as the groupings are categorical and not based on continuous coding. PCL-R Factor 1 – Personality (aggressive narcissism), PCL-R Factor 2 - Case history (socially deviant lifestyle)

Therapists.

One aspect of the study involved collecting data on the affective responses of treatment staff to the patients. Thus, the clinical staff members of the Phoenix Program were also participants in the study. As such they were invited to participate in the study, and signed consent was obtained from all those who volunteered (see Appendix C). All clinical staff of the Phoenix Program were invited to participate.

Initially, only full-time therapists were considered, however, it was decided that one part-time nurse (0.6 Full Time Equivalent) ought to be included given the amount of in-group work she did with patients. This staff member later took on a full time rotation with approximately ⅓ of the data collection phase remaining. Several disciplines were represented in the therapist sample. The pool of therapists available for inclusion at the start of data collection were comprised of: 1 Psychiatrist (MD), 1 Program Manager (MCA), 1 Psychologist (MEd), 1 Social Worker (MA), 3 Registered Nurses (BScN), 6 Registered Nurses (diploma level), 5 Forensic Therapists (BA), and 2 Recreation Therapists (BA). The gender composition makeup of this group is reported in Table 3. Of this group only one therapist declined participation at the outset (1 Registered Nurse, male). This represented 5.8% (1/17) of the total population of therapists available to participate at that time.

Approximately half of the data collection phase had passed when one therapist (Social Worker, female) formally asked to withdraw from ongoing participation, but was willing to allow the data already collected to be used in analysis. Interestingly, she reported that she thought completing the therapist affect rating forms were causing her to feel more negatively toward the patients. This appears to have been anomalous, as several

therapists reported having the opposite response, and some thought it was a wise thing to stop and reflect on their emotional responses to these patients from time to time. Over the course of the study, there was a small degree of therapist turnover. As new staff joined the team, they were invited to participate in the study and all agreed. Ultimately, 21 different therapists provided data for the study. Some therapists completed a great many affect assessment forms, while others completed relatively few (see Table 4). The distribution of disciplines did not change over the study, but some of the individuals (and the resulting gender makeup) did (see Table 3).

Table 3

Summary of Phoenix Program therapists by gender and discipline

Therapist discipline	n	male	female
Psychiatrist, MD	1	-	1
Psychologist, M.Ed.	1	-	1
Social Worker, MSW	1	-	1
Recreation Therapist, B.A	2	1	1
Nurse, B.Sc.N, R.N., R.P.N.	10	6	4
Forensic Therapist, B.A	5	2	3
Unit Manager, MCA	1	-	1
Total	21	9	12

Table 4

Number of REACT forms completed by each therapist

Therapist Code Number	Completed REACT forms	Percentage of all completed forms
3	502	10.9
5	437	9.5
7	393	8.5
6	377	8.2
4	349	7.6
13	404	8.7
16	330	7.1
8	324	7.0
2	303	6.6
15	297	6.4
10	245	5.3
9	217	4.7
12	99	2.1
11	97	2.1
14	67	1.5
18	56	1.2
1	51	1.1

19	36	0.8
20	12	0.3
21	14	0.3
17	8	0.2
Total	4618	100.0

Given variable shift rotations and 24 hour staffing requirements, some staff members work more evenings or more weekends than other staff. Consequently, they are likely to have more out-of-group interactions than regular daytime staff. By contrast, daytime staff members attend a substantially greater number of groups and have more therapeutic interactions with the patients. Consequently, staff may have differing perspectives on any particular patient, and differing affective responses toward them. These differing perspectives were desired so that variability in therapist responses might be maximized. Also, seeing patients in multiple environments allows for staff to report on a more comprehensive, and hopefully "truer", representation of the affective response elicited by these patients.

Najavits (2000) has made recommendations for conducting research with therapists. Where appropriate, these recommendations were adopted. For example, Najavits (2000) advocates that response anonymity be ensured. She suggested that therapists be instructed to respond via a code number of their choosing, and that completed coding forms are collected in a common bin. Accordingly, staff members were asked to consistently use any number, letter, or symbol code of their own choosing to identify themselves on response forms. This simple mechanism provided anonymity, but also permitted collation of forms. To assist the therapists, the primary investigator (PI) left the required forms for the week in a central area. They were prepared with the patients' name, hospital file identification number, and the patients' current number of months in treatment.

As the patient sample was exclusively male, therapists may have had emotional responses which may have been associated with therapist gender. For example, these

patients have been sexually abusive to women and children, and it is possible that the affective responses to these acts differ whether the therapists are male or female. As examples of how emotional responses might vary by gender, it was conceivable that female therapists might harbor an increased sense of conflict within themselves for working with this population, or increased negative affect given that other women and children were frequently the targets of their abuse. Alternatively, male therapists could conceivably have increased conflict within themselves for seeing parallels between their own thinking and that of the patients. Another possibility is that there would be a "gender shame" effect. That is, there might be increased resentment harbored by male therapists given that these patients do not typically represent the best examples of what it is to be male. To allow for gender discriminative analysis, female staff were provided pink response forms while male staff were provided blue response forms. No other means of demarcating which staff completed which forms was used.

Najavits (2000) also recommended that therapist responses were most meaningful in real world clinical settings as opposed to responding to written vignettes. Clearly, this condition is met in the present situation. She also recommended having a "can't say" response option. Najavits (2000) suggested that this will seldom be used, and provides a respectful option for therapists who are either reluctant to report an emotional response, or are unsure about a feeling they have. This recommendation was also followed in the current study.

Measures

Alliance.

The strength of the alliance from the patient's perspective was assessed using two measures. First, a six-item self-report alliance instrument previously used in a number of studies was employed (e.g., Piper, Joyce, McCallum, Azim, & Ogrodniczuk, 2002). Although not specifically named as such, this instrument has come to be known as the Edmonton Therapeutic Alliance Scale. Patients rated their experience of the alliance with the primary small group therapists they work with daily. They also rated their experience of the alliance with the overall program, and their sense of alliance with their peer group. With permission (and with no expectation of impact), the wording of these items was modified very slightly to suit the present situation. For example, item number three was variously phrased "To what extent do you feel clearly understood by your therapist today?", "To what extent to you feel clearly understood by your peers today?", and "To what extent do you feel clearly understood by staff generally today?" depending on which alliance target was being rated.

The decision to have patients rate alliance with three specific elements of their treatment experience fit well with Burlingame, Fuhriman, and Johnson's (2002) view of which relationships are "primary" within group therapy. These authors asserted that these three specific alliances (patient-therapist, patient-patient, patient-program) constitute the full therapeutic relationship of any clinical group. Collectively, these alliances define cohesion as it applies to group therapy (Burlingame et al.). In the current study then, the global mean of the three alliance dimensions was calculated and identified as "cohesion" as per Burlingame et al. and Leszcz (1998). It should be noted, however, that some

experts believe cohesion is a more complex construct than alliance (e.g., Joyce, Piper, & Ogrodniczuk, 2007).

Horvath and Bedi (2002) noted that there were at least 24 different instruments available to researchers to assess alliance. In the original format, the patient and therapist each rated six, 7-point Likert-type items that ranged from 1 = "very little" to 7 = "very much" after each therapy session, for a total of 20 sessions. The items address whether the patient (a) talked about private important material; (b) felt understood by the therapist; (c) understood and worked with what the therapist said; (d) felt that the session enhanced understanding; (e) felt the therapist was helpful; and (f) thought the therapist and patient worked well together. The latter two items reflect the helpfulness and collaboration elements of Luborsky's (1984) concept of the helping alliance. This instrument was attractive due its ease of use and straightforward scoring. Patients were not expected to find this instrument burdensome, and this appeared to be an accurate expectation as no negative comments were expressed with regard to this instrument. This was particularly important since patients were being asked to complete these ratings on multiple targets, numerous times over their time in treatment.

In evaluating the instrument’s relevant psychometrics, item ratings from each patient were averaged across sessions and subjected to a principal components analysis (Lorentzen, 2008). One factor accounting for 87% of the variance emerged for the patient-rated items. The factor had high internal consistency as reflected by coefficient alphas of .97 for patient-rated items. Lorentzen (2008) also reported that his group found a strong correlation (r = .75) between the Edmonton scale and the widely used Working Alliance Inventory (WAI; Tracey & Kokotovic, 1989). In previous work, an alliance

score for each participant in each session has been derived by calculating the average of the six items, and the overall alliance was represented by the mean of the session scores. This brief scale was originally designed for use with patients and therapists, but in the present study only the patient ratings were used. Alliance scores on the three relationships under consideration [patient to therapists, patients to copatients (or "peers" as they refer to each other), and patients to the program overall] were tallied and examined separately, in addition to an overall mean under the label of "Cohesion." The Likert scale also was simplified to range from 1 to 5 rather than the 1 to 7 scale used with the original instrument. A sample of the instrument given to patients is found in Appendix F.

Group Environment Scale.

Although assessing alliance is not the expressed intent of the Group Environment Scale (GES; Moos, 2002), it is an instrument designed to assess various facets of an individual's experience of a group of which they are a member. Burlingame and colleagues have cogently argued that, in contrast to individual therapy, the psychotherapy group consists of multiple relationships which interact with each other and are constantly changing (Burlingame, MacKenzie, & Strauss, 2004). They further assert that the alliance, as experienced by group members, takes these multiple relationships into account, and that group cohesion *is* the therapeutic relationship (Burlingame et al. 2002). The GES, then, with three subscales devoted to in-group relationship dimensions, was well suited for use in the present study. The GES is one of a set of widely used social climate scales and has previously been used in examining differences among sex offender treatment programs (Beech & Fordham, 1997) and differences in sex offender group

composition (Harkins & Beech, 2008). Beech and Hamilton-Giachritsis (2005) also found a strong correlation between scores on two GES scales (Cohesion and Expressiveness) and reductions in pro-offending attitudes among 88 convicted sex offenders. The GES has 90 items and contains 10 content scales. A scale score on this instrument is the summation of relevant items to which the respondent answered positively (Salter & Junco, 2007). As there are nine true/false items per scale, scores could range between 0 and 9 for each scale. A high score indicates the presence of that characteristic in the group, while a low score indicates a lack or absence of a particular characteristic within the group (Moos, 2002). The GES can be completed by the members of the group under study and/or by the leaders of the group. In the present study, only the patients completed the GES.

The scales are in turn are used to assess three dimensions of the group: relationships within the group, personal growth of group members, and system maintenance and system change. The scale descriptors as provided by Moos (2002) are:

Relationship Dimensions

1. Cohesion
2. Leader support
3. Expressiveness

Personal growth Dimensions

4. Group member independence
5. Emphasis on tasks
6. Group member self-discovery
7. Anger and aggression

System Maintenance and Change Dimensions

8. Group order and organization
9. Degree of leader control
10. Group innovativeness

The GES is psychometrically sound with test-retest reliability from r = .65 to .87 across scales over a one month period and moderate to high scale internal consistencies (Cronbach's alpha ranging from .62 to .86; Moos, 2002). Moos has developed versions of the GES available for assessing one's ideal group, and a group in which one is about to obtain membership. Other researchers have developed offshoot versions of the GES for other more specific group assessments (e.g., Wilson et al., 2008). The first three scales of the GES – cohesion, leader support, and expressiveness - are likely most relevant to this study, but consistent with the exploratory nature of this work, all the data are reported. The GES is unique in that it is something of a hybrid between a process and an outcome variable.

Staff Affective Responses.

The Ratings of Emotional Attitudes to Client by Therapist scale (REACT; Najavits et al., 1995) was employed to assess countertransference-type affect of therapists toward patients. The instrument was not considered appropriate for use with patients to assess their affective responses to therapists as it was not designed for that purpose, nor were items framed in such a way that this would be possible. The 38 item REACT scale was initially developed and used in work with cocaine-dependent patients. Substance abuse patients are commonly perceived by mental health professionals as a difficult

population with which to work. Sexual offenders are generally seen in that same light. Although this instrument has had limited use in published reports, it was considered very well suited for use in the present study.

Najavits et al. (1995) conducted a factor analysis on REACT responses by 51 therapists with mixed theoretical orientations. A four-factor solution provided the most meaningful interpretation of items and accounted for 52% of the variance. The four factors that emerged were: 1 - *therapist in conflict with self;* 2 - *therapist focus on own needs*; 3 - *positive connection with patient*; and 4 - *therapist in conflict with patient*. Truncated versions of the items in each of these factors are listed in Table 5.

Internal consistency was reportedly high, with Cronbach's alpha coefficients ranging between .80 - .82 across factor-scales at different times in treatment. While there were expected negative relationships between patient alliance scores and the three "negative" factors (1, 2, and 4), there was a low to moderate relationship between alliance and the "positive" factor (3). A low correlation was found between overall REACT scores and patient alliance ratings (.27 - .47). Najavits et al. suggest this may be due to therapists' ability to keep emotional responses hidden from their patients.

Table 5

REACT items and their associated Factors as per Najavits et al. (1995)

Item	Factor 1 Therapist in conflict with self	Factor 2 Therapist focus on own needs	Factor 3 Positive connection with patient	Factor 4 Therapist in conflict with patient
Doubting my competence	X - neg			
Satisfied with my therapeutic efforts	X - pos			
Thought about patient outside sessions	X			
Overwhelmed by severity of patient	X - neg			
Worried about the patient	X - neg			
Stressed working with patient	X - neg			
Optimistic about patient's future	X - pos			
Gratified about my work with patient	X - pos			

Confused about the patient	X - neg		
Frustrated	X - neg		
Disappointed with patient or treatment	X - neg		
“Burned out” with this patient		X - neg	
Drained and exhausted		X - neg	
Insufficiently paid on this case		X - neg	
Sense of over-involvement with patient		X - neg	
Provoked or angered by this patient		X - neg	
Wishing to withdraw from contact w/patient		X - neg	
Bored with the patient		X	
Enjoyment with the patient			X - pos
Connection or attachment with patient			X - pos
Liking, fondness, affection for the patient			X - pos
Empathy, sympathy, or compassion			X - pos
Tolerant and understanding			X - pos

Appreciated by the patient	X - pos	
Cautious/uneasy confronting or setting limits		X - neg
Manipulated or used by the patient		X - neg
Power struggles with this patient		X - neg
Helpless in relation to this patient		X - neg

Note. Items included on the overall Positive REACT dimension are noted "pos". Items included on the overall Negative REACT dimension are noted "neg". Some items not included on either dimension, and some items of the REACT are not included in any of the Factors. See original source for full item list and contact the REACT authors for scoring instructions.

Outcome Measures

In discussing what kinds of changes should be assessed in psychotherapy research, Messer and Warren (1990) note that the context of therapy and the underlying theoretical assumptions of the therapist will dictate what is considered positive outcome. They comment that these are unavoidably value-laden decisions. The important point, they say, is not that these assumptions be eradicated, but that they be made explicit (Messer & Warren, 1990). In terms of the present study, it is important to clearly identify the biases and assumptions about sex offender treatment that are embodied in the Phoenix Program.

A substantial body of literature has been generated which indicates the risk factors implicated in sexual offence and sexual re-offence are primarily static in nature. That is, factors which are historical in nature are associated with increased risk for offence. With minor variations, the most relevant factors are younger age, more prior convictions for sex offences, a demonstrated sexual deviance, male victims, victims from outside one's family, and elevated psychopathic traits (Boer et al., 1997; Hanson & Bussière, 1998; Hanson & Thornton, 1999; Quinsey, Rice, & Harris, 1995)

Treatment for sex offenders, then, becomes a challenging enterprise, as the factors known to lead individuals to recidivate are not particularly amenable to change. Typically, treatment has promoted the notion that relapse to sexual deviance can be combated by cognitively based strategies that are commonly referred to as the Relapse Prevention (RP) Model. The RP approach for sex offenders is an adaptation of a model originally developed for the treatment of substance abuse (Miner, Day, & Nafpaktitis, 1989; Witkiewitz & Marlatt, 2004). The model has demonstrated utility in work with this

population (Reddon, Takacs, & Hogan, in preparation), but one could rationally argue that the model addresses symptoms rather than the root cause of the pathology (cf. Studer & Aylwin, 2006a).

The attitudes of treatment providers have gradually changed. Whereas therapists in the past might have seen themselves as providing education to "inmates," it is now more likely that therapists see themselves as providing treatment to patients with interpersonal deficits (Marshall et al., 2003). With this increased sophistication in viewing the client as more than just his diagnosis (or his crime), an entirely new array of treatment goals become available – goals that embrace the intention to treat pathology rather than just symptoms of pathology. The rich history of psychotherapy and the accompanying deep body of literature, can now inform the treatment of sex offenders. Ideas such as those offered by Attachment Theory (Bowlby, 1971), for example, can help clinicians begin to examine root causes of sexually deviant behavior.

The Phoenix Program embraces the idea that relationships and interpersonal capabilities interact with issues of current environment, upbringing, past sexual activities or abuse, and personality traits. These interactions, then, make maladaptive coping (i.e., offending) more or less likely to occur. While best practice for sex offender treatment is known to incorporate a CBT orientation and an RP model, we have previously endorsed a perspective which sees this as limited in scope (Studer & Aylwin, 2006b). The position held by clinicians at the Phoenix Program is that CBT and RP continue to comprise major aspects of the therapeutic content. As discussed more thoroughly in Chapter 2, what differs for the Phoenix Program is that the content of the treatment is clearly subordinate

to the process aspects of treatment that occur in the here-and-now (Yalom & Leszcz, 2005).

This approach is entirely consistent with the earlier observations about how treatment can, in fact, only have influence upon dynamic variables. The goal, ultimately, is to reduce re-offense through a fundamental shift in aspects of personality such that the patient's view of themselves and their place in the world is relationship-promoting, rather than relationship-inhibiting. As a result, it is believed that important markers of change for this population are increased interpersonal maturity and social competence, a greater sense of personal efficacy, an accompanying improvement in personal accountability, and more accurate self-assessment (Studer, 2008, personal communication; Stukenberg, 2001). Performances in some of these areas were therefore considered measures of treatment outcome in the current study.

It has been known for many years that even in the absence of an intervention intended to promote change, scores on a retest of any sort will generally improve over those of the initial test (Loevinger, 1957). This phenomenon needs to be considered in any study using a pre-post design. There are many possible test-taking artifacts for this occurrence. They range from participant maturation, to increased sensitivity to the test material and increased familiarity with the instrument (Agular, Reddon, & McNeil, 2003), to response bias due to demand characteristics. In the present study, the outcome measures are relatively well insulated (though surely not immune) from these effects for at least two reasons. First, the temporal distance between test and re-test was very significant. In almost all cases, the outcome measures were obtained approximately 12

months apart. Any familiarity with the instruments can safely be considered to have degraded over this period of time.

The second reason that data integrity was maintained despite the pre-post format lies with the instruments selected for the study. Most of the instruments, described below, contain scales that are bipolar in nature, in that a higher or a lower score is neither "better" nor "worse". Rather, different scores simply indicate the absence or presence of a quality or trait. Also, as discussed below, some of the instruments used in this study were rigorously developed to maximize validity and reliability.

Gain Scores as Outcome

There has been some discussion in the literature as to whether difference scores (the arithmetic difference between pre- and post-treatment test results) are appropriate for evaluative purposes. For example, Reddon and Vander Veen (2005) examined data from four neuropsychological tests conducted on three distinct samples to demonstrate that difference scores for any single test accounted for a negligible amount of variance in the difference scores of the other three tests. They concluded that "…difference scores….obtained from non-independent measures need to be used with considerable caution because corroboration with other measures is unlikely" (Reddon & Vander Veen, 2005, p. 66). These researchers demonstrated very clearly that "(d)ifference scores are considerably less reliable than the scores from which they are calculated" (Kerlinger & Lee, 2000, p. 494).

One accepted procedure of adjusting for this instability of difference scores is to use residualized gain scores (Kerlinger & Lee, 2000). The use of residualized gain scores

allows one to measure change in each observation while controlling for the differences in performance at the time of the first measurement. Procedurally, this involves bivariate regression of post-treatment onto pre-treatment scores, and dividing the residuals by the mean standard deviation of pre-treatment scores (Kerlinger & Lee, 2000). This procedure expresses the gain in terms of standard deviation units, relative to where each subject was at pre-treatment. For the measures of outcome, then, residual gain scores were used as the indicator of change.

Network of Relationships Inventory-Relationship Qualities Version.

The Network of Relationships Inventory-Relationship Qualities Version (NRI-RQV; Buhrmester & Furman, 2008; Buhrmester, Furman, Wittenberg, & Reis, 1988) was administered at pre- and post-treatment and residual gain scores were used as the outcome measure. This instrument was used to assess interpersonal health/relationship maturity. The NRI-RQV was developed through a series of studies intended to identify reliable and relatively independent domains of social behavior which are grounded in theory (Buhrmester et al., 1988). The goal was also to identify areas that correlated logically with other theoretically related variables. Domains of interpersonal competence found to meet these criteria were: *initiating relationships, self-disclosure, asserting displeasure with others' actions, providing emotional support, and managing interpersonal conflicts.* These domains were found to be distinct in that they correlated only moderately with each other (r = .29 - .63, mean r = .42). These aspects of interpersonal competence closely reflect intended target areas of treatment in the Phoenix Program and improvements in these areas are considered markers of positive treatment

response. With permission (Buhrmester, personal communication, March 6, 2003) and again no expectation of impact, the wordings of some items were altered very slightly to suit the patient group under examination.

Inventory of Interpersonal Problems.

The Inventory of Interpersonal Problems (IIP) was developed to evaluate the various interpersonal problems that typically bring people to therapy (Horowitz, Rosenberg, Baer, Ureño, & Villaseñor, 1988). It was originally developed as a 127 item test that was later wed to a circumplex model of interpersonal behavior. It has been proposed that interpersonal behavior can be mapped onto a two-dimensional space using quadrants created by two axes (Keisler, 1983). One axis defines an individual's style of communion – hostile at one pole, and friendly at the other. The other defines the individual's sense of agency, from dominant to submissive.

These quadrants have been further subdivided into octants (Alden, Wiggins, & Pincus, 1990) and the test modified to a shorter IIP Circumplex Scales Test (IIP-64; Horowitz, Alden, Wiggins, & Pincus, 2000). The octants and brief descriptors are (Alden et al., 1990; Horowitz et al. 2000):

- *overly domineering* - tends toward being too controlling or manipulative in interpersonal interactions
- *overly vindictive/self-centered* - frequently self-focused and hostile with others
- *overly cold* - minimal affection for others, little connection with others
- *overly socially avoidant* - tends toward social avoidance, socially anxious

- *overly non-assertive* - difficulty expressing needs to others
- *overly exploitable* - gullible and easily taken advantage of
- *overly nurturing/self-sacrificing* - excessively selfless, generous, trusting, and permissive with others
- *overly intrusive/needy* - difficulty respecting personal boundaries of others, imposing

Alpha coefficients are reported for the IIP-64 ranging from 0.76 to 0.88. Even an abbreviated short version of the IIP (only 18 items) has been shown to have very good psychometric properties including strong correlation with its parent test and good discriminative validity for different samples of patients (Hansen, Umphress, & Lambert, 1998). Scoring of the IIP-64 results in an evaluation of how strongly the respondent fits within each octant, suggesting the nature of the interpersonal problems that characterize that individual. In the present study, gain scores on each octant were used as outcome measures.

The IIP-64 is widely used and is suitable for work with diverse populations. It has been used as a screening instrument for various personality disorders (e.g., Leising, Rehbein, & Eckardt, 2009) because some interpersonal problems are emblematic of personality disorders. Haggerty, Hilsenroth, and Vala–Stewart (2009) described the triangular relationship between personality disorders, interpersonal distress, and attachment style and put the IIP-64 at the centre as the instrument which had strong predictive associations with the other two factors. Some researchers have used it as part of a larger test battery in a single administration. Falkum and Vaglum (2005), for

example, used the IIP-64 in a study of 862 physicians examining the relationship between interpersonal problems and job stress.

This instrument has also been used in research with sex offenders. Anderson (2002) examined the utility of the IIP-64 to discriminate between child molesters and rapists. Significant statistical support was mixed, but there were clear trends that supported her hypothesis that in terms of interpersonal style, rapists were a more dominant group than child molesters. She also reported that rapists' difficulties fall along the dimension of affiliation (as they score strongly on the control dimension) and they tend to have negative views of others. Conversely, child molesters perceive themselves to have little interpersonal control and tend to have negative views of self.

The IIP was also for evaluating *intra*personal change experienced by patients over the course of therapy (Horowitz et al., 1988). Consequently, it is well suited for use in pre-post design studies. Horowitz et al. (1988) found the IIP detected patient improvement over 10 therapy sessions, and then again over an additional 10 therapy sessions, showing greater sensitivity to change than the Symptom Checklist-90-Revised (SCL-90-R; Derogatis, 1977).

Huber, Henrich, and Klug (2007) evaluated IIP-64 sensitivity to change, and it was found to perform well with a group of 63 patients with depression. These researchers used a pre-post design with a group of long term (M = 32 months) psychoanalytic psychotherapy patients, and used a number of construct-consistent measures as comparators as Campbell and Fiske (1959) would recommend. These researchers reported pre-post change with medium to large effect sizes for most of the IIP-64 scales.

The IIP-64 was added to the protocol shortly after the commencement of data collection, hence there is a slightly smaller sample available from this instrument. Studies have used the overall IIP-64 score as an outcome measure indicative of one's level of interpersonal distress (e.g., Piper, Ogrodniczuk, Joyce, Weideman, & Rosie, 2007). In the present study the overall residual gain score is used as an outcome measure, as are all the octant residual gain scores.

Personality Research Form.

The Personality Research Form-English version (PRF-E; Jackson, 1989) was developed to assess the "need structure" of the respondent. That is, the PRF-E provides a set of scores to assess "needs" thought to motivate behavior over a broad range of situations. This conception is based on early work which conceived a "need" to be a dynamic force, an organic potentiality, and "…a noun which stands for the fact that a certain trend is apt to recur" (Murray, 1937, p. 34). The PRF-E underwent a lengthy and rigorous development process with the expressed goal of ensuring that internal, external, and structural validity was maximized at all stages of development. All versions of the PRF-E inventories have undergone extensive psychometric evaluation and have shown very high test-retest (T-RT) reliability on content scales among several samples. In one study, Jackson (1989) reports T-RT reliability ranged from .77 to .90. In another study, T-RT reliability ranged from .80 to .96, indicating good stability of the measure (Jackson, 1989). This psychometric property is of particular importance to the present study, as changes from pre- to post-treatment can be interpreted with greater confidence as being "true" changes, if the T-RT reliability is high.

Studies have also been conducted to examine convergent and discriminant validity of the PRF-E. A pool of adjectives and descriptors of behavior were developed to reflect the traits which are assessed by the PRF-E. A sample of peers then assessed whether trait adjectives and behaviors described their friends/roommates. The median correlation between the behavior ratings by peers and the individual's PRF-E scale scores was .52. The median correlation of trait adjectives to peer responses was .56.

The PRF-E contains 352 items on 20 content scales and 2 validity scales. The scales are bipolar in nature, meaning that a low score on a scale does not imply the absence of the trait, but rather, the presence of its opposite. For example, high Dominance scores reflect the presence of trait adjectives such as influential, leading, and authoritative. Low dominance scores reflect trait adjectives such as unassertive, passive, or un-influential. In addition to the content scales, the PRF-E contains one validity scale to detect socially desirable responding and one to detect infrequency of responding.

Jackson Personality Inventory-Revised.

Another outcome measure was the Jackson Personality Inventory-Revised (JPI-R; Jackson, 1994). The JPI-R incorporates 300 true-false items to represent 15 scales "…reflecting a variety of interpersonal, cognitive, and value orientations thought to have important implications for a person's functioning" (p. 1). Aspects of personality can be broken down into an unwieldy number of variations of similar traits. The dimensions of personality deemed to be individually distinct yet collectively representative of the whole person were empirically derived from the personality and social psychology literature (Jackson, 1977, 1994). As with the PRF-E, development of this instrument was intended

to maximize scale properties considered highly desirable in psychometric theory. These properties include: freedom from response bias, fidelity of scale items to definitions of their respective scales, high scale homogeneity and representative item content, and normal scale distribution among normative samples (Jackson, 1994).

As the Phoenix Program ultimately intends to foster a characterological shift, rather than simply provide patients with an improved skills set, this instrument was expected to provide useful pre- and post-treatment assessment data. In results from four large samples, the JPI-R was found to have good overall internal consistency. Alpha values ranged from a low of .60 to .88, with most values in the upper portion of the range (Jackson, 1994).

Both the PRF-E and the JPI-R were developed utilizing a "construct validation" approach to assessment (American Educational Research Association [AERA], American Psychological Association [APA], & National Council on Measurement in Education [NCME] Joint Committee, 1999). Morey (2000) elaborated on this process and cited the importance of employing it to improve the rigor with which personality constructs are developed. This approach ensures that a construct of interest is measured using items that capture the full content domain of a construct. Morey (2000) noted that items may have a very high internal consistency, but this is not always desirable. The items might simply be assessing the exact same feature of the construct (i.e., limited in breadth) and would therefore be redundant. In developing the Personality Assessment Inventory (PAI), Morey (1991) noted that the "depth" of a construct should also be considered by utilizing a response set that allowed respondents to report the degree to which an item reflected themselves (e.g., always false, sometimes true, always true).

One feature of the PRF-E construct validation process is the fact that items in the original pool were theoretically grounded in Murray's (1937) early work on motivation for behavior. In addition, individual items of the PRF-E and JPI-R are not scored on multiple content scales. Discriminant validity was maximized by only including items that most strongly correlated with their "parent" scale rather than with any other scale (Jackson, 1989, 1994). This is important given that human behavior is complex and content scales are themselves inter-related in many cases.

In the current study, the use of these two personality inventories with this population in a pre-post design was exploratory. The inventories were used to evaluate change in personality as a function of treatment. With sufficient replication, subscale scores might ultimately be shown to account for sufficient variance in outcome so as to be used as pre-treatment predictors of treatment response.

Static Risk Predictors.

Understanding how static factors contribute to recidivism risk has assumed widespread importance; this has been especially true of sex offenders. A number of static factors were considered in order to determine if static risk factors accounted for outcome. Static factors included in this analysis were: age of the offender, level of violence in offences, actuarial risk scores (Static-99 and RRASOR), and psychopathy scores as determined by the Psychopathy Checklist- Revised (PCL-R). These instruments are widely used in forensic and/or correctional settings.

Hypotheses

1) Given previous published and unpublished data suggesting that treatment completers and non-completers of the Phoenix Program are far more similar to each other than different, it was hypothesized that the two groups would not differ in responses to outcome measures (PRF-E, JPI-R, IIP-64, NRI-RQV) at Time 1.
2) Given the intensity and duration of treatment, it is expected that treatment completers would demonstrate significant changes from pre- to post-treatment personality testing (PRF-E, JPI-R). Given that neither of these instruments have been used on this sample, the analyses investigating change in personality functioning or the relationship of the alliance to personality change are essentially exploratory.
3) Treatment completers would score significantly higher on the scales of the NRI-RQV over their time in treatment. This will be indicative of positive therapeutic change.
4) IIP-64 results were hypothesized to reflect fewer interpersonal problems among treatment completers at Time 2. This will reflect positive influence of therapeutic intervention, increased pro-social attitudes, and generally improved adjustment.
5) It was hypothesized that treatment completers would report increasingly more positive perceptions of the group environment as time in treatment increases (as per GES).
6) It was hypothesized that treatment non-completers would report fewer positive perceptions of the group environment as time in treatment increases (as per GES).

7) It was hypothesized that the pattern of change in the alliance (i.e., slopes of alliance ratings over time) would demonstrate a positive relationship with outcome variables.

8) Given that there is so little empirical literature addressing the role and impact of countertransference, no specific hypothesis for REACT scores was offered. That said, at least two possible results might be seen. If the staff team can be assumed to collectively constitute some approximation of the general population (appropriate and interpersonally healthy), it might be reasonable to expect they would have less intense negative responses toward patients as they progress through treatment and presumably make treatment gains. Alternatively, it may turn out that negative feelings change little, but positive feelings increase.

9) While the focus of the present study is on the relationship between outcome and the strength of the alliance for those who complete phase one of the Phoenix Program, patients who do not complete treatment also contributed valuable data. It was hypothesized that patients who did not complete treatment would feel less connection to their peers, the treatment staff, and the program at comparable points in treatment. That is, they would report significantly lower scores on the alliance variables than the patients who eventually completed treatment.

Chapter 4: Procedure

Men are more moral than they think and far more immoral than they can imagine.

Sigmund Freud

In some instances, potential patients were interviewed in their home institutions prior to being transferred to Alberta Hospital Edmonton. This occurred with most of the offenders housed in Federal institutions at the time of referral, but with very few of the Provincial inmates. Procedural differences in working with the two correctional systems necessitated the pre-admission meeting with Federal inmates. This was to obtain some basic information, but also to get a sense of whether these people had issues with any of the exclusion criteria described in the previous chapter. Once they arrived onto the unit, all patients had a complete intake interview with the unit psychiatrist to obtain a full history. At this time all newly admitted patients to the Phoenix Program were informed of their rights and sign a general consent to treatment. Signed consent to participate in this particular research project was invited during one of several testing/assessment sessions which occur during a patient's first week in the program. Participation was invited by one of the regular staff members. Patients already in treatment at the start of the study were addressed in small groups where the project was explained and their participation was invited by a research assistant not associated with the project. Signed consent was obtained from all individuals agreeing to participate (see Appendices A and B).

Newly admitted patients to the Phoenix Program are put into all therapy groups as a matter of course. Patients partake in many hours of group therapy per day, and are given small responsibilities/duties around the unit. They are encouraged to ask questions of their peers regarding life on the unit and are mentored on group norms through their participation. Approximately three weeks after admission, new patients completed the

pre-treatment testing battery. Three weeks was deemed optimal as patients typically require a period of adjustment when going from a prison to an in-hospital setting. At three weeks after admission, patients have had ample opportunity to form opinions about the unit environment and their initial connection to the group and staff. Three weeks was also seen as optimal because new patients are reviewed after four weeks to determine if they are suitable and should be accepted for ongoing treatment. Patients who were not accepted or requested to go back to their parent institution, after the four week assessment, were still able to contribute data for the initial test package.

The test battery included the PRF-E, JPI-R, NRI-RQV, GES, IIP-64, and the first alliance rating. This was considered to be "Time 1" or the pre-treatment period. During this initial assessment period new patients also engage in other psychological testing not part of the current study (e.g., Minnesota Multiphasic Personality Inventory – 2; MMPI-2, Butcher, Graham, Ben-Porath, Tellegen, Dahlstrom, & Kaemmer, 2001; and WAIS-III; Wechsler, 1997). During the last month prior to discharge, patients completed the same testing battery. For pre - post outcome measures, this was considered to be "Time 2" or post-treatment. The GES was administered at the same times as pre- and post-treatment batteries, but additionally at 6 months into therapy. The 6-month administration was chosen as it represented an approximate midpoint of treatment.

The six-item alliance self-report measure was completed by patients monthly. Each administration requested ratings of the alliance with small group therapists, peers, and the program as a whole (therefore 18 items total). Each week, a small number of patients are the focus of a general case conference. Over time, each patient is "conferenced" on a monthly basis. Those patients to be discussed in conference were the

patients on whom staff completed REACT ratings for the particular week. During the conference time period, these same patients were asked to complete alliance ratings toward the primary therapists in the patient's small psychotherapy group (which included the unit psychiatrist), the patient group as a whole, and the overall staff group and program.

At these same monthly intervals, staff completed the relevant REACT forms for patients who are the subject of the weekly conference. As noted earlier, therapists were provided with prepared forms and deposited the completed forms in a central location at their convenience. The forms were then periodically removed by a research assistant and entered into a database for record keeping and scoring. As the therapists were also study subjects, they provided signed consent just as the patients did. The therapists' consent form is reproduced in Appendix C.

The research assistant monitored completeness of data quite thoroughly during data collection and occasionally requested patients to complete missing items. There was a period of time, however, when the position was vacant, hence some missing items on some tests were unavoidable. The period of data collection took longer than expected, and in comparison to patients' shorter, and less frequent Alliance ratings, therapists had been burdened with REACT forms for longer than anticipated. Data collection from therapists therefore ended before data collection from patients.

