

WORKING ALLIANCE AND ITS RELATIONSHIP WITH ABORIGINAL ANCESTRY,  
PSYCHOPATHY, TREATMENT COMPLETION, AND RECIDIVISM IN A SAMPLE OF  
FEDERAL SEX OFFENDERS

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## **Abstract**

The relationship that develops between a client and therapist is arguably one of the most important factors toward achieving positive outcomes from therapy. Although the therapeutic alliance has been well studied, there is a paucity of research related to the impact of this relationship when the client is an offender, of Aboriginal ancestry, or psychopathic. The present study employed an archival design in which a sample of 427 treated sexual offenders were examined with regard to their experience of therapeutic alliance with their primary therapists. Offenders who were admitted to the Clearwater Sex Offender Program at the Regional Psychiatric Centre Hospital in Saskatoon (RPC Prairies) between 1998 and 2005 completed a measure that rated the strength of their relationship with their primary therapists using the Working Alliance Inventory (WAI) roughly three months after program admission. Approximately 46% of the sample was of Aboriginal ancestry, while the majority of the balance (approximately 52%) was Caucasian. A sub-sample of 111 offenders was also scored on the PCL-R.

Analysis of WAI scores among Aboriginal and non-Aboriginal offenders demonstrated a significant difference on the Bond scale of the WAI, suggesting that although the bonds between Aboriginal offenders and their primary therapists were not as strong as they were between non-Aboriginal offenders and therapists, Aboriginal offenders were still able to identify and agree on the goals and the tasks of the treatment (weaker bonds notwithstanding). Aboriginal offenders also spent slightly less time in treatment overall than their non-Aboriginal counterparts. The present research also found that as the scores on the WAI increased, rates of treatment noncompletion decreased, the implications of which would seem to highlight the need to foster and maintain strong therapeutic relationships.

In terms of outcome, perhaps unexpectedly, results of the present research found that WAI was not a significant predictor of any recidivism criteria. Aboriginal Ancestry was related to non-sexual violent reconvictions and general reconvictions, but not sexual recidivism. Moreover, offenders who were both Aboriginal and reported low WAI scores were the most likely to recidivate in a non-sexual violent manner and in general, but not sexually.

An examination of the relationship of working alliance to psychopathy found that WAI and PCL-R scores were not significantly correlated overall; however, a negative inverse

relationship between the Lifestyle and Emotional facets with total WAI score was noted, suggesting that callous-unemotional traits and lifestyle were associated with weaker alliance. Interestingly, these correlations were not evident in the Aboriginal sample suggesting that other factors, aside from levels of psychopathy, were associated with working alliance in this ancestral group. In addition, results of the present analysis revealed WAI and PCL-R together, were better able to predict sexual recidivism for non-Aboriginal offenders than for Aboriginal offenders; however, the WAI and PCL-R jointly predicted nonsexual violent recidivism, but only for non-Aboriginal offenders, and jointly predicted general recidivism for both ancestral groups. Together, the results of this study attempt to further advance our understanding of the therapeutic alliance and its link to treatment outcome, Aboriginal ancestry, and psychopathy.

## **Dedication**

I dedicate this dissertation to my mother. You made this possible. I love you.

*“How I wish, how I wish you were here” Pink Floyd, 1975*

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## **1. CHAPTER ONE: INTRODUCTION**

The importance of developing a strong, positive relationship between therapist and client has long been acknowledged in the helping professions. In more recent years, research has suggested that despite the specific therapy mode or approach taken, the client-therapist relationship is the most important factor toward achieving positive outcomes (Horvath & Greenberg, 1994; Bordin, 1979, 1994; Horvath & Symonds, 1991; Martin, Garske, & Davis, 2000). A strong working alliance is based on feelings of mutual trust, confidence, and acceptance in addition to a mutual agreement on the objectives of therapy and the subsequent tasks involved. Research suggests that there is an association between the working alliance and therapeutic outcome (Horvath & Symonds, 1991; Martin, Garske, & Davis, 2000). The question remains however, as to how this relationship is impacted by having an offender status.

Relationships develop naturally between people; whether they are positive or not depend on a variety of factors. The personalities of the parties involved play a large role on the subsequent relationship. Whether the individuals appreciate one another, whether they have anything in common, and whether there are feelings of mutual respect are just a few factors that can influence natural relationships. The current program of research examined some of the factors that might influence the relationship that develops between program facilitators and a sample of sex offenders. While it generally examined the association of working alliance with treatment non-completion and recidivism, this research also explored how the working alliance was affected when the offender was of Aboriginal ancestry and/or was psychopathic. To this researcher's knowledge, there have been no studies to date that have examined these questions, particularly as they relate to Aboriginal offenders.

### **1.1 Working Alliance**

In the early 20th century, Freud suggested that the transference in the client-therapist psychotherapy relationship was of utmost importance to achieving effective results (Horvath, Gaston, & Luborsky, 1993). It was Freud's contention that positive transference fosters a sense of security and confidence allowing patients to project feelings associated with previous

relationships onto the therapist (Horvath, 2000). It was the analysis of this working relationship that was the focus of Freudian therapy.

In modern forms of therapy the emphasis of treatment differs depending on the approach taken. Although traditional psychoanalytic approaches focus on the evolving transference feelings, more modern approaches (e.g., cognitive behavioral therapy) emphasize cognitions. Nevertheless, all modes of therapy, both modern and traditional, highlight the importance of developing a strong therapeutic relationship between client and therapist (Castonguay, Constantino, & Holtforth, 2006). Some argue that it is the “human interaction between therapist and patient” that induces the change process to occur (Wampold, 2007).

Over the years, the notion of a working alliance has evolved and its importance in therapy has strengthened (Weissmark & Giacomo, 1998). Since Freud, many subsequent psychologists have established that the relationship between therapist and client is an important predictor of success in therapy regardless of type of therapy and client characteristics (Horvath et al., 1993, Castonguay et al., 2006). For instance, though Carl Rogers never used the term alliance, he claimed that in order to ensure a successful therapeutic outcome the therapist must possess congruence, empathy, and unconditional positive regard (Rogers, 1951). Unlike Freud, however, Rogers stressed the importance of the real relationship rather than the transference relationship. He suggested that if the therapist demonstrated the aforementioned qualities, the client could be free to explore change and achieve personal growth (Hill & Nakayama, 2000). Rogers proposed that regardless of theoretical framework it was the developing therapist-client relationship itself rather than the techniques employed which induced any change in the client (Horvath, 2000). However, he also proposed that the relationship hinged on the therapist. That is, the therapist was responsible for providing the conditions necessary for a positive relationship to develop (Horvath, 2000).

Rogers’ ideas remain integral to some modern approaches to therapy such as motivational interviewing (Miller & Rollnick, 2002). However, rather than Rogers’ almost exclusive focus on the role of the therapist in the relationship, more modern theories include the role of the client. For instance, Bordin (1994) said that successful therapeutic outcomes depend on a collaborative relationship between client and therapist. In fact, he stated that this relationship or working alliance “is what makes it possible for the patient to accept and follow treatment faithfully” (Bordin, 1980, p.2, as cited in Horvath & Greenburg, 1989). According to Bordin, the working

alliance does not in itself promote change, but rather, it provides the impetus to change through specific therapeutic strategies (Horvath & Greenberg, 1989).

Bordin proposed that the successful working alliance is composed of three elements: goals, tasks, and bonds (Bordin, 1979). According to his theory, the first element that is integral to developing a strong working alliance is the identification of the goals of therapy; these are the mutually agreed upon objectives for treatment. Though the goals will differ for every client-therapist relationship depending on the purpose of treatment, they must always be mutually endorsed and valued by both therapist and client. The second element required are the tasks; tasks are the mutually agreed upon activities that are aimed at achieving the goals. Bordin identified these as an important element to developing a strong working alliance. Bordin suggested that both parties must perceive the tasks, or the “in-counseling behaviors” (Horvath et al., 1993, p. 252) as relevant to the individual and both parties must agree to follow through with them. The final element to Bordin’s conceptualization of the working alliance is the bond. According to the Oxford English Dictionary, the word “bond” means “a force or feeling that unites people; a shared emotion or interest” (Bond, 2012). In the context of the therapeutic relationship, the term bond refers to the positive personal attachment that develops between the client and the therapist. It is characterized by “mutual trust, acceptance, and confidence” between both the therapist and the client (Horvath et al., 1993, p. 252).

Since they are necessary for any positive relationship to emerge, mutual trust, acceptance, and confidence are intuitively integral to the development of a positive and successful therapeutic relationship (Castonguay et al., 2006). According to Bordin, when the tasks, bonds, and goals of therapy are mutually identified and endorsed, a strong working alliance is likely to develop. It follows then that a relationship lacking these qualities may result in disengagement from therapy.

Currently, there is a plethora of research in the area of working alliance. However, how these relationships are affected when a person is mandated treatment is less studied. Furthermore, there is no known research to date that examines how the therapeutic relationship develops in Aboriginal offenders in a prison setting. The present study was an attempt to examine aspects of the therapeutic relationship with this population and whether the effects of a positive working alliance as defined by Bordin had an impact on treatment completion and rates of recidivism in a group of sexual offenders.

## 1.2 Measuring the Working Alliance

Empirical investigations into those aspects of therapy that contribute to successful outcomes abound. Because there were and are so many different approaches to therapy, empirical evaluations are challenging given the multitude of variance that exists between them. For years, researchers have been looking for ways to measure the effects of therapy and determine which method is the most effective or curative. The results of this research have indicated that some benefit can be derived from all modes of therapy (Glass, 2001). Some have interpreted this to suggest that there are common variables among the different modes that are responsible for effecting positive change (Strupp & Hadley, 1979; Najavits & Strupp, 1994). In other words, the benefits of therapy may not be the specific type of therapy per se, but rather some commonality between therapies (e.g., therapist characteristics). It was this idea that was the impetus for Bordin's theory of working alliance.

Although the extent to which the therapeutic alliance determines outcome is unknown, there is no doubt that it contributes to achieving positive results. A determining factor is measurement. Over the years, several instruments have been developed to measure the strength of the alliance in therapeutic relationships (Martin, Garske, & Davis, 2000; Horvath et al., 1993). One such instrument is the Working Alliance Inventory (WAI; Horvath, 1981; Horvath & Greenberg, 1986, 1989; Horvath, 1994) which was developed and validated based on Bordin's theoretical model of the therapeutic alliance. It was designed to evaluate the strength of the working alliance from the therapist, the client, and independent observer perspectives. Its focus is on the collaborative nature of the relationship between the client and the therapist and is designed to measure the strength of that relationship. More specifically, this instrument was designed to measure Bordin's definition of the construct of the therapeutic alliance; namely, the bond that develops between the client and therapist, and the mutually agreed upon tasks and goals of therapy, (Martin, Garske, & Davis, 2000).

Research evaluating the reliability and validity of this measure is positive. For instance, based on Hoyt's (1941) algorithm, Horvath and Greenberg (1989) found reliability estimates based on item homogeneity indexes that ranged from  $r = .85$  to  $r = .92$ . Furthermore, the authors found a composite alpha value for the 32 items in the scale was  $r = .93$ . A more recent meta-analytic reliability generalization (RG) study examined 25 studies published between 1989 and 2002 (Hanson, Curry, and Bandalos, 2002). Results revealed internal consistency estimates that



ranged from  $r = .77$  to  $r = .97$  for all scale scores and total scores. In addition, studies of convergent and discriminant validity are supportive (see Horvath 1994 for a review). Overall, studies using the Working Alliance Inventory (WAI) have shown that the working alliance has a positive impact on outcome and that a strong alliance between client and therapist allows for engagement, trust, and agreement on therapeutic objectives (Horvath & Greenberg, 1994).