Data Preparation

Data files were closely reviewed before analysis. Errors or omissions in data entry were dealt with in appropriate fashion. For example, there were a few instances of test data being entered twice. In these instances (<5 cases), the first case was retained and the second case deleted. Cases of missing data (i.e., missing item responses) were re-checked with the original test forms to see if that item had indeed been omitted by the patient or had simply been overlooked on data entry. Range and frequency counts were also run to illuminate any obvious and easily correctable errors. In the great majority of cases, the error was an obvious keying oversight that was readily rectified (e.g., digit key hit twice instead of once).

Overall, there was very little missing data despite a vast amount of data being gathered. For example, on the JPI-R there were only 28 items not responded to. Given that this sample provided 128 completed JPI-Rs at 300 items each, the missing data represented only 0.07% of the total 38,400 item responses on this instrument. Missing values were replaced with the arithmetic mean of the remaining items on the relevant scale after adjusting for reverse scoring.

There were no missing data on the NRI-RQV nor on the GES. On the IIP, there were a total of 16 items left unanswered among the total sample. As there were 117 total IIPs completed by the sample, 7,488 data points would have been retained had there been no omissions. The 16 missing items therefore represented 0.21% of the potential IIP-64 data. Review of the missing items revealed no discernable trends in omissions. All missing items were attributed to separate patients, except in one case a patient had two

missing data points, but on different scales. Regardless, the IIP-64 scoring protocol tolerated up to two missing values on any one scale.

On the PRF-E, there were an unknown number of missing items. A procedural error resulted in the original data file for PRF-E item data being overwritten after making missing value estimation replacements. Procedurally, missing values were replaced with the mean of items on the relevant scale after adjusting for reverse scoring. There were a similar number of missing values on the PRF-E as on the JPI-R, and review before replacement confirmed no problematic trends in the missing values. Nevertheless, the exact number of missing items was lost.

Time Considerations

The time demands on study participants were not substantial. Completing the assessments at pre- and post-treatment required about three hours of the respondent's time. Providing alliance self-report ratings required only several minutes once per month. Staff required approximately 5-10 minutes per patient to complete the REACT scale.

Sample Size and Power Considerations

In this study there are numerous comparisons being made between groups. There are also numerous calculations which examine the strength of association between variables. Unfortunately, the sample size under consideration varies a great deal due to missing data, and depending on whether the entire sample is being considered or just the treatment completion group. A single power calculation is therefore problematic. There are two general types of analysis being conducted in the present study, and therefore two

power calculations were deemed to be appropriate and to sufficiently reflect the study globally.

Group differences concerning the treatment completers and non-completers are explored in Chapter 5. Overall there were 52 completers and 43 non-completers. Using these sample sizes and assuming an alpha of .05, two-tailed, and a moderate effect size (0.30), a comparison of means between the two groups would have a power of .30. In other words, with 52 completers and 43 non-completers, alpha = .05 using a two-tailed test, and a moderate effect size, 30% of comparisons would detect significant differences and cause one to reject a null hypothesis. If a large effect were presumed (and in many instances large effects were found) the power of the design would rise to .67.

Results from the sub-group of treatment completers are reported in Chapter 6 and Chapter 7. There were 52 treatment completers in the total sample, but only 45 with available alliance data. With a sample of n = 45, and assuming a population correlation of 0.30, we can determine the study will have a power of .54 if the critical region is allowed to be .05. Given the exploratory nature of this work, it would not be appropriate to presume an *a priori* direction of relationship, therefore a two-tailed test is most appropriate. In summary, with n = 45, alpha = .05, two-tailed, and assuming a correlation of 0.30 in the population (medium according to Cohen, 1992), the study has the power to detect true significant correlations 54% of the time and thereby reject a null hypothesis. Power of approximately .80 is generally considered to be good in studies such as this, so the present study is clearly underpowered. A sample of 82 treatment completers would have given this arm of the study a power of 0.8. The power to detect significant differences could have been increased by setting alpha = .10. However, the decision to let

alpha remain equal to .05 was made because there was already a significant potential for Type I error inflation due to multiple tests being conducted. Bonferonni corrections to the critical region were made for pre- to post-testing results, but for the latter analysis of slope coefficients, no adjustments were made.

Chapter 5 – Results from Outcome Measures

Imagine…

John Lennon

Due to the large amount of data gathered in the present study, it seemed appropriate to report results in distinct sections to maximize clarity. The description of the sample as patients began treatment has already been presented in Chapter 4 and comparisons between treatment completers and non-completers on demographic and on clinical-forensic variables are reported in Tables 1 and 2.

In the current chapter results are reported for the various outcome measures used in the study. Analyses involved the comparison of treatment completer and non-completer groups and reporting of differences from pre- to post-treatment on these same measures. Available psychometric data on these instruments is also reported here. Chapter 6 addresses the in-therapy measures of alliance and therapist emotion. Chapter 7 presents a different scope of analysis and looks at correlational relationships between variables.

IIP-64

The IIP-64 was introduced into the study protocol a short period of time after data collection began. Because of this delay there were only 37 treatment completers and 35 non-completers with available data on the IIP-64. All IIP-64 responses were scored using a computer spreadsheet-based program. Mean overall scores as well as mean octant scores were computed. Comparisons between completers and non-completers at Time 1 were conducted

and found to be non-significant. Multivariate analysis of variance (MANOVA) conducted on the octant scores indicated there was no difference between groups at Time 1, $F(8, 63) = .545$, $p = .818$, two-tailed, and an observed power of .23. To examine pre- and post- scores for the treatment completer group, a repeated measures MANOVA was conducted on octant scores at the two different points in time. The omnibus test revealed there were differences from pre- to post-treatment, $F(8, 27) = 4.814$; $p = .001$, two-tailed, with an observed power of .99. Follow-up univariate analysis revealed a number of changes on mean scores. Five of eight octant scores showed significant reduction over time in treatment. Octants revealing significant reduction were: *overly vindictive, overly socially avoidant, overly non-assertive, overly exploitable, and overly intrusive* (see Table 6). Cohen (1992) has suggested that in interpreting effect sizes calculated as Cohen's d, values of .2, .5 and .8 are considered small, medium, and large, respectively. Therefore, the changes demonstrated on the IIP-64 ranged from small–medium (*Overly Domineering*, ES = .32) to large (*Overly Socially Avoidant*, ES = .82), with most of the changes being of a large magnitude. The overall IIP-64 score also showed significant reduction over time in treatment (paired samples $t = 4.276$, $p = .000$, ES = .71). By the end of in-patient treatment, patients in this program clearly perceived themselves as having significantly fewer interpersonal problems than they did at the beginning of treatment.

Table 6

IIP-64 changes over treatment among n = 36 treatment completers of the Phoenix Program

IIP-64 variable	Raw scores pre Mean (SD)	Raw scores post Mean (SD)	t	*p*	ES
Overall mean	1.75 (0.508)	1.22 (0.655)	4.276	.000*	.71
Octants					
Domineering	1.49 (0.709)	1.23 (0.769)	1.916	.064	.32
Vindictive	1.47 (0.698)	1.03 (0.729)	3.046	.004*	.51
Cold	1.73 (0.796)	1.31 (0.938)	2.107	.042	.35
Socially avoidant	2.07 (0.831)	1.18 (0.947)	4.919	.000*	.82
Non-assertive	2.15 (0.797)	1.34 (0.871)	4.797	.000*	.80
Exploitable	1.96 (0.716)	1.19 (0.701)	4.667	.000*	.78
Intrusive	1.99 (0.695)	1.33 (0.691)	4.712	.000*	.80
Nurturing	1.35 (0.634)	1.22 (0.588)	1.037	.307	.17

Note. t calculated as paired samples t-test. Using Levene's test for equality of variance, equal variance assumed in all cases. *denotes significance at alpha <.05, 2-tailed after Bonferonni correction (.05/9=.006). ES denotes effect size calculated as Cohen's d = $\bar{D}/SD_{\Delta}$.

The IIP-64 octants that did not show change from pre- to post-testing were *Overly Domineering, Overly Cold* (non-significant after adopting a Bonferonni correction), and *Overly Nurturing*. Given that there was otherwise a great deal of shift on the other scales of this instrument, it suggests a substantial degree of discriminant validity on the part of the IIP-64. The lack of reduction on nurturing is likely positive. An overall decrease in a sex offenders' sense of nurturance is perhaps not something that is desirable as a response to therapy. On the other hand, a decrease on the dominance scale would typically be a desirable outcome, assuming it was elevated to begin with. As with the PRF-E discussed below, it may be the case that improvements in overall assertiveness may mask any reductions in true dominance. Alternatively, it may be the case that a tendency to be domineering is very difficult for these men to relinquish, and changes on this scale would not be captured for some period of time.

As per Hoffart, Hedley, Thornes, Larsen, and Friis (2006), scores at the poles of each axis (dimension) were obtained by mathematically manipulating the octant values. These were calculated as:

dominance = domineering + (.707) (intrusive + vindictive)

submission = non-assertive + (.707) (exploitable + socially avoidant)

nurturance = overly nurturant + (.707) (intrusive + exploitable)

hostility = hostile + (.707) (vindictive + socially avoidant)

Status of treatment completion had no impact on these four pole scores at the first administration of the test. That is, MANOVA revealed there was no significant relationship

between treatment completion and initial pole scores, $F(4,67) = .791$, $p = .535$, and observed power of .24. Changes in raw scores from pre- to post-treatment among the treatment completers are reported in Table 7. It was found that all of the four pole scores decreased significantly over treatment. These results were expected. Recall that the octant descriptors are framed so that high scores reflect "too much" of a particular interactional style. Since six of eight octants showed significant decrease and the pole scores were derived from the octant scores, it follows that the poles should all show decreases to more moderate positions.

Internal reliabilities for the IIP-64 were determined to be good. Cronbach's alpha was calculated for each octant at pre- and post-treatment. Alphas ranged from a low of .65 to .97 with most values falling in the upper end of the range. All alphas are reported in Table 8.

Table 7

Pre- post raw score changes on the four poles of the two-dimensional IIP-64 space among n = 35 treatment completers

Pole	Raw Scores pre *Mean (SD)*	Raw Scores post *Mean (SD)*	t	*p*	ES
Dominance	.47 (1.44)	2.83 (1.54)	2.235	.032*	.38
Submission	4.99 (1.64)	3.02 (1.89)	5.234	.000***	.87
Nurturant	4.35 (1.34)	3.04 (1.45)	4.339	.000***	.73
Hostile	4.23 (1.59)	2.88 (2.02)	3.483	.001**	.58

Note. t calculated as paired samples t-test. Using Levene's test for equality of variance, equal variance assumed in all cases. *denotes significance at alpha <.05, 2-tailed; **denotes significance at alpha <.01, 2-tailed; ***denotes significance at alpha <.001, 2-tailed. ES denotes effect size calculated as Cohen's $d = \bar{D}/SD_{\Delta}$.

Table 8

Internal consistency reliabilities of the IIP-64

IIP-64 scale	Pre-treatment (Time 1) n = 72	Post-treatment (Time 2) n = 45
Overall IIP-64 (all items)	.91	.97
Octants		
Overly domineering	.75	.84
Overly vindictive	.78	.86
Overly cold	.83	.90
Overly socially avoidant	.83	.90
Overly non-assertive	.80	.87
Overly exploitable	.71	.81
Overly intrusive	.72	.65
Overly nurturing	.67	.83

Note. Each Octant is made up of eight items.

Personality Research Form

On the PRF-E, a between-group MANOVA revealed there was no significant difference between completers and non-completers on scale raw scores at Time 1, $F(20,59) = 1.512$, $p = .112$, with an observed power of .86. Internal reliabilities for the PRF-E were calculated at both test administration times (pre- and post-treatment). Alphas ranged from .41 (Tolerance) to .80 (Social Confidence). All internal consistencies as well as test-retest reliabilities for the PRF-E are reported in Table 9. All item-total correlations for the PRF-E are reported in Appendix E.

Table 9

Internal consistency and test-retest reliabilities of the PRF-E

PRF-E Scale Label	Pre-treatment Alpha n = 80	Post-treatment Alpha n = 47	Test-retest r n = 41
Abasement	.46	.45	.23
Achievement	.69	.48	.41
Affiliation	.83	.73	.55
Aggression	.78	.76	.64
Autonomy	.60	.57	.48
Change	.60	.46	.60
Cognitive Structure	.56	.77	.39
Defendance	.76	.66	.34
Dominance	.83	.79	.51
Endurance	.74	.63	.36

Exhibition	.86	.84	.73
Harm Avoidance	.86	.77	.76
Impulsivity	.80	.80	.60
Nurturance	.66	.60	.36
Order	.84	.82	.63
Play	.63	.60	.65
Sentience	.66	.36	.73
Social Recognition	.77	.50	.55
Succorance	.68	.51	.44
Understanding	.80	.73	.73

Note. r is test-retest reliability calculated as point biserial correlation.

A repeated measures MANOVA was conducted to determine if there were significant differences in pre- to post- treatment mean scores. As there were significant differences $F(20,21) = 3.347$, $p = .004$ two-tailed, with observed power of .98, post hoc univariate analyses were then conducted. Changes in PRF-E responses pre- to post-treatment are reported in Table 10. Patients who completed treatment showed significant change on seven of 20 scales. The scales on which patients demonstrated change were consistent with overall treatment goals. As a group, treatment completers were more willing to take a lesser position (Abasement; $p = .023$, two-tailed; ES = .37), valued Affiliation more ($p = .000$, two-tailed; ES = .76), were more open to new experiences and more adaptable (Change; $p = .001$, two-tailed, ES = .54), more willing to be noticed by others (Exhibition; $p = .001$, two-tailed; ES = .57), less Impulsive ($p = .007$, two-tailed; ES = .45), and were more sensitive and perceptive (Sentience; $p = .000$, two-tailed; ES = .68) after treatment. Treatment completers also scored higher on the Dominance scale ($p = .000$, two-tailed; ES = .55). Review of the trait adjectives provided by Jackson (1989) reveal that Dominance is not pejorative. Rather, it appears to capture a positive change in patients' assertiveness. After controlling for risk of Type II error by employing a Bonferroni correction, (.05/20=.0025) five of these seven scales remained significant.

Table 10

PRF-E scale raw-score changes over treatment among n=41 treatment completers of the Phoenix Program

PRF-E Scale Label	Pre-treatment Mean (S.D.)	Post-treatment Mean (S.D.)	t	*p*	ES
Abasement	7.98 (2.37)	6.88 (2.41)	2.364	.023	.37
Achievement	10.00 (3.29)	10.07 (2.39)	-.147	.884	.02
Affiliation	7.73 (3.98)	10.39 (3.29)	-4.898	.000*	.76
Aggression	7.46 (3.87)	7.78 (3.55)	-.646	.522	.10
Autonomy	6.44 (2.49)	6.00 (2.53)	1.094	.280	.17
Change	7.85 (2.41)	9.05 (2.51)	-3.453	001*	.54
Cognitive Structure	9.37 (2.83)	10.37 (3.21)	-1.913	.063	.30
Defendance	7.37 (3.59)	6.17 (3.13)	1.972	.056	.31
Dominance	6.22 (4.42)	9.00 (3.90)	-4.296	.000*	.55
Endurance	9.51 (3.08)	10.44 (2.73)	-1.800	.079	.28

Exhibition	5.41 (4.39)	7.24 (4.31)	-3.677	.001*	.57
Harm Avoidance	7.20 (4.09)	6.93 (3.29)	.642	.524	.10
Impulsivity	6.66 (3.77)	5.22 (3.43)	2.850	.007	.45
Nurturance	8.71 (2.61)	8.90 (2.61)	-.423	.674	.07
Order	9.27 (4.25)	10.34 (3.75)	-1.986	.054	.31
Play	7.73 (3.09)	8.24 (2.77)	-1.322	.194	.21
Sentience	7.54 (2.92)	8.90 (2.36)	-4.352	.000*	.68
Social Recognition	7.98 (3.32)	8.17 (2.48)	-.439	.663	.07
Succorance	7.76 (3.52)	8.71 (2.63)	-1.816	.077	.28
Understanding	6.54 (3.64)	6.93 (3.17)	-.988	.329	.15

Note. paired samples t-tests. *denotes significance at alpha <.05, 2-tailed after Bonferroni correction (.05/20=.0025). ES denotes effect size calculated as Cohen's d.

JPI-R

On the JPI-R, a between groups MANOVA revealed there was no significant effect of treatment completion status on initial (pre-treatment) scale scores, $F(15,63) = 1.356$, $p = .198$, with observed power of .74. An examination of pre-post scores (repeated measures MANOVA) did reveal significant differences across time, $F(15,25)= 3.492$, $p = .003$, two-tailed, with observed power of .98. Post hoc analysis revealed that over the course of treatment, completers showed significant change on three of the 15 content scales of the JPI-R (see Table 11) after a Bonferroni correction (.05/15 = .0033).

Following many months of therapy, these patients, as a group, were more imaginative (Innovation; $p = .000$, two-tailed; ES = .74), had greater Sociability ($p = .000$, two-tailed; ES = .67), and greater Social Confidence ($p = .000$, two-tailed; ES = 1.04). The observed changes on JPI-R scales were clearly aligned with the program's treatment goals.

Internal reliabilities for the JPI-R were calculated at both test administration times (pre- and post-treatment). These results as well as test-retest reliabilities are reported in Table 12. Cronbach's alphas for the JPI-R were lower than for any of the instruments used in this study (range .41 - .85). A full report of item-total correlations for the JPI-R is contained in Appendix F.

Table 11

JPI-R scale raw score changes over treatment among n = 41 treatment completers of the Phoenix Program

JPI-R Scale Label	Pre-treatment Mean (S.D.)	Post-treatment Mean (S.D.)	t	*p*	ES
Complexity	7.80 (3.12)	8.29 (2.81)	-1.362	.181	.21
Breadth of Interest	8.88 (4.20)	10.10 (3.97)	-2.078	.044	.32
Innovation	10.05 (4.43)	12.73 (3.85)	-4.742	.000*	.74
Tolerance	10.41 (3.24)	11.44 (2.62)	-2.137	.039	.33
Empathy	10.34 (3.60)	11.85 (3.29)	-2.276	.028	.36
Anxiety	11.29 (3.70)	11.32 (3.39)	-.053	.958	.01
Cooperativeness	10.37 (3.95)	9.83 (3.44)	.768	.447	.12
Sociability	7.88 (4.56)	10.73 (4.56)	-4.315	.000*	.67
Social Confidence	8.61 (5.11)	12.80 (4.41)	-6.651	.000*	1.04
Energy Level	10.15 (3.48)	11.27 (3.75)	-1.944	.059	.30

Social Astuteness	8.83 (3.94)	8.29 (3.36)	.962	.342	.15
Risk Taking	8.34 (4.24)	8.20 (3.92)	.236	.815	.04
Organization	11.66 (3.98)	12.20 (3.79)	-.985	.330	.15
Traditional Values	12.51 (3.13)	12.73 (2.75)	-.657	.515	.10
Responsibility	13.03 (4.29)	14.58 (3.40)	-2.372	.023	.38

Note. Paired samples t-tests. Phoenix sample comprised of treatment completers tested post treatment. *denotes significance at alpha <.05, 2-tailed after Bonferroni correction (.05/15=.0033). ES denotes effect size calculated as Cohen's d = $\bar{D}/SD_{\Delta}$.

Table 12

Internal consistency and test-retest reliabilities of the JPI-R

JPI-R Scale Label	Pre-treatment alpha n = 81	Post-treatment alpha n = 47	Test-retest *r* n = 41
Complexity	.62	.56	.71
Breadth of Interest	.80	.72	.58
Innovation	.82	.76	.63
Tolerance	.58	.41	.47
Empathy	.68	.69	.24
Anxiety	.68	.64	.66
Cooperativeness	.77	.65	.28
Sociability	.85	.80	.57
Social Confidence	.83	.80	.65
Energy Level	.78	.71	.48

Social Astuteness	.69	.57	.53
Risk Taking	.81	.78	.53
Organization	.74	.76	.60
Traditional Values	.66	.58	74
Responsibility	.81	.77	.44

Note. *r* is test-retest reliability calculated as point biserial correlation.

To obtain some sense of how similar to or how different from other samples the Phoenix Program sex offender sample was, comparisons with two large normative samples reported by Jackson (1989) on the PRF-E were conducted. Because the normative samples were so much larger than the Phoenix Program sample, it was most appropriate to consider the normative samples to effectively represent populations. Therefore, a simple z-test was used to compare means. The results of the comparisons are presented in Table 13 and Table 14. It was found that the pre-treatment sex offender sample differed quite substantially from both normative samples. After employing a Bonferroni correction, the Phoenix Program patients were found to differ from the military population on 13 of 20 content scales (see Table 13). A total of 11 of 20 scales were significantly different when the patients were compared to the population of college males (see Table 14).

Table 13

Comparisons between Jackson's (1989) military normative sample (n = 1288) and consecutive admissions to the Phoenix Program (n = 80) on the pre-treatment PRF-E

PRF-E Scale Label	*Mean*	*SD*	z	*p*	*ES*
Abasement	7.61	2.44	-4.488	.000*	.50
Achievement	9.60	3.24	-4.074	.000*	.46
Affiliation	7.75	4.04	-8.314	.000*	.93
Aggression	7.93	3.73	3.172	.002*	.35
Autonomy	6.69	2.70	0.191	.849	.02
Change	7.44	2.74	-11.069	.000*	1.24
Cognitive Structure	9.09	2.61	-1.068	.285	.12
Defendance	7.72	3.60	6.927	.000*	.78
Dominance	6.25	4.11	-6.957	.000*	.78
Endurance	9.36	3.31	-4.077	.000*	.46

Exhibition	5.93	4.32	-2.878	.004.	.322
Harm Avoidance	8.19	4.27	7.929	.000*	.887
Impulsivity	7.41	3.89	3.372	.000*	.377
Nurturance	8.91	3.06	-1.766	.077	.197
Order	8.79	4.26	20.002	.000*	2.236
Play	7.71	2.96	-2.639	.008	.295
Sentience	7.43	2.99	1.645	.100	.184
Social recognition	8.08	3.53	-1.685	.092	.188
Succorance	7.84	3.18	3.288	.001*	.368
Understanding	6.39	3.62	-4.827	.000*	.540

Note. Jackson's (1989) normative data from a sample of male Canadian Forces Selectees, no criminal convictions, mean age 19.5 yrs, academic achievement grade eight or better, "acceptable" scores on intelligence testing. See original source for raw data. z calculated as single sample z-test. Phoenix sample comprised of treatment completers and non-completers tested pre-treatment; *denotes significance at alpha <.05, 2-tailed after Bonferroni correction (.05/20=.0025). *ES* = effect size.

Table 14

Comparison between Jackson's (1989) college males normative sample (n = 1350) and consecutive admissions to the Phoenix Program (n = 80) on the pre-treatment PRF-E

PRF-E Scale Label	Mean	SD	z	*p*	*ES*
Abasement	7.61	2.44	-0.551	.582	.06
Achievement	9.60	3.24	-3.956	.000*	.44
Affiliation	7.75	4.04	-1.402	.161	.16
Aggression	7.93	3.73	1.543	.123	.17
Autonomy	6.69	2.70	-7.100	.000*	.79
Change	7.44	2.74	-6.411	.000*	.72
Cognitive Structure	9.09	2.61	1.191	.274	.13
Defendance	7.72	3.60	4.992	.000*	.56
Dominance	6.25	4.11	-8.176	.000*	.91
Endurance	9.36	3.31	-4.487	.000*	.50

Exhibition	5.93	4.32	-3.42	.001*	.38
Harm Avoidance	8.19	4.27	1.731	.083	.19
Impulsivity	7.41	3.89	4.765	.000*	.53
Nurturance	8.91	3.06	0.024	.981	.00
Order	8.79	4.26	1.834	.067	.21
Play	7.71	2.96	-1.178	.239	.131
Sentience	7.43	2.99	-4.534	.000*	.51
Social recognition	8.08	3.53	1.336	.182	.15
Succorance	7.84	3.18	5.275	.000*	.59
Understanding	6.39	3.62	-10.590	.000*	1.18

Note. Jackson's (1989) normative data from a sample of male college students from 31 colleges and universities in the U.S. and Canada. Phoenix sample comprised of treatment completers and non-completers tested pre-treatment; See original source for raw data. z calculated as single sample z-test. Phoenix sample comprised of treatment completers and non-completers tested pre-treatment. *denotes significance at alpha <.05, 2-tailed after Bonferroni correction (.05/20=.0025). *ES* = effect size.

To get a sense of whether the sex offender group presented as more similar to the normative samples after treatment, a second set of comparisons was conducted between treatment completers' Time 2 (post-treatment) PRF-E scores and Jackson's (1989) normative samples. The results are presented in Table 15. Overall, the three samples differed on many scales, and it is difficult to know if the Phoenix program sample is more like a sample of college males or a sample of military personnel. However, while the sex offender's PRF-E scores differed significantly from the military sample on 13 of 20 content scales at pre-treatment, after treatment the offenders differed from the military sample on only five of 20 scales (see Table 15). In comparison to the PRF-E scores of the college population, untreated sex offenders scored significantly differently on 11 of 20 content scales at pre-treatment, but the completer group differed from the college sample on only seven of 20 content scales at post-treatment (see Table 15). Although this is clearly not the focus of the present study, it does strongly suggest some degree of normalization for the treated group of sex offenders. That is, on a widely used personality assessment tool, sex offenders scored much more similarly to two distinct normative samples after completing treatment in the Phoenix Program than they did before treatment.

Table 15

Mean PRF-E Scale comparisons between treatment completers of the Phoenix Program (n = 41) versus Jackson's (1989) college males normative sample (n = 1350), and Jackson's (1989) military sample (n = 1288)

	Phoenix sample	vs. College males			vs. Military personnel		
PRF-E Scale Label	Mean (SD)	z	p	ES	z	p	ES
Abasement	6.88 (2.41)	-2.088	.037	.33	-4.913	.000*	.77
Achievement	10.07 (2.39)	-1.868	.062	.29	-1.923	.054	.30
Affiliation	10.39 (3.29)	3.565	.000*	.56	-0.534	.594	.08
Aggression	7.78 (3.55)	0.819	.413	.13	1.964	.050	.31
Autonomy	6.00 (2.53)	-6.314	.000*	.99	-1.436	.151	.22
Change	9.05 (2.51)	-0.985	.325	.15	-3.628	.000*	.57
Cognitive Structure	10.37 (3.21)	3.277	.001*	.51	2.032	.042	.32
Defendance	6.17 (3.13)	0.762	.446	.12	1.716	0.086	.27

Dominance	9.00 (3.90)	-15.137	.000*	2.36	-0.430	.667	07
Endurance	10.44 (2.73)	-0.988	.323	.154	-.566	.571	.09
Exhibition	7.24 (4.31)	-0.431	.666	.067	0.170	.865	.03
Harm Avoidance	6.93 (3.29)	-0.763	.446	.12	3.202	.001*	.50
Impulsivity	5.22 (3.43)	-0.420	.675	.07	-1.502	.133	.23
Nurturance	8.90 (2.61)	0.000	1.000	.00	-1.285	.199	.20
Order	10.34 (3.75)	3.411	.001*	.53	0.554	.580	.09
Play	8.24 (2.77)	0.108	.914	.02	-0.777	.437	.12
Sentience	8.90 (2.36)	-0.653	.514	.10	4.326	.000*	.68
Social recognition	8.17 (2.48)	1.110	.267	.17	-1.009	.313	.16
Succorance	8.71 (2.63)	5.270	.000*	.82	4.089	.000*	.64
Understanding	6.93 (3.17)	-6.521	.000*	1.02	-2.150	.032	.34

Note. Jackson's (1989) normative data from samples of male college students from 31 colleges and universities in the U.S. and Canada, and Jackson's (1989) normative data from a sample of male Canadian Forces Selectees, no criminal convictions, mean age 19.5 yrs, academic achievement grade eight or better, "acceptable" scores on intelligence testing. See original source for raw data.

Phoenix sample comprised of treatment completers tested post-treatment. z calculated against each normative sample separately and as one sample z-tests. *denotes significance at alpha <.05, 2-tailed after Bonferroni correction (.05/20=.0025).

NRI-RQV

Treatment completers and non-completers were compared regarding pre- treatment NRI-RQV responses. MANOVA revealed no significant effect of eventual treatment completion at Time 1, $F(5,77) = 1.526$, $p = .192$. Responses of treatment completers pre- and post- therapy were examined using repeated measures MANOVA. It was found that the scores were significantly different, $F(5,38) = 19.736$, $p = .000$, two-tailed with observed power of 1.0, and post hoc univariate analysis was warranted (see Table 16). On all five scales, significant changes were demonstrated and all were consistent with treatment goals. Results indicate that this group of patients showed very significant improvement in terms of their interpersonal confidence and relationship maturity. Effect sizes were quite large on all scales (≥ 1 in all cases).

Reliability was calculated for each scale for pre- and post-treatment administrations. Reliability with this sample was good, with alphas ranging from .79 to .91. All alphas for the NRI-RQV are reported in Table 17.

Table 16

NRI-RQV scale raw-score changes over treatment among n = 44 treatment completers of the Phoenix Program

NRI-RQV Scale Label	Pre-treatment Mean (S.D.)	Post-treatment Mean (S.D.)	t	*p*	ES
Initiates Relationships	2.80 (0.85)	3.62 (0.71)	-7.319	.000*	1.10
Provides Emotional Support	2.98 (0.67)	3.78 (0.48)	-7.659	.000*	1.15
Asserting Influence	2.81 (0.78)	3.72 (0.58)	-8.501	.000*	1.28
Self-Disclosure	2.36 (0.79)	3.62 (0.77)	-9.080	.000*	1.37
Conflict Resolution	2.77 (0.72)	3.59 (0.61)	-6.420	.000*	.98

Note. Paired samples t-tests. *denotes significance at alpha <.001, 2-tailed. ES denotes effect size, calculated as Cohen's d.

Table 17

Internal consistency and test-retest reliabilities of the NRI-RQV

NRI-RQV scale	Pre-treatment Alpha n = 85	Post-treatment Alpha n =48	Test-retest *r* n = 41
Initiating relationships	.91	.87	.56
Providing emotional support	.88	.79	.30
Asserting influence	.88	.87	.50
Self-disclosure	.91	.91	.30
Conflict resolution	.87	.88	.23

Note. r is test-retest reliability calculated as point biserial correlation.

Chapter 6: Results – In-group Ratings from Patients and Therapists

The greater the feeling of inferiority that has been experienced, the more powerful is the urge to conquest and the more violent the emotional agitation.

Alfred Adler

Alliance Ratings

For the Alliance measure, item Likert scores were summed for each patient at each month, and for all three Alliance targets. Overall, there were 729 Alliance rating forms completed. The bulk of these were contributed by treatment completers (549, 75.0% of completed forms, M = 11.2 forms per patient, range 1 - 15), while non-completers contributed 180 or 25.0% (M = 3.8 forms per patient, range 1 - 7) of the Alliance rating forms. As there were six items with a maximum score of five on each item, the sum was out of 30 possible points on each alliance target (i.e., Patient-to-Therapist, Patient-to-Peer, and Patient-to-Program). To convert these scores to the same unit of measure as the items themselves, the monthly sums were simply divided by six (six items per alliance target). The mean and standard deviation of Alliance ratings were calculated for each month in therapy.

In an effort to reveal general trends, the results on all completed Alliance forms are represented graphically in Figures 1 to 4. Mean raw Alliance ratings (and +/- 1 standard deviation as error bars) are presented for each of the relationships under consideration: Patient-to-Therapist, Patient-to-Peer, Patient-to-Program, and overall Cohesion. These data are also graphically presented with the sample stratified into treatment completers and non-completers (see Figures 5 to 8). A review of the Figures shows some consistent trends.

Figure 1

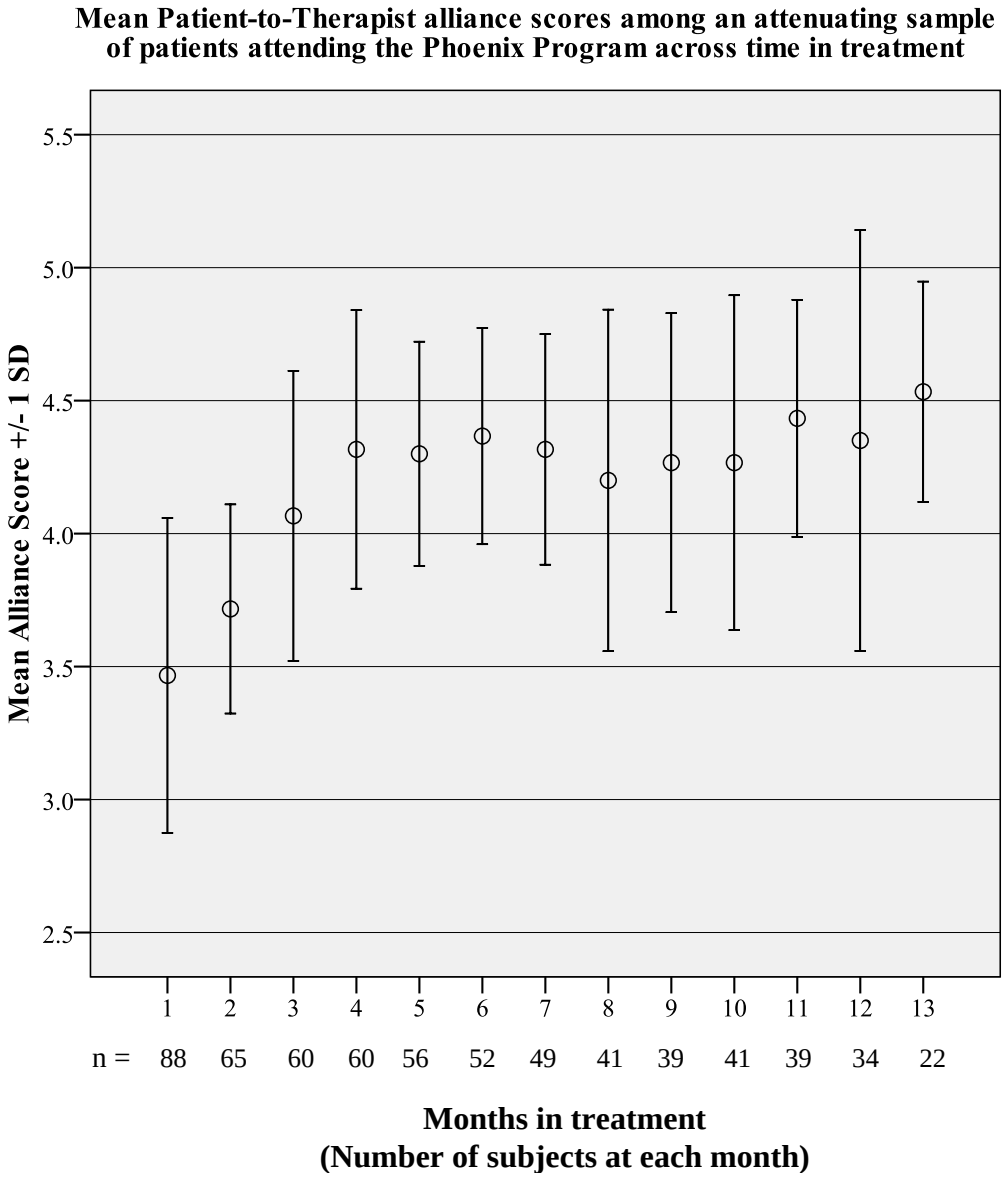

Mean Patient-to-Therapist alliance scores among an attenuating sample of patients attending the Phoenix Program across time in treatment
Mean Alliance Score +/- 1 SD
5.5
5.0
4.5
4.0
3.5
3.0
2.5
1 2 3 4 5 6 7 8 9 10 11 12 13
n = 88 65 60 60 56 52 49 41 39 41 39 34 22
Months in treatment
(Number of subjects at each month)

Figure 2

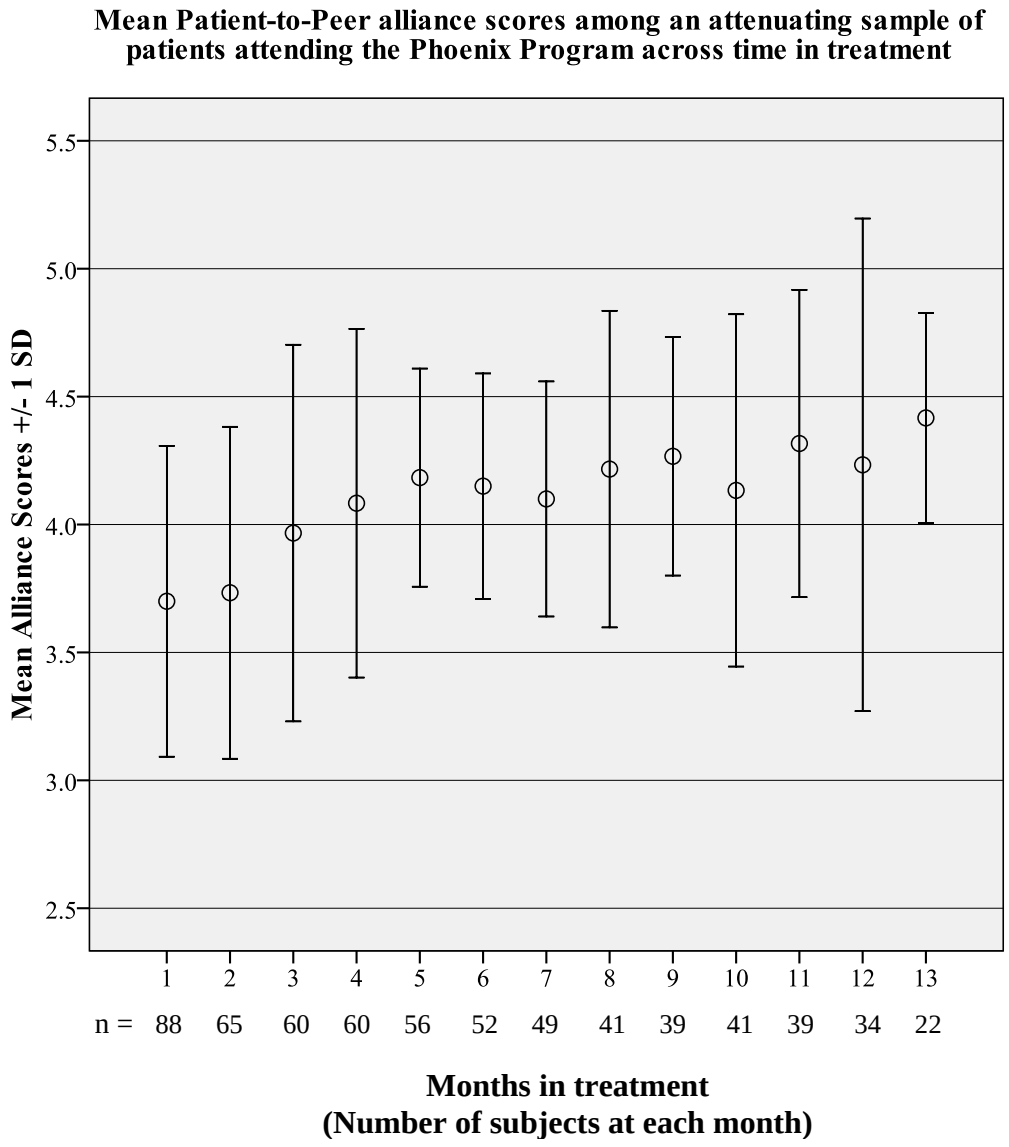

Mean Patient-to-Peer alliance scores among an attenuating sample of patients attending the Phoenix Program across time in treatment
Mean Alliance Scores +/- 1 SD
5.5
5.0
4.5
4.0
3.5
3.0
2.5
1 2 3 4 5 6 7 8 9 10 11 12 13
n = 88 65 60 60 56 52 49 41 39 41 39 34 22
Months in treatment
(Number of subjects at each month)

Figure 3

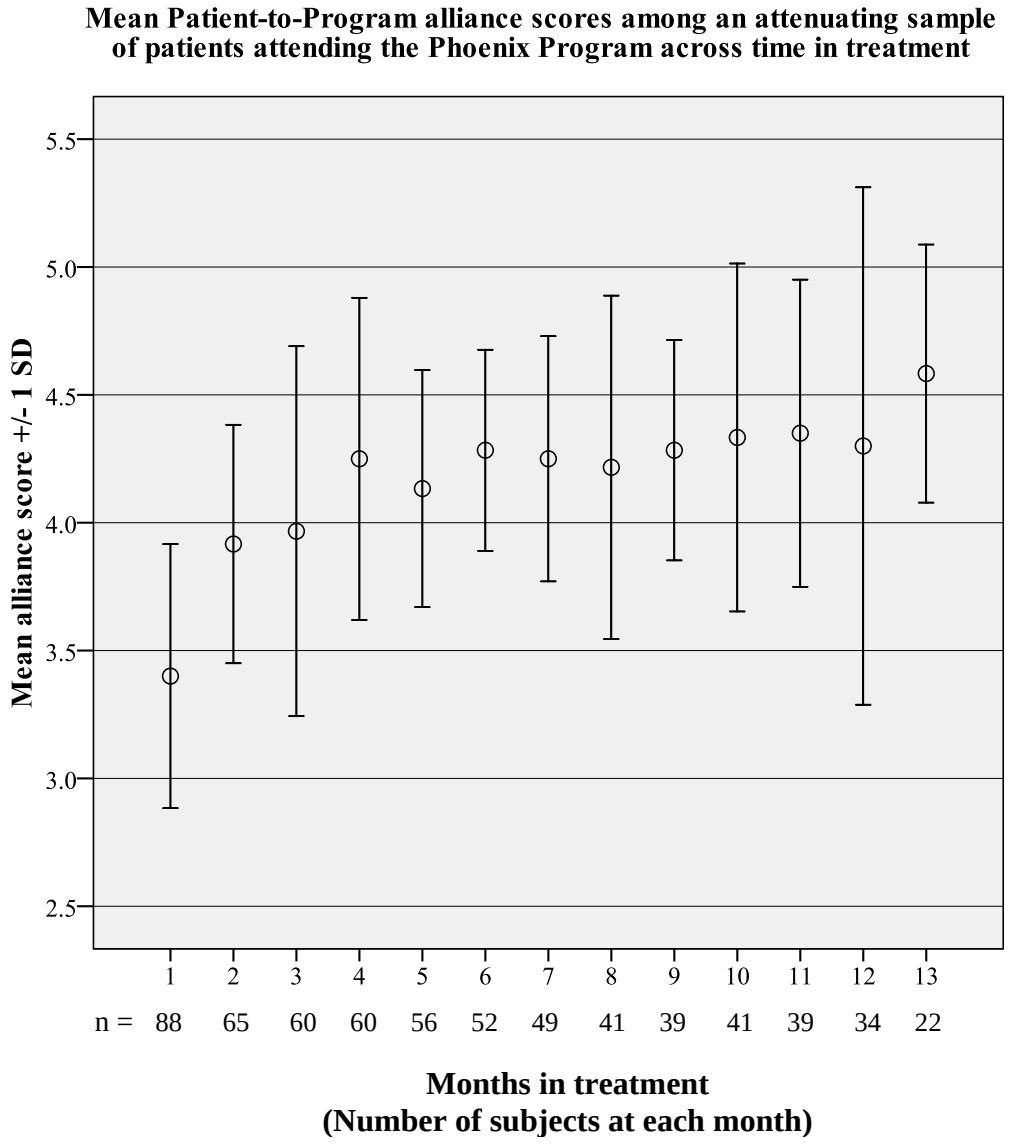

Mean Patient-to-Program alliance scores among an attenuating sample of patients attending the Phoenix Program across time in treatment
Mean alliance score +/- 1 SD
5.5
5.0
4.5
4.0
3.5
3.0
2.5
1 2 3 4 5 6 7 8 9 10 11 12 13
n = 88 65 60 60 56 52 49 41 39 41 39 34 22
Months in treatment
(Number of subjects at each month)

Figure 4

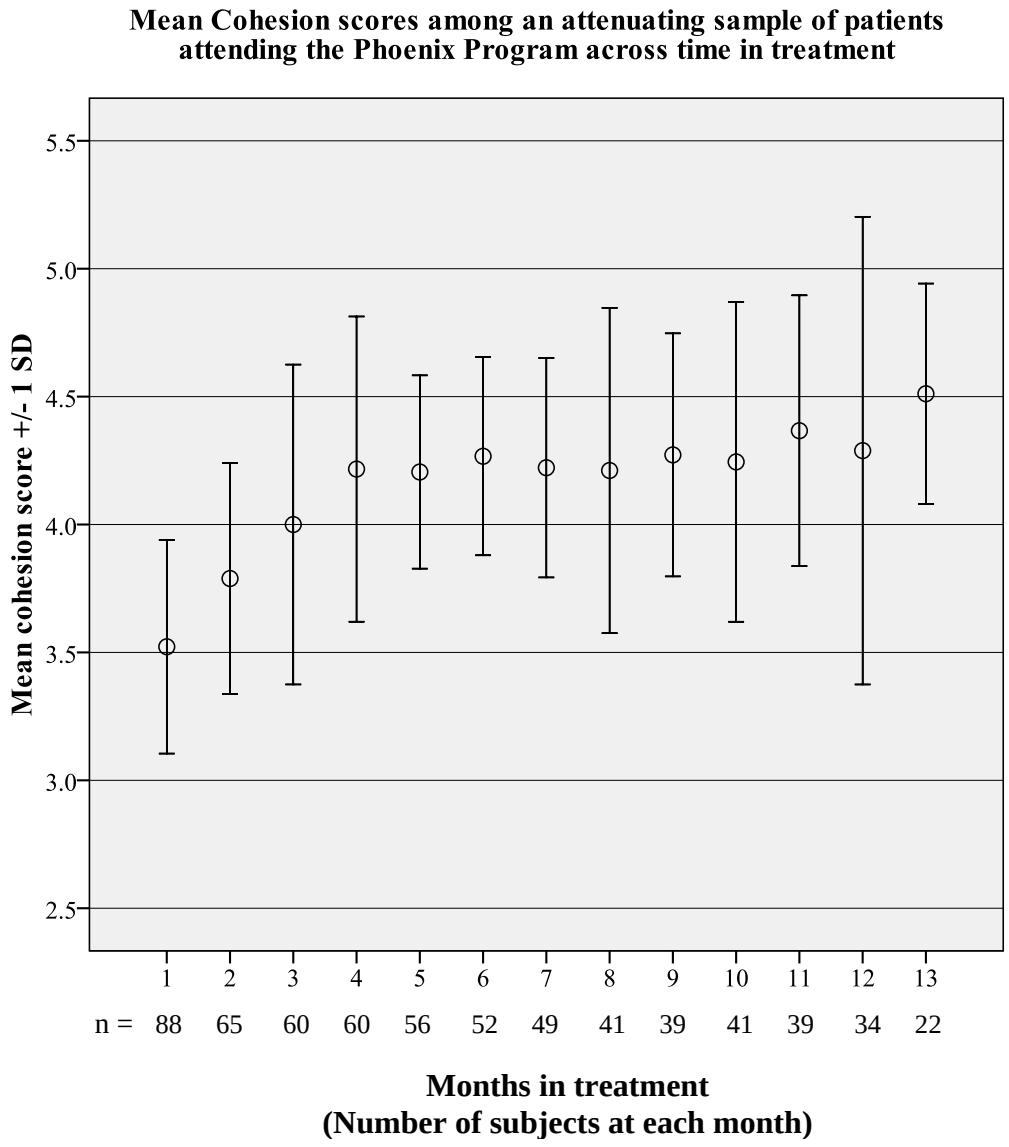
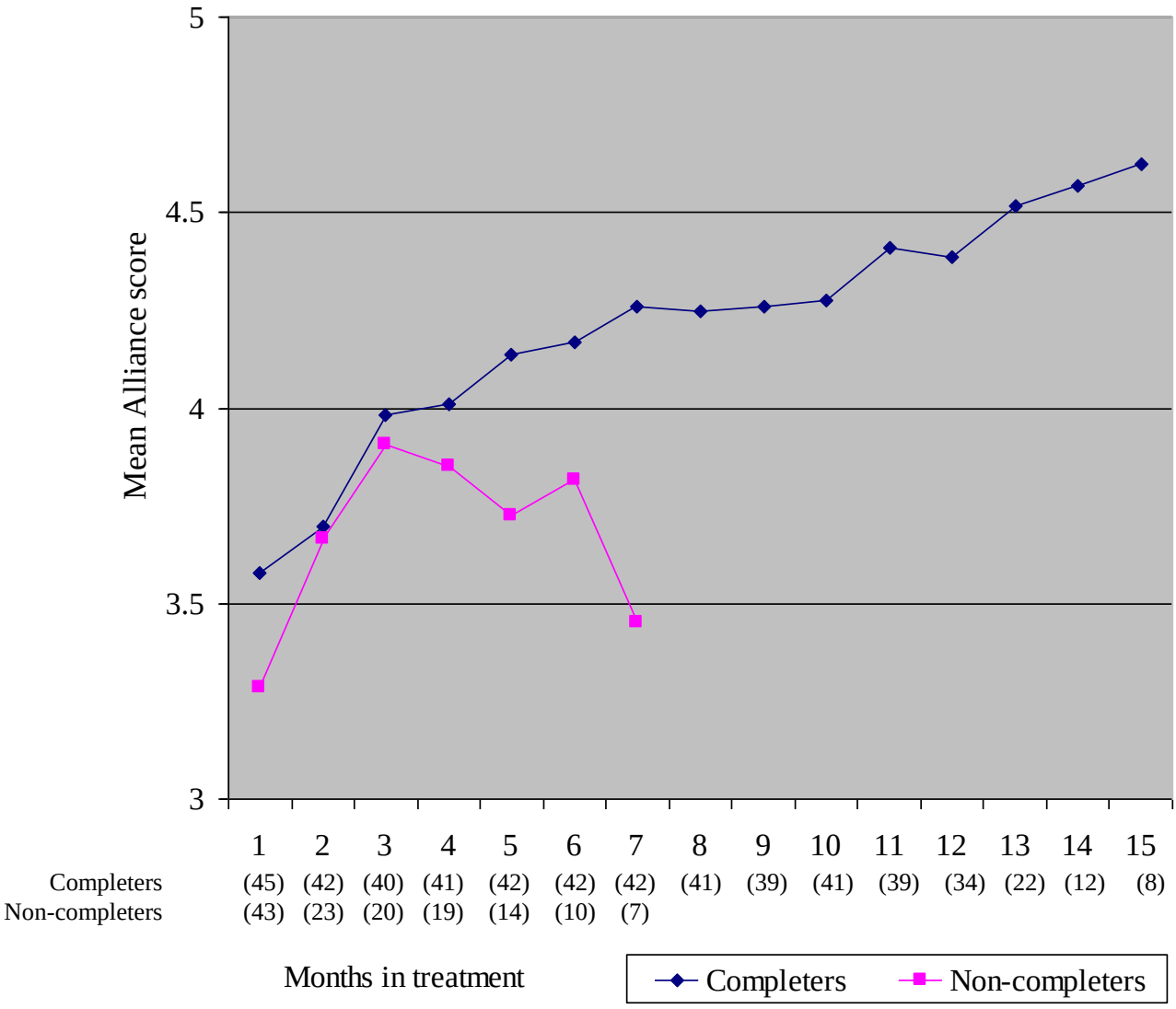

Mean Cohesion scores among an attenuating sample of patients attending the Phoenix Program across time in treatment
Mean cohesion score +/- 1 SD
5.5
5.0
4.5
4.0
3.5
3.0
2.5
1 2 3 4 5 6 7 8 9 10 11 12 13
n = 88 65 60 60 56 52 49 41 39 41 39 34 22
Months in treatment
(Number of subjects at each month)

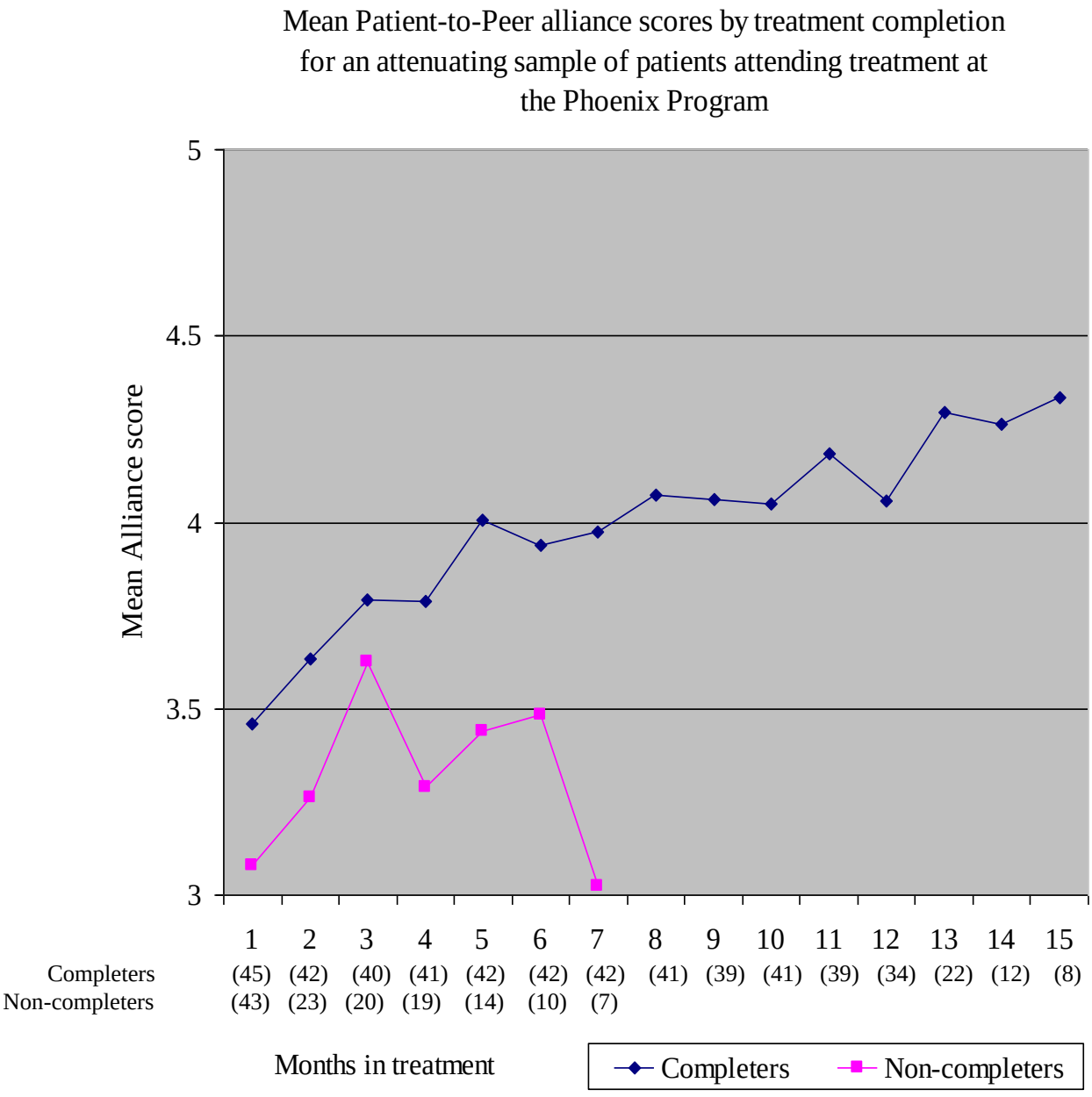
Figure 5

Mean Patient-to-Therapist alliance scores by treatment completion for an attenuating sample of patients attending treatment at the Phoenix Program



Note: Data points represent discrete points in time.
They are joined for ease of interpretation only.

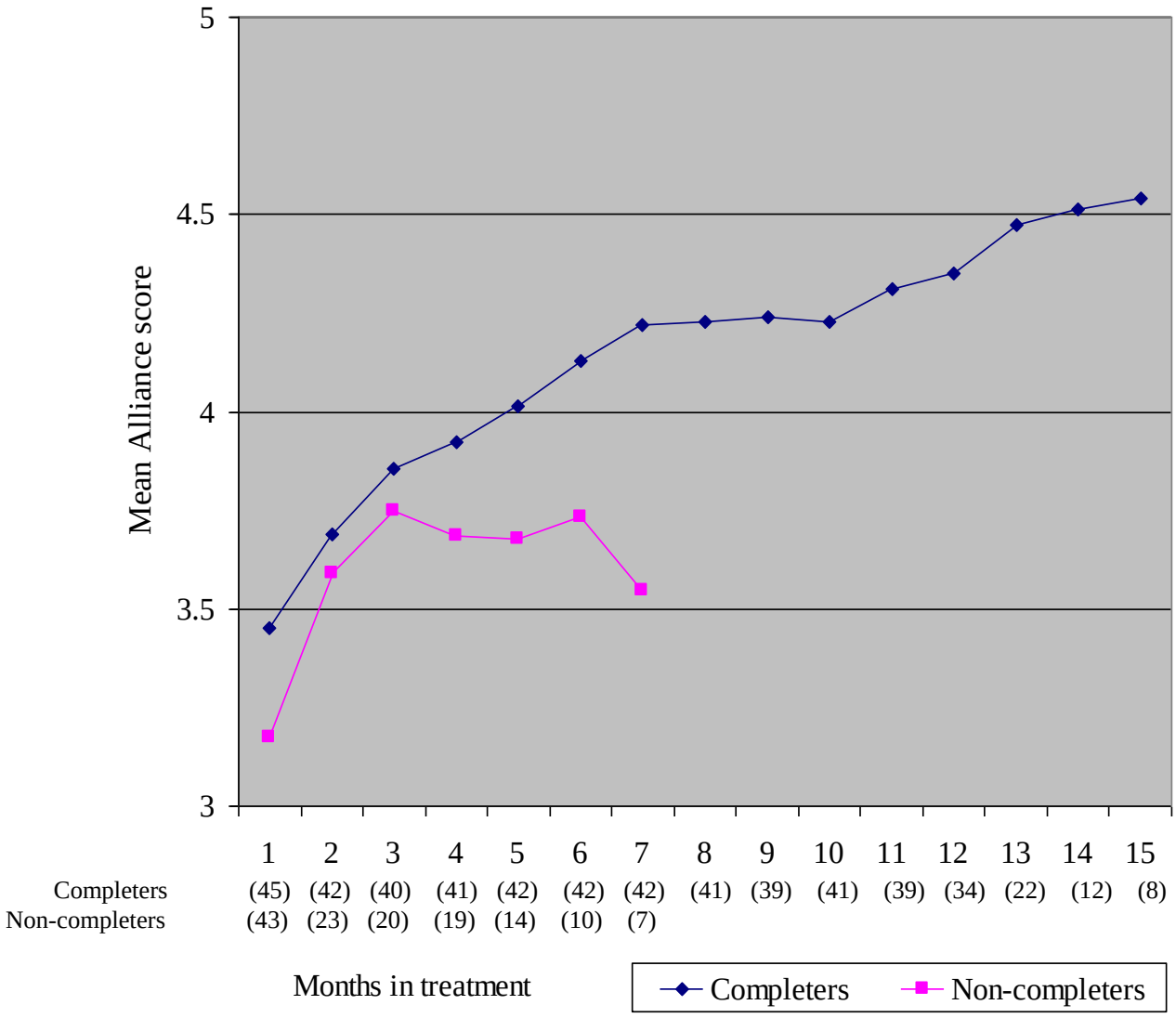
Figure 6



Note: Data points represent discrete points in time.
They are joined for ease of interpretation only.

Figure 7

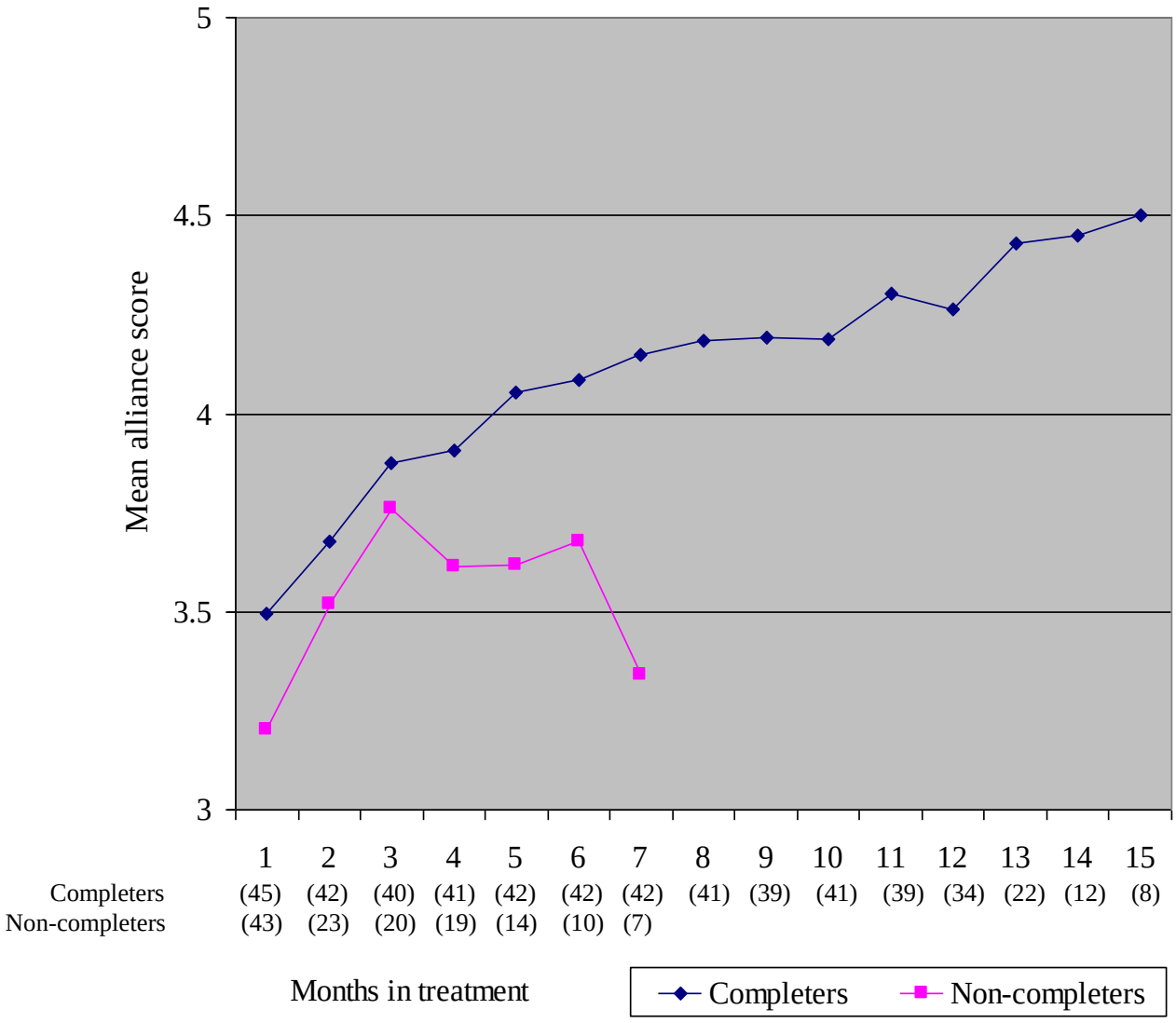
Mean Patient-to-Program alliance scores by treatment completion for an attenuating sample of patients attending treatment at the Phoenix Program



Note: Data points represent discrete points in time. They are joined for ease of interpretation only.

Figure 8

Mean Cohesion scores by treatment completion for an attenuating sample of patients attending treatment at the Phoenix Program



Note: Data points represent discrete points in time.
They are joined for ease of interpretation only.

On all three alliance targets and on the overall Cohesion plot, there is a gentle positive slope for Alliance ratings over time in treatment. In all cases, the most rapid growth takes place in the first four to five months in therapy. Alliance ratings then grow less rapidly over the remaining months. The fact that the sample size was attenuating as months passed may have played a role in that trending. In order to determine if that was the case, a separate plot was generated using only the treatment completers. The completer group had the least attenuation of course as they remained in treatment for 10 months minimum. The resulting plots were essentially identical to the results that are seen in Figures 5 to 8. It is interesting to note that the error bars on the plots (which cover one standard deviation plus or minus the mean) also reveal some trends. They tend to be smallest over the period of months 4, 5, and 6, indicating that the patient group as a whole tended to have less variation in their alliance ratings during that period. Also of interest is that the group consistently had the most variation in their alliance scores at the one year mark. It may be that by this time in treatment, patients are ambivalent. Some are apparently highly connected to the program elements, while others clearly are not.

When the sample is stratified into treatment completers and non-completers, another clear pattern becomes apparent. Treatment non-completers had a virtually identical trajectory of alliance over the first three months of treatment, but consistently had lower mean scores than treatment completers. For those who did not complete the program, alliance with their peer group was notably lower than to the other alliance targets.

Non-completers were not considered for this graphical representation past seven months, as there were simply too few subjects to warrant inclusion versus the risk of

introducing unstable data. Data for treatment completers past 15 months were excluded for the same reason.

GES

The GES was administered at three points during treatment. This was, in part, to reflect the tradition of considering change between the early, middle, and late phases of psychotherapy, but also because clinical impressions were that the patients did in fact change in terms of their perceptions of, and relationship to, the group. In an examination of patients with mood and anxiety disorders, it was recommended that the GES be administered periodically to examine developments in group (Oei & Browne, 2006). At Time 1 (early phase) there were 49 treatment completers and 45 non-completers with forms available for analysis. At Time 2 (middle phase), there were 40 treatment completers and 4 non-completers, and at Time 3 (late phase) there were 44 treatment completers. Because only scale scores had been retained on computer files, item data were not available at the time of analysis; therefore no determination of reliability with this sample was possible for the GES.

Raw scores were obtained for both the treatment completers and the non-completers and are reported in Table 18. These were translated to standardized scores as per Moos (2002), and are also reported. Standardized scores were designated as low, medium, or high. Cut points for these designations are somewhat arbitrary, but follow the criteria used by Harkins and Beech (2008). Grouping the scales of the GES into their three respective dimensions, between-group MANOVAs at each time point were conducted, contrasting scores between completers and non-completers. Obviously, there were zero non-completers at discharge,

hence no comparison was made at that time point. The effect of treatment completion on the Relationship Dimension was not significant at Time 1, $F(3,90) = .446$, $p = .721$, nor at Time 2, $F(3,50) = .261$, $p = .853$. Similarly, there was no effect on the Personal Growth Dimension at Time 1, $F(3,90) = .322$, $p=.862$ or at Time 2, $F(4, 49) = 2.076$, $p = .098$. The System Maintenance and Change Dimension was also unrelated to treatment completion at Time 1, $F(3,90) = .107$, $p = .956$ or at Time 2, $F(3, 50) = .033$, $p = 992$. These results were confirmed by conducting a one-way MANOVA on the data with treatment completion as the grouping variable and the 10 GES scales as multiple dependant variables. At Time 1, no significant effect of treatment completion was found, $F(10,83) = .247$, $p = .990$. At Time 2 (six months into therapy), there were again no significant effects, $F(10,43) = .880$, $p = .559$.

As measured by the GES, all patients of the Phoenix Program reported a generally positive experience with group membership. The patients scored positively (medium or high) on all relationship dimensions (cohesion, leader support, and expressiveness), on all system dimensions (order and organization, leader control, and innovation), and almost all the personal growth dimensions (task orientation, self-discovery, and anger and aggression). The highest scores were for the self-discovery scales.

Table 18

Mean raw and T-scores for treatment completers and treatment non-completers on GES subscales at early, mid, and late treatment

Time 1	Treatment completers (n = 49)		Treatment non-completers (n = 45)	
GES Subscale	Raw Score (SD)	T-Score	Raw Score (SD)	T-Score
Cohesiveness	7.04 (2.20)	52 (Medium)	6.58 (2.18)	49 (Medium)
Leader Support	6.65 (2.16)	49 (Medium)	6.58 (2.26)	49 (Medium)
Expressiveness	5.90 (1.70)	54 (Medium)	5.73 (1.50)	50 (Medium)
Independence	5.37 (1.62)	42 (Low)	5.18 (1.39)	38 (Low)
Task Orientation	7.67 (1.69)	56 (High)	7.38 (1.56)	56 (High)
Self-Discovery	7.94 (1.20)	66 (High)	7.84 (1.22)	66 (High)
Anger & Aggression	5.67 (1.78)	59 (High)	5.49 (2.12)	59 (High)
Order & Organization	5.49 (2.08)	49 (Medium)	5.49 (2.11)	49 (Medium)

Leader Control	4.45 (1.95)	48 (Medium)	4.51 (1.83)	48 (Medium)
Innovation	5.02 (1.90)	54 (Medium)	4.80 (1.87)	54 (Medium)

Time 2	Treatment completers (n = 40)		Treatment non-completers (n = 14)	
GES Subscale	Raw Score (SD)	T-Score	Raw Score (SD)	T-Score
Cohesiveness	7.70 (1.11)	52 (Medium)	7.71 (1.38)	55 (Medium)
Leader Support	7.15 (1.44)	52 (Medium)	7.00 (1.71)	52 (Medium)
Expressiveness	6.10 (1.37)	54 (Medium)	5.71 (1.90)	50 (Medium)
Independence	5.70 (1.14)	42 (Low)	5.29 (1.59)	42 (Low)
Task Orientation	7.85 (1.23)	59 (High)	8.07 (1.07)	59 (High)
Self-Discovery	8.43 (0.75)	68 (High)	7.71 (1.33)	63 (High)
Anger & Aggression	5.85 (2.09)	62 (High)	6.14 (1.51)	62 (High)
Order & Organization	4.90 (2.09)	46 (Medium)	4.93 (2.50)	46 (Medium)
Leader Control	3.85 (2.09)	45 (Medium)	4.00 (1.96)	45 (Medium)
Innovation	5.57 (1.81)	58 (High)	5.43 (2.17)	58 (High)

Time 3 Treatment completers

(n = 44)

GES Subscale	Raw Score (SD)	T-Score
Cohesiveness	7.77 (1.22)	58 (High)
Leader Support	7.43 (1.15)	55 (Medium)
Expressiveness	6.52 (1.56)	57 (High)
Independence	5.93 (1.21)	46 (Medium)
Task Orientation	7.98 (1.39)	59 (High)
Self-Discovery	8.57 (0.76)	68 (High)
Anger & Aggression	5.93 (1.91)	62 (High)
Order & Organization	5.39 (1.63)	49 (Medium)
Leader Control	4.11 (2.00)	45 (Medium)
Innovation	5.70 (1.64)	58 (High)

Note. GES = Group Environment Scale. Time 1 = < 1 month, Time 2 = 6 months, Time 3 = prior to discharge, months variable. Conversion to standardized T-scores done as indicated in Moos (2002).