Over the past couple of decades, research into the therapeutic alliance has consistently shown that the client-therapist relationship is related to outcome (Horvath & Symonds, 1991). In their meta-analysis, Horvath and Symonds (1991) found that the relationship between quality of alliance and outcome had an average effect size of .26. A more recent meta-analysis found an average effect size of .22 (Martin, Garske, & Davis, 2000). The latter authors suggested that their results supported the notion that the alliance is therapeutic in and of itself. Regardless of technique or mode of therapy, when a positive alliance develops early in treatment, it is likely to remain throughout therapy and ultimately lead to more positive outcome ratings. The authors also found that the therapeutic alliance related to positive therapeutic outcome regardless of moderator variables such as the alliance rater, the timing of the ratings, and the type of instrument used to rate the alliance (Martin, Garske, & Davis, 2000). Furthermore, some have suggested that the scales measuring the alliance have a restricted range; clients and therapists tend to only use the upper 20% - to 30% of the scale (Tryon, Blackwell, & Hammel, 2008). They suggested that ratings with a less restricted range would produce a larger alliance-outcome relationship.

Some researchers contend that the WAI does not adequately capture the power imbalance that exists in mandated treatment settings (Howgego, Yellowlees, Owen, Meldrum, & Dark, 2003). These authors argue that traditional measures of the therapeutic relationship do not consider the issue of control that may exist in these situations. Although that is overtly the case, one can argue that the Working Alliance Inventory does just that through a scale that targets the mutually identified goals. Even clients who are forced to engage in treatment have the option of participating. That is, clients are forced to attend treatment, not to engage. If a client is not interested in deriving any benefit from therapy, it often becomes evident early on through their level of participation and engagement with the process. Although many clients may feel pressured to attend as a result of incarceration, parole, or probation orders, their level of participation varies. It can be argued that the Goals and Tasks scales of the WAI capture that

level of engagement and that clients who are not motivated for treatment would likely score lower on these scales.

Although there are a variety of tools used to measure the working alliance, the WAI is currently the most widely used and the most vigorously researched (Skeem, Jouden, Polaschek, & Camp, 2007). As such, despite the possibility of not capturing power imbalances, the present research opted to use this measure to assess the relationship that develops between offender and primary therapist and how that relationship impacts or is related to treatment completion and rates of recidivism.

### **1.3 Sexual Offenders**

Approximately 24% of the Canadian federal correctional population is composed of sexual offenders, a number that includes both parolees and incarcerated offenders (Motiuk & Belcourt, 1996). To be charged with a sexual assault, one must have committed an assault that was sexual in nature and that violated the sexual integrity of the victim (Edmonton Police Service, 2012). It is considered an act of violence with three levels of seriousness: 1) sexual assault, 2) aggravated sexual assault, and 3) sexual assault with a weapon, threats to a third party or causing bodily harm. If the victim of the offense was under the age of 16, the charges include: 1) sexual interference, which involves physical contact to the body of the victim for a sexual purpose, 2) invitation to sexual touching, and 3) sexual exploitation (the perpetrator is in a position of authority or trust). There are additional sexual offences that include exposure and public nudity, for instance.

In order to come under federal jurisdiction, an offender must be given a minimum sentence of two years. Any smaller sentence falls under provincial jurisdiction and the offender must serve his or her time in a provincial facility, or be supervised by a provincial government body. According to the severity of the offense, sentencing of sexual offences varies from days up to a maximum sentence of life in prison (i.e., 25 years before eligible for parole). According to Motiuk and Belcourt (1996), at the time their data was collected, the average sentence length of sexual offenders was four years and eight months; this was much lower than the average sentence of all incarcerated federal offenders which was calculated at six years and six months.

To be released from prison, an offender must either reach his or her warrant expiry date, be granted statutory release, or be granted parole. An offender who serves his or her full

sentence in prison (i.e., is released on warrant expiry) is not supervised in the community. Most offenders who have not been granted parole are statutorily released after they have effectively served two-thirds of their prison sentence. In contrast to warrant expiry, once released on statutory release, the offender continues to be monitored in the community by CSC, often resides in a halfway house and reports to a parole officer. Unlike warrant expiry and statutory release, to effectively be granted parole, offenders must demonstrate and convince members of the Parole Board of Canada that risk to the community can be managed outside of an institution. In making their decision, the Board considers whether “the offenders understand their offences, the factors that contributed to their criminal behaviour, the progress they are able to demonstrate as a result of their participation in treatment programs, and the soundness of their release plans” (Parole Board of Canada, 2009, [http://pbc-clcc.gc.ca/infocntr/myths\\_reality-eng.shtml](http://pbc-clcc.gc.ca/infocntr/myths_reality-eng.shtml)). The Board considers testimony and reports provided from a variety of sources including but not limited to parole officers, social workers, psychologists, and treatment facilitators, for example. In reaching a decision about the type of release, the Board seeks aggregate information from multiple sources. Ultimately, the Board must be convinced that the offender’s risk to re-offend has been reduced and that he or she is safe to re-enter into the community.

One way to reduce risk may be to engage in treatment programs that are offered in the institutions. However, there has been considerable skepticism regarding the effectiveness of sex offender treatment to reduce recidivism (Furby, Weinrott & Blackshaw, 1989). Critics have argued that the results from early reviews reflected flawed methodology both in research and practice (Marshall & Pithers, 1994; Rice & Harris, 2003). Reviewed studies tended to be non-specific in their orientation and non-specialized toward sex offenders. As treatment became more specialized toward sex offenders, and took a cognitive behavioral approach with a relapse prevention focus, evaluation studies became more positive (Marshall, Anderson, & Fernandez, 1999). More recent research with better methodology supports this trend (Hanson, Bourgon, Helmus, & Hodgson, 2009).

In response to calls for more vigorous evaluative procedures of modern programs, a group of researchers from California designed the “first true randomized trial of modern cognitive behavioral approaches with incarcerated adult sexual offenders,” commonly referred to as California’s Sex Offender Treatment and Evaluation Project (SOTEP) (Marques, Wiederanders, Day, Nelson, & van Ommeren, 2005, p. 81). This study compared the rates of re-

offense in offenders who took part in an inpatient relapse prevention program with two groups of untreated offenders (i.e., the prison control groups). Results from their eight year prospective study found no significant differences in recidivism between treated and untreated groups (Marques, Wiederanders, Day, Nelson, & van Ommeren, 2005). Despite the “gold star” standard of research applied to this program, the authors acknowledged several limitations. For instance, in lieu of increased treatment attrition, they were willing to retain offenders in treatment with low motivation and performance. In addition, this program did not adhere to the principles of Risk, Need, and Responsivity (RNR). For example, although it was a high intensity sex offender treatment program, participants were not high risk offenders. Studies have shown that providing intensive services to low risk offenders can actually serve to increase recidivism (Bonta, Wallace-Capretta, & Rooney, 2000). As such, results from the SOTEP study may have been affected and the rates of recidivism inflated because of the inclusion of treated low risk offenders. Another limitation is that there was only a minimal focus placed on addressing dynamic risk factors which weakened treatment. In a review of sex offender treatment, Hanson et al. (2009) found that programs that adhered to all three principles of RNR demonstrated the largest reduction in both sexual and general recidivism and that there is an additive effect of adhering to the principles (i.e., programs that adhere to all three principles demonstrate a 26% reduction in rates of recidivism; those who adhere to only two principles demonstrate an 18% reduction, and those who adhere to one principle demonstrate a 2% reduction in rates of recidivism, (Andrews & Bonta, 2006)). Given that SOTEP adhered most strongly to only the general prong of the responsivity principle (i.e., the program was cognitive behavioral in nature), the low observed treatment efficacy rates are not surprising (see also Marshall & Marshall, 2007).

Modern standard sex offender treatment programs tend to be a combination of psycho-education with a cognitive behavioral approach (Cordess, 2002; Marshall, Anderson, & Fernandez, 1999; Marshall & Serran, 2004). This combination has been regarded as the treatment of choice. Evidence demonstrates that detailed treatment manuals and highly structured programs are “what works” with offenders (Andrews, 2001; Leschied, 2001). The RNR model of rehabilitation posits that interventions aiming to reduce criminal behavior must be applied in a compassionate, understanding, and collaborative manner in order to be effective and

to benefit society as a whole (Polascheck, 2012). In other words, the essential components to building a strong therapeutic alliance must be present in order to help instill change.

In the past, behaviorists did not support the notion of a therapeutic alliance inspiring change. Instead, it was believed that positive relationships developed as a result of being effective in helping clients make changes in their lives (Horvath, 2000). Behaviorists now generally support the idea that a positive therapeutic relationship can foster feelings of trust and safety, ultimately leading offenders to practice and implement new skills learned through therapy.

The research in the area of treatment efficacy for sexual offenders is contradictory and scientists have yet to reach a consensus, largely due to the difficulty in evaluating such programs (Hanson et al., 2002). As previously stated, the first “truly randomized trial” (i.e., the SOTEP study) with a sex offender population found no differences in rates of recidivism. However, Olver, Wong, and Nicholaichuk (2009), in their review of a high-intensity inpatient sex offender treatment program (the same program for which the data for the current research was obtained), found that treated offenders sexually recidivated significantly less than the control group after a 20 year follow up period. Specifically, the Clearwater program adhered to the principles of RNR, adding support to the current thinking that the *what works* principles can reduce rates of recidivism over the long term.

The current research focused on the therapeutic alliance that developed between sexual offenders and their primary therapists. It attempted to examine its quality and strength and determine if indeed this relationship led to improved outcomes with this particular population. Given that the present research drew its sample from the same program as was evaluated by Olver et al. (2009), there is confidence that the program is relatively successful and that generally, offenders demonstrate positive outcomes after completing the program. Whether the working alliance contributed to this success was examined.

#### **1.4 Working Alliance and Sexual Offenders**

Researchers generally agree that therapist characteristics contribute to the effectiveness of therapy (Beck, Rush, Shaw, & Emery, 1979; Kohut, 1990; Rogers, 1975; Lambert, 1989; Luborsky, 1984). However, as Mahoney and Norcross (1993) have stated, technique and therapeutic relationships are interrelated and are not mutually exclusive. Given these assertions,

we can then assume that therapy would reach maximum effectiveness when skilled clinicians implement effective techniques (Marshall et al, 2003).

In his review of the literature related to clients' experience of therapy, McLeod (1990) concluded that clients have identified therapeutic process as more important than technique. For instance, he suggested that the ability to listen, to show understanding, demonstrate empathy, and offer encouragement were all identified as helpful by clients. When these factors and others that contribute to a positive working alliance are not present, research has shown that rates of treatment noncompletion have risen (Horvath, 2000; Beckham, 1992; Samstag, Batchelder, Muran, Safran, & Winston, 1998). This poses a problem for sex offenders in particular because sex offenders who drop out of treatment have demonstrated higher recidivism rates than those who complete treatment (Olver, Stockdale, & Wormith, 2011). Therefore, ensuring the development of a strong and positive therapeutic relationship with this population is imperative to ensuring success.