REACT

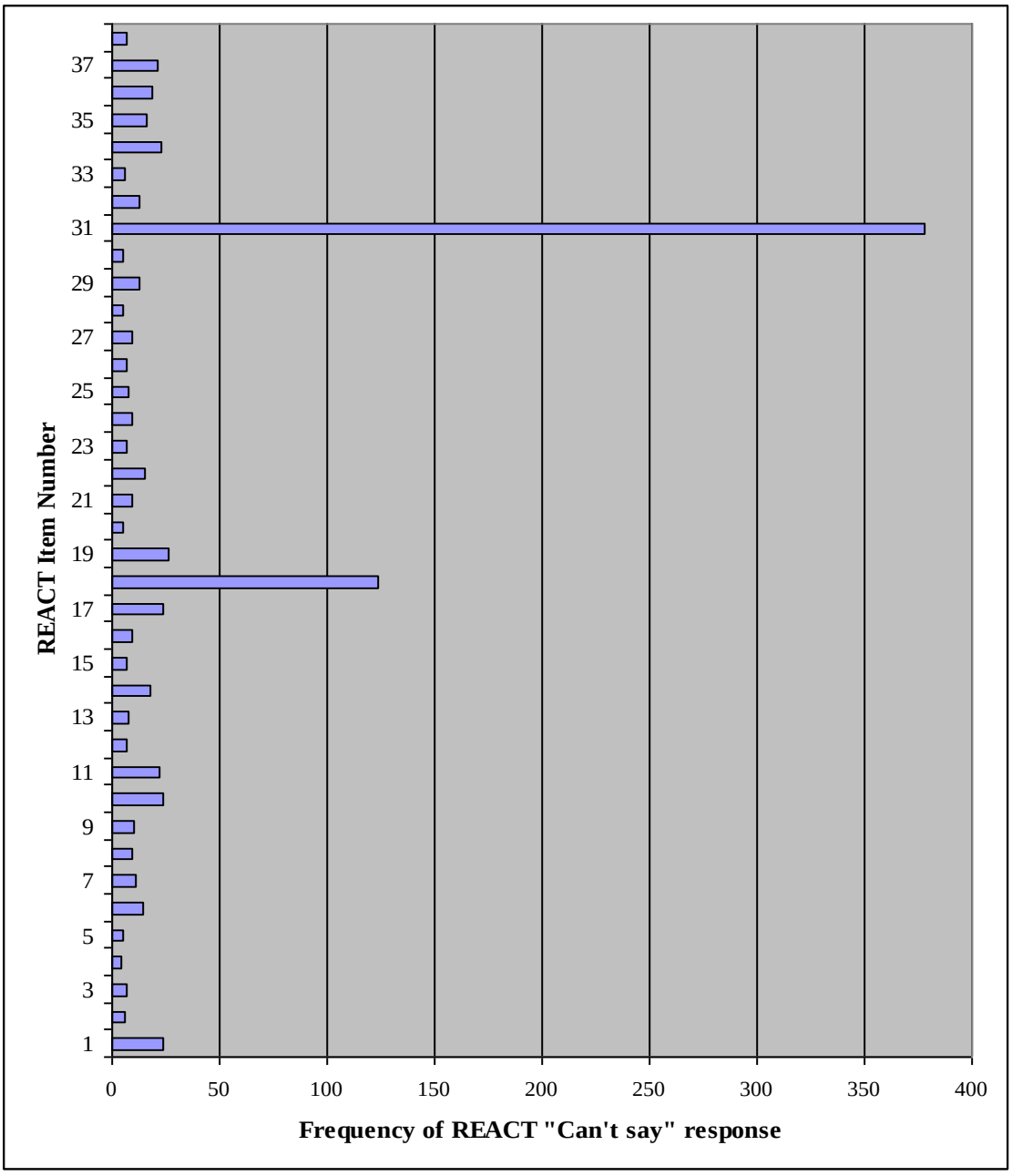
Next, a review of REACT scores was conducted. Recall that each therapist had the opportunity to complete a REACT form on each patient for each month that patient was in therapy. It was very unlikely that all therapists would have completed an evaluation on a patient in any given month. A host of obstacles ensured that full and complete data were impossible to obtain on the REACT. In any given week, some therapists would be on vacation, off sick, attending courses, or away from the workplace for any number of other reasons. At other times, events on the unit or around the hospital made it very difficult for therapists to attend to this task. Still other weeks, therapists either forgot to complete the forms or simply opted not to. As data collection went on for a long period of time, therapists were candid that they sometimes wearied of completing these forms. Despite all the obstacles to completing REACT forms, the therapists ultimately completed a total of 4,618 REACT forms for this study. In monitoring progress during data collection, there were no discernable biasing trends as to which therapists did or did not complete REACT forms for a given patient in a given month.

As noted earlier, Najavits et al. (1995) recommended utilizing a "can't say" option in work with therapists. She suggested it would be seldom used. In the present study, the "can't say" option was exercised 934 times. With the REACT having 38 items, 4,618 forms generated 175,484 data points. The "can't say" selections therefore represented 0.53% of the total item data pool. Although a small proportion, this was a substantially greater proportion of "can't say" responses than the .0001% rate reported by Najavits et al. (1995). The items not

responded to by therapists were generally scattered with two glaring exceptions. Item #31 (*Appreciated by the patient*) was unanswered 378 times, while item #18 (*Guilty with a sense you are doing something wrong, or should be doing more*) was unanswered 124 times (see Figure 9). This is addressed in Chapter 9.

Figure 9

Histogram of REACT items coded as “Can’t say” by therapists among a data pool of 4,618 completed forms



The “Can’t say” responses represented the equivalent of missing data on this instrument. Therapists either responded with one of the Likert options or chose “Can’t say”. Given that the non-countable responses were evenly distributed except for items #18 and #31, no other corrections were made to the data prior to scoring.

Through factor analysis of item responses in her development sample, Najavits et al. (1995) determined that the instrument contained four content scales. Given labels to reflect the nature of the item groups, the factors were: *therapist in conflict with self, therapist focused on own needs, positive connection with patient,* and *therapist in conflict with patient.* SPSS syntax provided by Najavits enabled appropriate scoring for these factors, as well as for scoring on global “positive” and “negative” emotional responses. Scoring involved taking the arithmetic mean after a summation of item scores (taking into account reverse scored items). See Table 5 for a review of the REACT items associated with each factor. It is notable that a number of the REACT items are not subsumed under any of the four factors. A future factor analysis of the present data set would be useful to determine if this sample of therapists generated factors similar to those identified in Najavits et al. (1995).

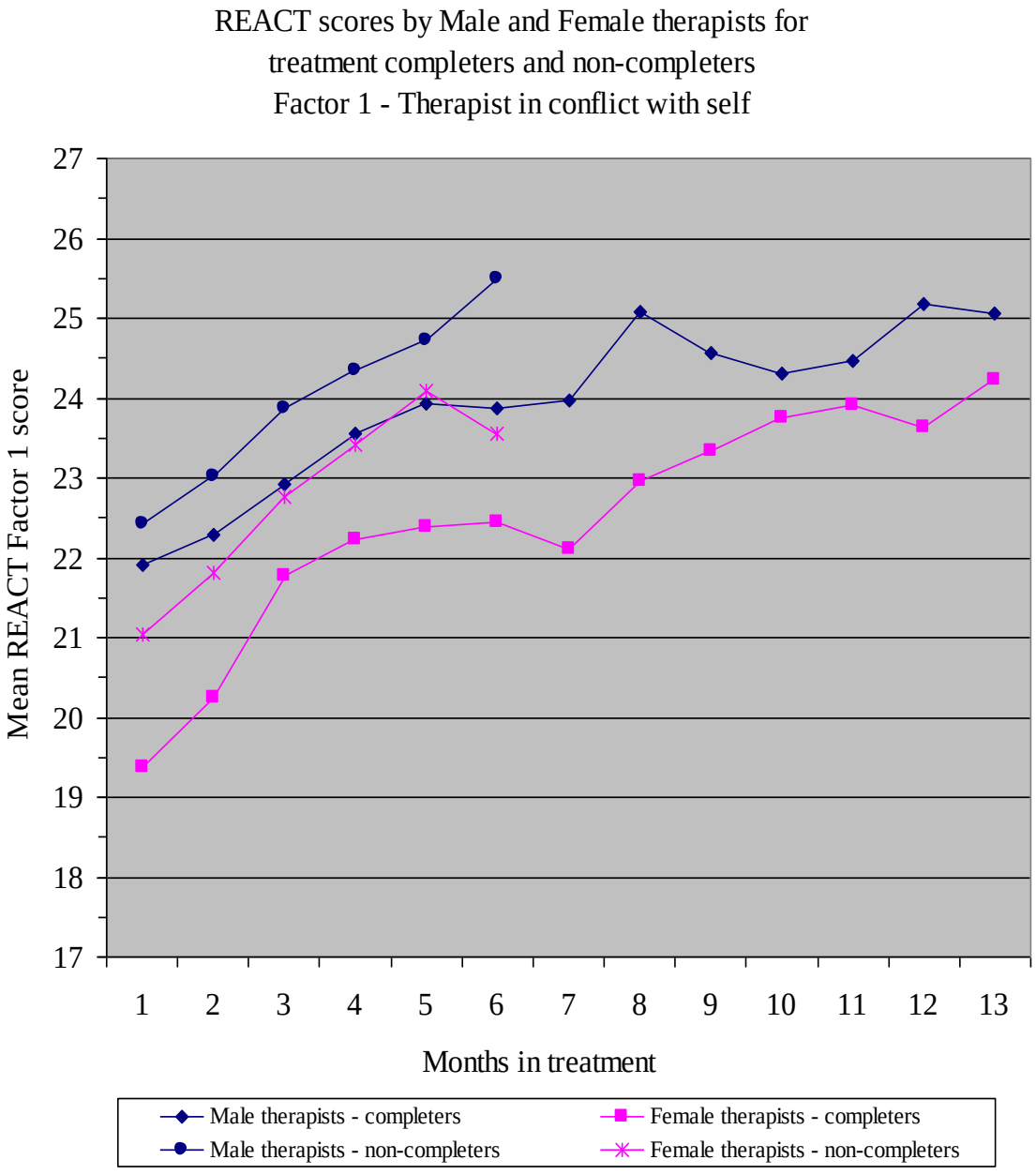
As a way to provide an initial overview of the numerous REACT forms, mean scores were calculated for each of the four factors and the overall positive and overall negative scores, at each month in therapy for each individual patient and across all therapists. For example, all the REACT forms that were completed for all patients at, say, month number three were scored on the various factors. The means of those scores are plotted in Figures 10 - 15. The data were aggregated a number of ways. Scores for the treatment completers and

treatment non-completers are presented. As well, scores are stratified by therapist gender. For any given month, the number of therapists who provided data fluctuated to some degree (M = 17.7 therapists ratings per month, SD = 3.4, Range 6 – 21 therapists).

Figures 10 through 15 show the change patterns of therapists' emotions toward these patients over time. For ease of presentation, the number of patients that contributed to each data point are not reported here. Instead, the interested reader can refer to Appendices F to O for these data. Also for consistency, Figures 10 to 15 all employ a vertical axis that spans 10 points on the REACT scale. This allows one to readily compare the slope of one Factor with the slope of another Factor, as they are all plotted using the same metric.

On Factor 1 (*Therapist in conflict with self*), male and female therapists demonstrated similar growth patterns to all the patients in that there was steady growth over the first months of participation in the program. As patients' time in treatment increased, therapists reported that so did their sense of conflict within themselves. Male therapists reported a greater sense of internal conflict than did the female therapists, and both had more internal conflict in response to patients who did not complete therapy (see Figure 10). Compared to the other REACT factors reviewed in this chapter, there was a large degree of variation on Factor 1 depending on whether therapists were male or female and depending on whether they were responding toward treatment completers or non-completers.

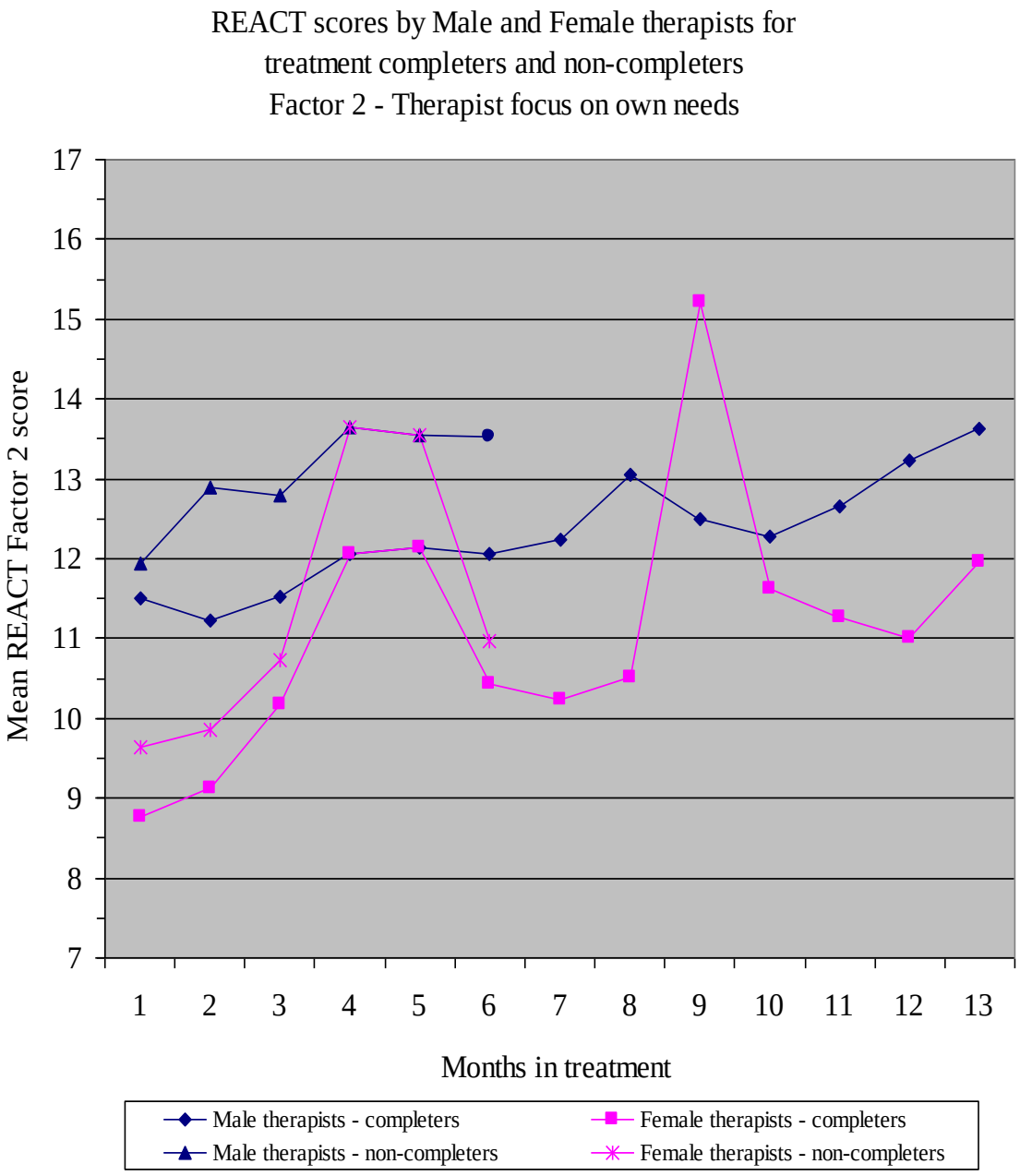
Figure 10



Note: Data points represent discrete points in time.
They are joined for ease of interpretation only.

Therapists' experience of focusing on their own needs (REACT Factor 2) also showed a great deal of variability over the months in treatment. Among female therapists especially, there was an almost erratic trajectory for patients who completed the Phoenix Program and those who did not. In terms of magnitude on Factor 2, female therapists revealed that for the most part they were much less focused on their own needs than were male therapists. However, there were clear spikes at month 4 and 5 and again at month 9. Trend lines would indicate that the overall pattern was found to be positive, but the slope was slight (see Figure 11).

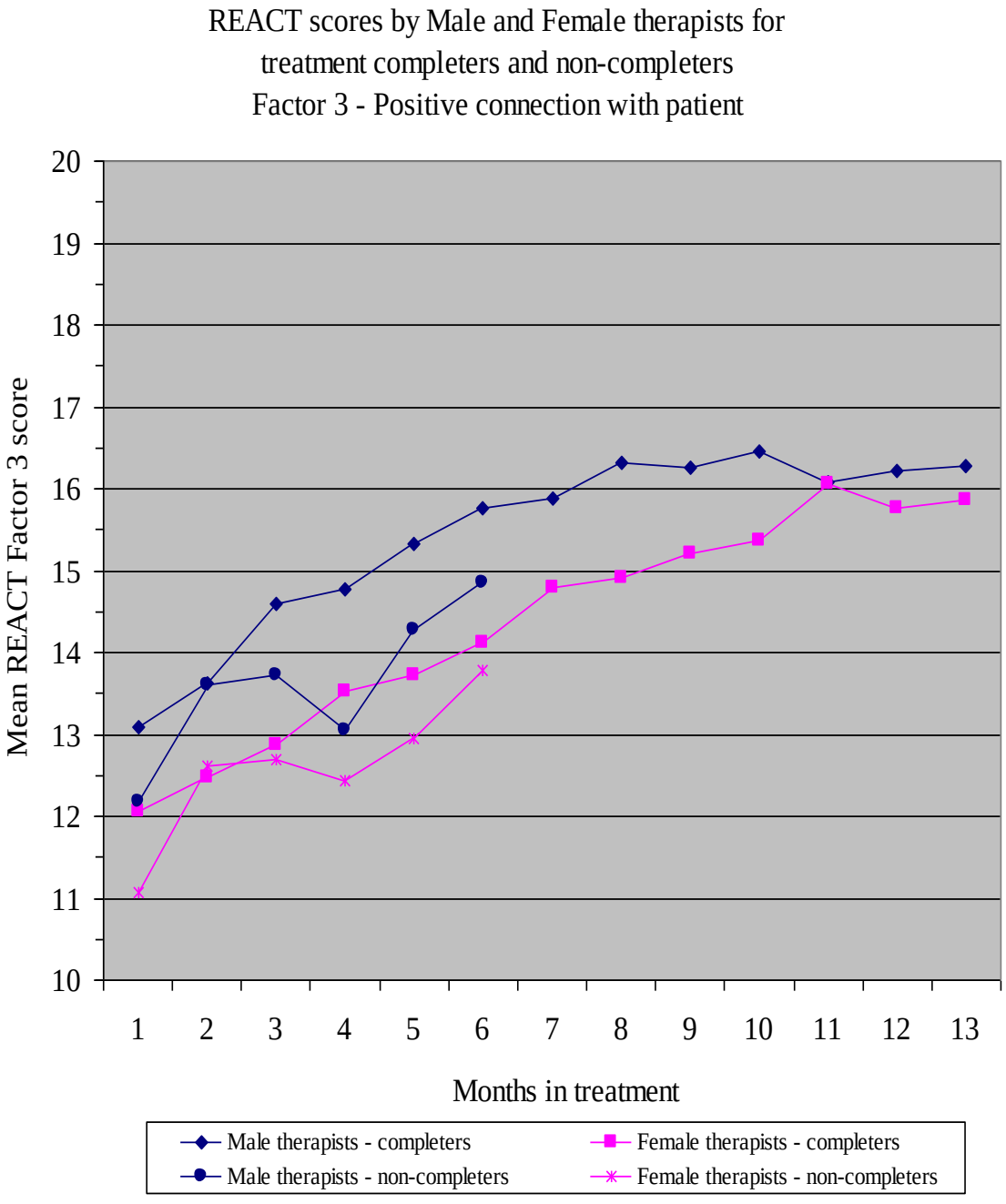
Figure 11



Note: Data points represent discrete points in time.
They are joined for ease of interpretation only.

Both male and female therapists showed similar patterns on their sense of positive connection with patients (REACT Factor 3) over time. Toward both treatment completers and non-completers, there was gradual positive growth on this factor. Interestingly, both genders of therapists had an increasing sense of positive connection to those who did not complete treatment, much in the same way they did toward those who eventually did complete treatment (see Figure 12).

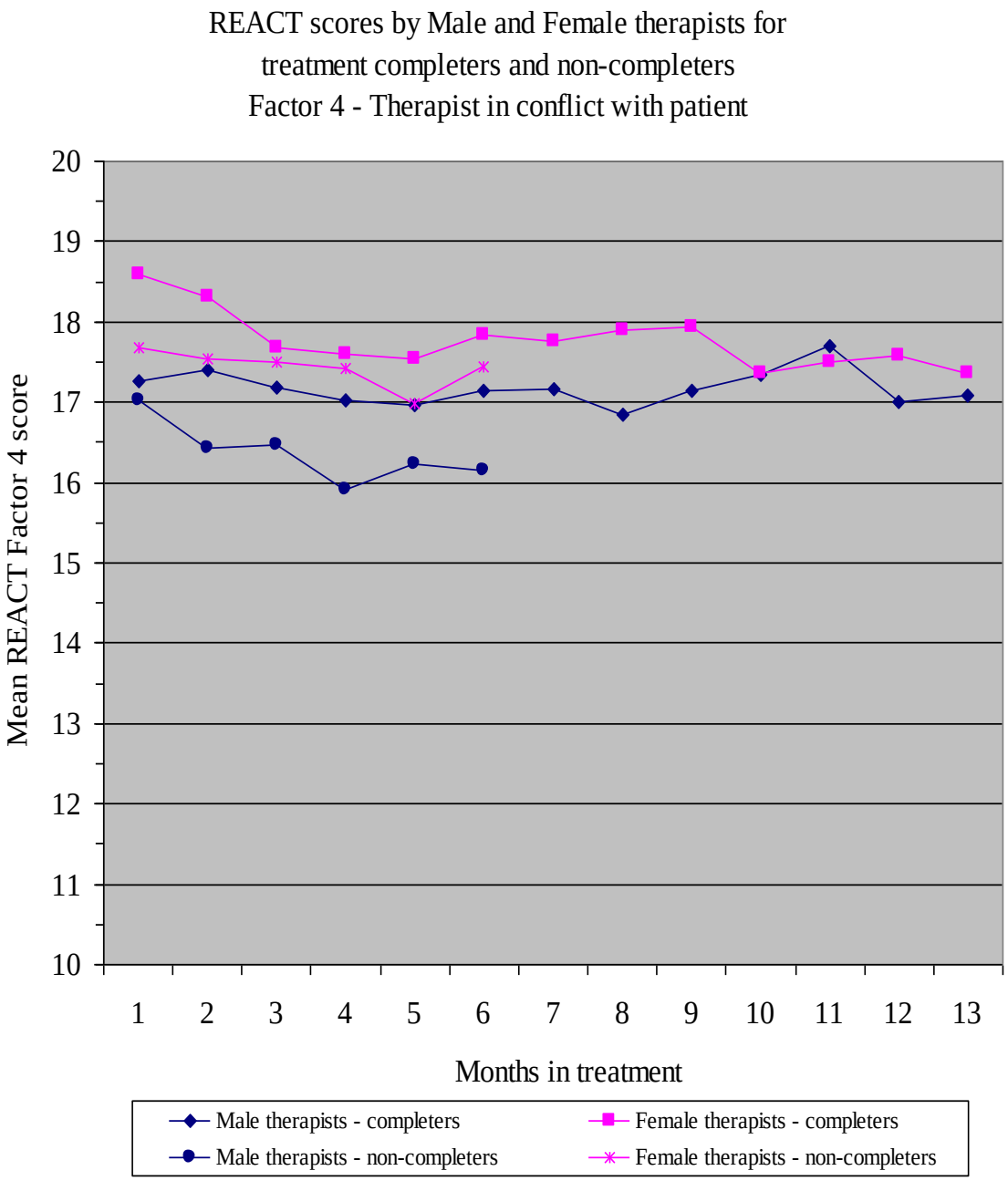
Figure 12



Note: Data points represent discrete points in time.
They are joined for ease of interpretation only.

In terms of REACT Factor 4 (*Therapist in conflict with patient*), responses of both genders were rather flat. Male therapists especially showed little change in their experience of conflict with the patient over the months. Female therapists revealed a trend toward experiencing less conflict with patients over time. Although not to a great degree, both genders reported less conflict with treatment non-completers than with completers (see Figure 13). This might simply highlight that relationships between therapists and engaged patients (versus patients who have less engagement in therapy) evoke more affect of all types. It may also indicate that therapists have some sense of which patients will succeed and which patients will not, and unknowingly make less of an investment in those not likely to complete the program. Yet another possibility is that the smaller cells in the non-completer group simply produce less reliable data.

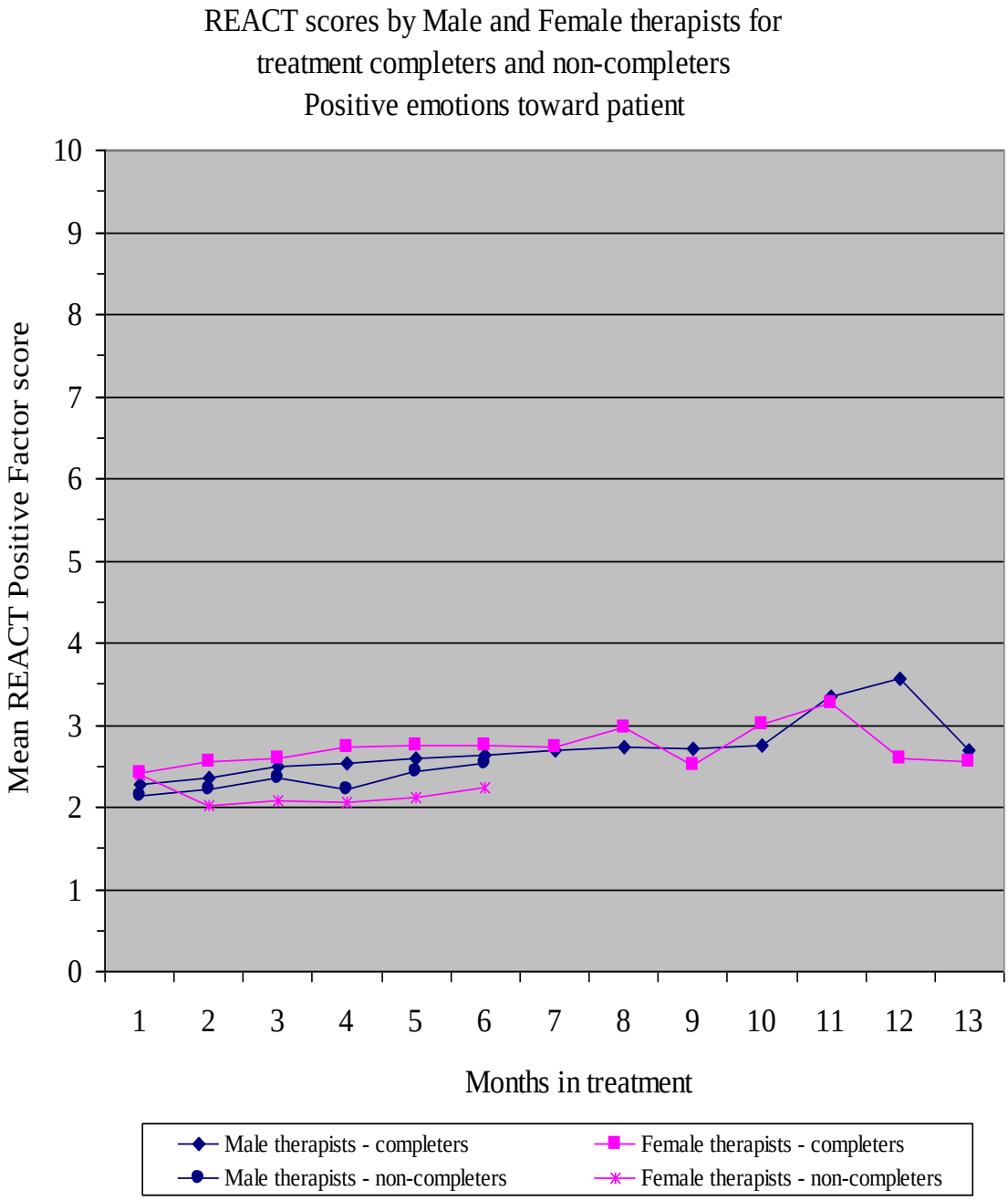
Figure 13



Note: Data points represent discrete points in time.
They are joined for ease of interpretation only.

Changes in overall positive emotions toward patients were virtually identical for male and female therapists (see Figure 14). Over time in therapy, there was a very gradual increase in positive emotions toward patients. For the male therapists, the experience of positive emotions was extremely close in magnitude and trajectory for treatment non-completers as completers. For female therapists, the starting point for both groups was virtually identical, but ultimately they had somewhat less overall positive affect toward treatment non-completers.

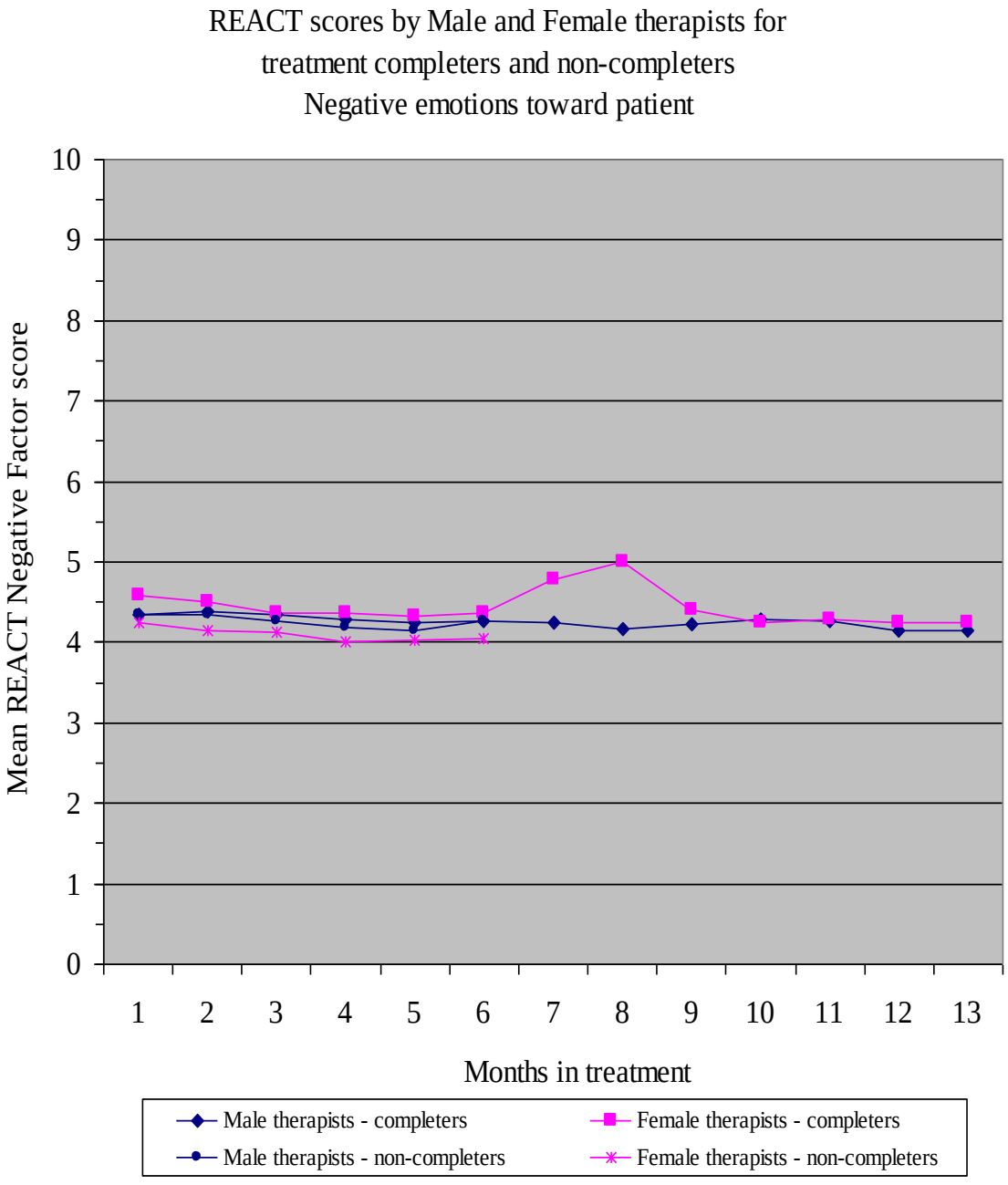
Figure 14



Note: Data points represent discrete points in time.
They are joined for ease of interpretation only.

Overall negative emotions toward patients showed very little shift over time (see Figure 15). This factor was remarkable in how very similar male and female therapists experienced overall negative feelings toward this patient group. Both the magnitude and the almost complete absence of slope was virtually identical for therapists of both genders except for a notable period during the seventh and eighth month of treatment. Although slight in magnitude, female therapists experienced a spike in negative affect toward patients during this point in therapy. This could be a response to some attitudinal presentation that was common among the patients at this point in therapy, or it may represent negative judgment as to how patients are doing at this point in therapy.

Figure 15



Note: Data points represent discrete points in time.
They are joined for ease of interpretation only.

Chapter 7 – Results – Alliance, Demographics, and Outcomes

Educate your children to self-control, to the habit of holding passion and prejudice and evil tendencies subject to an upright and reasoning will, and you have done much to abolish misery from their future and crimes from society.

Benjamin Franklin

The previous chapters reported how treatment completers and non-completers differed at the outset of treatment, how much change occurred for treatment completers and on what measures. This chapter moves ahead from the previous in that relationships between variables are examined. In particular, the relationships between Alliance variables, patient demographics, and outcome measures are reported. However, now our discussion will be limited to treatment completers only. The treatment completer group had the most complete data, and due to being in treatment longer, had on average many more data points on which to base slope estimates as discussed below. Chapter 8 will deal with therapist variables.

Hierarchical Linear Modeling

In this section, much of the analysis employed Hierarchical Linear Modeling (HLM) to obtain slope coefficients for the alliance and REACT data. HLM (or multi-level modeling) is a statistical technique typically used when data are "nested." The classic example of nested data refers to students nested within classes, nested within schools, nested within districts.

For the present purposes (and for psychotherapy research generally) multiple measures across time by a given subject can be considered nested data in that repeated ratings are nested within the person (Raudenbush & Bryk, 2002). The first level of HLM analysis calculates the

rate of change for a variable of interest for each individual case. HLM does so in the typical form of a regression slope coefficient. In other levels of an HLM analysis, co-variates could be considered to determine their respective contribution to slope variance among the whole sample, but this second step is not applicable to the results reported here.

The slope coefficients for all alliance targets (i.e., Patient to therapist, Patient to peer, Patient to program, and overall Cohesion) were generated for each patient. Mean alliance slopes are presented in Table 19. The coefficients were then imported back into regular statistical software to be manipulated as any other variable. Pearson product moment correlations were calculated to determine if there were significant relationships between slopes, demographics, and outcome (i.e., NRI-RQV, IIP-64, PRF-E, or JPI-R gain scores). In all cases, HLM procedures determined that there was a significant degree of variance among slopes so as to warrant further investigation ($p < .001$, two-tailed). This presents a rich opportunity for future research.

Generating slope coefficients for the GES was considered since there were multiple (i.e., three) administrations for treatment completers. It was reported in a previous chapter that there was there was very little variation in GES scores, but some degree of slope would still have been ascertainable. However, it seemed quite apparent from earlier analysis (omnibus MANOVA non-significant) that any slope coefficients would be very unlikely to be clinically relevant. Therefore, there was little reason to conduct even more tests than were already conducted.

Table 19

Mean slope coefficients on alliance targets among n = 42 treatment completers of the Phoenix Program

Alliance target	*M*	*SD*	*p*	*ES*
Patient to therapist	.0624	.0562	.000***	1.11
Patient to peer	.0548	.0584	.000***	0.94
Patient to program	.0776	.0515	.000***	1.51
Cohesion	.0651	.0494	.000***	1.32

Note: Slope coefficients tested for significance using a 1 sample z-test against a population with M = 0 and SD = sample SD. ***denotes significance at alpha <.001, 2-tailed. ES denotes effect size, calculated as Cohen's d.

Alliance and Patient Variables

Zero order correlations were computed between the slope coefficients for all alliance variables and the demographic variables used in this study. On theoretical grounds, it was reasonable to expect that there may be relationships between these patient variables and rates of change in alliance over time. For example, psychopathy is generally viewed as a relationship-damaging quality or trait. Therefore it is reasonable to suspect that higher psychopathy scores might have a significant association with negative alliance growth. For other relationships, the exploratory nature of this study invited exploratory analysis. As an example within the exploratory realm, it is of interest to know if sex offenders with higher education might have different alliance trajectories than those with less education. A zero-order correlation matrix for alliance and patient demographic/clinical variables is found in Table 20.

Table 20

Correlation matrix for alliance slope coefficients and patient demographic variables among treatment completers of the Phoenix Program

Variable (n)	Patient to therapist *r (p)*	Patient to peer *r (p)*	Patient to program *r (p)*	Cohesion *r (p)*
PCL-R (n = 42)	-.131 (.407)	-.056 (.723)	-.267 (.087)	-.170 (.283)
STATIC-99 (n = 40)	.029 (.861)	.140 (.390)	.055 (.735)	.083 (.612)
RRASOR (n = 40)	-.008(.961)	.130 (.423)	.162 (.317)	.100 (.538)
No. prior sex.[a] (n = 27)	-.061 (.762)	.099 (.624)	.026 (.898)	.025 (.903)
Education[b] (n = 35)	.162 (.352)	.214 (.217)	.249 (.150)	.238 (.169)
Offence severity[c] (n = 40)	.234 (.145)	.113 (.486)	.085 (.602)	.157 (.333)
Additional victims.[d] (n = 42)	.053 (.742)	.205 (.199)	-.128 (.423)	.053 (.743)

Note. r calculated as Pearson product moment correlation. [a]number of prior convictions for sexual offenses. [b]education in years. [c]severity of most invasive known or self-reported sexual crime as per Aylwin et al (2000). [d]number of victims additional to those in the index offence by self report or official records.

In looking at Table 20, the most remarkable finding is that there were no significant correlations between patient variables and alliance slope co-efficients. This means that changes in how patients experienced alliance with therapists, peers, and the program were unrelated to the patient variables under consideration. This result is very encouraging from a clinician's perspective. Recall that, as a group, the various alliance trajectories were positive (refer back to Figures 1 to 8). Yet, the patients' experience of alliance appears to have been independent of such strong criminal predictors as their PCL-R scores, number of prior convictions for sexual offenses, and actuarial risk scores. This finding indicates that a criminal population can indeed experience positive relationships with treatment providers and with peers. Given the rich literature on psychotherapy generally, this should hardly be a point of discussion, however in the present offender treatment climate this finding would not be expected. This is provocative because there is a virtual uniformity of attitude among professionals in corrections which hold up insight-oriented psychotherapy for criminal populations as being fruitless and out-dated (e.g., Hare & Neumann, 2009). Clearly, this is a sweeping generalization that appears not to be the case with this sample.

Although not reported in Table 20, there were other notable correlations within the full matrix. Patients' PCL-R scores correlated positively with STATIC-99 scores, $r(48) = .529$; $p = .000$, two-tailed, positively with offence severity, $r(42) = .410$; $p = .006$, two-tailed, and negatively with years of education, $r(38) = -.365$; $p = .020$, two-tailed. Number of additional victims was associated with psychopathy, $r(43) = .416$, $p = .004$, two-tailed, and, not surprisingly with STATIC-99 and RRASOR scores, $r(42) = .404$; $p = .007$, two-tailed, and r

(42) = .319; p = .035, two-tailed, respectively. These associations were expected, and the variables perform together as they ought to given their known roles in predicting criminal behavior. For example, it makes sense that the number of victims an offender has would also be related to the number of convictions he has for prior sex crimes. Again, this is noteworthy because the variables "hang together" exactly as they should, *but demonstrated no relationship* with the rate at which Alliance changed (from the patients' point of view).

Alliance and Outcomes

Recall that the outcome measures for this study were residualized gain scores of the NRI-RQV, the IIP-64, the PRF-E, and the JPI-R. Correlations were calculated between Alliance coefficients and residualized gain scores for all subscales on these measures. For ease of presentation, only subscales which were found to have significant associations with alliance slope coefficients are included in Table 21.

In examining Table 21 it is clear that the rate of change in patient-rated alliance had some rather specific relationships with outcome measures. Alliance growth had no relationship with NRI-RQV scales except for *conflict resolution*. The rate of growth of alliance with peers, $r(37) = .339$, p = .035, two-tailed, with the program overall, $r(37) = .347$, p = .019, two-tailed, and overall cohesiveness, $r(37) = .361$, p = .024, two-tailed, was associated with greater gains in conflict resolution as assessed by the NRI-RQV. These associations were medium in magnitude as determined by effect size.

Table 21

Correlations between alliance slope coefficients and outcome measures among treatment completers of the Phoenix Program

Variable (n)	Patient to therapist *r (p)*	Patient to peer *r (p)*	Patient to program *r (p)*	Cohesion *r (p)*
NRI-RQV (n = 39)				
Conflict Resolution	ns	.339 (.035*)	.347 (.019*)	.361 (.024*)
IIP-64 (n = 32)				
Overall	ns	-.448 (.010*)	ns	-.379* (.032)
Overly domineering	-.622 (.000***)	-.541 (.002**)	-.467 (.008**)	-.598 (.000***)
Overly vindictive	-.419 (.017*)	-.479 (.006**)	ns	-.445 (.011*)
Overly cold	ns	-.394 (.026*)	ns	-.395 (.025*)
Overly intrusive	ns	-.393 (.026*)	ns	ns

PRF-E (n = 37)				
Defendance	ns	ns	-.338 (.041*)	ns
Dominance	-.352 (.033*)	ns	ns	ns
JPI-R (n = 37)				
Anxiety	-.489 (.002**)	-.399 (.014*)	ns	ns
Energy level	ns	ns	.333 (.044*)	ns
Responsibility	.390 (.019*)	.407 (.014*)	475 (.003**)	.468 (.004**)

Note. r calculated as Pearson product moment correlation. *denotes $p < .05$, two-tailed, **denotes $p < .01$, two-tailed; ***denotes $p < .001$, two-tailed, ns = not significant.

Of all the outcome measures, gains on the IIP-64 had the most pervasive relationship to alliance coefficients. These associations tended to be very strong and their effect sizes large. Improvements (reduction in this case) in patients' tendencies to be overly domineering, vindictive, cold and intrusive were strongly related to their growing sense of alliance with their therapists, with their peer group, and with their sense of overall cohesion. It would be difficult to imagine that patients could show significant positive growth in their sense of connection with others while maintaining domineering, hostile, vindictive, and intrusive relationships at the same time. Positive growth in alliance may be curative in and of itself. However, it is equally plausible that reductions in one's interpersonal problems simply make it much easier for those individuals to have deeper relationships with others – including therapists.

Gains on PRF-E subscales had relatively few associations with Alliance rate of change. Slope co-efficients for patient to therapist alliance were significantly and inversely associated with residualized gains in the Dominance scale $r(35) = -.352$, $p = .033$, two-tailed. So, the greater the rate of growth in alliance to therapists, the lower the "need" to endorse pro-dominance items on the PRF-E. There was also a significant inverse relationship between patient to program alliance and Defendance gains $r(35) = -.338$, $p=.041$, two-tailed. The greater the rate of growth in alliance with the program overall, the lower the need to adopt a defensive posture.

The JPI-R also had relatively few associations with alliance coefficients, but the two associations that were revealed were specific and strong. Reductions on the JPI-R Anxiety scale were associated with stronger growth in alliance with therapists, $r(35) = -.489$, $p = .002$,

two-tailed) and peers, $r(35) = -.399$, $p = .014$, two-tailed. There is some face validity to this finding as anxiety surely inhibits interpersonal relationships. It follows, then, that reductions in anxiety would make it easier for patients to connect with others in the form of therapeutic alliance. Increases on the JPI-R Responsibility scale were strongly associated with the growth rate of all alliance targets (range $r = .390$ to .475). As patients develop increasingly strong attachments to staff, it becomes more likely that they might also feel more responsibility in general and towards these people in particular. Alternatively, the relationship between Responsibility and alliance trajectory might be particularly susceptible to expectancy effects. That is, patients might have a greater desire to endorse the values they perceive might be expected of them.

Higher gain scores on Energy Level were associated with rate of change in Alliance to the program, $r(35) = .333$, $p = .044$, two-tailed. This indicates that improvements in enthusiasm and tenacity were significantly associated with patients' growth rate of alliance toward the program overall.

As noted earlier, this portion of the study is essentially exploratory as it represents the first empirical examination of how these variables are associated. As such, no Bonferroni corrections were used to control for inflation of Type I error due to multiple tests; alpha was maintained at .05, two-tailed. In sum then, it appears that greater rates of Alliance growth in this psychotherapy program are significantly associated with improvements in patients' conflict resolution abilities, several types of interpersonal problems, reduced anxiety, and increased sense of responsibility. Clearly, changes in these areas are all consistent with treatment goals.

Chapter 8 – Therapist Focused Results – The relationship between REACT and Alliance

God give us grace, to accept with serenity the things that cannot be changed, courage to change the things that should be changed, and the wisdom to distinguish the one from the other. (From the Serenity Prayer)

Reinhold Niebuhr

Results for Treatment Completers and Non-Completers

In this chapter we report the findings revealed by analysis of over 4,500 REACT forms. Recall from earlier chapters that therapists completed these rating forms of their own emotional responses to the patients with whom they were working. They were ostensibly completed at monthly intervals, and at approximately the same time as when patients rated their sense of alliance. Scoring of the instrument produced values for a number of factors as well as for overall positive affect and overall negative affect scales.

Correlations Between Alliance and REACT

To shed some initial light on the nature of the relationships between Alliance and REACT scores, zero order correlation matrices were generated using mean raw scores for both the treatment completer and non-completer groups (see Tables 22 and 23). These correlations reflect a somewhat crude analysis, as mean Alliance and REACT scores were collected across all patients and across all months. Nevertheless, it did provide an initial look at how the variables were related to each other.

Table 22

Correlation matrix for alliance raw scores, and REACT scores of therapists by gender, toward n = 42 treatment completers

Variables	Patient to therapist r *(p)*	Patient to peer *r (p)*	Patient to program *r (p)*	Cohesion *r (p)*
Alliance variables				
Patient to therapist (n = 556)	1			
Patient to peers (n = 556)	.704 (.000***)	1		
Patient to program (n = 551)	.867 (.000***)	.730 (.000***)	1	
Cohesion (n = 555)	.930 (.000***)	.884 (.000***)	.943 (.000***)	1
REACT Factors				
Factor 1 males (n = 424)	.148 (.002**)	.145 (.003**)	.115 (.018*)	.148 (.002**)
Factor 2 males (n = 424)	.051 (.296)	.104 (.032*)	.072 (.141)	.083 (.089)
Factor 3 males (n = 424)	.322 (.000***)	.172 (.000***)	.272 (.000***)	.278 (.000***)
Factor 4 males (n = 424)	.122 (.012*)	.071 (.144)	.141 (.004**)	.122 (.012*)

Positive males (n = 424)	.150 (.002**)	.130 (.007**)	.146 (.003**)	.155 (.001***)
Negative males (n = 424)	-.007 (.881)	-.065 (.182)	-.010 (.836)	-.030 (.540)
Factor 1 females (n = 421)	.152 (.002**)	.074 (.131)	.189 (.000***)	.150 (.002**)
Factor 2 females (n = 421)	.002 (.967)	.002 (.962)	.067 (.168)	.026 (.592)
Factor 3 females (n = 421)	.331 (.000***)	.206 (.000***)	.307 (.000***)	.306 (.000***)
Factor 4 females (n = 421)	.095 (.053)	.155 (.001***)	.060 (.216)	.114 (.020*)
Positive females (n = 421)	.094 (.054)	.052 (.285)	.103 (.034*)	.091 (.063)
Negative females (n = 421)	.011(.828)	.048 (.324)	-.038 (.439)	.008 (.867)

Note. [a]This is a matrix using all available mean raw score data points. Values are across patients and across months in treatment. *r* calculated as Pearson product moment correlation. *denotes $p < .05$, two-tailed, **denotes $p < .01$, two-tailed, ***denotes $p < .001$, two-tailed. Factor 1 – Therapist in conflict with self, Factor 2 – Therapist attending to own needs, Factor 3 – Positive connection with patient, Factor 4 – Therapist in conflict with patient.

Table 23

Correlation matrix[a] for alliance raw scores and REACT scores of male and female therapists among n = 42 treatment non-completers

Variables	Patient to therapist *r (p)*	Patient to peer *r (p)*	Patient to program *r (p)*	Cohesion *r (p)*
Alliance				
Patient to therapist (n = 138)	1			
Patient to peers (n = 137)	.781 (.000***)	1		
Patient to program (n = 133)	.922 (.000***)	.833 (.000***)	1	
Cohesion (n = 137)	.953 (.000***)	.916 (.000***)	.972 (.000***)	1
REACT Factors				
Factor 1 males (n = 88)	-.138 (.199)	-.152 (.160)	-.187 (.084)	-.156 (.148)
Factor 2 males (n = 88)	-.134 (.214)	-.150 (.167)	-.130 (.229)	-.142 (.186)
Factor 3 males (n = 88)	.059 (.587)	.046 (.167)	.047 (.665)	.053 (.622)
Factor 4 males (n = 88)	.264 (.013*)	.293 (.006**)	.294 (.006**)	.292 (.006**)

Positive males (n = 88)	.068 (.526)	.036 (.741)	-.013 (.904)	.043 (.693)
Negative males (n = 88)	.180 (.093)	.198 (.066)	.189 (.079)	.193 (.072)
Factor 1 females (n = 87)	.088 (.420)	.019 (.863)	.093 (.394)	.063 (.562)
Factor 2 females (n = 87)	.131 (.225)	-.009 (.938)	.116 (.288)	.076 (.482)
Factor 3 females (n = 87)	.108 (.320)	.073 (.502)	.117 (.282)	.097 (.482)
Factor 4 females (n = 87)	.028 (.794)	.122 (.262)	.023 (.832)	.056 (.605)
Positive females (n = 87)	.148 (.171)	.123 (.260)	.152 (.162)	.138 (.203)
Negative females (n = 87)	-.057 (.598)	.050 (.649)	-.058 (.593)	-.020 (.852)

Note. [a]This is a matrix using all available mean raw score data points. Values are across patients and across months in treatment. *r* calculated as Pearson product moment correlation. *denotes $p < .05$, two-tailed, **denotes $p < .01$, two-tailed, ***denotes $p < .001$, two-tailed. Factor 1 – Therapist in conflict with self, Factor 2 – Therapist attending to own needs, Factor 3 – Positive connection with patient, Factor 4 – Therapist in conflict with patient.

It is quickly apparent that Alliance scores on all three targets are highly intercorrelated for treatment completers and for non-completers. The average intercorrelation across all alliance variables and among completers and non-completers using Fisher's z transformation and back transformation procedure was $r = .88$. That is, high alliance with therapists strongly predicted high alliance with copatients and with the overall program. As the Cohesion measure is simply an aggregation of these alliance scores, it too was highly intercorrelated by default. Although the full correlation matrix is presented in Tables 22 and 23 for treatment completers and non-completers, respectively, the relationship between Cohesion and REACT scores most efficiently summarizes how patient rated Alliance interacted with therapist's emotional responses.

Alliance and REACT Raw Score Correlations – Treatment Completers.

For the treatment completers, there were a number of small to moderate strength correlations between Cohesion and REACT factors (see Table 22). Patient rated Cohesion positively predicted *Therapist conflict within self* for both male, $r(422) = .148$, $p = .002$, two-tailed, and female therapists, $r(419) = .150$, $p = .002$, two-tailed. Patient rated Cohesion was also positively associated with *Therapist positive connection with patient* for male, $r(422) = .278$, $p = .000$, two-tailed, and female therapists, $r(419) = .306$, $p = .000$, two-tailed. *Therapist in conflict with patients* for both genders was also positively associated with Cohesion, $r(422) = .122$, $p = .012$, two-tailed for males; $r(419) = .114$, $p = .020$, two-tailed for females.

At first, it may seem paradoxical that Cohesion should be associated with therapists' reports of positive connection with patients *and* with conflict with patients. However, from a clinical perspective, this result is not particularly striking. Many post-group debriefings find therapists sharing anecdotes that reveal this same phenomenon. Often, patients that are particularly invested and engaged in therapy are also patients that evoke the greatest affect from therapists.

Finally, for treatment completers, raw scores for Cohesion were positively associated with the overall positive emotional scale of the REACT, $r(422) = .155$, $p = .001$, two-tailed, but for male therapists only. Perhaps the male therapists in this program valued patient perceived cohesion more than the female therapists did. Cohen (1992) has suggested that correlation coefficients of .10, .30, and .50 are considered small, medium, and large

respectively. The effect sizes reported above, then, are considered small to medium in magnitude.

Alliance and REACT Raw Score Correlations – Treatment Non-Completers.

For patients who did not complete the treatment program successfully, there were notably fewer significant relationships between patient rated Cohesion and REACT scores by therapists (see Table 23). As noted earlier in the chapter, Cohesion was highly correlated with the three more discrete Alliance scores (i.e., patient-to-therapists, patient-to-peers, and patient-to-program). Among treatment non-completers the only association between patient rated Cohesion and therapist's emotional responses was on REACT Factor 4 – *Therapist in conflict with patient,* and even then, only among male therapists, $r(86) = .292$, $p = .006$, two-tailed. Recall that a correlation of this size is considered medium in magnitude (Cohen, 1992). So for non-completers, male therapists experienced a stronger sense of being in conflict with patients the greater the sense of cohesion reported by this group. This could reflect an ability of therapists to facilitate a group environment conducive to alliance building, despite the fact that they are feeling they are in conflict with patients. Alternatively, therapists may have a good sense of who will not complete treatment and experience a sense of conflict with these patients due to the lack of investment therapists make into these patients. Patients either do not sense this, or they are able to build Alliance despite therapists' inward experience of feeling they are in conflict with patients.

These results indicate that therapists in this treatment program have emotionally charged relationships with this patient population, especially those that eventually complete treatment. Although the items which comprise the four factors of the REACT are mutually exclusive (i.e., they appear only on one factor) it seems internally consistent that therapists would report heightened feelings of internal conflict given that they also experience increased connection with patients *and* increased conflict with patients the more connected those patients feel towards the therapists, their peers, and the program as a whole.

These results might also indicate the general absence of interpersonal relationship between therapists and patients who eventually leave the program unsuccessfully. While therapists clearly had changes in REACT scores to non-completers over time (refer back to Figures 10 to 20), these were apparently independent of how much Alliance to the program patients reportedly felt. This tempts one to wonder if these patients might have completed treatment had therapists been able to cultivate more emotion-laden relationships with them.

Considering Growth Trajectories

Using initial HLM procedures, slope coefficients were generated for all REACT Factors just as they were for Alliance trajectories. It is interesting to note that HLM determined, in all cases but one, that there was significant variance in REACT slopes to be explained by other variables. Only REACT Factor 4 (*Therapist in conflict with patient*) among male therapists showed non-significant variance to be explained by other factors. Here again, future research projects present themselves.

In Table 24, mean REACT slope coefficients are presented for male and female therapists, and they are examined for differences. The only significant gender difference in mean slope was for REACT Factor 4 (*Therapist in conflict with patient*), where female therapists were found to have a mean negative slope and males had a slightly positive mean slope (paired sample $t = -2.252$, $p = .030$, two-tailed). In other words, female therapists on average reported experiencing significantly less conflict with patients over time than male therapists. Male therapists, on average, experienced a slight increase in their sense of conflict with patients over time. All other things being equal, it appears to be the case that male therapists move toward feeling more at odds with these patients, while female therapists have the opposite sense. Perhaps female therapists feel more optimism about their progress or feel more as if they and the patient are working in the same direction than the male therapists do.

Table 24

Comparison of mean slope coefficients on REACT factors reported by male and female therapists on n = 42 treatment completers of the Phoenix Program

	Male therapists *M (SD)*	Female therapists *M (SD)*	t	p
REACT Factors				
Factor 1	.2636 (.2427)	.3471 (.3250)	1.411	.166
Factor 2	.1454 (.3258)	.1979 (.2884)	.907	.370
Factor 3	.3185 (.2245)	.3739 (.2826)	1.188	.242
Factor 4	.0038 (.1780)	-.0710 (.2110)	-2.252	.030*
Positive Factor	.0829 (.2226)	.0610 (.0390)	-.661	.513
Negative Factor	-.0133 (.0388)	-.0197 (.0444)	.897	.375

Note. Paired-samples t–test. *denotes significance at alpha <.05, 2-tailed. Factor 1 – Therapist in conflict with self, Factor 2 – Therapist attending to own needs, Factor 3 – Positive connection with patient, Factor 4 – Therapist in conflict with patient.

Treatment Completers in Isolation

Turning our attention exclusively back to the treatment completers, the zero-order REACT slope coefficient correlation matrices are presented in Tables 25 and 26 for male and female therapists, respectively.

The results presented in Tables 25 and 26 suggest that therapists working with this sample experienced emotions that were intertwined in complex ways. The data also suggest that male and female therapists had emotional experiences that were both similar and different, perhaps in response to different elements of their own inner experiences. Other results were consistent and rather predictable**.**

Table 25

Correlation matrix of REACT Factor slope coefficients for Male therapists toward n = 42 treatment completers of the Phoenix Program

REACT Factor	Factor 2 *r (p)*	Factor 3 *r (p)*	Factor4 *r (p)*	Positive *r (p)*	Negative *r (p)*
Factor 1	.738 (.000***)	-.223 (.158)	-.739 (.000***)	.223 (.156)	-.844 (.000***)
Factor 2	-	-.622 (.000***)	-.580 (.000***)	.568 (.000***)	-.950 (.000***)
Factor 3	-	-	.394 (.010**)	-.301 (.053)	.609 (.000***)
Factor 4	-	-	-	.259 (.098)	-.769 (.000***)
Positive	-	-	-	-	-.388 (.017)

Note. r calculated as Pearson product moment correlation. *denotes p < .05, two-tailed, **denotes p < .01, two-tailed, ***denotes p < .001,two-tailed . Factor 1 – Therapist in conflict with self, Factor 2 – Therapist attending to own needs, Factor 3 – Positive connection with patient, Factor 4 – Therapist in conflict with patient.

Table 26

Correlation matrix for REACT Factor score slope coefficients by Female therapists toward n = 42 treatment completers of the Phoenix Program

REACT Factor	Factor 2 *r (p)*	Factor 3 *r (p)*	Factor4 *r (p)*	Positive *r (p)*	Negative *r (p)*
Factor 1	.724 (.000***)	-.089 (.663)	-.763 (.000***)	.067 (.672)	-.769 (.000***)
Factor 2	-	-.594 (.000***)	-.867 (.000***)	-.581 (.000***)	-.890 (.000***)
Factor 3	-	-	.320 (.039*)	.930 (.000**)	.451 (.003**)
Factor 4	-	-	-	.389 (.011*)	.909 (.000***)
Positive	-	-	-	-	.502 (.001***)

Note. r calculated as Pearson product moment correlation. *denotes $p < .05$, two-tailed, **denotes $p < .01$, two-tailed, ***denotes $p < .001$, two-tailed . Factor 1 – Therapist in conflict with self, Factor 2 – Therapist attending to own needs, Factor 3 – Positive connection with patient, Factor 4 – Therapist in conflict with patient.

For example, an unsurprising finding was that both male and female therapists experienced positive growth trajectory over time on Factor 2 (*therapist attending to own needs)* in relation to increased growth on Factor 1 (*therapist in conflict with self), r*(40) = .738, p = .000, two-tailed for females, and *r*(40) =.724, p = .000, two-tailed for males. There is inherent logic in finding that therapists experiencing inner turmoil or conflict should be responding to inner reactions and/or attending to them more as the conflict rises.

For both genders, slope coefficients on Factor 2 *(therapist attending to own needs*) were negatively associated with coefficients for Factor 3 (*positive connection with patients*). Although determination of cause-effect relationships are beyond the design of the current study, it makes intuitive sense that a therapist focusing on their own needs would experience difficulty in developing positive connections with the patient. It could well be the case that attending to one's own emotional needs in the therapeutic transaction gets in the way of connecting to the patient in a positive sense. This hypothesis would seem to be supported by the combined work generated by Gelso, Hayes, Rosenberger, and others who have indicated that countertransference reactions are obstacles to therapy.

It also has face validity that therapists experiencing greater growth rates of inner conflict should also experience an accompanying growth in their sense of conflict with the patient and overall negative affect toward the patient. In fact, however, the opposite was found to be the case. For both the female and the male therapists, increased growth trajectory of inner conflict was strongly associated with *negative* growth trajectories on Factor 4 *(therapist in conflict with patient*) and on the overall Negative affect factor ($r \geq .72$, a large ES). It is

noteworthy that the mean slope coefficients for Factor 3 (*positive connection with patients*) and overall Positive affect were consistently positive. Review of the raw data shows that an intriguing situation arises in the work with the patients in this sample. Possibly due to propinquity, these patients almost inevitably evoke increases in the positive ways that therapists experience their relationships with them, but this comes with a price. Therapists also experience increases in the conflict they experience within themselves, and a concomitant increase in the need to attend to their own needs.

Gender Differences in Emotional Responses to Sex Offenders

In designing the present study, it was considered possible that male and female therapists would have different emotional responses to the members of this sample. The potential reasons for this are many, but some of the more obvious possibilities might be:

- females would feel more negative or more harsh toward these patients, given that females and children were primarily the patients' victims;
- females would feel more conflicted as many of these men have desirable qualities despite their criminal backgrounds;
- males would feel more negative or harsh toward sex offenders as they make all males look reprehensible;
- males would feel threatened by patients (either physically or emotionally), or feel inferior or superior to these men;

- males could recognize similarities in their own beliefs, attitudes, or sexual fantasies. This could result in feeling more aligned with patients, or more estranged due to a desire to distance themselves from the patient population.

Returning again to Table 26, female therapists showed very strong positive correlations between growth on Factor 3 (*positive connection with patient*) and the overall Positive factor (r = .930, p = .000, two-tailed). Male therapists, however, had a non-significant association between these two growth patterns. It appears the genders differ in terms of how they view or perhaps how they experience positive connection with these patients.

Males and females had strong correlations between slope coefficients on Factor 2 (*therapists attending to own needs*) and overall Positive affect, $r(40)$ = .568, p = .000, two-tailed, and $r(40)$ = -.581, p = .000, two-tailed, for male and female therapists respectively. The direction, however, was polar opposite. Whereas males had a positive correlation between these variables, females had a more expected negative relationship. That is, among female therapists, as the growth of Factor 2 was steeper, the growth of general positive affect was shallower.

For female therapists, a steeper growth trajectory on Factor 4 (*therapist in conflict with patient*), was associated with increased growth on the overall Negative affect factor, $r(40)$ = .909, p = .000, two-tailed. Male therapists on the other hand had the opposite relationship between the two variables. Stronger trajectory coefficients on Factor 4 (*therapist in conflict with patient*) were associated with weaker coefficients on the overall Negative factor, $r(40)$ = -.769, p = .000, two-tailed. Again, it appears that male and female therapists experience

conflict with patients is different ways, and further, male therapists might not experience conflict as necessarily negative.

Another example of different gender responses can be found in the slope coefficient correlations between the overall Positive factor and the overall Negative factor. For male therapists, the association was negative as might be intuitively expected – as one goes up, the other goes down, $r(40) = -.366$, $p = .017$, two-tailed. For female therapists, however, overall Positive and overall Negative coefficients increase in tandem. That is, the trajectory of the overall Positive affect factor positively, and significantly, predicts the trajectory of the overall Negative affect factor, $r(40) = .502$, $p= .001$, two-tailed. This finding highlights the conundrum in which therapists find themselves when working with this population, the more positive they feel toward these patients, the more negative they also feel.

REACT and Alliance Slopes by Therapist Gender

The slope coefficients for male therapists' REACT scores had very little relationship overall to the Alliance ratings provided by patients. Findings reported in Table 27 show that only two coefficient pairings had a significant relationship with each other. Patient slope coefficients for Alliance to their peers and for overall Cohesion were positively associated with male therapists' coefficients for overall Positive affect, $r(40) = .339$, $p = .028$, two-tailed, and $r(40) = .308$, $p =.047$, two-tailed, respectively. So it appears that male therapists were increasingly positively disposed to patients who reported greater Alliance with their peers and greater cohesion with the overall program. What is not ascertainable from the present study is

whether patients in fact *demonstrated* this positive change in some manner, such that male therapists responded to patients' increased sense of connection with their peers. It would be fair to assume, however, that this would be likely given that the program stresses the importance of interpersonal relationships.

Table 27

Correlations of REACT slope coefficients for male therapists and alliance targets for a sample of n = 42 treatment completers of the Phoenix Program

	Alliance variable			
REACT	Patient to therapist	Patient to peers	Patient to program	Cohesion
Factor	*r (p)*	*r (p)*	*r (p)*	*r (p)*
REACT factor				
Factor 1	.128 (.419)	.031 (.844)	-.014 (.928)	.056 (.726)
Factor 2	.105 (.506)	.089 (.577)	.141 (.374)	.122 (.440)
Factor 3	.016 (.917)	-.108 (.495)	-.166 (.292)	-.091 (.566)
Factor 4	.063 (.694)	.195 (.215)	.089 (.576)	.132 (.404)
Positive	.225 (.152)	.339 (.028*)	.256 (.102)	.308 (.047*)
Negative	-.089 (.577)	-.040 (.800)	-.084 (.598)	-.077 (.626)

Note. r calculated as Pearson product moment correlation. *denotes $p < .05$, two-tailed. Factor 1 – Therapist in conflict with self, Factor 2 – Therapist attending to own needs, Factor 3 – Positive connection with patient, Factor 4 – Therapist in conflict with patient.

The relationships between Alliance ratings and female therapists' REACT coefficients paints a somewhat more interesting story (see Table 28). Overall, the change in female therapists' ratings on the REACT measure had more numerous associations with the patients' growth in their sense of alliance with the therapists. Stronger rates of growth in patient rated Alliance with therapists was significantly correlated to weaker rates of growth in REACT Factor 2 - *therapist attending to own needs*, $r(40) = -.375$, $p = .015$, two-tailed. There was also a significant positive correlation between change rate in the patient to therapist Alliance and Factor 3 (*positive connection with patient)* slopes for female therapists, $r(40) = .372$, $p = .015$, two-tailed. The conflicted nature of work with this population is again borne out by the finding that the coefficients of patient rated Alliance to therapists was positively correlated to Factor 4 - *therapist in conflict with patient*, $r(40) = .344$, $p = .028$, two-tailed, and positively with the overall Positive affect factor, $r(40) = .337$, $p = .029$, two-tailed. Similar to an earlier finding, patients who perceive increasing connection with female therapists over time also tend to elicit negative affect from them, $r(40) = .358$, $p = .020$, two-tailed. This may reflect a different phenomenon for female than for male therapists. An increasing sense of connection from a male sex offender's point of view may be experienced as intrusion or something similarly negative to a female therapist. All of the significant correlations among the female therapists were of medium to large effect size.

Table 28

Correlations of REACT slope coefficients for female therapists and alliance targets for a sample of n = 42 treatment completers of the Phoenix Program

	Alliance variable			
REACT	Patient to therapist	Patient to peers	Patient to program	Cohesion
Factor	*r (p)*	*r (p)*	*r (p)*	*r (p)*
REACT factor				
Factor 1	-.261 (.095)	-.064 (.687)	-.148 (.350)	-.178 (.261)
Factor 2	-.375 (.015*)	-.148 (.350)	-.236 (.132)	-.286 (.066)
Factor 3	.372 (.015*)	.203 (.197)	.240 (.127)	.305 (.050*)
Factor 4	.344 (.028*)	.220 (.161)	.150 (.342)	.273 (.081)
Positive	.337 (.029*)	.215 (.172)	.181 (.252)	.276 (.077)
Negative	.358 (.020*)	.168 (.286)	.199 (.207)	.274 (.079)

Note. r calculated as Pearson product moment correlation. *denotes $p < .05$, two-tailed. Factor 1 – Therapist in conflict with self, Factor 2 – Therapist attending to own needs, Factor 3 – Positive connection with patient, Factor 4 – Therapist in conflict with patient.

It would be an unwarranted extrapolation to conclude that female therapists were more responsive to the alliance projected by patients, as it could as easily be the case that patients' alliance was responsive to the affect experienced by female therapists. Nevertheless, the data certainly suggest that female therapists experience greater impact from growth in patient-rated alliance than do the male therapists.

Reflecting on the day-to-day clinical environment, one obvious explanation for the different alliance-REACT relationships for male versus female therapists presents itself. Given that these patients have obvious problems in embracing non-deviant sexuality, they are routinely asked to share the content of their sexual fantasies. This is encouraged so that they might gain insight into their fantasy lives, learn to better differentiate between normal and deviant themes, and understand how moment to moment events influence sexual thoughts and beliefs. As a consequence, female staff members are often mentioned as being subjects of the patients' sexual fantasies. While many patients of the Phoenix Program have homosexual interests (either primary or secondary), the reality is that male therapists are cited as fantasy subjects far less frequently than the female therapists. The differing level of personal intrusion might promote a situation where female emotional responses are indeed more directly tied to patients' sense of alliance with them.

Chapter 9: Discussion

Morality, like art, means drawing a line someplace.

Oscar Wilde

Support for Hypotheses

The hypotheses offered in Chapter 3 are reviewed in light of the evidence presented in Chapters 5, 6, 7, and 8. Hypothesis 1 stated that completers and non-completers would show few differences at Time 1 on the psychometric measures. This was clearly supported. There were no differences between groups at Time 1 on the NRI-RQV, the GES at pre-treatment or the GES at 6 months. No pre-treatment differences were detected with the IIP-64 octant or overall scores. On the JPI-R and the PRF-E treatment, completers and non-completers were also indistinguishable at Time 1.

Hypothesis 2 stated that treatment completers would demonstrate significant changes on outcome measures on pre- and post-treatment personality testing (PRF-E, JPI-R). This hypothesis was supported. On the PRF-E, 6 of 20 content scales showed significant change. Importantly, these were all in treatment-expected directions. Recall that a Bonferroni adjustment to the critical region had been employed (.05/20 = .0025).

Effect sizes on the changed scales were found to be of medium magnitude. Comparisons with two normative samples provided by Jackson (1989) revealed that this group of sex offenders became more similar to normative groups after treatment.

On the JPI-R, 7 of 15 content scales revealed significant change (i.e., $p<.05$) in treatment-expected directions. After controlling for inflated risk of Type I error (.05/15 =

.003) 3 of the 7 scales showing change would have been retained. Effect sizes were in the medium to large range. The hypothesis did not predict which scales of the PRF-E and JPI-R would demonstrate change, only that there would in fact be demonstrable change. Future studies might be advised to use the present findings to generate a more specific hypothesis.

Hypothesis 3 predicted that treatment completers would demonstrate change on the scales of the NRI-RQV in directions consistent with treatment goals (improved scores). This was clearly supported as all five scales showed very significant positive changes. In all cases, the changes remained significant following Bonferroni correction. In all cases the effect sizes were very large. Given the emphasis placed on the value of interpersonal relationships in this program, this result was expected. It is apparent that the program is successful in having patients improve their interpersonal relationships.

Hypothesis 4 stated that treatment would have a positive influence on the interpersonal problems of patients as assessed with the IIP-64. This hypothesis was supported. The overall mean score at post-treatment was significantly lower than at pre- treatment. The mean pole scores (on both the affiliation and control dimensions) were all less extreme after treatment as well. When the octant scores were examined from pre- to post-treatment it was found that 6 of the 8 domains showed significant change. In each case it was a movement to a less extreme and treatment desired position. Effect sizes were mostly of large magnitude.

The IIP-64 overall score quantifies the degree to which patients perceive themselves as having distress associated with interpersonal problems. Post-treatment, then, this group of sex offenders saw themselves as having fewer interpersonal issues than they did at the start of

therapy. The octant scores of the IIP-64 are framed as indicating "too much" of a characteristic. Offenders typically arrive to treatment and act out their extreme personality styles, whatever they might be. Moderating these so that they are less pronounced is seen as being relationship enhancing.

The GES results were hypothesized to reveal that treatment completers would have increasingly positive perceptions of the group environment as time in treatment increased. This hypothesis was not supported. At all three administrations of this test, completers had very positive impressions of the group environment. This may suggest this instrument's overall lack of sensitivity to change. Alternatively there may have been a ceiling effect which made positive change from an initially positive impression impossible to detect. The GES might also have been more vulnerable than other measures to the effects of demand characteristics due to transparency.

Hypothesis 6 was closely related to Hypothesis 5 and stated that treatment non-completers would consistently report less positive impressions of the group environment than completers. This hypothesis was also not supported. As with the completers, those who did not complete treatment still maintained an overall positive impression of the group environment. Again, this might be accounted for by failure of the GES to demonstrate sensitivity to change, or by ceiling effects.

In Hypothesis 7, the rates of change in alliance slopes were hypothesized to be positively associated with outcome measures. In other words, it was expected that patients who had a steeper alliance growth trajectory would also make the greatest degree of

improvement on outcome measures. This hypothesis was tentatively supported. Many subscales from a number of instruments were evaluated in this study, and the majority of these did not have any associations with change in the patient rated alliance. The many tests conducted in this part of the analysis left the results highly vulnerable to Type I error. However, there is strong indication that although the risk of Type I error is inflated in this overall analysis, it seems to not have actually been problematic. If Type I error was, in fact, actively influencing the results, one would expect to find results that are strong as well as weak, and in directions both consistent and inconsistent with expectations. As it turned out, where there were significant associations between slope coefficients and outcome variables, the relationships were strong, effect sizes large, and in all cases were in expected directions.