Additionally, research has shown that clients' overall perceptions of their therapists are related to improvements in treatment (Andrews, Bonta, & Hoge, 1990; Marshall et al., 2003). For instance, in his review of the impact of the therapeutic relationship on clients, Horvath (2000) concluded that clients who saw their therapists as confident, directive, and sincere, showed more treatment benefits than clients who did not. Moreover, a study that examined the development and course of the therapeutic relationship in high risk violent offenders over the span of an eight month treatment program found that offenders whose alliance increased the most throughout the course of treatment demonstrated the most change (Polaschek & Ross, 2010). Data was collected over a 3.5 year period from fifty offenders and their therapists in seven consecutive treatment cohorts. Using the Working Alliance Short Form (WAI-S) to assess the therapeutic alliance and the Violence Risk Scale to measure change, Polaschek and Ross (2010) concluded that offenders who viewed their therapists as interpersonally warm, empathic, and collaborative tended to demonstrate more positive behaviours and increased motivation. This is likely explained by the idea that the more positively clients perceive their therapists the more likely the client is to engage in the therapeutic process thereby effectively creating a more positive outcome (Saunders, 1999). This study is particularly relevant to the present research as the demographics are similar with a large Aboriginal population (i.e., Maori and Pacific people), with 52% also scoring at or above the cut-off for psychopathy as measured by the Psychopathy

Checklist: Screening Version. Although the present research does not measure change in the therapeutic alliance, an attempt to capture the impact of the alliance was measured through comparing rates of recidivism.

Caution must be heeded when examining the ratings of the alliance as rated by therapists; often therapists rate what they believe are their clients perceptions of them as higher than they actually are (Marshall et al., 2003; Horvath, 2000). Because it is the client's perception that is related to change and not the therapist's estimate of the quality of the relationship, we must be certain that the clients actually feel positive (Marshall & Serran, 2004). As such, it is especially important for offenders to view their therapists as sincere and supportive. Unfortunately, offenders often have a difficult time developing trust with therapists and hence, have problems engaging in the therapeutic process.

Though it seems intuitive that trust should play such a large role, gaining the trust of an offender can be difficult. Often, offenders view therapists as just another government employee with divided loyalties. Dahle (1997) examined this issue of trust more specifically in his study of 400 randomly chosen prison offenders who provided self-ratings regarding their motivation for therapy. He found that trust in the treatment provider's intentions predicted treatment readiness and commitment. Similarly, in their review of the literature, Marshall et al., (2003) reported that generating trust in offenders was crucial to instilling any kind of change in individuals with mental health difficulties. Therefore, overcoming lack of trust between client/offender and treatment provider is imperative. Although the current study does not overtly examine trust, the WAI measures the bond that develops between client and therapist on a subscale of the WAI (the Bond subscale) of which trust is a component (Horvath et al., 1993).

Despite the difficulty in instilling trust between therapists and offenders, research has indicated that offenders identified the therapist as the most important factor to effective treatment (Drapeau, 2005). In his series of pilot studies, Drapeau used both quantitative (e.g., various measures including the Core Conflictual Relationship Theme Method and the Defense Mechanism Rating Scale) and qualitative techniques (e.g., Comparative Analysis, Plan Analysis, and Dynamic Qualitative Analysis) to analyze the responses of 24 child molesters (2005). He found that qualities that contributed to these ratings included honesty, respect, caring, and the ability to be nonjudgmental and non-critical. When the therapist was perceived as supportive,

caring, and genuinely had the offenders best interests at heart, positive alliances were achieved, thereby effecting positive change.

Furthermore, offenders are often mandated treatment and are expected to complete programs or engage in therapy in order to fulfill the rehabilitation expectation of their sentences. Given that treatment engagement is usually required before an offender will be considered for parole or in order to fulfill part of their community sentence orders, offenders may see treatment as mandatory and therefore not approach therapy as openly as one who is self-referred. These offenders may be more difficult to engage in treatment and developing a strong alliance with their therapist can prove challenging. The three essential components of forging a strong alliance include identifying mutually agreed upon tasks and goals of the treatment, in addition to developing a bond with the therapist. Although it is possible to develop a strong bond with a therapist when the treatment is mandatory, often the tasks and the goals of therapy are pre-defined. As a result, two of Bordin's essential components to building a strong alliance are lacking (i.e., tasks and goals). Accordingly, offenders are immediately faced with an inherent challenge to treatment and reaching positive outcomes.

Some argue that treatment providers of those offenders who are mandated treatment have an additional responsibility that is not captured in our current methods of measuring the therapeutic alliance. The argument is that these treatment providers are responsible for caring for offenders, in addition to maintaining control of them (Skeem, Loudon, Polaschek, & Camp, 2007). Although there are no current instruments to date that measure the construct of control in offender/therapist relationships, one could argue that the scores on the WAI might in fact, reflect this dynamic. The WAI is composed of three scales: Task, Bond, and Goals. Although none of these scales explicitly measure control in the therapeutic relationship, it can be argued that those relationships that are based primarily on control, or have a strong element of control, would be reflected in poor scores on at least two of the scales of the WAI. Specifically, scores on the Bond scale would likely be lower for those individuals who felt that they were being "controlled" by their therapists. Bond scores are made up of items that reflect "mutual trust, acceptance and confidence" (Horvath, 2003, p.252). The term control directly contradicts the idea of mutuality, therefore feelings of being controlled would likely be reflected in poor Bond scores. A similar argument applies to the scale that measures the Goals of therapy. Given that



this scale measures the “mutually agreed upon goals,” those who do not agree with the purpose or the goals of therapy will score low on this scale.

Those who argue that there is not a tool that explicitly measures the control that exists in these relationships between therapists and offenders who are mandated treatment are correct. However, it can also be argued that the impact of control is reflected in the subscale scores of the WAI.

**1.4.1 Working alliance as a responsivity factor.** Over the past couple of decades, research on correctional populations has uncovered what is commonly referred to in the literature as “What Works” for the treatment of offenders (Andrews, 2001). This body of research followed some years after the publication of Martinson’s (1974) systematic review of correctional treatment programs which concluded that “nothing works” for reducing recidivism among offenders. The prevailing belief at that time was that correctional programming was ineffective and did not have “any appreciable effect on recidivism” (p. 25), offering support to those who felt that a more punitive approach to correctional practices was warranted. More specifically, harsh criminal sanctions were thought to be the best option for protecting the general public, notwithstanding a lack of empirical evidence for this notion.

Despite widespread public and systemic support for implementing more severe punishments on criminals, researchers continued to investigate the effects of correctional programming. Since Martinson’s series of reviews, research has revealed that criminal sanctions alone are not effective at reducing recidivism (Cook & Roesch, 2011; Andrews, Bonta, & Hoge, 1990). Currently, researchers are more interested in answering the question, “what works for whom?” (Wormith, 2007; Norcross & Wampold, 2011) in contrast to the previously dominant ‘nothing works’ doctrine. Research now supports the notion that correctional programming does work if it adheres to some basic principles; namely the principles of risk, need, and responsivity (RNR) (Hanson et al., 2009).

The risk principle dictates that the intensity of the program should match the offender’s level of risk. For example, high risk offenders are more likely to demonstrate reductions in recidivism following intensive programming while low risk offenders do best with little or no interventions (Andrews & Dowden, 2006). Moreover, other research has provided evidence for the belief that there is a risk to disrupting the positive social networks of low risk offenders when they were placed in the same programs as high risk offenders (Kennedy, 2000). With this in

mind, the predominant perspective of psychological researchers is that in order to achieve the greatest reductions in recidivism, providing intensive service to high risk offenders is ideal.

The second principle, the need principle, reflects the notion that offenders' criminogenic needs should be targeted in treatment. Criminogenic needs are those risk factors that are directly linked to the criminal behavior. For instance, an offender who committed a crime in order to support his or her dependence on drugs would benefit from a program designed to address substance abuse. The idea is that if the specific needs of the offenders are addressed in treatment, then the criminal behavior should desist, resulting in lower rates of recidivism.

Finally, the responsivity principle suggests that treatment delivery should match the offender's level of insight, cognitive capacity, language, and culture (Dowden & Andrews, 2000; Beyko & Wong, 2005). According to Bonta and Andrews (2007), responsivity includes both general and specific factors. General responsivity suggests that programs should be of a cognitive-behavioral social learning style, as it has been shown to be effective regardless of the offender type (i.e., Aboriginal offender, female offender, violent offender, sex offender, etc.; Bonta & Andrews, 2007). On the other hand, specific responsivity refers to those specific characteristics of the offender that might affect programming (i.e., cognitive ability, learning style, personality, etc.). When offender programs are tailored to meet these specifications, learning is maximized. Studies have demonstrated reductions in recidivism from addressing one or two of the principles in treatment. However, as previously delineated, the cumulative effects of addressing all three are much more significant (Hanson et al., 2009). Moreover, studies indicated that treatment interventions that did not adhere to any of the three principles can be iatrogenic (Bonta & Andrews, 2007).

Though much research has investigated the role of risk and needs of offenders, historically, not much attention has been paid to responsivity factors (Kennedy, 2000). Recent research into the noncompletion rates of ethnic minorities in correctional programs suggested that factors associated with responsivity have largely been ignored. For instance, Spiropoulos, Spruance, and Van Vooris (2005) found a 14% treatment effect for Whites, but for African Americans, the effect was only 3%. Similarly, Wormith and Olver (2002) found that 80% of high risk Aboriginal offenders dropped out of treatment compared to 38% overall. Given that this research also demonstrated that individuals who dropped out of treatment had higher rates of recidivism (57% completers versus 77% non-completers), addressing the reasons for the higher

noncompletion rate in Aboriginals would be beneficial. The present research specifically examines whether the therapeutic alliance, or lack thereof, may contribute to higher rates of treatment noncompletion in an Aboriginal population.

The principle of responsivity suggests the need for flexibility on the part of the therapist. That is, in order to achieve maximum benefits, therapy must be suited to the specific offender needs. At times this might require adjusting personal style or delivery. As most offender programs are delivered in a group format, this poses an even greater challenge. Facilitators must adjust their style to meet the needs of the individual as well as the group as a whole. Research has demonstrated that results are positive when the principles of responsivity have been addressed (Bonta, 2005). As such, in order to understand the specific needs of each offender a detailed and thorough assessment must be completed prior to beginning treatment.

**1.4.2 Working alliance as a risk factor for treatment noncompletion.** Previous research has demonstrated that treatment attrition among offenders is high, particularly among sex offenders (Wormith & Olver, 2002; Geer, Becker, Gray, & Krauss, 2005). A recent meta-analysis that included 114 studies with over 41,000 offenders as participants, examined offender program treatment attrition and its relationship to recidivism and confirmed this finding, concluding that offenders who were the highest risk and demonstrated the most needs were the least likely to complete treatment (Olver, Stockdale, & Wormith, 2011). Regarding sex offender programs specifically, the authors found that treatment responsivity issues (i.e., negative impression management, negative treatment attitudes, and denial) were most strongly linked to attrition. As would be expected, offenders with higher levels of motivation and who were engaged in treatment were less likely to drop out of treatment (Olver et al., 2011). High attrition among this group of offenders does not bode well, as Olver et al. (2011) also found that treatment noncompletion was a significant predictor of sexual as well as other forms of recidivism. Results from Wormith and Olver's (2002) study were similar in that they found that high risk offenders with less education and less employment background were less prone to successfully complete treatment. Other studies have reported treatment attrition rates as high as 30% to 50% among sex offenders specifically (Hunter & Figueredo, 1999; Kraemer, Salisbury, & Spielman, 1998; Moore, Bergman, & Knox, 1999; Geer, Becker, Gray, & Krauss, 2005). These results are of concern, given that the programs are designed for this population.