The IIP-64 had the clearest relationship with change in patient rated alliance. As noted earlier, it was the patient-to-peer alliance trajectory that was most strongly associated with change in interpersonal problems. It would appear that learning how to negotiate a collaborative therapeutic relationship with their peers had a positive impact on reducing interpersonal distress. Thus, the changes in relationships that these patients experience in group settings appear to generalize to promoting better interpersonal functioning with less distress.

Two possibilities – as opposed to clear hypotheses − were considered regarding REACT scores. One possibility was that therapists might have less intense negative responses toward patients as they progress through treatment and presumably make treatment gains. Another possibility was that negative feelings would change little, but positive feelings would

increase. It turned out that the second scenario was most accurate. The mean REACT slope for negative affect remained virtually flat, while there was a clear positive slope to therapists' connection with patients. In fact, the most aggressive of any mean REACT slopes were for *positive connection with patient*. However, the results were not nearly as straightforward as this might suggest. Virtually all aspects of therapist emotional response to these patients were heightened over the months in therapy. As patients progressed through treatment, therapists of both genders simply experienced more affect in response. Conflict with patients was also very close to unchanged for both genders. However, therapists generally experienced greater conflict within themselves and focused more on their own needs, while also experiencing more positive affect overall as time in treatment increased.

Finally, it was hypothesized that patients who do not complete treatment would feel less connection (alliance) to the therapists, their peers, and the program, than would completers. This hypothesis was marginally supported. In virtually every instance, non-completers reported alliance that was of slightly less magnitude than those patients who did complete treatment. It was interesting to see that non-completers' initial trajectory of alliance closely mirrored those of patients who eventually went on to finish the program. After a few months of reporting similar trends in alliance to therapists and peers, the non-completers then had divergent and somewhat erratic scores. One gets the impression that non-completers made initial attempts to connect with therapists and peers, but simply could not make these last in the longer term. Recall the findings from the PRF-E where non-completers were found to be harm avoidant and impulsive, and this impression seems valid.

Reflecting on the Bigger Questions

The collection and analysis of empirical data was intended to shed some light on general research questions presented at the start of this study. The first general question was "What is the nature of the therapeutic alliance between convicted adult male sex offenders and their therapists, their co-group members, and their treatment program?"

It appears from the present data that patient rated alliance does grow in magnitude over time in treatment. While the largest period of growth takes place in the initial several months of therapy, there are ongoing gains past that initial period of time. It is not clear from the present study whether positive changes in outcome would have been achieved if the period of treatment had been limited to only the greatest period of growth (i.e., the initial 4 months of therapy). A future study might examine this very issue by administering the outcome measures after 4 to 6 months of therapy, and then again at the end of treatment.

Regarding alliance toward therapists or peers, there was a trend for patients to experience a flattened period of alliance growth during the midpoint of treatment. Again, it is not clear if this period of time is valuable for patients in terms of their progress. It was reassuring to confirm a clinical perception that there are distinct phases in a patients' treatment. It has been the clinical impression that this midpoint lull in alliance growth is in fact very important. This is possibly a period of time when patients are beginning to integrate change, exert their independence and possibly resist therapist input. This would seem to be desirable as one intention of therapy is to see patients develop inner strength. Patients often

describe “growing up” while they are in the program and perhaps this midpoint plateau is akin to adolescence.

The second large question was “Is there change on outcome measures among this population over the course of treatment?” The data confirm that the answer is a resounding “yes.” Patients showed improvement in terms of their perceived interpersonal problems, improvement in their relationships with others, and they even showed significant positive changes in personality during therapy. It warrants mention that these positive changes would not be tapped by most assessments of future risk. However, it is premature to conclusively state that these positive changes will necessarily be associated with reduced recidivism. Evaluating that question will require a much larger study with a lengthy follow-up period, but the present study does a great deal to lay some theoretical groundwork.

The Experience of the Therapists

Two of the larger research questions were “What is the nature of emotional responses by therapists to this forensic sample?” and “How do the emotional responses to these patients differ between male and female therapists?” The answers to these questions generate more questions.

Analysis of the data revealed that therapists experienced a great deal of affect in their work with this population. More to the point, the affect grew as therapy progressed, but it was clearly not all positive. Therapists in this program reported experiencing very conflicted emotions in response to the patient group. Therapists of both genders experienced an

increasing conflict within themselves and an increasing tendency to take care of their own needs and this was seen to occur at the *same time* that positive affect toward these patients was increasing

This result might account for why items #31 (*Appreciated by the patient*) and item #18 (*Guilty with a sense you are doing something wrong, or should be doing more*) of the REACT were left unanswered far more than any other items. It could be the case that working with patients who do not demonstrate their appreciation for the work done by therapists generates increasing conflict about doing the work. There might well be therapist guilt associated with this experience. For other therapists, it may be a slightly different phenomenon. It could be that some therapists do in fact sense appreciation by the patients, but are conflicted in having this positive response to sexual offenders.

Thus far, the conflicted emotions of therapists have been cast in a negative light, but there is a possible explanation that has a more positive connotation. We have noted that therapists in this study had an *increasing* tendency to attend to their own needs. It is plausible that this is the response that therapists have toward any patient group showing improvement over time. Perhaps therapists begin to attend to their own needs, as their patients become less needy and more capable of emotional self-care. It might be the natural evolution of all therapeutic relationships that therapists put their own emotional needs aside until such time as the patient no longer requires this to occur. This is admittedly an incomplete theory, however, as it does nothing to account for the simultaneous increase in *therapist conflict with self.*

Perhaps these results highlight the importance of clinicians participating in their own therapy. Many psychotherapists would view this as a fundamental aspect of preparing to work with patients, and in ongoing personal development. Irvin Yalom, a widely acknowledged luminary in the field of group psychotherapy, considers therapists' own personal therapy and experiential group participation to be "minimum essential standards" for therapists in training (Yalom, 1985, p. 533). Although the Phoenix Program therapists have the opportunity to debrief after each and every group, there is no formal requirement to participate in one's own therapy. It is interesting to consider how REACT responses may have been different if it were an expected part of ongoing development.

There were some significant and specific differences in how male and female therapists differed in terms of the relationship between changes in patient rated alliance to therapists and therapists' emotional responses to patients. These differences were reviewed in Chapter 7. Primarily, however, one is left with the impression that female therapists tend to struggle most directly in their work with the patients, while male therapists tend to struggle most significantly within themselves. There were few associations for male therapists between their REACT slope coefficients and patients' alliance ratings. Male therapists' overall positive affect trajectory was associated with patients' cohesion and peer alliance slope. Male therapists, then, seemed to have a positive impression about patients getting more attached to their peers. Otherwise, though, males' REACT slopes were independent of patient rated alliance. Yet, as noted above, male therapists experience a similar phenomenon as the female

therapists in that they show significant growth in *therapist in conflict with self* and *therapist attending to own needs*. The conflict they experience, then, does not appear to be related to how patients feel about them. Female therapists on the other hand demonstrated many more significant associations between REACT slopes and alliance slopes. For the women, almost every mean slope of the REACT was significantly associated to the Patients' alliance to therapist. So, while male therapists' emotional responses were independent of patient alliance, female therapists seem to be vigilant to patients' alliance to them. It is clearly evident that therapists experience a great deal of contradictory emotion in their work.

Reflecting on the Public and Professional Mood

As noted in Chapter 1, the sex offender treatment field has been slow to embrace the lessons learned over many years of psychotherapy research. Drapeau et al. (2005) identified this neglect on the part of researchers as "troubling", and Marshall et al. (2003) identified years of ignoring process variables as "an error". The reasons why treatment providers have been slow to incorporate knowledge from the general literature bear some reflection as they might prove to be informative.

Identified (convicted) sexual offenders usually end up involved in some facet of the correctional system either in custody, on parole, or on probation. It follows, then, that efforts at rehabilitation would also bear the imprint of the correctional culture. It is common knowledge that sex offenders have the lowest status among prison populations, and are seen in a very negative light by society generally. Reports suggest that sex offender vilification is

greatest in the United States, but this is becoming increasingly visible in other jurisdictions (Petrunik & Deutschmann, 2008; Robbers, 2009). There is nothing to suggest this is likely to change and psychotherapy (or talk-therapy) could be seen as a "soft" way of dealing with criminals who perhaps do not deserve such compassionate treatment. Given this backdrop, it is difficult to imagine that prison-based treatment programs would embrace all the aspects of psychotherapy known to promote positive outcomes in other settings (instillation of hope, therapists suspending judgment, demonstrating positive regard, etc.). It is difficult for many people, even well intentioned professionals, to look at sex offenders as patients who require our help more than our scorn.

Another possible hurdle to having treatment providers embrace findings from the general psychotherapy literature is that there is a firmly entrenched belief among a great many professionals that anything even resembling insight oriented therapy for criminal populations is completely ineffective. Not only is it viewed as ineffective by many, it is asserted by some that it makes criminals "worse," especially if they score high on the PCL-R (Rice, Harris & Cormier, 1992). This perception is repeated frequently, despite the fact there is precious little empirical evidence to support the supposition (Ross et al. 2008). D'Silva, Duggan, and McCarthy (2004) attempted to conduct a meta-analysis to examine this issue, but found existing studies were inadequate in number, in rigor of methodology, and in procedural consistency to make any conclusions. They did, however, highlight the strengths, weaknesses, and results of the relevant studies and comment on the clear lack of consistent findings. In

fact, with regard to sex offenders who score high on psychopathy scales, a more recent study reported that the evidence appears to *support* treatment efforts (Doren & Yates, 2008).

Lastly, there is a small, but provocative, body of literature which is beginning to put the supportive weight of empiricism behind Freud's ego defense of "projection" (Freud, 1936). In discussing the patient who is projecting, Jung (1968) eloquently wrote:

> When he projects negative qualities and therefore hates and loathes the object, he has to discover that he is projecting his own inferior side, his shadow, as it were, because he prefers to have an optimistic and one-sided image of himself (p.179).

Schimel and colleagues have conducted a number of experiments which demonstrate that projection can be elicited from individuals in an attempt to distance themselves from a bad other (Schimel, Greenberg, & Martens, 2003; Schimel, Pyszczynski, Greenberg, O'Mahen, & Arndt, 2000). They provide support for the notion that "…perceiving one's own negative characteristics in others reduces one's own concern that they possess the threatening characteristic" (p. 970). We will leave it to others to determine if projection in fact contributes to the widespread revulsion toward sex offenders.

It is not a new observation that failing to attend to process issues could result in sub-optimal outcomes for sex offenders (e.g., Rogers & Dickey, 1991). What seems different in the field now is that a critical mass of evidence may now exist so that clinicians and administrators now see the value in attending to these issues.

It was found that many of the personality scale scores changed over the course of treatment. This is in and of itself an important finding, but one which should perhaps not be

surprising. Provocative results have been generated by a small but growing body of literature examining the effect of psychotherapy on brain physiology and function. For example, Roffman, Marci, Glick, Dougherty, and Rauch (2005) reviewed 14 studies and concluded that brain abnormalities in patients with anxiety disorders (in areas of the brain believed to be associated with the disorder) were consistently attenuated by psychotherapy treatment. Similarly, Lindauer et al. (2007) used single-photon emission computed tomography (SPECT) to evaluate and verify functional changes (both blood perfusion and metabolism) among patients with post-traumatic stress disorder (PTSD) after receiving 16 weeks of psychotherapy. If measurable physical brain changes have been observed for psychotherapy, it seems a small leap indeed to accept that changes in personality (or at least the expression of personality) should also be observed and measurable.

Converging lines of evidence are particularly persuasive. Reports out of the University of Alberta Hospital by Joyce and colleagues have demonstrated that personality disorders (considered notoriously difficult to treat) can and do show significant improvement with psychotherapy. The converging evidence comes in the fact that this research group has found that treatment needs to take place over the course of at least one year (Joyce, personal communication June 2009) – the same time frame typically required for inpatient treatment at the Phoenix Program. Bearing in mind that the University of Alberta Hospital program and the Phoenix Program provide services to very different populations (fundamentally non-criminal versus entirely forensic), it is possible that other programs with other patient populations

might also expect success in generating personality modifications if treatment is permitted to continue for an extended period of time (i.e., at least one year).

It has been our clinical impression that this group of patients is much more like other patient populations than they are different – despite the fine differences that always exist between any groups. By adopting a clinical focus on process issues in the here and now, the Phoenix Program has a default position of targeting treatment efforts at those experiences, qualities, and emotions that are ubiquitous to all members of the treatment community. By extension, there is a clear emphasis on the patients' similarities with the rest of society. In doing so, we capitalize on the innate human need for affiliation that Bowlby has written so much about (Bowlby, 1971). It is suspected that this is what enables the program to work so well with different types of sex offenders within the same treatment group, when others have advocated for the need to categorize sex offenders and focus treatment on the perceived differences between them. The present study strongly suggests that it is indeed good clinical practice to maximize and highlight the common factors in psychotherapy settings with sex offender populations.

Perhaps most compelling in the results of this study is the consistency of findings. The fact that all changes in pre- to post-testing were in the direction of treatment goals strongly supports the notion that the type of treatment provided to sex offenders is effective in producing the desired results. It is premature to conclusively extrapolate this to a presumed reduction in recidivism, however all indications suggest this would be the case.

The treatment received by the patients examined in this study was essentially the same treatment received by Phoenix Program patients for the past 20 years. Previous reports have revealed that treatment completers re-offend at a significantly lower rate than non-completers (Studer et al. 1996).

The current sample provides a valuable opportunity to examine the strength of the therapeutic alliance and its relationship with recidivism. The obstacle to this, of course, is that meaningful recidivism studies require that the sample under study have a prolonged period of time at risk before a follow-up study is done. The Phoenix Program does in fact conduct criminal records checks on past treatment participants, so these data will be available at some point in the future. For the present study, however, a criminal record check was conducted in the midst of the data collection. Therefore, there is not a group of study participants large enough, or with long enough time at risk, to warrant an examination of recidivism and its relationship to the variables examined here. Practical matters such as a short time at risk only make recidivism studies more complex and involved than they already are. Generally low base rates for sexual re-offending are positive in terms of public safety, but pose problems for researchers in this area. Other complicating factors for doing recidivism research include differing legal standards in different jurisdictions and the integrity of police/court records.

Limitations

In the typical usage of the Edmonton alliance protocol, both patients and therapists would provide ratings. In the present study, however, we opted to obtain alliance ratings only

from patients. This choice was made because it was desired to specifically capture countertransference-like material, and the REACT was best suited to that goal. Also, it would not have been realistic to ask therapists to provide more data than they were already providing. Regardless, this would have offered a valuable addition to establishing validity. One might expect that therapist rated alliance would fluctuate with some relationship to the REACT positive and negative factors.

The instruments used in this study are mostly widely used, stringently developed, and well suited to their usage here. Having said that, the factors of the REACT have yet to be examined in terms of their relationship with other instruments. The factors were named apparently because of the themes which appeared to be encompassed by the items, but they would still benefit from ongoing psychometric evaluation to assure their validity. The fact that the REACT has not been widely used in published research is not a comment on the instrument (since there seems to be nothing else that is so well suited for its intended usage). Rather, it is more likely a testament to how little of this type of research is being conducted.

Another limitation of the present study involves the lack of clear hypotheses, especially around changes in personality test results. Because much of this study was exploratory in nature, there were a great many comparisons made, significantly increasing the risk of Type I error. In many cases this was controlled through the use of a Bonferroni correction to the critical region. However the Bonferroni correction was suspended for the last part of the analysis, and there were a great many comparisons made in the course of analysis.

A more precise set of hypotheses would have reduced the need for so many comparisons, and would have reduced the risk of Type I error accordingly.

In any study, a complete set of data is highly desirable. In the present study, the REACT responses were by far the least rigorously controlled in terms of ensuring completeness of data. This was a function of shift work, a desire to ensure anonymity, the need to allow therapists to choose non-participation, staff holidays, time constraints on the part of therapists, organizational demands and obstacles, and variable enthusiasm to complete REACT forms. While the therapists were initially co-operative in providing responses, the task was eventually seen as tedious by some members of staff. Therefore, in any given month it was virtually impossible to have every single staff member complete forms on each and every patient. In retrospect, enthusiasm for the study may have been enhanced if staff were provided periodic updates as to the general findings. The danger in that strategy, however, would be the possibility of introducing a contamination effect in that staff might alter their responses (either inadvertently or deliberately) based on how they interpreted interim results.

One methodological limitation to studies examining the therapeutic alliance has been that ratings have typically been obtained from patients or therapists at very few discrete points in time. Typically, these points have been early, middle and late stages of therapy. The variability of *multiple* alliance and therapist response ratings can be maximally exploited by HLM to generate slope coefficients (Boroto, Piper, Joyce, & McCallum, 2002). Using ratings obtained monthly, the present study provided a more complete picture of the patient's sense of alliance with their therapists, their peers, and the Phoenix Program overall.

In analyzing the differences within the entire sample of 95, the study had adequate power to detect true differences. However, in the analysis of data for treatment completers only, the present study was clearly underpowered. The month to month variation in the number of patients providing responses complicated power calculations, and changing *n* no doubt introduced some measure of instability to all the data. Changing *n* did not just apply to the patient sample, but to the therapists as well. Different numbers of therapists (and to some degree different therapists) contributed to REACT data every month.

One of the most serious limitations to this study arose as a result of not having a control group to which the findings could be compared. The Phoenix Program is first and foremost a treatment program. Because of this, research demands need to take on reduced priority. Given that the program needs to work co-operatively with other agencies (e.g., Correctional Services of Canada, National Parole Board), there was virtually no opportunity to create even a waitlist control group. Other realities of working with a forensic population contributed to making this difficult. Many patients were removed from the program or opted to go back to prison before completion. Once patients were returned to prison, they likely would have had very little interest in completing the post- treatment testing.

The lack of a control group complicates the interpretation of the results. Although many of the outcome measures showed improvement across time in treatment, it is difficult to know how much improvement was the result of treatment, how much may have resulted from simple maturation, how much was due to simply removing exposure to a violent (prison) environment, etc.

Future Directions

As with any study, it is important to provide context. The preceding pages have put the present study in context of the existing literature and the existing state of clinical practice. It is also important to put the study into context in terms of what future research might follow from this work. First and foremost, it would be valuable to allow the present study design to continue for a lengthy period of time. With criminal records checks being conducted periodically, it is a relatively easy matter to determine if there are significant relationships between process variables (alliance, and therapist affect), outcome data (gain scores), and recidivism. This would begin to inform researchers as to whether paying better attention to patient-therapist alliance is useful not only for achieving positive outcome on psychological measures, but also for influencing recidivism rates among this population. It would be interesting to know if the known static risk factors for recidivism are influenced by patient alliance or by therapist affect, as we suspect they are.

Virtually all studies benefit from replication, and this study would be no different in that regard. It would be beneficial to test the over-arching Phoenix Program philosophy (i.e., relationship deficits are primary in making deviant and/or criminal behavior more likely, and positive relationship skills/experiences are curative and/or prophylactic for criminal behavior). To begin exploring the scope of its efficacy, this treatment approach could be adopted in work with other non-sexual offender populations. Other future work could examine whether the alliance is a more powerful predictor of outcome than the therapist's interventions.

In order for this work to move forward, it would be important to invoke data from other studies to provide some sort of a control sample. Given the difficulties inherent in having a true control sample, researchers might have to content themselves with using a comparator sample or samples. At the present time, however, therapy process studies with criminal populations are uncommon. Hopefully the present project will begin to change this tide.

Summary

This paper represents the findings from a six year, prospective clinical study on the relationships between patient-rated therapeutic alliance, therapist emotional responses, and outcome among convicted adult male sex offenders participating in inpatient group psychotherapy. It was encouraging to discover that patients demonstrated positive changes on numerous outcome measures − psychological measures sensitive to changes in interpersonal functioning. In a socio-political climate where sex offenders are seen as the "worst of the worst" and are generally viewed as untreatable by the public but also by many professionals, this is notable indeed. But what has been learned about the sex offender's experience of treatment, and what of those clinicians who treat this despised group?

The sex offenders in this sample were able to experience positive alliance with therapists and peers. More importantly, patient-rated alliance was shown to grow stronger over time, demonstrating that patients in this program experienced relationships as dynamic processes. This is consistent with anecdotal reports from many patients that they perceive their time in the Phoenix Program as a time when they "grow up." In the correctional field there is a

relentless priority placed on assessment of offenders and an unstated tendency to view offenders as static beings mostly resistant to change. These results should serve as a reminder that given the right environment and a sufficient period of time where offenders can experientially learn about interpersonal relationships, true rehabilitation (or perhaps simply habilitation) is possible.

It has always been a goal of the Phoenix Program to do more than simply provide offenders with an improved set of skills with which to cope and respond to life's daily stressors. Instead, there has been the rather lofty goal of promoting characterological shift within patients. Metaphorically speaking, this is consistent with treating the disease rather than the symptoms of the disease. Given this context, it was important to discover that patients did demonstrate a significant degree of personality shift as measured by two well constructed and widely used instruments.

The goal of the study was to explore the therapeutic alliance in sex offender treatment. It was determined that positive change in patient-rated alliance was clearly associated with positive changes in outcomes, but this is not yet the entire story. If it were, all scales on all outcome measures would have had significant relationships with patient-rated alliance and that was not the case. However, the results of this study should help to guide future researchers toward more pointed hypothesis testing with sex offender samples. Perhaps there is a yet to be determined quantity or quality of alliance that is necessary and sufficient to facilitate change in this population. Perhaps only specific therapist traits need to be present in order to elicit growth in patient-rated alliance. Future research may reveal a therapist by patient interaction

which will highlight those therapists best suited to maximize outcomes with this group. Alternatively, there may be one or a combination of therapist traits that are toxic to relationships with some sex offenders in treatment.

Many studies have examined such phenomena as alliance ruptures and clinical plateaus for various types of patients. The longitudinal design of the present study revealed once again that this sex offender population was more typical to a general psychotherapy patient group than different from it. Spikes in therapist affect were observed at different times in treatment, and the strength of alliance varied for each individual as time went by. For a typical psychotherapy patient, such phenomena are entirely expected.

Over the many years of conducting psychotherapy with these men, clinicians in the program have seen therapists come and go, and a very clear trend has been observed in the new or visiting staff members. Therapists not accustomed to working with a population such as this spend a great deal of time and energy trying to understand the criminal act(s) which bring these men to treatment. This is true even of otherwise experienced therapists. There seems to be a pre-occupation with the facts and circumstances around the crime, and an almost hyper-vigilant (and sometimes overtly fearful) response when these men disclose their thoughts and fantasies. Many patients have related anecdotes which have suggested that most professionals have such a strong response to what these men have done and how they think, that it makes it very difficult for therapists to see the individual behind the deviant acts. However, even when therapists, such as those in the Phoenix Program, have a much deeper

understanding of how the behavior is a symptom of the damaged individual, there is still a negative response that is measurable and persistent.

Therapists who work with difficult populations such as sex offenders should be aware and candid about the range of often conflicted affect they apparently experience. It may be reassuring to know that their own inner experiences are shared by others. The degree of conflict revealed in this study points toward the importance of therapist self-care, which may include participating in ones' own personal therapy. This is certainly not a new idea, but the empirical evidence uncovered in this study may put a finer point on the importance of attending to issues such as burn-out, the importance of ongoing professional development, engaging in personal therapy, or maintaining diversity in patient load.

Another perspective that becomes apparent in light of the present findings is the ability of therapists to operate effectively in the face of strong internal emotions. Despite experiencing conflict within themselves, and having virtually no reduction of negative affect toward these patients over time, therapists were still able to cultivate relationships with patients that fostered growth in alliance from the patients' perspective. Therapists were also able to have increasing positive affect toward these patients despite the conflict and the unyielding negative affect that was part of their daily work.

Therapists of both genders experienced similarly conflicting affect in their work. While male and female therapists both had strong and often contradictory emotional responses, it appears that the genders were perhaps reactive to different things. The rate of change in alliance toward therapists was positively associated with greater conflicted affect for female

therapists. For male therapists, conflicting affect was independent of the alliance growth trajectory of patients. Thus, female therapists appeared to experience heightened affect in the face of greater patient alliance, while male therapists also experienced heightened affect, but for reasons unrelated to patient alliance. Despite the apparent emotional challenges in working with this population, therapists were still able to experience increased positive emotions toward these patients over time.

Although not the intent, this study ultimately represents an important validation of a treatment model that seeks to improve general adjustment and ameliorate known risk factors for recidivism among adult male sex offenders. It is very apparent from the present research that ignoring the process issues of treatment for sex offenders has indeed been an error. The importance of the alliance with a sex offender population has been severely under-recognized. It has been well established that the actual therapist techniques used in psychotherapy account for markedly less variance in outcome than the universal human interplay which occurs in our relationships with others. Clearly, the "how" of treatment is markedly more important than the "what." Given that the alliance developed progressively over time, and given that the alliance was predictive of the change demonstrated by these patients on self-report measures of personality and interpersonal functioning, it is essential that treatment providers place a higher priority on the alliance than has occurred to now. This study provides strong evidence that convicted sex offenders can and will change given lengthy exposure to a relationship-promoting environment with therapists able to withstand the emotional turmoil of doing this work with this population.

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Appendices

Appendix A: Patient Consent Form

Healthier people in healthier communities

REGIONAL MENTAL HEALTH PROGRAM
Alberta Hospital Edmonton
Phoenix Program
17480 Fort Road P.O. Box 307
Edmonton, AB T5J 2J7

Patient Consent Form

The Therapeutic Alliance in Sex Offender Treatment

Principal Investigator: Scott A., BA (Crim), Graduate student, Dept. of Psychiatry, University of Alberta.
Co-investigators: Anthony S. Joyce, Ph.D., Lea H. Studer, MD, John R. Reddon, Ph.D.

Do you understand that you have been asked to be in a research study?	Yes	No
Have you read and received a copy of the attached information sheet?	Yes	No
Do you understand the benefits and risks involved in taking part in this research project?	Yes	No
Have you had the opportunity to ask questions and discuss this study?	Yes	No
Do you understand that you are free to withdraw from the study at any time without having to give a reason and without affecting your medical care?	Yes	No
Have the issues associated with confidentiality been explained to you in detail?	Yes	No
Do you agree to allow the investigator(s) access to your standard Alberta Hospital Edmonton file?	Yes	No

Who explained this study to you?

_____

I agree to take part in this study: **Yes** **No**

Signature of Research Subject: _____

(Printed Name) _____

Signature of Witness: _____

Signature of Investigator or Designee: _____

Date: _____

I believe that the person signing this form understands what is involved in he study and voluntarily agrees to participate.

Researcher: _____

Printed Name: _____

Appendix B: Patient information form

REGIONAL MENTAL HEALTH PROGRAM
Alberta Hospital Edmonton
Phoenix Program
17480 Fort Road P.O. Box 307
Edmonton, AB T5J 2J7

Capital Health

Healthier people in healthier communities

Patient Information Form

THE THERAPEUTIC ALLIANCE IN SEX OFFENDER TREATMENT

PRINCIPAL INVESTIGATOR:
Scott A., BA (Crim),
Forensic Therapist, Phoenix Program, Alberta Hospital Edmonton Graduate Student, Department of Psychiatry, University of Alberta
Unit 3-3, Box 307, 17480 Fort Road
Edmonton, Alberta, T5J 2J7 (780) 472-5251

CO-INVESTIGATORS:
Anthony S. Joyce, Ph.D., Associate Professor, Department of Psychiatry, University of Alberta
Lea H. Studer, MD, Psychiatrist, Alberta Hospital Edmonton
John R. Reddon, Ph.D., Research Scientist, Alberta Hospital Edmonton

BACKGROUND: The relationship between patients and the staff working with them is called the therapeutic alliance. A strong alliance between patients and staff can help make therapy more effective. In group therapy there are also alliances between patients and group members. There has been little study into the role of the alliance in treating sex offenders.

It is not clear if it is important for sex offenders to have strong bonds with their peers and staff. During your treatment you are always asked to share your thoughts and feelings about your peers and about the staff. In this study you will rate how you feel about these relationships. This study will look at how your feelings about these relationships change or stay the same.

PURPOSE: This study is to help us understand your experiences of therapy. It is also to help us improve therapy for future patients. We want to learn how the alliance changes during therapy. This study will look at the feelings patients have toward their peers, staff, and the program.

How you feel about others may be related to your offence. How you feel about others may be related to your progress. Your experience here may help you not re-offend.

You will be asked to rate the strength of your relationships. You will be asked to complete assessments about your experiences in the program. You will be asked to complete other written tests. Staff will also be asked about their experience in providing your treatment. This study will not change the treatment you receive in any way.

PROCEDURES: When you have been in the program for about three weeks you will be asked to complete:

- two personality tests
- a test of your interpersonal skills
- a survey about the group environment
- a rating of your relationships

These tests will be given again at the end your treatment.

- You will be asked to rate your relationships once a month.
- You will be asked to complete the survey of group environment again about halfway through treatment.
- At the end of in-hospital treatment, you will be asked to share any thoughts or feelings about your treatment.
- You will also be asked to share any thoughts or feelings you have about your relationships with others.
-

The personality tests may take as much as 1 hour to complete. All other tests should not take longer than 15 minutes to complete. Most will only take a few minutes to finish. The total amount of time needed to participate in the study is about 6 hours. Data about your offence(s) may be part of the study. Other test results may also be used in this study.

RISKS AND DISCOMFORT: There are no risks to your health or well being by participating in this study. Your therapy and your care will not be different in any way by being part of the study, or not being part of the study.

BENEFITS: Participating in this study will likely have no benefit to you. At most you may understand your feelings better. Findings will help us understand treatment issues for sex offenders better. Future patients may benefit from the study. The public may benefit from the study.

PARTICIPATION AND TERMINATION: Your participation in this study is voluntary. You do not have to participate. You may stop participating at any time. You will be able to talk about your participation at any time.

CONFIDENTIALITY: All data will be kept private except when professional codes of ethics or legislation requires reporting. No one will know of you being part of this study except study investigators and program therapists. Your name will not be linked with this study or shared with others.

Your responses will be added to a secure computer database. Data will be stored by code number not by patient name. Lists of names and code numbers will be kept in secure offices. All data will be kept in locked offices. Your responses will be kept for 5 years and then destroyed.

Summaries or scientific articles that report the results of this study may be prepared and published. No report of the results will identify individuals. Data gathered for this study may be looked at in the future to answer other study questions. If so, the ethics board will first review the study to ensure the data is used ethically.

INQUIRIES: If you have questions about the study, please contact Scott A., Forensic Therapist, at (780) 472-5251. Concerns can be raised with the Patient Representative at (780) 472-5404.

Appendix C: Therapist Consent Form

REGIONAL MENTAL HEALTH PROGRAM
Alberta Hospital Edmonton
Phoenix Program
17480 Fort Road P.O. Box 307
Edmonton, AB T5J 2J7

Healthier people in healthier communities

Therapist Consent Form

The Therapeutic Alliance in Sex Offender Treatment

Principal Investigator: Scott Aylwin, BA (Crim), Graduate student, Dept. of Psychiatry, Univ. of Alberta
Co-investigators: Anthony S. Joyce, Ph.D., Lea H. Studer, MD, John R. Reddon, Ph.D.

Do you understand that you have been asked to be in a research study?	Yes	No
Have you read and received a copy of the attached information sheet?	Yes	No
Do you understand the benefits and risks involved in taking part in this research project?	Yes	No
Have you had the opportunity to ask questions and discuss this study?	Yes	No
Do you understand that you are free to withdraw from the study at any time without having to give a reason?	Yes	No
Have the issues associated with confidentiality been explained to you in detail?	Yes	No

Who explained this study to you?

_____

I agree to take part in this study: **Yes** **No**

Signature of Research Subject: _____

(Printed Name) _____

Signature of Witness: _____

Signature of Investigator or Designee: _____

Date: _____

I believe that the person signing this form understands what is involved in he study and voluntarily agrees to participate.

Researcher: _____

Printed Name: _____

Appendix D: Edmonton Protocol Alliance Rating Form

Circle the number which best describes how you feel about this relationship overall since the last rating.

Patient to Psych Group Staff (Including Doctor)	Very Little				Very much
How much are you able to talk about what really matters to you (which is private or important)?	1	2	3	4	5
To what extent do you feel clearly understood by your therapist today?	1	2	3	4	5
How much are you able to understand and work with what the therapist says?	1	2	3	4	5
Overall, how useful has Psych group been in helping you better understand yourself or your problems?	1	2	3	4	5
The staff in Psych group are helpful.	1	2	3	4	5
The staff and I work well together.	1	2	3	4	5

Patient to Peer Group	Very Little				Very much
How much are you able to talk about what really matters to you (which is private or important)?	1	2	3	4	5
To what extent do you feel clearly understood by your peers today?	1	2	3	4	5
How much are you able to understand and work with what the peers says?	1	2	3	4	5
Overall, how useful have your peers been in helping you better understand yourself or your problems?	1	2	3	4	5
The peers generally are helpful.	1	2	3	4	5
The peers and I work well together.	1	2	3	4	5

Circle the number which best describes how you feel about this relationship overall since the last rating.