According to the principles of RNR, offenders who are deemed high risk would most benefit from high intensity treatment programs. Unfortunately, studies such as Olver et al. (2011) found that it is this population (i.e., high risk offenders) who are most likely to discontinue treatment. One possible explanation is that high risk offenders often display characteristics that are not conducive to establishing strong therapeutic alliances. For instance, individuals who score high on measures of psychopathy display characteristics such as shallowness, selfishness, and an inability to show remorse. Though they may appear to be engaged in treatment and demonstrate some improvement, this is not necessarily the case. Some argue that psychopathy is characterized by an inability to form strong relational ties (Hare, 2003); as such, it is unlikely that these high risk offenders are able to form a true working alliance. Given these challenges, forming strong relationships with high risk or psychopathic offenders is extremely challenging and it is possible that high rates of treatment noncompletion among high risk offenders are related to this inability to form strong therapeutic alliances (Hemphill & Hart, 2002).

This idea was supported in a recent study by Olver and Wong, (2011). They found that those offenders who demonstrated callous/unemotional traits (high scores on the Emotional facet of the PCL-R) were more likely to drop out of treatment. They posited that individuals who exhibited these traits were less likely to be able to form strong therapeutic bonds with their treatment providers, and were likely viewed by treatment staff as callous and unemotional, aloof, and cold. They concluded that attempts to instill empathy or caring in these individuals are likely to fail and could ultimately lead to termination of treatment (Olver & Wong, 2011).

It seems intuitive that the working alliance can affect whether a client remains in therapy or decides to drop out. When the relationship between the therapist and the client is positive and supportive, overcoming obstacles is much more likely to occur. On the other hand, when there are some components of the working alliance that are missing, the drive to overcome obstacles is weakened and dropping out of treatment might be a more salient alternative.

**1.4.3 Implications for recidivism.** A meta-analysis of 61 studies and more than 23, 000 sex offenders, found that the average recidivism rate for sexual offenders was 13.4% (Hanson & Bussiere, 1998). Though this is a relatively low rate of recidivism, the authors found that those individuals who dropped out of treatment were at a higher risk to reoffend than those who completed treatment ( $r = .17$  which corresponds to about a 17% difference in the sexual

recidivism rate between noncompleters and completers). In their more recent meta-analysis, Olver, Stockdale, and Wormith (2011) found that treatment attrition was positively correlated with recidivism, regardless of type of program (sexual, domestic, general violence) or outcome (general, violent and non-violent recidivism). They found that recidivism rates ranged from 10 to 23% higher for treatment non-completers than for completers, suggesting the importance of retaining offenders in the treatment programs.

One study of approximately 280 federal sex offenders attempted to determine whether good treatment behavior was associated with lower rates of recidivism (Seto & Barbaree, 1999). Surprisingly, results did not support the authors' hypothesis. Rather, they found that offenders who scored high on a measure of positive treatment behavior and scored above 15 on the PCL-R were four times more likely to recidivate, and to commit a new, serious offence than other offenders. In addition, results indicated that offenders who dropped out of treatment were more likely to score higher on a measure of psychopathy. The authors suggested that individuals with higher PCL-R scores may have been more adept at manipulation and exploiting others or that they may have learned these skills in treatment. They then use these newly honed skills to commit new, more serious crimes once in the community (Seto & Barbaree, 1999). The results of this study fuelled the debate over whether psychopaths should be allowed to participate in treatment and whether they are in fact, treatable. However, it is important to keep in mind that this study did not use the extensive Canadian Police Information Centre (CPIC) files to gather recidivism data, and the follow-up time was relatively short at only 32 months. Furthermore, the authors used a low cut-off score on the PCL-R, thereby including many offenders in their sample who did not meet the diagnostic criteria for psychopathy. Based on their sample, it is difficult to determine whether individuals who do in fact meet diagnostic criteria as defined by the PCL-R would respond differently to treatment. Despite these limitations, some have argued that these results suggest that treating psychopaths is more dangerous than helpful, the treatment causes harm hypothesis (Hart & Hare, 1997; Rice & Harris, 1997). These findings could have tremendous impact on treatment and to offenders who score high on the PCL-R.

Due to the potential implications of that research, others attempted to replicate Seto and Barbaree's findings with mixed results (Looman, Abracen, Serin, Marquis, 2005). Barbaree followed up with the same sample of sex offenders several years later to determine whether a longer follow-up time combined with more complete recidivism data might affect outcome

(2005). This second study did not support the results of Seto and Barbaree's 1999 study; Barbaree was not able to support the idea that offenders who scored high in psychopathy and did well in treatment were at a higher risk to recidivate. In 2006, Langton, Barbaree, Harkins, and Peacock investigated the role of treatment response and recidivism among a group of sex offenders. Compared to other similar studies, the Langton et al. (2006) study was the most methodologically sound as their study included 418 sex offenders, a 5 year follow-up period, used CPIC outcome data, and applied a cut-off PCL-R score of 25. Much like Barbaree (2005), treatment response failed to predict both serious and sexual recidivism. However, this study did reveal that offenders who scored 25 or higher on the PCL-R and had a negative response to treatment recidivated at a faster and higher rate than others; high PCL-R scorers with a positive response to treatment, by contrast, had lower rates of sexual reconviction (Langton et al., 2006).

More recently, Olver and Wong (2009) examined rates of drop out, therapeutic change, and sexual and violent recidivism among a group of 154 treated sex offenders who were also rated on the PCL-R. Results indicated that psychopathic offenders were more likely to drop out of treatment and to recidivate violently than non-psychopathic offenders. However, in this particular study, most psychopathic offenders completed treatment (73%) which is higher than other reported treatment retention rates in the literature. Olver and Wong suggested that this may be a result of that particular sex offender treatment program whose mandate is to pay particular attention to responsivity issues with moderate to high risk offenders (2009). According to the principles of RNR, when programs are designed to target the specific needs of the offenders and can adjust and accommodate to individual participants' needs, chances of remaining in treatment are better. Furthermore, Olver and Wong found that positive therapeutic changes were associated with a reduction in the rates of violent and sexual recidivism, regardless of scoring high or low on a measure of psychopathy (2009). Though there remain some skeptics who believe that psychopaths are untreatable, there is a small but growing body of empirical literature to counter this sentiment.

Olver and Wong's (2009) study also highlighted the importance of focusing on issues of responsivity. That is, treatment programs must take into account the needs of the participants, and facilitators are responsible for addressing those needs. When responsivity issues are addressed in treatment, it will likely lead to increased working alliance. Offenders whose needs are met and are made to feel that they are important tend to develop stronger associations with

their facilitators. It follows that this would lead to increased participation, and ultimately better outcome. The present research was an attempt to provide support for the idea that offenders who develop stronger alliances with their primary therapists will demonstrate lower rates of treatment noncompletion and ultimately lower rates of recidivism.

## **1.5 Aboriginal Offenders**

In 2010/11, there were approximately 163,000 adult offenders involved in Canada's correctional system and approximately 38,000 adults in custody (Statistics Canada, 2012). Of this population, approximately 19% of federal admissions, and 27% of provincial/territorial admissions were of Aboriginal ancestry. As Aboriginal peoples constitute approximately 3% of the Canadian population, it is clear that Aboriginal offenders are extremely overrepresented in correctional facilities. In fact, some federal institutions in the prairie region of the Correctional Service of Canada (CSC) report that more than half of their offender population is of Aboriginal descent (Correctional Service of Canada, 2009). Additionally, it has been noted that federal Aboriginal offenders are at a greater risk to re-offend than non-Aboriginal offenders (Moore, 2003). For instance, indicators of recidivism, parole revocations, and conditional release show that Aboriginal offenders are less successful than non-Aboriginal offenders (Correctional Service of Canada, 2005). These statistics point to the need for further interventions in an attempt to successfully re-integrate Aboriginal offenders into the community and to prevent further criminal behavior.

Although reasons for this over-representation are not completely clear, many have suggested that differences in socio-economic status, lower levels of education and employment, and greater instances of substance abuse are to blame (Moore, 2003; Roberts & Melchers, 2003; Bonta, Laprairie, & Wallace, 1997; La Prairie, 2002). Therefore, correctional agencies place much importance on offender programming in an attempt to address some of these issues commonly referred to as "criminogenic" needs. These programs include, but are not limited to, substance abuse programs, cognitive living skills programs, sex offender treatment programs, family violence programs, violence prevention programs, and literacy programs (Mason, 2001). The aforementioned "core" programs are designed to help offenders address issues that are salient to their criminal thinking and are intended to prevent future criminal conduct

(Correctional Service of Canada, 2005). However, it has been argued that the high rate of non-participation in core programming by Aboriginal offenders is an indicator that these programs do not meet the needs of this population (Vandoremalen, 1998).

At the same time, specific Aboriginal programming is well received by this population and appears to be addressing some of those needs that cannot be met in core programs (CSC, Aboriginal Issues Branch, 2001). Though it is not clear why some Aboriginal offenders respond to Aboriginal programming more positively than mainstream programs, it is possible that it involves being able to form stronger alliances between facilitators (in this case, Elders) and program participants.

Though there is ample evidence to support the importance of developing and maintaining a strong therapeutic alliance, how this relationship is affected by ancestry is not clear. Cultural paradigms tend to help shape people and their identities, and hence, how they interact with others (Shonfeld-Ringel, 2001). Therefore, it stands to reason that cultural ancestry would impact the therapeutic alliance. In addition to examining the relationship between working alliance and offender status, the current research also explored how Aboriginal ancestry impacts the working alliance and affects outcome.

## **1.6 Working Alliance and Ancestry**

Unfortunately, there is a dearth of information regarding the role of ancestry in psychology. Kazarian and Evans (1998) critique the lack of cultural theory, research, practice and training in North American psychology as a whole. Despite the recent move of the American Psychiatric Association (APA) to incorporate cultural awareness and competency in clinical practice, little progress has been made in the last decade and research regarding cultural practices remains scarce. Therefore, it is difficult to draw any conclusions about how culture and ancestry might influence westernized practice of psychology.

In Canadian correctional practice in particular, given the large proportion of Aboriginal offenders, it is important to understand the manner in which ancestry impacts treatment efficacy. According to Sue, Allen, and Conaway (1978), Aboriginal peoples find mental health services unhelpful for several reasons: concerns over white supremacy, feeling unwelcome and out of place, bureaucratic run-around, and services that are unusual to their traditional ways of being.



Despite these challenges and the large number of Aboriginal people in correctional facilities, program expectations are no different. That is, Aboriginal people are expected to complete the same programs and are expected to make the same changes as all other prison inmates. Though there are additional treatment options for Aboriginal offenders (i.e., attending sweats and working closely with elders), most mainstream programming was designed based on a western style of thinking. Therefore, understanding how cultural issues might affect the offenders and their responsivity to westernized programs is important.

Though the literature is scarce, one consistent finding relates to the high noncompletion rate among Native Americans from therapy. In their examination of services rendered to 13,450 clients (including both Chicano and Native American clients), from 17 mental health facilities in the Seattle, Washington area, Sue et al., (1978) found that in addition to being overrepresented in Seattle, the treatment noncompletion rates were in excess of 55% for Native Americans. The authors suggested that language barriers, stereotypes and discrimination may be responsible for the high attrition rates among ethnic minorities (Sue & Zane, 1987). They further suggested that the most important factor that contributes to drop out is the inability of therapists to provide culturally responsive forms of treatment. The authors have made assumptions that most therapists have been trained to work with Western-European clients and are often unfamiliar with ethnic minority cultures and traditions. Although the Sue et al. (1978) study is dated and their sample only consisted of 152 Native Americans out of 13,450 people, support for this postulation was found in a review by Kazarian and Evans (1998). Specifically, they cited a study by Bernal and Padilla (1982) who conducted a survey of 106 accredited clinical psychology programs and found that psychology students were inadequately prepared to work with minority cultures. With that being said, we must accept these assertions with caution as there is currently little evidence to support these claims. Although the forensic research is clear that Aboriginal offenders in Canada tend to drop out of treatment more frequently than their non-Aboriginal counterparts (Nunes & Cortoni, 2006; Wormith & Olver, 2002), specific reasons for this are not entirely clear and future research into this area would be beneficial to understanding the high rates of attrition in this ancestral group.