Patient to the overall staff group	Very Little				Very much
How much are you able to talk about what really matters to you (which is private or important)?	1	2	3	4	5
To what extent do you feel clearly understood by staff generally?	1	2	3	4	5
How much are you able to understand and work with what the staff say?	1	2	3	4	5
Overall, how useful have the staff been in helping you better understand yourself or your problems?	1	2	3	4	5
Overall, the staff generally are helpful.	1	2	3	4	5
Overall, staff and I work well together.	1	2	3	4	5

(Adapted from Joyce, McCallum, Azim, & Ogrodniczuk, 2002; reproduced with permission)

Appendix E: PRF-E item numbers and corrected item-total correlations at pre-treatment and post-treatment

Abasement																
	PRF-E items	001	023	045	067	089	111	133	155	177	199	221	243	265	287	309	331
	Pre	.229	-.011	.220	.076	.326	.173	.169	-.059	.226	.125	.163	.379	.152	-.018	-.009	.282
	Post	.063	.234	.257	.133	.350	-.128	.001	.138	.310	-.021	.066	.249	.080	.191	.105	.324
Achievement																	
	PRF-E items	002	024	046	068	090	112	134	156	178	200	222	244	266	288	310	332
	Pre	.154	.438	.417	.275	.375	.492	.352	-.008	.317	.309	-.063	.308	.207	.409	.241	.358
	Post	.343	-.121	.378	.178	.229	.337	.206	-.004	.225	.267	-.112	.205	.048	.128	.272	.137
Affiliation																	
	PRF-E items	003	025	047	069	091	113	135	157	179	201	223	245	267	289	311	333
	Pre	.104	.297	.506	.435	.582	.336	.402	.663	.464	.607	.431	.464	.413	.150	.607	.509
	Post	-.175	.189	.227	.571	.396	.038	.369	.555	.194	.350	.488	.411	.388	.019	.480	.527

Aggression																
PRF-E items	004	026	048	070	092	114	136	158	180	202	224	246	268	290	312	334
Pre	.453	.362	.382	.408	.335	.411	.269	.491	.540	.127	.349	.165	.491	.407	.310	.426
Post	.320	.368	.249	.409	.266	.545	.291	.495	.165	-.094	.560	.166	.601	.211	.383	.660
Autonomy																
PRF-E items	005	027	049	071	093	115	137	159	181	203	225	247	269	291	313	335
Pre	.236	.172	.137	.147	.428	.470	.313	.425	.505	.296	.269	.104	.235	.029	.271	.068
Post	.283	.392	.286	.135	.208	.230	.187	.502	.273	.210	.212	.215	.050	.003	.088	.067
Change																
PRF-E items	006	028	050	072	094	116	138	160	182	204	226	248	270	292	314	336
Pre	.216	.216	.063	.231	.211	.199	.304	.282	.369	.284	.375	.170	.331	-.001	.251	.155
Post	.324	.272	.132	.011	.011	.270	.178	-.015	.247	.330	.327	-.028	.161	.115	.032	.041
Cognitive structure																
PRF-E items	007	029	051	073	095	117	139	161	183	205	227	249	271	293	315	337
Pre	.326	.411	.061	.154	.239	.084	.074	.154	.134	.404	.062	.217	.240	.434	.144	.095
Post	.366	.559	.192	.346	.383	.084	.478	.445	.269	.499	.228	.544	.453	.535	.189	.192

Defendance																
PRF-E items	008	030	052	074	096	118	140	162	184	206	228	250	272	294	316	338
Pre	.410	.603	.216	.402	.223	.331	.278	.237	.156	.451	.489	.558	.306	.386	.404	.163
Post	.214	.336	.264	.266	.018	.131	.009	.305	.258	.353	.263	.719	.098	.551	.380	.170
Dominance																
PRF-E items	009	031	053	075	097	119	141	163	185	207	229	251	273	295	317	339
Pre	.517	.437	.187	.606	.447	.660	.191	.628	.619	.480	.570	.394	.391	.177	.600	.168
Post	.390	.543	.085	.545	.356	.333	.430	.449	.420	.420	.264	.210	.437	.265	.521	.425
Endurance																
PRF-E items	010	032	054	076	098	120	142	164	186	208	230	252	274	296	318	340
Pre	.405	.523	.507	.429	.124	.133	.242	.256	.094	.435	.224	.298	.510	.342	.468	.344
Post	.216	.413	.303	.436	.096	.228	.246	.077	-.010	.322	.030	.195	.371	.242	.564	.330
Exhibition																
PRF-E items	011	033	055	077	099	121	143	165	187	209	231	253	275	297	319	341
Pre	.573	.446	.617	.501	.370	.487	.495	.368	.567	.578	.282	.487	.483	.429	.548	.549
Post	.503	.592	.635	.427	.397	.513	.378	.438	.286	.573	.230	.425	.501	.427	.503	.571

Harm avoidance																
PRF-E items	012	034	056	078	100	122	144	166	188	210	232	254	276	298	320	342
Pre	.507	.481	.497	.342	.406	.493	.618	.438	.515	.342	.436	.627	.529	.380	.605	.621
Post	.103	.358	.335	.338	.367	.335	.537	.284	.402	.304	.398	.594	.462	.331	.494	.162
Impulsivity																
PRF-E items	013	035	057	079	101	123	145	167	189	211	233	255	277	299	321	343
Pre	.358	.381	.270	.232	.246	.295	.597	.176	.304	.260	.574	.589	.567	.438	.544	.530
Post	.218	.425	.333	.349	.301	.550	.681	.116	.354	.326	.664	.542	.420	.405	.173	.577
Nurturance																
PRF-E items	014	036	058	080	102	124	146	168	190	212	234	256	278	300	322	344
Pre	.354	-.031	.017	.238	.091	.305	.165	.388	.389	.430	.159	.381	.221	.477	.286	.312
Post	.356	-.022	.170	.226	.178	.111	.067	.292	.133	.280	.183	.383	.180	.460	.306	.360
Order																
PRF-E items	015	037	059	081	103	125	147	169	191	213	235	257	279	301	323	345
Pre	.453	.422	.262	.592	.471	.505	.435	.329	.575	.466	.473	.496	.309	.362	.534	.411
Post	.365	.472	.131	.748	.446	.546	.281	.373	.540	.422	.444	.558	.353	.045	.572	.496

Play																
	PRF-E items	016	038	060	082	104	126	148	170	192	214	236	258	280	302	324	346
	Pre	.066	.517	.144	.303	.168	.219	.247	.275	.115	.352	.183	.258	.203	.384	.091	.349
	Post	.172	.193	.273	.147	.423	.329	.134	.403	.290	.003	.257	.290	.268	.283	-.156	.280
Sentience																	
	PRF-E items	017	039	061	083	105	127	149	171	193	215	237	259	281	303	325	347
	Pre	.245	.209	.422	.385	.312	.122	.336	.196	.275	.120	.268	.289	.199	.160	.325	.345
	Post	.253	.149	.171	.142	.075	.063	.173	.135	.190	.293	-.016	-.248	.112	.102	.066	.142
Social recognition																	
	PRF-E items	018	040	062	084	106	128	150	172	194	216	238	260	282	304	326	348
	Pre	.294	.162	.333	.313	.483	.459	.391	.503	.483	.559	.237	.533	.379	.254	.073	.431
	Post	.111	-.078	.064	.146	.435	.295	.216	.206	.095	.378	.136	.349	.157	.199	-.203	.241
Succorance																	
	PRF-E items	019	041	063	085	107	129	151	173	195	217	239	261	283	305	327	349
	Pre	.238	.115	.314	.380	.207	.172	.424	.387	.487	.401	.054	.164	.146	.472	.086	.527
	Post	.039	-.146	.036	.151	-.294	.094	.369	.496	.469	.075	.185	.099	.404	.259	.268	.405

Understanding																
PRF-E items	020	042	064	086	108	130	152	174	196	218	240	262	284	306	328	350
Pre	.229	.524	.371	.284	.540	.451	.564	.418	.393	.244	.515	.489	.133	.220	.563	.413
Post	.299	.398	.397	.293	.381	.239	.461	.223	.314	.049	.583	.342	.158	.247	.421	.442
Infrequency																
PRF-E items	021	043	065	087	109	131	153	175	197	219	241	263	285	307	329	351
Pre	.042	-.042	.000	-.038	-.194	-.181	.042	-.144	-.017	.008	.053	-.038	.042	.064	-.068	.042
Post	.000	.036	.069	.191	-.027	-.027	.000	.036	.117	.000	.000	-.032	.000	.000	.126	.000
Desirability																
PRF-E items	022	044	066	088	110	132	154	176	198	220	242	264	286	308	330	352
Pre	.330	.321	.81	.329	.379	.202	.390	.363	.491	.539	.345	.360	.296	.479	.260	.412
Post	.221	.093	.220	.244	.514	.456	.242	.381	.062	.361	.350	.358	.135	.087	.489	.361

Note. Pre-treatment correlations n = 80, post-treatment n = 47

Appendix F: JPI-R item numbers and corrected item-total correlations at pre-treatment and post-treatment

Complexity			Breadth of interest			Innovation		
Items	Pre	Post	Items	Pre	Post	Items	Pre	Post
001	.063	-.042	002	.269	.264	003	.306	.391
016	.136	.114	017	.493	.448	018	.321	.110
031	.278	.431	032	.477	.413	033	.388	.067
046	.126	.170	047	.304	.377	048	.320	.326
061	.086	.164	062	.326	.195	063	.561	.610
076	.078	.030	077	.260	.075	078	.362	.405
091	.378	.438	092	.335	.090	093	.504	.505
106	.208	.218	107	.520	.226	108	.317	.286
121	.383	.491	122	.189	.145	123	.439	.433
136	.354	.468	137	.217	.558	138	.520	.447
151	.062	.197	152	.306	.006	153	.507	.447
166	.229	.065	167	.477	.448	168	.458	.524
181	.218	-.036	182	.444	.365	183	.399	.380
196	.163	.008	197	.500	.415	198	.387	.087
211	.142	.128	212	.203	.197	213	.147	-.007
226	.430	.142	227	.470	.111	228	.53	.505
241	.437	.438	242	.294	.275	243	.519	.361
256	.063	.240	257	.445	.479	258	.374	.344
271	.259	-.090	272	.442	.345	273	.216	.178
286	.153	.073	287	.178	.266	288	.267	.206

Tolerance			Empathy			Anxiety		
Items	Pre	Post	Items	Pre	Post	Items	Pre	Post
004	.213	.009	005	.417	.331	006	.316	.187
019	.197	.172	020	.282	.491	021	.472	.484
034	.174	.242	035	.197	.269	036	.119	.272
049	.375	.249	050	.296	-.041	051	.141	.105
064	.300	.189	065	.221	.111	066	.295	.208
079	.325	.183	080	.094	.153	081	.407	.357
094	.077	.097	095	.391	.352	096	.342	.168
109	-.050	-.054	110	.248	.195	111	.152	.276
124	-.105	.060	125	.269	.245	126	.434	.054
139	.297	-.026	140	.233	.269	141	.297	.136
154	.229	.190	155	.221	.394	156	.356	.122
169	-.087	.097	170	.176	.318	171	-.078	.139
184	.362	.047	185	.046	.450	186	.152	.403
199	.247	-.062	200	.122	.152	201	.301	.118
214	.218	.164	215	.209	.429	216	.117	.351
229	.242	.422	230	.431	-.029	231	.319	.152
244	.438	.279	245	.346	.343	246	.245	.038
259	.247	.252	260	.381	.407	261	.023	.267
274	-.016	-.060	275	.276	.176	276	.341	.296
289	.233	-.009	290	.194	.286	291	.434	.424

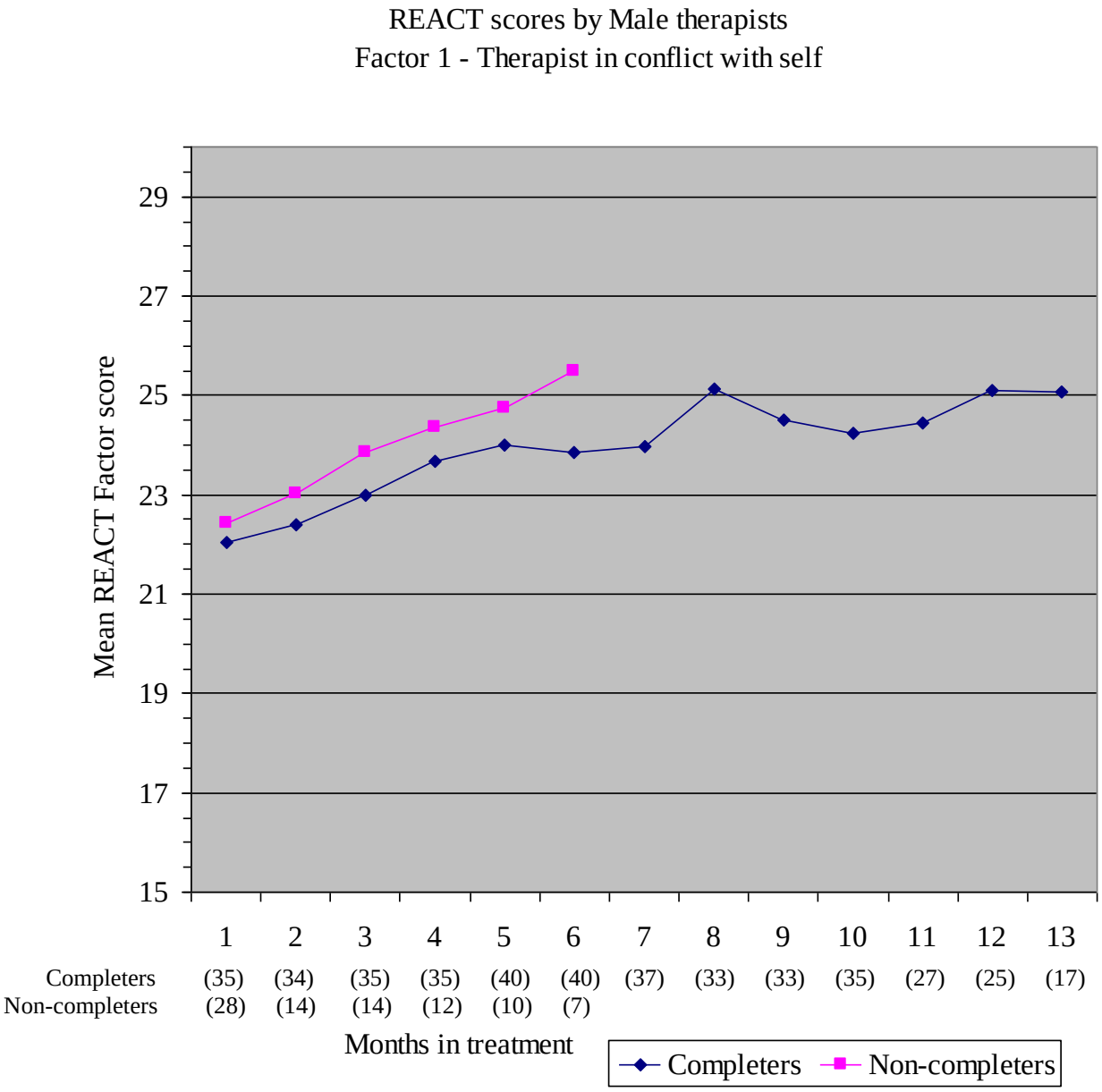
Cooperativeness			Sociability			Social confidence		
Items	Pre	Post	Items	Pre	Post	Items	Pre	Post
007	.474	.216	008	.182	.088	009	.427	.152
022	.372	.295	023	.454	.211	024	.456	.487
037	.238	.288	038	.296	.143	039	.196	.071
052	.064	.102	053	.629	.526	054	.450	.336
067	.391	.160	068	.266	.354	069	.563	.325
082	.281	.255	083	.448	.401	084	.307	.410
097	.387	.333	098	.391	.218	099	.484	.384
112	.379	-.033	113	.405	.400	114	.462	.344
127	.303	.062	128	.484	.431	129	.467	.406
142	.198	.341	143	.445	.445	144	.187	.363
157	.375	.298	158	.460	.249	159	.511	.482
172	.108	.419	173	.375	.308	174	.524	.311
187	.380	.568	188	.574	.463	189	.383	.355
202	.192	.158	203	.552	.538	204	.367	.416
217	.459	.208	218	.300	.237	219	.255	.478
232	.185	.272	233	.423	.566	234	.474	.340
247	.494	.277	248	.267	.379	249	.418	.323
262	.446	.194	263	.432	.434	264	.445	.537
277	.238	.120	278	.619	.407	279	.581	.461
292	.511	.188	293	.568	.485	294	.181	.468

Energy level			Social astuteness			Risk taking		
Items	Pre	Post	Items	Pre	Post	Items	Pre	Post
010	.495	.251	011	.159	.194	012	.263	.109
025	.010	.238	026	.312	.463	027	.183	.117
040	.524	.281	041	.393	.253	042	.549	.272
055	.225	.201	056	.054	.132	057	.447	.190
071	.252	.241	072	.352	.383	073	.263	.318
085	.226	.405	086	.159	.057	087	.420	.255
100	.443	.137	101	.353	.321	102	.227	.237
115	.183	.187	116	.240	.130	117	.603	.517
130	.502	.384	131	.314	.316	132	.414	.540
145	.222	.493	146	.389	.162	147	.326	.193
160	.274	.400	161	.208	-.057	162	.392	.372
175	.261	.120	176	.173	.060	177	.539	.525
190	.507	.296	191	.381	.312	192	.015	.033
205	.366	.323	206	.031	-.216	207	.624	.622
220	.433	.391	221	.330	.416	222	.391	.411
235	.376	.204	236	.640	.380	237	.505	.545
250	.324	.287	251	.434	.347	252	.330	.266
265	.437	.210	266	.031	.102	267	.359	.439
280	.409	.393	281	.079	-.056	282	.378	.426
295	.368	.149	296	.293	.155	297	.337	.308

Organization			Traditional values			Responsibility		
Items	Pre	Post	Item	Pre	Post	Items	Pre	Post
013	.230	.423	014	.452	.169	015	.364	.251
028	.302	-.046	029	.180	.333	030	.387	.299
043	.287	.197	044	.374	.021	045	.495	.534
058	.316	.439	059	.318	.293	060	.232	.216
073	.583	.624	074	.429	.126	075	.479	.265
088	.337	.296	089	.483	.346	090	.328	.041
103	.222	.306	104	.090	.182	105	.572	.556
118	.251	.462	119	.523	.209	120	.274	.436
133	.106	.309	134	.478	.562	135	.572	.559
148	.323	.429	149	.161	-.012	150	.292	-.092
163	.226	.424	164	.281	.218	165	.427	.470
178	.311	.284	179	.131	.143	180	.408	.494
193	.534	.586	194	.151	.193	195	.484	.429
208	.272	.247	209	.185	.342	210	.201	.384
223	.257	.062	224	-.006	-.011	225	.224	.127
238	.227	.211	239	.218	.116	240	.153	.123
253	.050	.338	254	.206	.310	255	.444	.378
268	.436	.406	269	.021	.149	270	.318	.414
283	.320	.335	284	-.035	.027	285	.289	.365
298	.422	.272	299	.110	.103	300	.411	.366

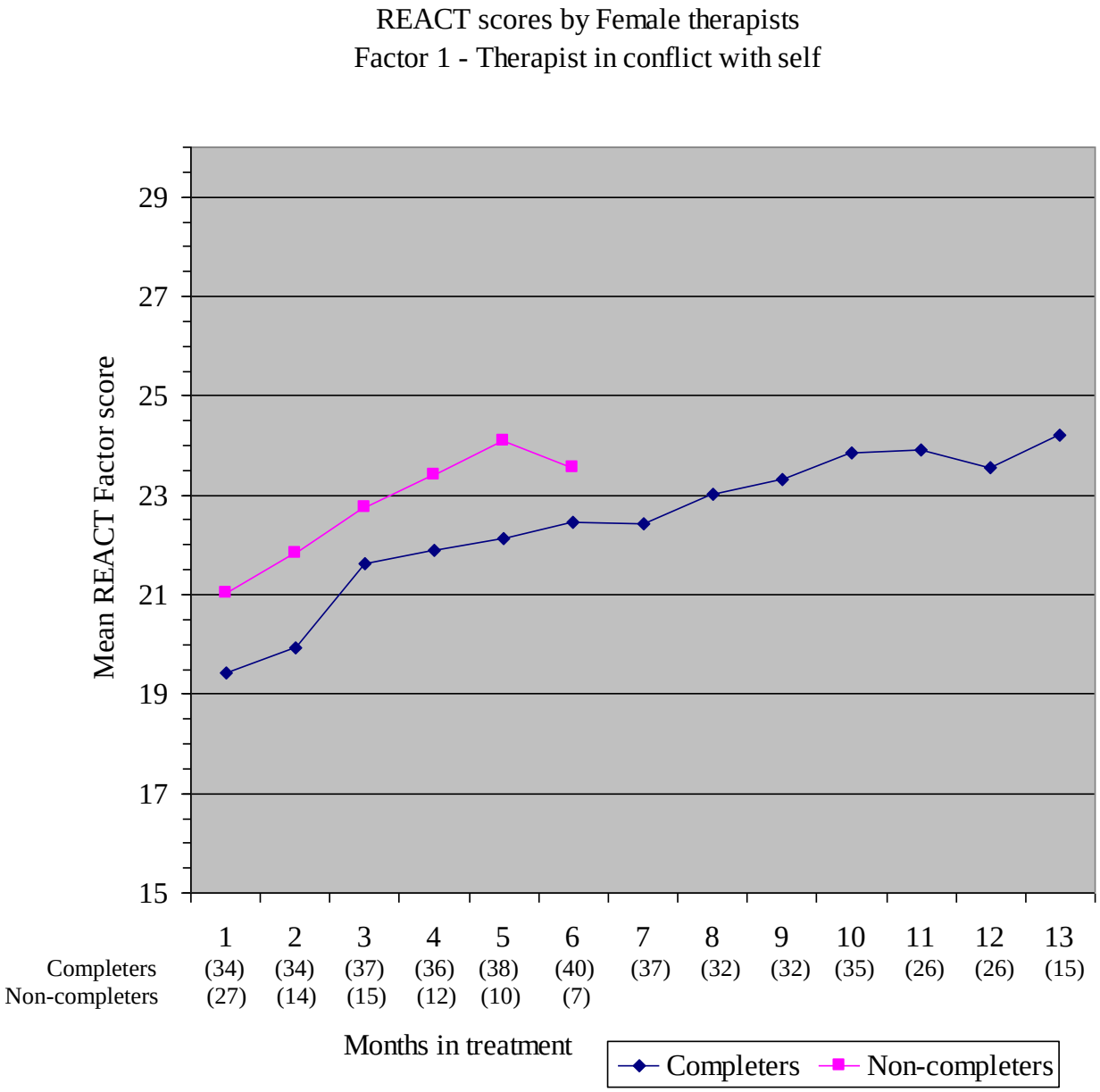
Note. Pre-treatment correlations n = 81, post-treatment n = 47

Appendix G: REACT scores by Male therapists Factor 1- Therapist in conflict with self



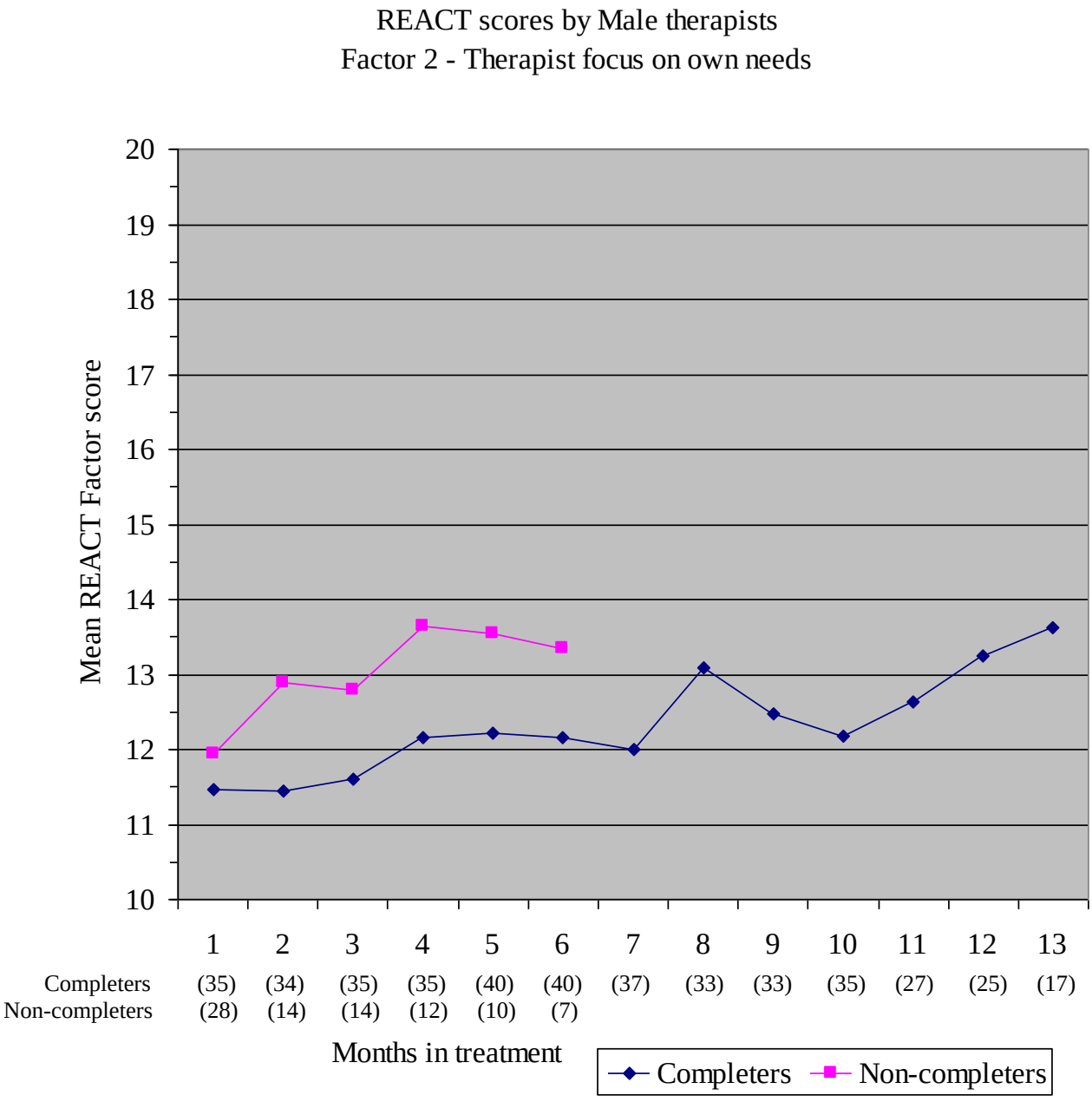
Note: Data points represent discrete points in time.
They are joined for ease of interpretation only.

Appendix H: REACT scores by Female therapists Factor 1- Therapist in conflict with self



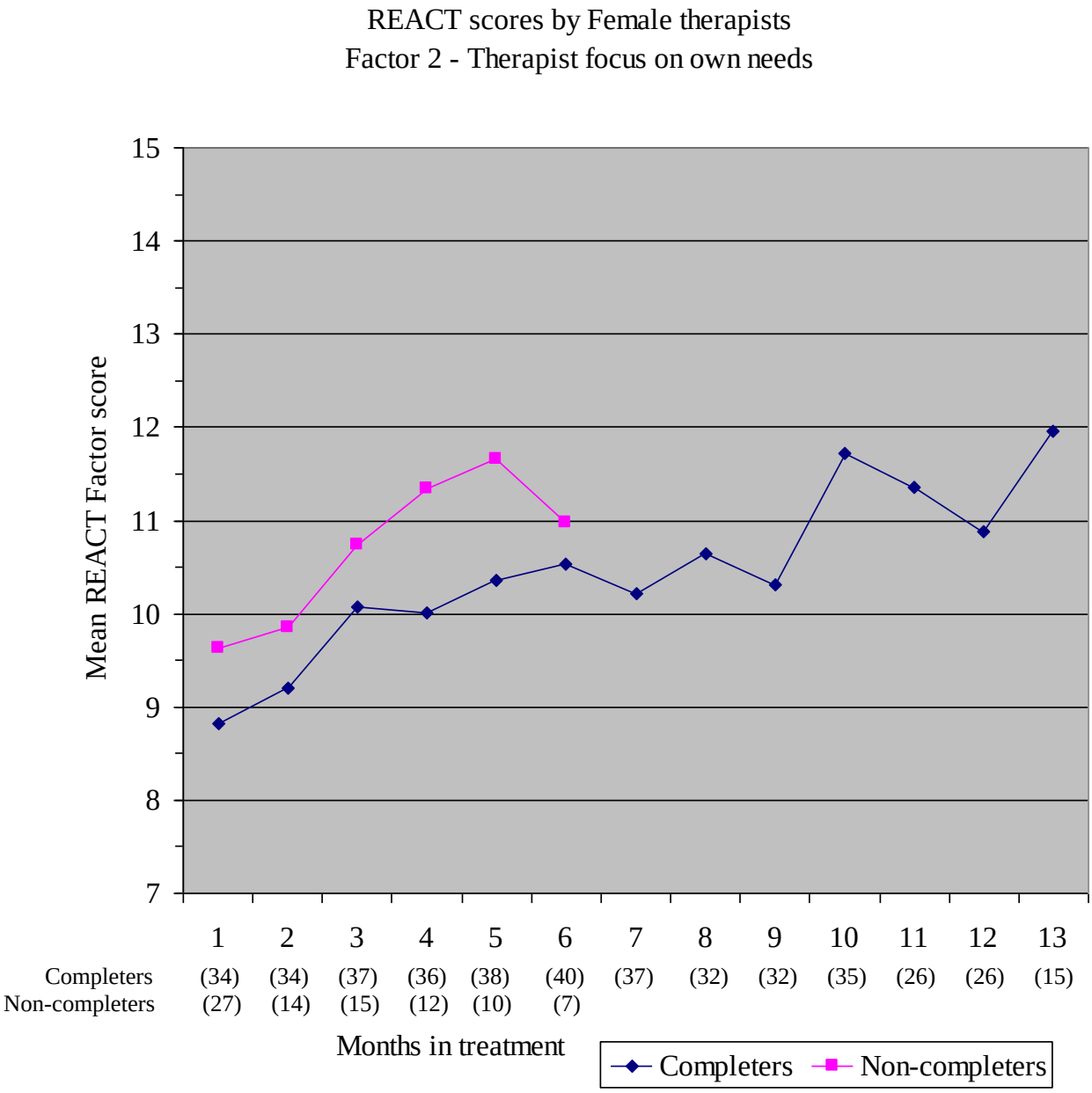
Note: Data points represent discrete points in time.
They are joined for ease of interpretation only.

Appendix I: REACT scores by Male therapists Factor 2- Therapist focus on own needs



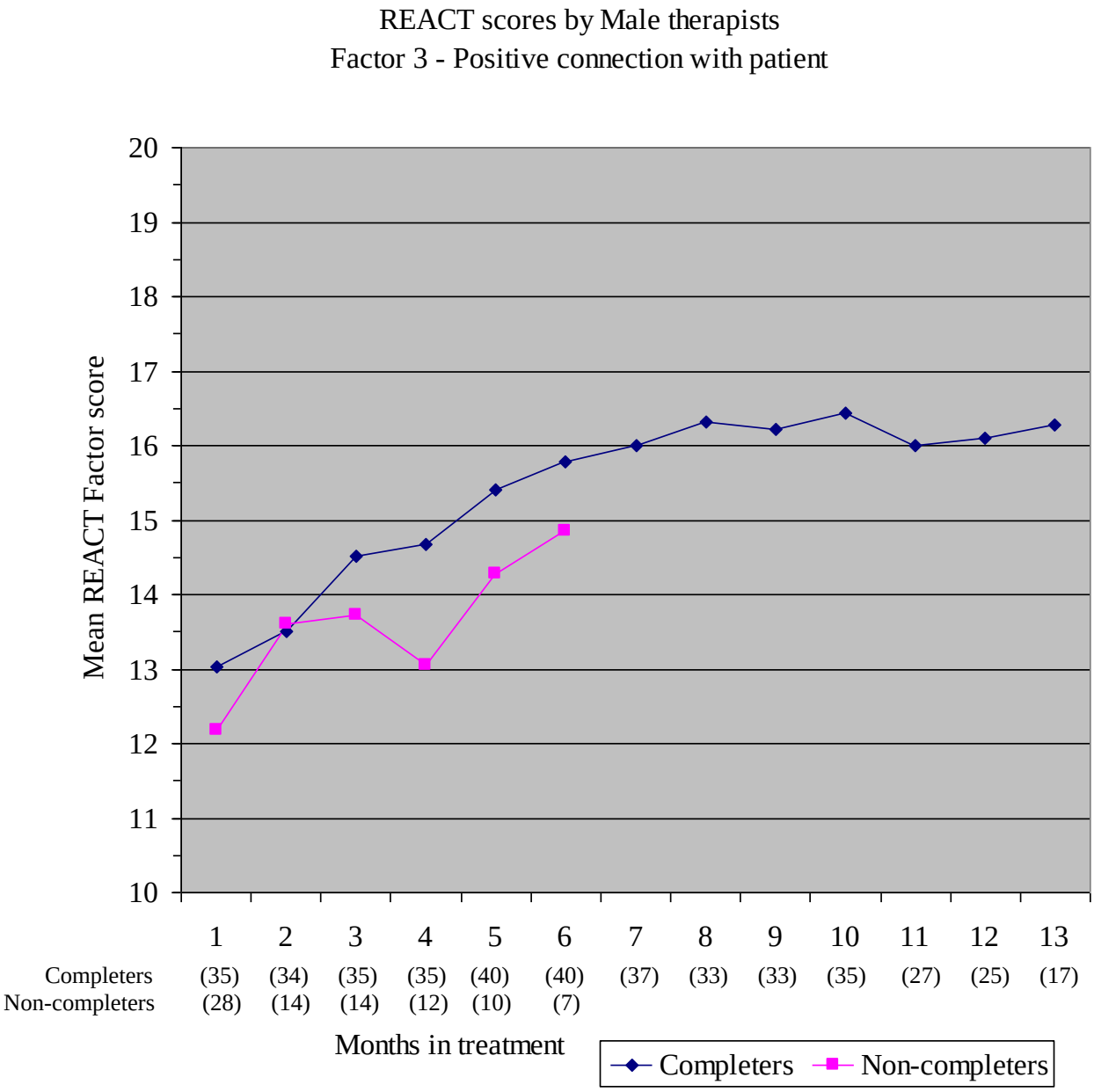
Note: Data points represent discrete points in time.
They are joined for ease of interpretation only.

Appendix J: REACT scores by Female therapists Factor 2- Therapist focus on own needs



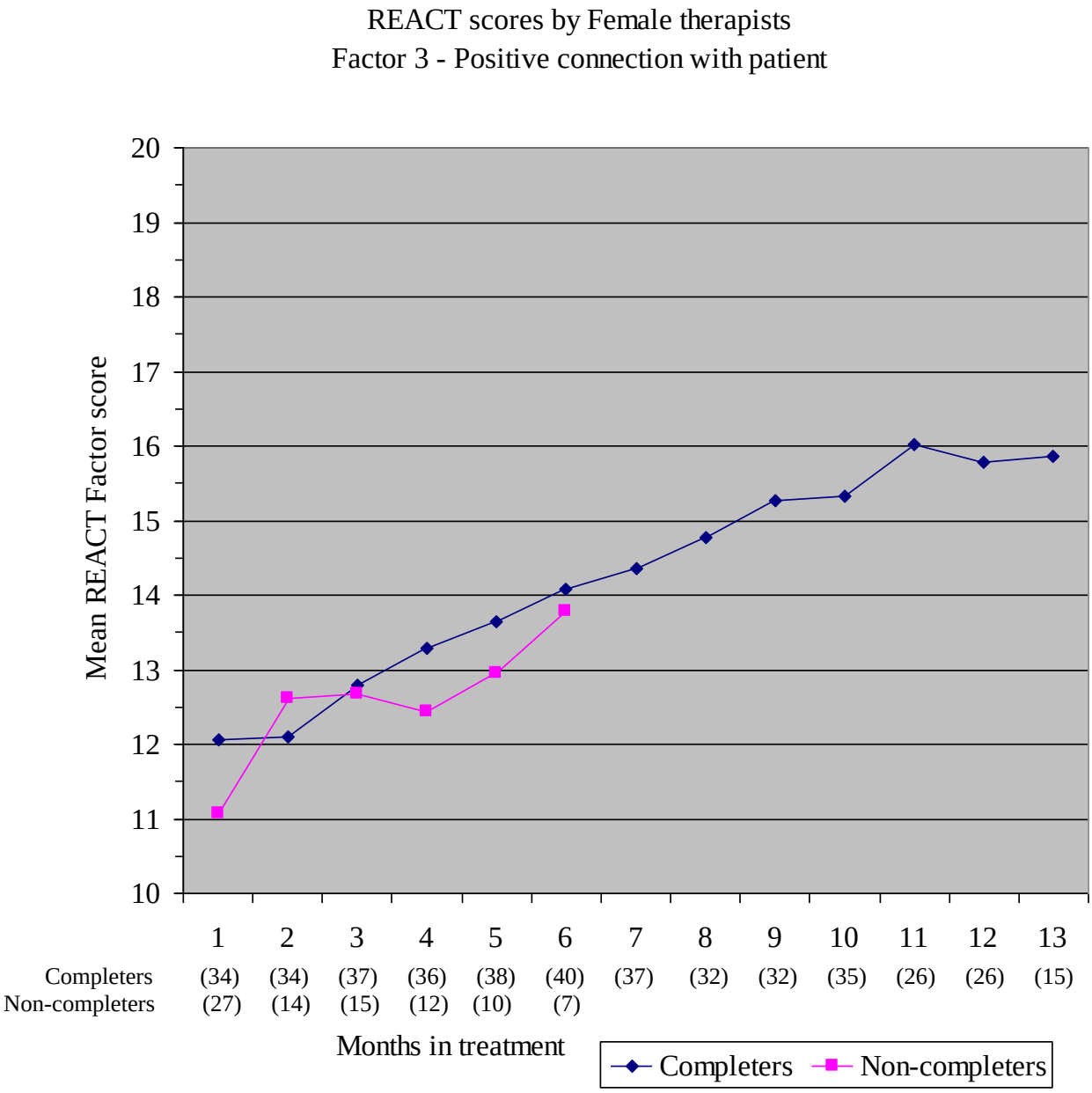
Note: Data points represent discrete points in time.
They are joined for ease of interpretation only.