Given that our criminal offender population is disproportionately Aboriginal with Aboriginal adults representing 19% of the federal offender population and 3% of the general population in Canada; (Correctional Service of Canada, 2009; Public Safety Canada Portfolio

Corrections Statistics Committee, 2011), it is important to understand the role that ancestry plays in rehabilitation and in making therapeutic gains. As previously stated, current thinking in psychology is that the relationship that develops between the client and the therapist is the most important factor to influencing outcome, despite mode of therapy (Martin, Garske, & Davis, 2000; Safran & Muran, 1995). Theorists such as Bordin have suggested that the working alliance helps to facilitate counseling techniques. That is, when a positive therapeutic alliance exists, the client and therapist are more effective in instituting therapeutic strategies and techniques and greater change can then occur. According to Bordin, in order to achieve a positive and strong working alliance, certain conditions must be met; namely, the tasks, bonds, and goals, must all be identified and endorsed by both the client and the therapist. Though these three factors have all been accepted as integral components of the working alliance, how they are influenced by ancestry has not been demonstrated.

Though many people have endorsed the notion of a working alliance, and research has shown that a stronger, positive working alliance leads to better outcomes, there remain some questions as to what influences these specific factors. More specifically, how does ancestry influence the tasks, bonds, and goals of therapy and what happens when the client and therapist have different cultural backgrounds?

Ariel (1999) suggested that in order to form a good cross cultural alliance, one must be aware of his or her own culture and how it differs from the client's. He further suggested admitting to one's own ignorance of the other culture while being open and responsive to new ideas and cultural practices. This implies that one does not need to know the intricacies of every culture, but instead, must be aware of one's own biases and limitations. A working alliance can still be formed between people of different cultural backgrounds but in order for this to occur, it is important to admit ignorance and be open and willing to learn different customs and traditions. Showing the client open mindedness regarding their ancestry can help forge a strong alliance despite differences in culture.

Unlike Aboriginal programs, many core correctional programs take some form of cognitive therapy. That is, facilitators aim to change the distorted cognitions that many offenders have regarding certain areas in their lives and replace them with more positive and pro-social cognitions. For instance, the Regional Psychiatric Centre (RPC) in Saskatoon, Saskatchewan offered the Aggressive Behavior Control (ABC) program to high risk, high needs offenders who

had been convicted of violent crimes and suffered from mental health disorders. The program used a cognitive behavioral approach in a group setting in an effort to change distorted cognitions. In 2002, Wormith and Olver (2002) studied the ABC program at the RPC in an attempt to determine the characteristics of those offenders who tend to drop out of treatment. Their results indicated that the attrition rate for high-risk Aboriginal offenders was the greatest at approximately 80%. Although there are likely several reasons for this high rate of attrition, one such conclusion could be that the westernized mode of delivering therapy did not meet the needs of this particular clientele.

On the other hand, correctional programmes that were designed to address the needs of the Aboriginal offender population take a different approach in attempting to reform offenders. Rather than applying a westernized approach (e.g., cognitive-behavioral), many Aboriginal programs are designed to address the spiritual and cultural needs of its participants (Wilson, 2007). The emphasis is on teaching the offender Aboriginal culture, traditions, and history instead of attempting to alter the offender's cognitions while focusing solely on criminogenic needs. According to Aboriginal spirituality principles, gaining knowledge of culture and tradition induces healing to occur (Waldram, 1993). Regrettably, most mainstream offender programs do not take this cultural perspective but rather, use more cognitive-behavioral approaches.

In his qualitative review, Mason (2000) interviewed eleven federally incarcerated Aboriginal men who were participating in both cognitive behavioral treatment and traditional Aboriginal Sweat Lodge ceremonies at the Regional Psychiatric Centre in Saskatoon, Canada. Mason's study aimed to acquire "a deeper understanding and appreciation of the perceptions of respondents as they relate to the psychological effects and potential healing properties from attending the Sweat Lodge ceremony and cognitive-behavioural programs" (2000, p.1), through the use of a semi-structured interview questionnaire. Offenders who participated in this study described some similarities between treatment programs (i.e., the promotion of insight, awareness, and understanding as it relates to various areas in life such as family, relationships, community, and society). Despite these acknowledged similarities, respondents indicated that they viewed the programs as more dissimilar than similar, particularly in regards to therapeutic alliance and engagement. For instance, Mason noted that the relationship with the Elder was facilitated "by virtue of his status within the Aboriginal culture" (p. 187). In response to his

questions related to “perceptions of cognitive-behavioural programming and the Sweat Lodge Ceremony” (p. 94), Mason identified several thematic sub-categories, one of which was “respect”. Mason’s interpretation of participant responses was that the Elders were automatically granted respect and reverence based on their title. However, some of the offenders in this study reported that respect with the facilitators had to be earned; that is, they had to show respect before being given respect. Furthermore, they indicated feeling respect from the Elders and a sense of safety and refuge in the Sweat Lodge ceremonies and from the Elders. In contrast, the offenders reported feeling judged by the facilitators which thereby resulted in being cautious and guarded during the CBT program. Although Mason’s study was qualitative in nature and included the opinions of eleven participants, it provided a window into some of the thoughts that Aboriginal offenders had of CBT programs in comparison to the spiritual based ceremonies they participate in while incarcerated.

In his most recent work, Waldram (2012) described his ethnographic research with sex offenders undergoing an intensive treatment program. In fact, the program that he studied is the same program from which the current sample of offenders was attending (i.e., the Clearwater program at the RPC). He described this program as “a high intensity treatment program for sexual offenders designed according to the principles of Cognitive Behavioral Therapy (CBT), a standard psychotherapeutic technique that seeks to change how individuals think about or understand their life” (Waldram, 2012, p. 2). Waldram later wrote that though the program was largely populated with Aboriginal men, he “found Aboriginality to play a minor role in program participation generally, and treatment staff made few efforts to search for or accommodate any perceived cultural differences” (p. 52).

As was the case with the Clearwater program, many correctional programs have not been modified to include an Aboriginal perspective. In fact, the majority of offender programs in Canada, and in other countries worldwide (e.g., Australia, New Zealand, and the United States), continue to take a cognitive behavioral approach (Howells, Heseltine, Sarre, Davey, & Day, 2004). Because this mode of therapy has some empirical support, administrators are more likely to endorse its use. On the other hand, to date there have not been any studies examining the efficacy of Aboriginal specific programs. Given that most programs are designed for a general population and not Aboriginal specific, it is important to examine how factors such as the working alliance contribute to cultural differences. The present research took a quantitative

approach to examining the relationships between offenders and their primary therapists in a CBT program. Based on Mason's results, it is hypothesized that offenders who are of Aboriginal ancestry would form weaker alliances, as defined by Bordin, with their primary therapists than those who are of non-Aboriginal ancestry. Although the current research does not evaluate the program specifically, it makes an attempt to examine the therapeutic relationship that develops between the Aboriginal offenders and their primary therapists and whether it is related to more positive outcomes (e.g., treatment completion and recidivism).

## **1.7 Psychopathy**

Psychopathy is a serious personality disorder that is defined by a constellation of behaviors and personality characteristics including: egocentricity, impulsivity, irresponsibility, shallow emotions, lack of empathy, remorse, and guilt, pathological lying, manipulateness, and the persistent violation of social norms and expectations (Cleckley, 1976; Hare, 1970, 1998b; Wong & Hare, 2005). Given these characteristics, the prevailing view that psychopaths are difficult to treat seems intuitive (Wong & Hare, 2005).

Based on what we know about the working alliance, it follows that offenders who are also psychopaths have difficulty forming the bond that is necessary to develop a strong positive working alliance. According to Bordin's theory of the working alliance, all three elements including the tasks, bonds, and goals are required to form to a positive therapeutic relationship. Because psychopaths are limited in their capacity to feel remorse, guilt, or empathy, often appear satisfied with themselves where they see little wrong with their attitudes and behaviors, and suffer little personal distress, forming a close bond with a therapist is not likely. In fact, the psychopath is often expert at manipulating and exploiting others; the antithesis of the qualities necessary to form a strong bond with people. While forming a strong 'bond' with the psychopath may be unrealistic, the relationship between the therapist and offender must remain respectful and professional in order to make any progress (Wong & Hare, 2005). However, one study that examined WAI and the PCL-R scores for a group of violent offenders found that the WAI was unrelated to psychopathy (Nast, 2003). These results were part of an undergraduate thesis project that included 24 participants. As such, generalization must be done with caution.

There is little doubt that psychopaths are a difficult population to work with therapeutically. However, that is not to say there is no hope in the treatment of psychopaths. In

the field of correctional research, there has been much debate on this issue, with many arguing that psychopaths are simply untreatable (Hart & Hare, 1997; Rice & Harris, 1997; Rice, Harris, & Cormier, 1992). Others have suggested that the research methodologies have been flawed and we therefore should not leap to such conclusions (D'Silva, Duggan, & McCarthy, 2004; Wong, 2000; see Working Alliance and Sexual Offenders section for detailed discussion). In order to come to a more definitive conclusion on this issue, methodologically sound studies will need to be conducted.

While forming close therapeutic bonds with psychopaths may be difficult and perhaps not possible, the remaining two factors of Bordin's working alliance triad must be the focus of therapy; namely, the tasks and the goals. The present research will attempt to examine this issue more carefully by exploring whether sex offenders who are also psychopaths are able to form a positive working alliance with their program facilitators, despite their personality deficits. Furthermore, treatment noncompletion rates and rates of recidivism will be explored.

## **1.8 Measuring Psychopathy**

Psychopathy was first operationalized in 1941 by Hervey Cleckley. He outlined 16 criteria that described a psychopath, including being chronically maladjusted with superficial relationships, being highly manipulative, and lacking in empathy among other attributes. Robert Hare furthered this work by developing a valid and reliable instrument to assess the disorder; the Psychopathy Checklist (Hare, 1980) and later the Psychopathy Checklist- Revised (PCL-R, Hare, 1991, 2003). Over the past couple of decades, this tool has become the gold standard both in psychopathy research and in clinical assessment of the disorder (Hare & Neumann, 2008).

The PCL-R is a 20-item, clinical construct rating scale composed of two broad factors: Factor 1, Interpersonal/Affective and Factor 2, Social Deviance and four narrow factors or facets: Facet 1, Interpersonal; Facet 2, Affective; Facet 3, Lifestyle; Facet 4, Antisocial. The items that load onto Factor 1 describe a variety of interpersonal and affective traits that are commonly associated with psychopathy. For instance, items such as shallow affect and superficial charm load onto Factor 1. On the other hand, Factor 2 is formed by items that when combined, may describe a socially deviant lifestyle. For instance, juvenile delinquency, irresponsibility, and impulsivity are some of the items that load onto this factor. Scores are

derived through semi structured interviews, file information, and any other collateral sources available.

It is clear that the construct of psychopathy, as measured by the PCL-R, is linked to violence and criminality. Several meta-analyses have demonstrated the predictive accuracy of the PCL scales to general and violent recidivism (Campbell, French, & Gendreau, 2009; Edens, Campbell, & Weir, 2007; Salekin, Rogers, & Sewell, 1996), sexual violence (Hanson & Morton-Bourgon, 2005), and institutional misconduct (Walters, 2003). The current study will specifically examine how ratings on the PCL-R are related to rates of recidivism among sexual offenders, and how psychopathy is related to the therapeutic construct of working alliance.

## CHAPTER TWO: THE CURRENT STUDY

### 2.1 Rationale

There are many factors that can influence program participation and program impact. Such influences may include the relationship that develops between the client and the therapist, the appropriateness of the program for the individual, and the overall effectiveness of the program. As sex offenders constitute a large percentage of the Canadian offender population (i.e., approximately 18.5% (Correctional Service Canada, 2012), CSC), it follows that programs designed to address their needs more appropriately should be implemented. Despite the considerable efforts of CSC to address the needs of the sex offender population, there continues to be debate over the efficacy of such programs on reducing rates of recidivism among sex offenders (Collaborative Outcome Data Committee, 2007b; Furby, Weinrott, & Blackshaw, 1989; Hanson, Bourgon, Helmus, & Hodgson, 2009). Part of this debate involves the various factors that impact treatment efficacy. The current program of research examined some of these factors and their relationship to outcome in a sample of sex offenders.

More specifically, the therapeutic relationship between sex offenders and their program facilitators was examined. A primary aim of the current study was to investigate to what extent the therapeutic alliance was linked to treatment outcome, specifically through an examination of treatment retention and recidivism. A secondary aim was to investigate the role of Aboriginal ethnicity with working alliance. Finally, previous studies have examined the relationship of psychopathy to treatment noncompletion and retention and the current study also examined the relationship of PCL-R measured psychopathy to therapeutic alliance as measured by the WAI.

### 2.2 Hypotheses

Based on a review of the literature, the following hypotheses were made:

**2.2.1 Working alliance and treatment retention.** First, it was hypothesized that WAI scores would be negatively correlated with treatment noncompletion as well as duration of time spent in treatment (i.e., as WAI score increases, noncompletion decreases; as length of time spent in treatment increases, noncompletion decreases).



**2.2.2 Working alliance and recidivism.** Second, high WAI scorers would have lower rates of treatment drop out and recidivism than low WAI scores.

**2.2.3 Working alliance and ancestry.** Third, WAI scores would be significantly lower in Aboriginal compared to non-Aboriginal offenders. In addition, Aboriginal offenders would have higher rates of treatment noncompletion and recidivism than non-Aboriginal offenders, irrespective of WAI scores.

**2.2.4 Working, alliance, treatment outcome, and ancestry.** Fourth, Aboriginal offenders scoring low (i.e., below the median) on the WAI would have higher and faster rates of treatment noncompletion and recidivism than Aboriginal offenders scoring high on (i.e., above the median) on the WAI, or non-Aboriginal offenders in general, irrespective of WAI group.

**2.2.5 Working alliance and psychopathy.** WAI scores would be significantly lower in psychopathic offenders (i.e., PCL-R score > 25) compared to nonpsychopathic offenders (i.e., PCL-R < 25).

**2.2.6 Working alliance, treatment outcome, and psychopathy.** Psychopathic offenders who also scored low on the WAI would have higher and faster rates of treatment noncompletion than other offenders.

**2.2.7 Working alliance, treatment outcome, ancestry, and psychopathy.** Finally, psychopathic offenders who were also of Aboriginal ancestry and scored low on the WAI would have the highest rates of attrition and recidivism than any other group. Non-Aboriginal offenders who scored less than 25 of the PCL-R and had high WAI scores were predicted to have the lowest attrition and recidivism rates than any other group.

## CHAPTER THREE: METHOD

### 3.1 Participants

Participants included 427 male federal offenders who consecutively attended the Clearwater program at the Regional Psychiatric Centre in Saskatoon (RPC Prairies) between 1998 and 2005 (see Table 1). Approximately 45.9% of participants were of Aboriginal ancestry and the majority of the balance (51.8%) was Caucasian. The mean age of the sample at program admission was 36.76 years ( $SD = 10.18$ ) and at data collection, close to 50 years ( $M = 49.77$ ,  $SD = 10.32$ ). On the basis of their index offences, approximately 93.4% of offenders in the sample were classified as sex offenders and the remaining 6.6% were categorized as nonsexual violent offenders. It is important to note that although their index offences were not sexual in nature these offenders do in fact have histories of sexual deviancy. Of those who do have sexual index offences, 50.8% were classified as rapists, 21.3% were extra-familial child molesters, 18.9% were mixed offenders, 5% were incest offenders, 2.1% were mixed intra/extra familial child molesters, 0.9% were non-contact sex offenders, 0.2% were offenders whose victims were adult family members only, and 0.7% engaged in sexually motivated offences. Four offenders were excluded from analysis because their Federal Penitentiary Service (FPS) numbers could not be located through the Offender Management System (OMS; a computerized case file management system used by CSC to manage offender file information throughout the course of their sentences) or the Canadian Police Information Centre (CPIC; a computerized database system operated by the Royal Canadian Mounted Police) and thus recidivism data and program completion data could not be obtained leaving a total of 423 offender cases for analysis.

Of the 423 participants, the average sentence length for those offenders with a determinate sentence ( $n = 375$ ) was 6.18 years with an  $SD$  of 4.14, ranging between one year and 29 years. The remainder of the participants ( $n = 48$ ) were serving life sentences that ranged from parole eligibility of ten years ( $n = 35$ ,  $M = 20.60$ ) to indeterminate sentences ( $n = 13$ ). The dates of offences ranged from 1967 to 2004 with the majority of the offences occurring between 1990 and 2000. Offenders spent an average of 205 days in the Clearwater program ( $M = 204.69$ ,  $SD = 68.12$ ) with more than 86% successfully completing program. Additional sample descriptives are presented in Table 1.

Table 1

*Descriptive Statistics for Criminal History and Sentencing Variables as a Function of Ancestry*

<b>Variable</b>	<b>N</b>	<b>Aboriginal M (SD)</b>	<b>N</b>	<b>Non-Aboriginal M (SD)</b>	<b>N</b>	<b>Total M (SD)</b>
Number of admissions to program	190	1.76 (1.19)	222	1.63 (1.21)	412	1.69 (1.20)
Age at admission	194	33.74 (8.79)	229	39.33(10.59)	423	36.76 (10.18)
Sentence length (years)	174	5.61 (3.68)	201	6.67 (4.46)	375	6.18 (4.14)
Length of time in treatment (days)	194	203.52 (58.29)	228	205.72 (75.82)	422	204.71 (68.26)
<b>Number of prior convictions</b>	182	19.16 (17.39)	210	12.83 (13.43)	392	15.78 (15.70)
Sexual	194	.97 (1.19)	229	1.66 (2.55)	423	1.35 (2.07)
Nonsexual violent	194	3.10 (3.61)	229	1.50 (2.62)	423	2.23 (3.21)
<b>Number of re-convictions</b>	184	5.82 (7.98)	209	2.95 (5.28)	393	4.29 (6.82)
Sexual	184	.45 (1.11)	210	.62 (2.01)	395	.54 (1.69)
Nonsexual violent	183	1.46 (2.26)	209	.55 (1.33)	394	.98 (1.88)

### **3.2 Treatment Program**

The Clearwater Program is a formalized sex offender treatment program offered in a Canadian federal maximum-security correctional treatment facility, the Regional Psychiatric Centre (RPC) in Saskatoon, Saskatchewan. The program's mandate is to develop and provide effective and efficient therapeutic programming for high risk sex offenders. This is a nationally accredited program; accreditation was based on the level of compliance to eight program evaluation criteria derived from the 'what works' principles previously outlined by Andrews and Bonta (2003). Programming and assessment is delivered through an interdisciplinary treatment team that consists of nurses, psychologists, psychiatrists, social workers, and parole officers. Treatment is based on a cognitive behavioral model of sexual deviance and aggression with a focus on relapse prevention (i.e., it subscribes to the principles of risk, need, and responsivity). Offenders are required to attend group and engage in individual treatment; they receive up to 20 hours per week of clinical contact. In addition, participants are offered opportunities to upgrade their education, learn work and life skills, and address interpersonal needs (i.e., attitudes and values) when appropriate. Furthermore, the Clearwater program attends to specific offender responsivity factors such as cultural factors, cognitive functioning, and treatment readiness whenever possible. The program is targeted primarily at sexual offenders who are assessed as high risk to re-offend sexually with high to moderate treatment needs and who would not be suitable for less intensive, prison based sex offender treatment programs. At the time of data collection, there were approximately 48 beds and programming lasted between six to nine months, depending on the needs of the individual.

### **3.3 Data Collection Sources**

The current study drew primarily on archival offender file information to rate the PCL-R and data collection protocols. The files used were taken from Offender Management System (OMS) and Canadian Police Information Centre (CPIC) files (a database maintained by the Royal Canadian Mounted Police). The CPIC database is said to be the most comprehensive source of criminal outcome data available on Canadian citizens (see Royal Canadian Mounted Police, 2006), despite its reliance on reported criminal activities. The information contained in the files varied; those that were considered more comprehensive contained psychological reports,

criminal profile reports, National Parole Board (NPB) reports, psychological treatment summaries, program reports, and treatment progress notes.

Working Alliance Inventories (WAI) were completed by offenders as part of routine paperwork. Approximately three months into treatment, offenders were asked to rate their primary therapists using the WAI. Subscale and Total scores were computed by RPC research staff and then entered into a spreadsheet.

### **3.4 Measures**

**3.4.1 Working Alliance Inventory (WAI).** As has been previously described, the WAI is a 36 item self-report measure that assesses the relationship that develops between a client and his or her therapist. The WAI was designed to capture the multiple perspectives of the working alliance by providing three rater versions of the measure; the client, the therapist, and/or from an observer's perspective. For the purposes of this research, "the client" refers to the offender receiving treatment and "the therapist" refers the client's primary therapist. The current study examines the clients' ratings of the alliance; offenders were asked to rate their primary therapist on the three subscales included in the WAI (Goals, Tasks, and Bonds).

The WAI is comprised of three subscales that are based on Bordin's conceptualization of the working alliance; namely, the identified goals and tasks of therapy and of the bond that develops between the client and the therapist. Ratings are assigned on a 7-point rating scale ranging from 1 (Never) to 7 (Always). Scores are summed to determine the three subscale scores and a total score. Total scores can range from 36 to 252 with higher scores reflecting more positive ratings. Horvath and Greenberg (1989) demonstrated adequate reliability estimates based on item homogeneity indexes, ranging from  $r = .85$  to  $r = .93$ .

**3.4.2 The Psychopathy Checklist-Revised (PCL-R).** The PCL-R is a 20-item symptom construct rating scale that assesses psychopathy in individuals. Items load onto one of two factors: Factor 1, which is further subdivided into Interpersonal and Affective facets and Factor 2, which is further subdivided into Lifestyle and Antisocial facets. Scores are based on a three point rating scale (0, 1, and 2) according to how much each item applies to a certain individual. Total scores range from 0 to 40 where a score of 30 or more is traditionally used to diagnose psychopathy (Hare, 2003). However, there is evidence that a cut-off score of 25 should be used when scores are solely based upon file information, given that archival data sources can

sometimes result in an underestimate of the interpersonal and affective features of the syndrome (Wong, 1988). Because the current ratings were based strictly on file review, a cut-off score of 25 was used; any scores above 25 were coded as “psychopath”, and scores of 25 and below were coded as “non-psychopath”.