Appendix K REACT scores by Male therapists Factor 3- Positive connection with patient



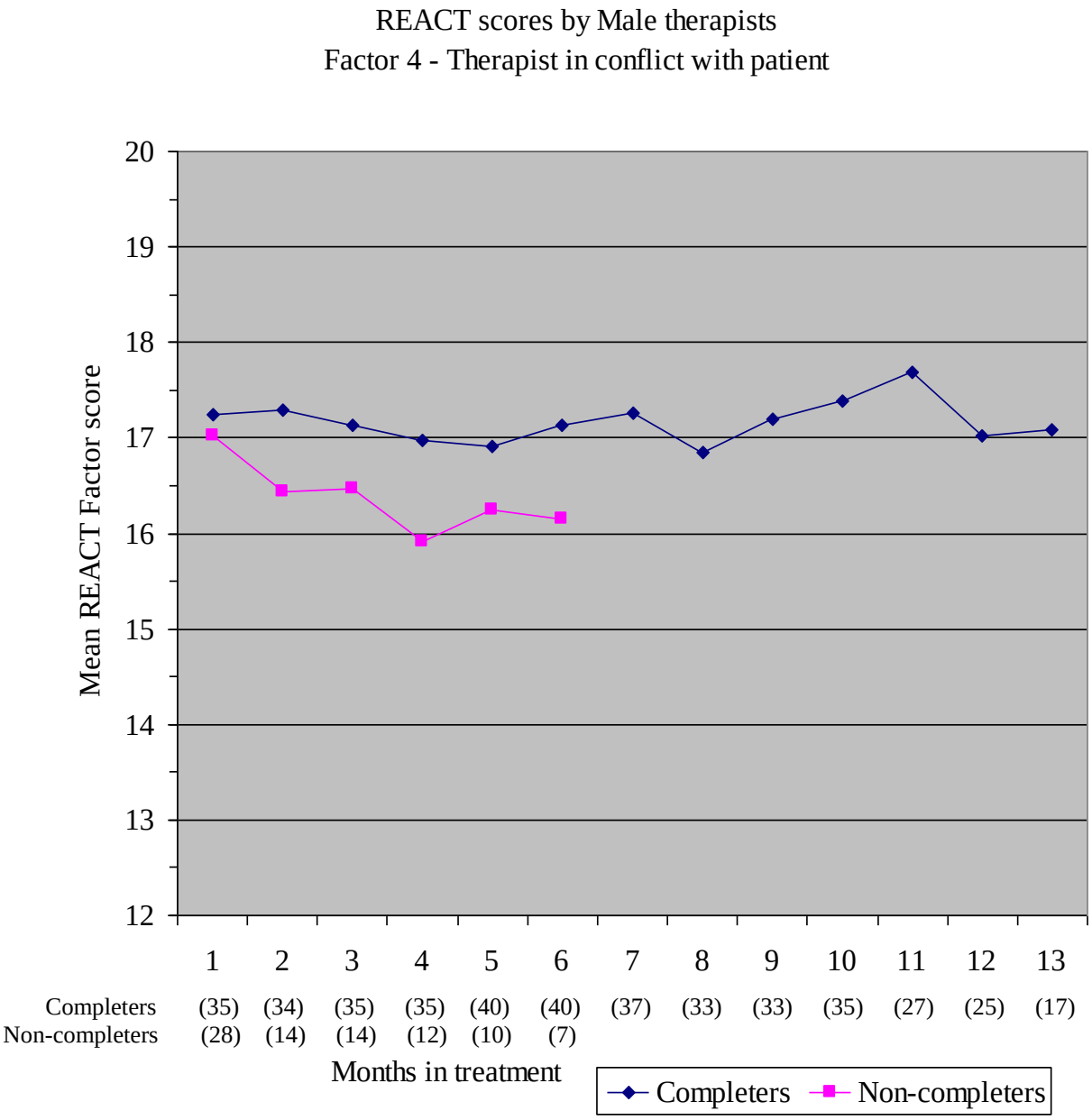
Note: Data points represent discrete points in time.
They are joined for ease of interpretation only.

Appendix L: REACT scores by Female therapists Factor 3- Positive connection with patient



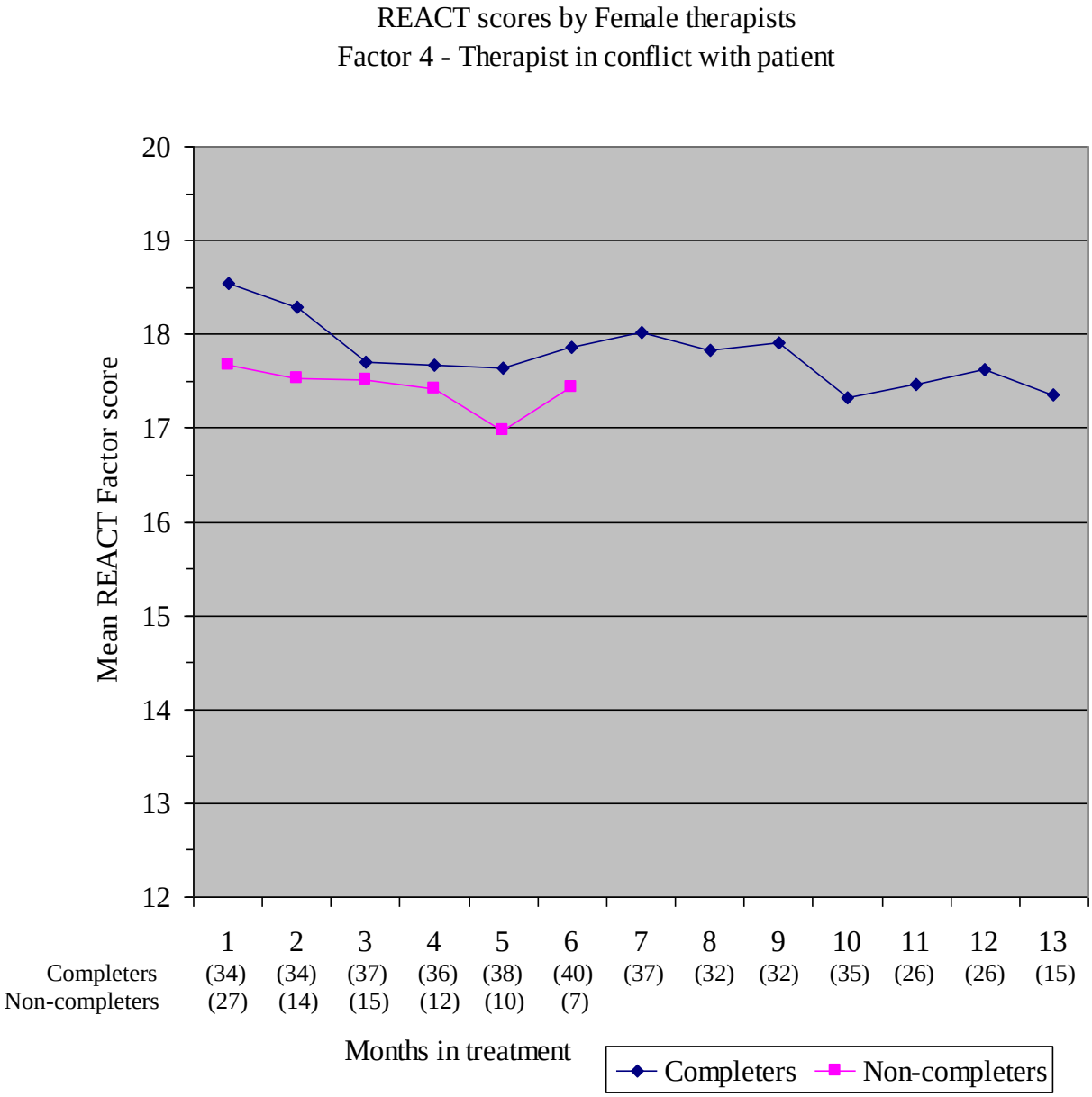
Note: Data points represent discrete points in time.
They are joined for ease of interpretation only.

Appendix M: REACT scores by Male therapists Factor 4- Therapist in conflict with patient



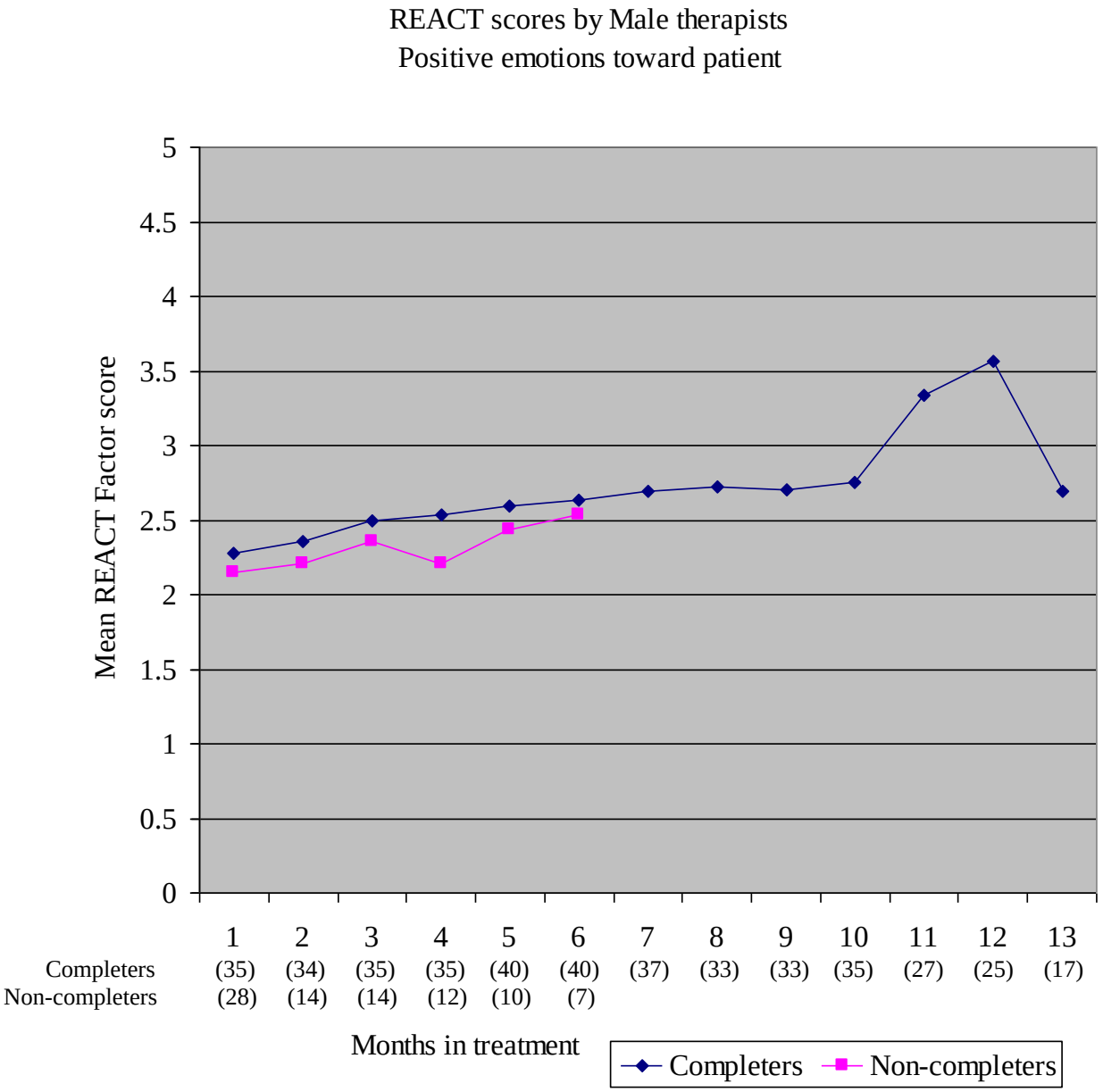
Note: Data points represent discrete points in time.
They are joined for ease of interpretation only.

Appendix N: REACT scores by Female therapists Factor 4- Therapist in conflict with patient



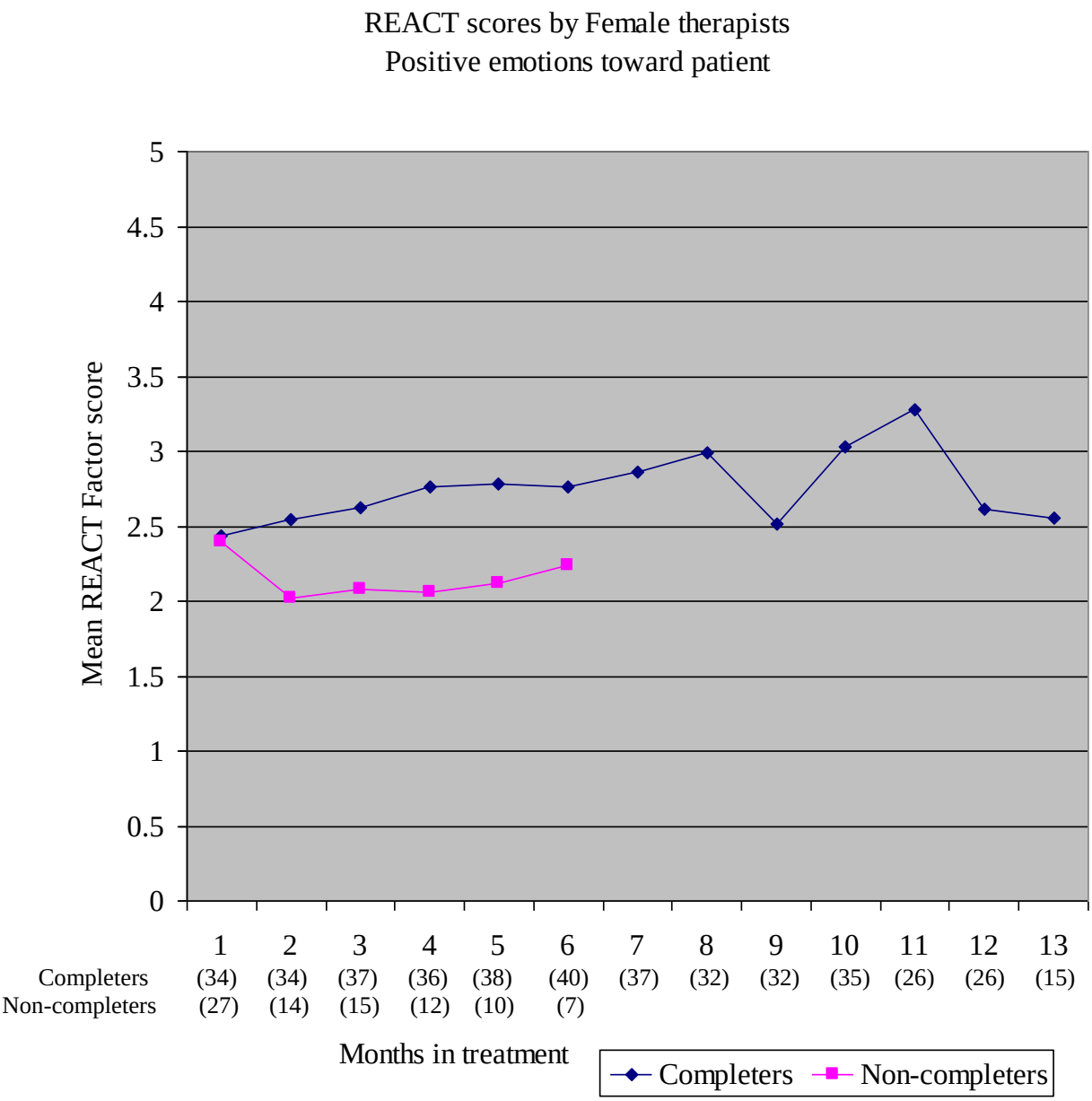
Note: Data points represent discrete points in time.
They are joined for ease of interpretation only.

Appendix O: REACT scores by Male therapists – Positive emotions with patient



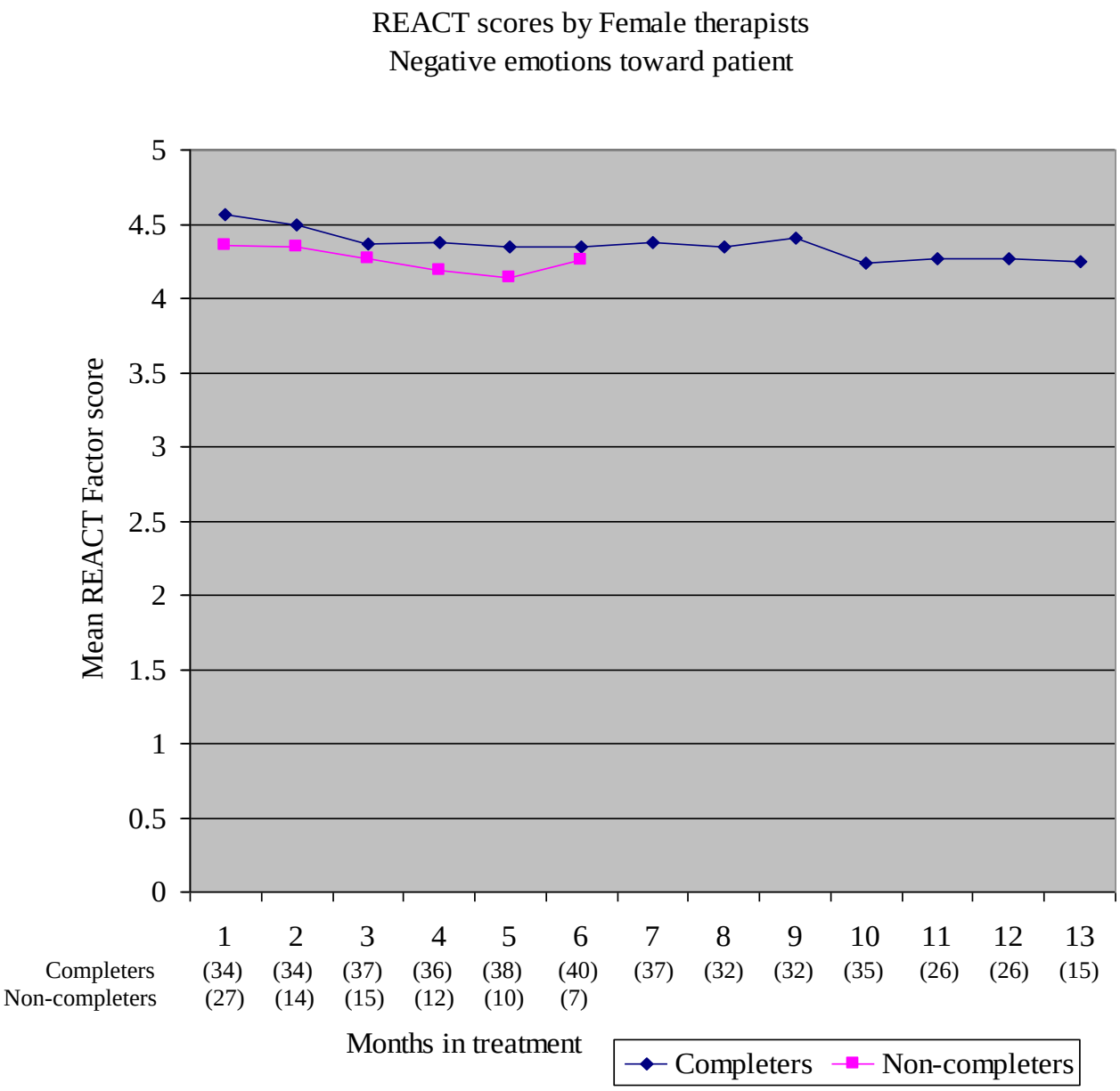
Note: Data points represent discrete points in time.
They are joined for ease of interpretation only.

Appendix P: REACT scores by Female therapists – Positive emotions with patient



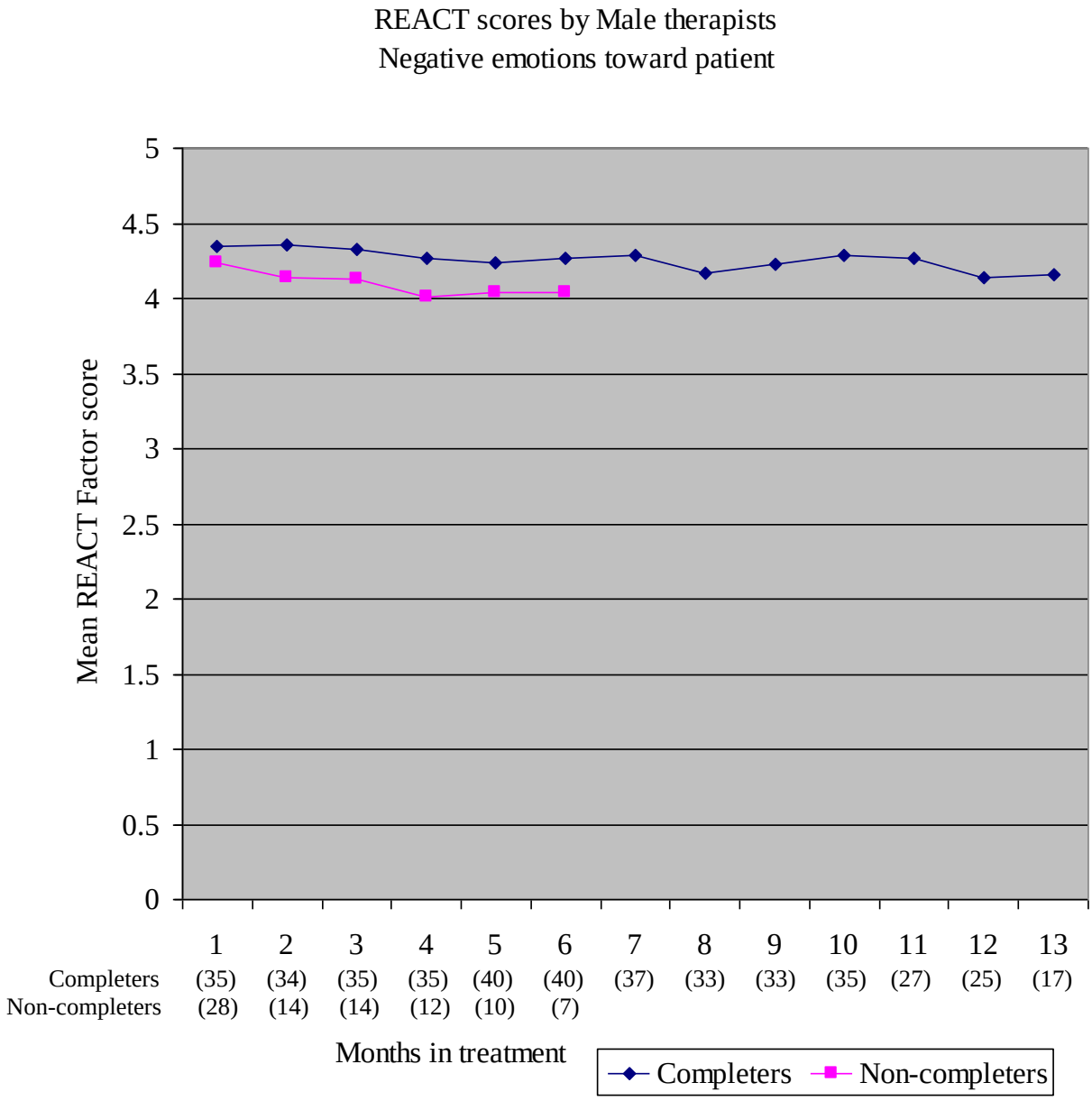
Note: Data points represent discrete points in time.
They are joined for ease of interpretation only.

Appendix Q: REACT scores by Male therapists – Negative emotions with patient



Note: Data points represent discrete points in time.
They are joined for ease of interpretation only.

Appendix R: REACT scores by Female therapists – Negative emotions with patient



Note: Data points represent discrete points in time.
They are joined for ease of interpretation only.

Appendix S: NRI-RQV

Network of Relationships Inventory – Relationship Qualities Version

Instruction: Circle the number which best describes you. See bottom of page for what each number means.

1. How good are you at asking someone new to do things together, like go to a ball game or a movie?
   1 2 3 4 5
2. How good are you at making someone feel better when they are unhappy or sad?
   1 2 3 4 5
3. How good are you at getting people to go along with what you want?
   1 2 3 4 5
4. How good are you at telling people private things about yourself?
   1 2 3 4 5
5. How good are you at resolving disagreements in ways that make things better instead of worse?
   1 2 3 4 5
6. How good are you at going out of your way to start up new relationships?
   1 2 3 4 5
7. How good are you at being able to make others feel like their problems are understood?
   1 2 3 4 5

1 = **Poor at this;** would be so uncomfortable and unable to handle this situation that it would be avoided at possible.
2 = **Fair at this;** would feel uncomfortable and would have some difficulty handling this situation.
3 = **O.K. at this;** would feel somewhat uncomfortable and have a little difficulty handling this situation.
4 = **Good at this;** would feel very comfortable and could handle this situation very well.
5 = **Extremely good at this;** would feel very comfortable and could handle this situation very well.

8. How good are you at taking charge?

1 2 3 4 5

9. How good are you at letting someone see your sensitive side?

1 2 3 4 5

10. How good are you at dealing with disagreements in ways that make both people happy in the long run?

1 2 3 4 5

11. How good are you at carrying on conversations with new people that you would like to know better?

1 2 3 4 5

12. How good are you at helping people work through their thoughts and feelings about important decisions?

1 2 3 4 5

13. How good are you at sticking up for yourself?

1 2 3 4 5

14. How good are you at telling someone embarrassing things about yourself?

1 2 3 4 5

15. How good are you at resolving disagreements in ways so neither person feels hurt or resentful?

1 2 3 4 5

16. How good are you at introducing yourself to people for the first time?

1 2 3 4 5

1 = **Poor at this;** would be so uncomfortable and unable to handle this situation that it would be avoided at possible.
2 = **Fair at this;** would feel uncomfortable and would have some difficulty handling this situation.
3 = **O.K. at this;** would feel somewhat uncomfortable and have a little difficulty handling this situation.
4 = **Good at this;** would feel very comfortable and could handle this situation very well.
5 = **Extremely good at this;** would feel very comfortable and could handle this situation very well.

17. How good are you at helping people handle pressure or upsetting events?

1 2 3 4 5

18. How good are you at getting someone to agree with your point of view?

1 2 3 4 5

19. How good are you at opening up and letting someone get to know everything about you?

1 2 3 4 5

20. How good are you at dealing with disagreements in ways so that one person does not always come out the loser?

1 2 3 4 5

21. How good are you at calling new people on the phone to set up a time to get together to do things?

1 2 3 4 5

22. How good are you at showing that you really care when someone talks about problems?

1 2 3 4 5

23. How good are you at deciding what should be done?

1 2 3 4 5

24. How good are you at sharing personal thoughts and feelings with others?

1 2 3 4 5

1 = **Poor at this;** would be so uncomfortable and unable to handle this situation that it would be avoided at possible.
2 = **Fair at this;** would feel uncomfortable and would have some difficulty handling this situation.
3 = **O.K. at this;** would feel somewhat uncomfortable and have a little difficulty handling this situation.
4 = **Good at this;** would feel very comfortable and could handle this situation very well.
5 = **Extremely good at this;** would feel very comfortable and could handle this situation very well.

25. How good are you at dealing with disagreements in ways that don't lead to big arguments?

1 2 3 4 5

26. How good are you at going places where there are unfamiliar people in order to get to know new people?

1 2 3 4 5

27. How good are you at helping others understand your problems better?

1 2 3 4 5

28. How good are you at voicing your desires and opinions?

1 2 3 4 5

29. How good are you at telling someone things that you do not want everyone to know?

1 2 3 4 5

30. How good are you at getting over disagreements quickly?

1 2 3 4 5

31. How good are you at making good first impressions when getting to know new people?

1 2 3 4 5

32. How good are you at giving suggestions and advice in ways that are received well by others?

1 2 3 4 5

33. How good are you at getting your own way with others?

1 2 3 4 5

1 = **Poor at this;** would be so uncomfortable and unable to handle this situation that it would be avoided at possible.
2 = **Fair at this;** would feel uncomfortable and would have some difficulty handling this situation.
3 = **O.K. at this;** would feel somewhat uncomfortable and have a little difficulty handling this situation.
4 = **Good at this;** would feel very comfortable and could handle this situation very well.
5 = **Extremely good at this;** would feel very comfortable and could handle this situation very well.

34. How good are you at telling someone your true feelings about other people?

1 2 3 4 5

35. How good are you at controlling your temper when having a conflict with someone?

1 2 3 4 5

36. How good are you at being an interesting and fun person to be with when first getting to know people?

1 2 3 4 5

37. How good are you at listening while others "let off steam" about problems they are going through?

1 2 3 4 5

38. How good are you at making decisions about where to go or what to do?

1 2 3 4 5

39. How good are you at telling someone what you personally think about important issues?

1 2 3 4 5

40. How good are you at backing down in a disagreement once it becomes clear that you are wrong?

1 2 3 4 5

1 = **Poor at this;** would be so uncomfortable and unable to handle this situation that it would be avoided at possible.
2 = **Fair at this;** would feel uncomfortable and would have some difficulty handling this situation.
3 = **O.K. at this;** would feel somewhat uncomfortable and have a little difficulty handling this situation.
4 = **Good at this;** would feel very comfortable and could handle this situation very well.
5 = **Extremely good at this;** would feel very comfortable and could handle this situation very well.

The NRI-RQV was used and reprinted with permission from the author.

Appendix T: Curriculum Vitae

A. SCOTT AYLWIN

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or
12431 Lansdowne Drive
Edmonton, AB, T6H 4L4
(780)-433-0664 or (780)-903-0762

EDUCATION

University of Alberta

2002 – Present, Department of Psychiatry, Psychotherapy Research

1994 - 2002, Graduate level coursework in Personality Development, Psychotherapy Systems, Construct Validity, and Biological Aspects of Psychiatry.

1987 - 1991, Bachelor of Arts Degree in Criminology

1985 - 1987, Partial completion of Mechanical Engineering Degree

WORK EXPERIENCE

Alberta Hospital Edmonton
Position: **Unit Manager**
Phoenix Program (in-patient adult sex offender) August 2007 - Present

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Reporting to the Forensic Services Program Director, I am responsible for managing both personnel and fiscal resources to provide ongoing care on an 18 bed in-patient sex offender treatment program. Oversee and am responsible for all aspects of unit operations. With a multidisciplinary staff of 25, I am required to have familiarity with and application of multiple union contracts. Represent the unit to various internal and external stakeholders including the Edmonton Police Service, the National Parole Board, and Correctional Services of Canada. Provide direction to staff as required, and actively maintain clinical and research responsibilities. Required to make presentations on all aspects of sex offender treatment provision and group therapy issues. Involved in all aspects of patient selection, recruitment and staffing, agency liaison and, associated administrative duties.

Alberta Hospital Edmonton

Position: **Forensic Therapist** (Counselor II)
Phoenix Program (in-patient adult sex offender) February 1997 – August 2007

Co-therapist in psychotherapeutic, cognitive-behavioral, and psychoeducational groups; program development and evaluation; assessment of prospective patients; assessment and documentation of patient progress; dynamic and static security/environment management; presentations/teaching; student supervision. Actively collected and coded data to maintain an existing database. Conducted data analysis using SPSS software. Developed coding protocols and rating scales for various projects. Actively participated in ensuring the ongoing integrity of the database. Initiated and assisted in program evaluation projects of a varied nature. Actively sought current and related literature, and communicated with various professionals as appropriate.

Alberta Hospital Edmonton
Position: **Residential Counselor** (Counselor I)
Counterpoint House (residential youth sex offender) April 1993 - February 1997

Primary and co-therapist in individual therapy sessions; co-therapist in psychotherapy and psychoeducational groups; development and implementation of treatment plans; documentation of patient progress; dynamic and static security/environment management; development of sexual offender programming; liaison with institutional and community based agencies; supervision of students and volunteers; involvement in data collection/program evaluation activities, and developed new initiatives.

PROFESSIONAL ASSOCIATIONS & COMMITTEES

- Concordia University Advisory Committee- Psychology Program – 2009 – Present

- International Association for the Treatment of Sexual Offenders (IATSO) - 2008–Present Student member.

- *Alberta Hospital Edmonton* - 2009 – present
  Co-coordinator of the Critical Incident Stress Management Team at Alberta Hospital Edmonton.

- *Alberta Hospital Edmonton* - 1999 - 2009
  Northern Alberta Forensic Psychiatric Development Committee – Alberta Hospital Edmonton.

Continued

- *Capital Health* – June 2004 – Present
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  Mental Health Regional Quality Improvement Committee
- *Capital Health* - Regional Mental Health 2005 and 2006 REACH Award Selection Committee.
- *Alberta Mental Health Board* – Mental Health Research Showcase 2006, 2007, 2008 - peer reviewer.

AWARDS

Hassan F. A. Azim Graduate Award – Department of Psychiatry, University of Alberta (2008).

Recipient of the Recognition of Effort and Achievement in Capital Health (REACH) Award, June, 2004. Peer nominated award.

CURRENT PROJECTS

A.S. Aylwin. *The Therapeutic Alliance in Sex Offender Treatment*. (Health Research Ethics Board approved July 4, 2003; Project B-070703) Dissertation in progress. Expected defence December 2009.

PUBLICATIONS & ABSTRACTS

Studer, L.H., & Aylwin, A.S. (2008). Male victims and post treatment risk assessment among adult male sex offenders. *International Journal of Law and Psychiatry, 31*, 60-65.

Aylwin, A.S. (2007). Exploring the Therapeutic Alliance in Sex Offender Treatment. (30th International Congress on Law and Mental Health, Padua, Italy, June 2007). Abstract.

Joyce, A.S., Wolfaardt, U., Sribney, C., & Aylwin, A.S. (2006). Psychotherapy research at the start of the 21st century: The persistence of the art versus science controversy. *Canadian Journal of Psychiatry, 51,* 797-809.

Aylwin, A.S., Studer, L.H., & Takacs, S. (2006). Sex Offender Treatment: Ameliorating Static Risk Factors Through The Milieu. (6th Conference of the International Association of Forensic Mental Health Services, Amsterdam, June 2006.) Abstract.

Studer, L.H., &, Aylwin, A.S. (2006). Problems in sex offender subtyping: The incest offender question. *Sexual Offender Treatment, 1,* 1-8.

Studer, L.H., &, Aylwin, A.S. (2006). Elevated prolactin levels among adult male sex offenders. *Psychological Reports, 98,* 841-848.

Studer, L.H., &, Aylwin, A.S. (2006). Pedophilia: The Problem with Diagnosis and Limitations of CBT in Treatment. *Medical Hypotheses, 67,* 774-781.

Studer, L.H., Aylwin, A.S., & Reddon, J.R. (2005). Testosterone, sexual offense recidivism, and treatment effect among adult male sex offenders. *Sexual Abuse: A Journal of Research and Treatment, 17,* 171-181.

Aylwin, A.S., Reddon, J.R., & Burke, A. (2005). Sexual Fantasies of Adolescent Male Sex Offenders in Residential Treatment: A Descriptive Study. *Archives of Sexual Behavior, 34,* 231-239.

Aylwin, A.S. (2005). Investigating Risk factors for sex offense recidivism among child molesters pre and post treatment. (29th International Congress on Law and Mental Health, Paris, July 2005). Abstract.

Aylwin, A.S., Clelland, S.R., Studer, L.H., & Reddon, J.R. (2003). Abuse prevalence and victim gender among adult and adolescent child molesters. *International Journal of Law & Psychiatry, 26,* 179-190.

Studer, L.H., Aylwin, A.S., Clelland, S.R., Reddon, J.R., & Frenzel, R. (2002). Primary erotic preference in a group of child molesters. *International Journal of Law & Psychiatry, 25,* 173-180.

Aylwin, A.S., Studer, L.H., & Reddon, J.R. (2002). Relationship of the Yalom Card Sort with Recidivism, Demographics, and Offense Characteristics Among Sex Offenders. (25th Anniversary International Congress on Law and Mental Health. Amsterdam, July 2002). Abstract.

Aylwin, A.S., Clelland, S.R., Kirkby, L.K., Reddon, J.R., Studer, L., H., & Johnston, J. (2000). Sexual offense severity and victim gender preference: A comparison of adolescent and adult sex offenders. *International Journal of Law & Psychiatry, 23,* 113-124.

Studer, L.H., Clelland, S.R., Aylwin, A.S., Reddon, J.R., & Monro, A. (2000). Re-thinking risk assessment for incest offenders. *International Journal of Law & Psychiatry, 23,* 15-22.

Aylwin, A.S., Clelland, S.R., Kirkby, L.K., Reddon, J.R., Studer, L., H. (1999). Bridging the gap: comparing adolescent and adult sex offenders. (24th International Congress on Law & Mental Health. Toronto, June 1999). Abstract.

Aylwin, A.S., Clelland, S.R., Kirkby, L.K., Reddon, J.R., Studer, L., H. (1998). Bridging the gap: Comparing adult and adolescent sex offenders within a treatment milieu. (The National Adolescent Perpetrator Network, International Conference. Winnipeg, June 1998). Abstract.