The reliability and validity of the PCL-R have been demonstrated with male offenders and forensic patients (Hart & Hare, 1989; Hart & Hare, 1997; Hare, 1991; Hare, 2003). Moreover, indices of internal consistency and interrater reliability are generally high. For instance, Hare, Harpur, Hakstian, Forth, Hart, and Neumann (1990) reported ICC's that ranged between .77 and .92 and coefficient alphas of .84 and .79 for Factors 1 and 2, respectively. Furthermore, the authors found corresponding mean interitem correlations of .39 and .31. Though the PCL-R is a tool used to measure the construct of psychopathy, studies have also demonstrated its ability to predict a variety of recidivism outcomes (Hare, Clark, Grann, & Thornton, 2000). These sound psychometric properties have ensured the continued use of the PCL-R in both research and clinical practice alike.

### **3.5 Materials**

All offender information was collected at the RPC (Prairies) and stored in a secure computerized database. Once data collection was complete, all identifying information was removed from the database followed by subsequent analysis using Version 20.0 of the Statistical Package for the Social Sciences (SPSS).

### **3.6 Outcome Variables**

In order to explore the research questions, the present study looked at two outcome variables: 1) treatment completion and length of time spent in treatment; 2) sexual, violent, and general recidivism.

**3.6.1 Treatment completion.** For the purposes of the present study, program start and end dates were recorded to obtain the length of time spent in treatment for each offender. In addition, file information was used to determine whether the program was successfully completed or not; whether the offender completed the program or not was explicitly specified on the OMS computer database system and reasons for non-completion were usually outlined in the offender's final treatment report. Treatment non-completion was coded as a binary variable (0 =

completer; 1 = non-completer). The type of attrition was also recorded, specifically whether it was system generated, client generated, or program generated.

**3.6.2 Recidivism.** Recidivism was operationally defined as any new conviction and was coded as both a continuous variable (number of convictions) and as a binary variable (0 = no new convictions; 1 = new convictions) for each type of recidivism (i.e., sexual, non-sexual violent, and general/all).

### **3.7 Data Collection Protocol**

Basic demographic information, including birthdate and marital status, was collected via file information. Criminal offense data was collected through CPIC between January 2010 and August 2010. Coded information included the index offence (the offence for which they had been serving a sentence while in programming) and sex offender type (rapist, child molester, mixed, or incest). Sex offender type was operationalized using the criteria employed by Olver and Wong (2006). A rapist was defined as anyone who was charged or convicted of a sexual offense whose victim was at least 14 years of age. On the other hand, a child molester was defined as anyone who committed a sexual offense against a person under the age of 14 years. A mixed offender had at least one child and one adult victim and incest offenders were those who committed a sexual offense against a person with whom they were sufficiently close in relationship such that marriage would ordinarily be prohibited, including blood ties.

Ethnicity was also obtained from file information. Specifically, whether participants had self-reported as having an Aboriginal ancestry (i.e., Métis, Inuit, or First Nations) was noted. As is common practice, Ancestry was coded in binary format (i.e., 1 = Aboriginal; 0 = non-Aboriginal) as it is said to “make the coefficient of the logistic regression model easier to interpret” (Warner, 2008, p. 959).

Treatment noncompletion was defined as any premature withdrawal, dropout, termination, or failure to successfully complete the program (as determined by treatment staff). This variable was also coded in binary form (i.e., 1 = noncompletion; 0 = successful completion). In addition, length of program stay was coded as a continuous variable, up to one year maximum (356 days). Finally, the reason for noncompletion was also recorded (e.g., voluntary, system generated, disruptive behavior, etc.).

Recidivism was defined as any new conviction following first release to the community after program participation. Recidivism data was coded as both binary (1 = recidivism, 0 = no recidivism) and continuous (number of offences). Furthermore, type of crime committed (sexual, nonsexual violent, and general [i.e., all] recidivism) was coded. Nonsexual violent recidivism was defined as any crime that used or threatened to use force upon a victim but was not sexual in nature. Sexual recidivism was defined as any crime that was deemed sexual in nature or was sexually motivated. Non-violent crimes were those crimes that occurred without any person being physically hurt or injured during the crime (i.e., break and enter, theft). Finally, both number of charges and convictions were coded.

### **3.8 Planned Analyses**

**3.8.1 Working alliance and treatment noncompletion.** To examine the relationship between working alliance and treatment noncompletion, WAI total and subtest scores were correlated with the binary treatment completion variable and the continuous treatment length variable.

**3.8.2 Working alliance and recidivism.** To examine the relationship between working alliance and recidivism, WAI total and subtest scores were correlated with the binary recidivism variable and the continuous number of reconvictions variable.

**3.8.3 Working alliance and ancestry.** To examine ancestral group differences, t-tests for independent sample means were conducted on WAI total and subscale scores. In addition, point biserial correlations were also computed between the ancestry variable and WAI scores.

**3.8.4 Working, alliance, treatment outcome, and ancestry.** To examine the relationship of working alliance and ancestry to noncompletion, Lifetables survival analysis was performed. Cumulative noncompletion rate over program duration was examined in four groups: high WAI-Aboriginal (HW-A); low WAI-Aboriginal (LW-A); high WAI-non-Aboriginal (HW-nA); low WAI-non-Aboriginal (LW-nA).

**3.8.5 Working alliance, treatment outcome, and psychopathy.** To examine the relationship of working alliance and psychopathy to noncompletion, Lifetables survival analysis was performed. Cumulative noncompletion rate over program duration was examined in four groups: high WAI-Psychopath (HW-P); low WAI-Psychopath (LW-P); high WAI-non-Psychopath (HW-nP); low WAI-non-Psychopath (LW-nP).



**3.8.6 Working alliance and psychopathy.** To examine the relationship between working alliance and psychopathy, t-tests for independent sample means were conducted on WAI total and subscale scores. In addition, Pearson correlations were computed between PCL-R and WAI scores.

**3.8.7 Working alliance, treatment outcome, psychopathy, and ancestry.** To examine the relationship of working alliance, psychopathy, and ancestry to noncompletion, Lifetables survival analysis was performed. In addition, logistic regression was applied to examine how well WAI and PCL-R total scores predicted program completion for both Aboriginal and non-Aboriginal groups.

### **3.9 Procedure**

Ethical approval to conduct the present research was obtained from the Correctional Service of Canada, in lieu of obtaining consent from individual study participants, and the University of Saskatchewan's Behavioral Research Ethics Board.

The writer was provided with a list of WAI scores for approximately 427 federal offenders who had previously participated in the Clearwater program between 1998 and 2005. As part of a standard battery of questionnaires, the WAI was administered to offenders following their admissions to the Clearwater program at the RPC. Offenders were asked to rate their relationships with their primary therapists approximately three months into the treatment program. Scores for all three components of the WAI were recorded and entered into a database using FPS numbers to identify corresponding offenders.

Of the 427 offenders with WAI ratings, 30 had been previously scored on the PCL-R for a separate study. Interrater reliability for that subset of ratings was good, ICC = .84 (Olver and Wong, 2006). In order to increase the number of rated PCL-R's included for analysis, a random subset of 73 FPS numbers was selected from the 427 offenders with WAI ratings using SPSS statistics package. In an attempt to generate equal numbers of PCL-R scores for Aboriginal and non-Aboriginal offenders, cases were randomly chosen after ethnicity had been identified. Offender files were accessed from the Offender Management System (OMS), an electronic database containing detailed and comprehensive institutional files on all federally incarcerated offenders in Canada. These offender files were then reviewed by the primary investigator along with one trained research assistant. Each rater accessed all available file information as outlined

above for the other rater in order to ensure that outcome was unknown during the course of the file review. Each rater was responsible for reviewing offender file information until such time that enough evidence was collected to rate the offender on the PCL-R. After all files were rated on the PCL-R, all Total and Facet scores were entered into a database for analysis. Strong interrater reliability was obtained on the PCL-R as follows (values represent intraclass correlation, or ICC, averaged measures of absolute agreement) PCL-R total = .92; Interpersonal facet = .88; Affective facet = .57; Lifestyle facet = .74; Antisocial facet = .91; Factor 1 = .65; and Factor 2 = .93.

A data collection protocol for coding demographic, criminal history, and recidivism data was used. The demographic information was extracted from their RPC treatment files and entered into the database for analysis. The participants' criminal records were then accessed from CPIC to code recidivism data, which was entered in numeric format and inputted for analysis.

## **CHAPTER FOUR: RESULTS**

### **4.1 Data Screening and Brief Descriptive Statistics Related to the WAI**

Table 2 provides basic descriptive statistics related to key outcome variables and the various groups of offenders. Basic screening procedures as recommended by Tabachinek and Fidell (2001) revealed few violations of assumptions. As previously mentioned, four cases from the original data collection had to be removed as the FPS numbers could not be located, thereby disallowing for any additional file information to be obtained. Furthermore, one case was found to have a data entry error on one subscale of the WAI. In order to correct for this error, regression was used to estimate the value of the missing case, based on its linear relationships with the other two subscales across the whole sample. According to Tabachnik and Fidell (2001), this is a sophisticated and robust method for estimating missing values.

Table 2

*Descriptive statistics of key outcomes by groups*

	Treatment Completion	Treatment Incomplete	Length of Treatment	Sexual Recidivism	Non-Sexual Violent Recidivism	General Recidivism
	<i>N (%)</i>	<i>N (%)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
Overall <i>n</i> = 423	366 (86.5)	56 (13.2)	202.81 (59.84)	.54 (1.69)	.98 (1.87)	4.28 (6.81)
Aboriginal <i>n</i> = 194	162 (38.3)	32 (7.6)	202.90 (56.30)	.45 (1.11)	1.47 (2.26)	5.81 (7.98)
Non-Aboriginal <i>n</i> = 229	204 (48.2)	24 (5.7)	202.73 (62.81)	.62 (2.07)	.55 (1.32)	2.94 (5.27)
Psychopaths <i>n</i> = 51	43 (38.7)	8 (7.2)	189.78 (50.97)	.49 (.91)	1.81 (2.36)	6.55 (8.36)
Nonpsychopaths <i>n</i> = 60	55 (49.5)	4 (3.6)	191.38 (55.33)	.52 (1.15)	.73 (1.74)	2.56 (4.57)
Aboriginal psychopaths <i>n</i> = 24	16 (14.4)	8 (7.2)	197.08 (42.43)	.38 (.67)	2.24 (2.86)	6.43 (7.16)
Non-Aboriginal psychopaths <i>n</i> = 27	27 (24.3)	0	183.30 (57.53)	.57 (1.06)	1.46 (1.86)	6.65 (9.36)
Aboriginal nonpsychopaths <i>n</i> = 29	26 (23.4)	3 (2.7)	188.28 (52.79)	.45 (.74)	1.28 (2.25)	3.83 (5.64)
Non-Aboriginal nonpsychopaths <i>n</i> = 31	29 (26.1)	1 (1.0)	194.29 (58.32)	.60 (1.45)	.20 (.76)	1.33 (2.79)

*Note:* Successful program completion information was missing for one participant. Treatment completion and incompleteness scores are raw data representing number of individuals who completed or did not complete; Length of treatment is mean number of days; and recidivism scores are mean number of reconvictions.

Another concern related to the distribution of WAI scores. The Total WAI scores,  $D(422) = .10, p < .001$ , the Task subscale scores  $D(422) = .09, p < .001$ , the Bond subscale scores,  $D(422) = .09, p < .001$ , and the Goal subscale scores,  $D(422) = .08, p < .001$ , were all significantly non-normal. Examination of P-P plots and histograms revealed that WAI total scores and all three subscale scores were negatively skewed (see Figures 1-4). However, given that large sample sizes give rise to small standard errors, it was not surprising to see that these values were significant, even with small deviations from normality. Mean total WAI ratings for the total sample were calculated at  $M = 195.06, SD = 34.5$ , similar to other studies reporting WAI scores. For instance, one study that examined the working alliance between 39 sex offenders and their primary therapists reported a mean of  $M = 187.89, SD = 38.89$  in treatment completers versus a mean of  $M = 187.09, SD = 34.77$  in treatment noncompleters, which was not a significant difference (Beyko & Wong, 2005). However, another study that examined WAI scores between 107 men with a history in intimate partner violence and their CBT group therapist demonstrated mean WAI ratings of  $M = 193.77, SD = 32.17$  after the third and fifth sessions (Taft, Murphy, King, Musser, & DeDeyn, 2003). In a study of 143 inpatients at a Veterans Affairs hospital, patients reported mean WAI scores in relation to their case workers,  $M = 197, SD = 29$  after two years of treatment (Neale & Rosenheck, 1995). Another study of 90 seriously mentally disabled patients and their case managers reported mean WAI ratings of  $M = 202.9, SD = 35.1$ , after two years of treatment (Solomon & Draine, 1995).

Figure 1

*Frequency histogram of total scores on the Working Alliance Inventory (WAI)*

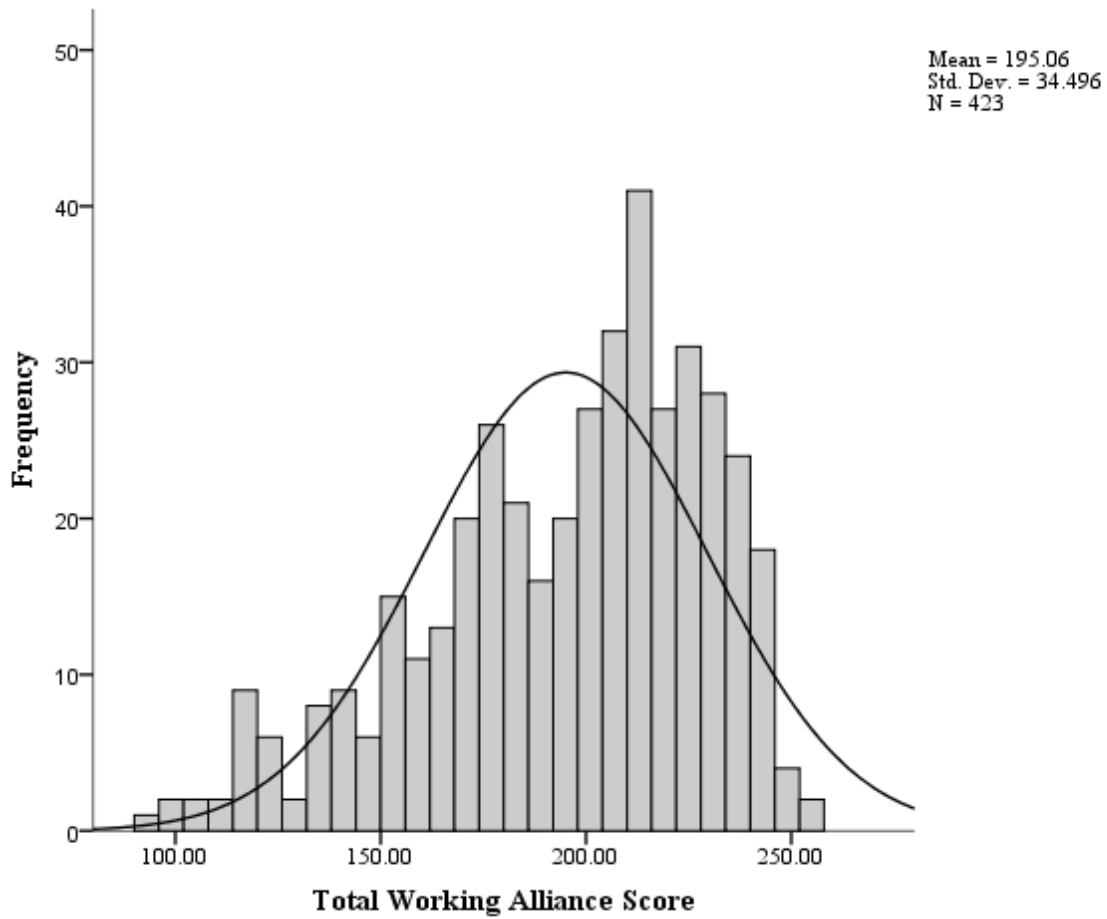


Figure 2

*Frequency histogram of Task subscale scores on the Working Alliance Inventory (WAI)*

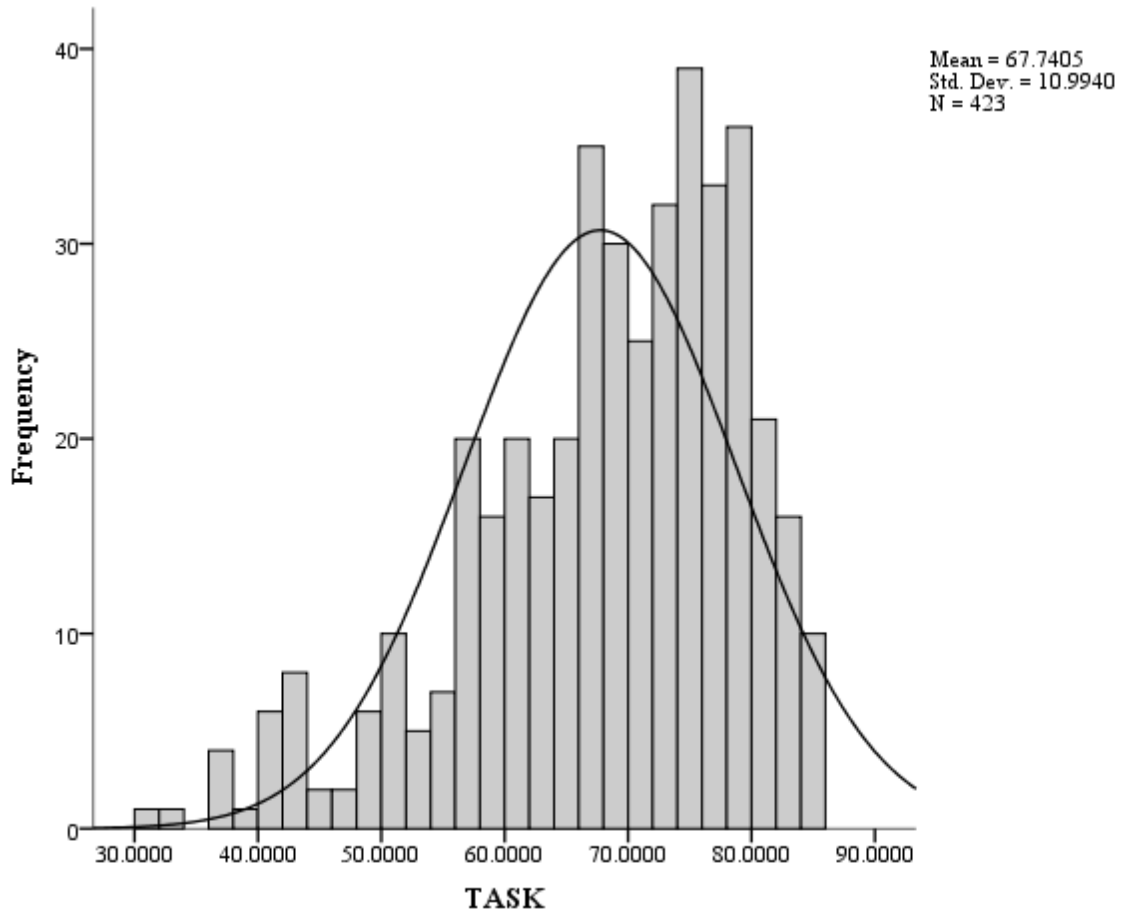


Figure 3

*Frequency histogram of Bond subscale scores on the Working Alliance Inventory (WAI)*

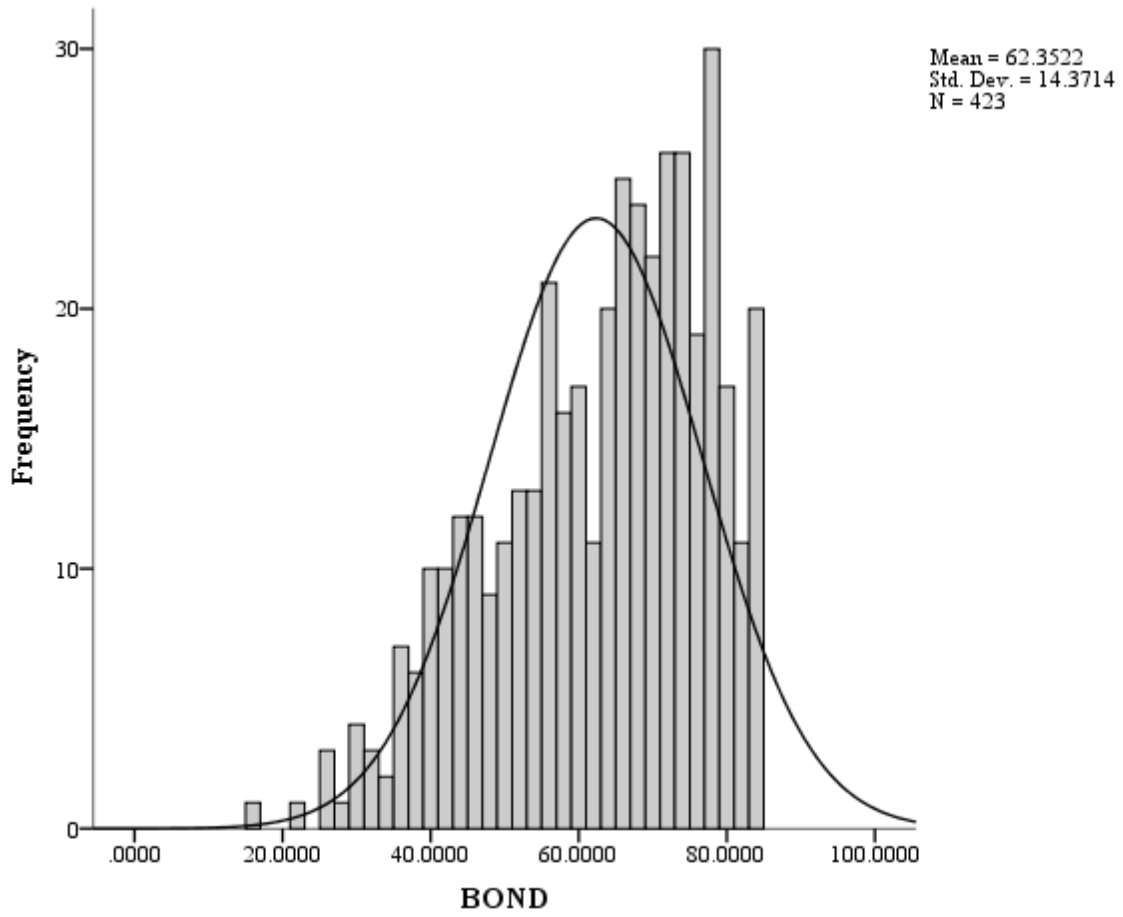
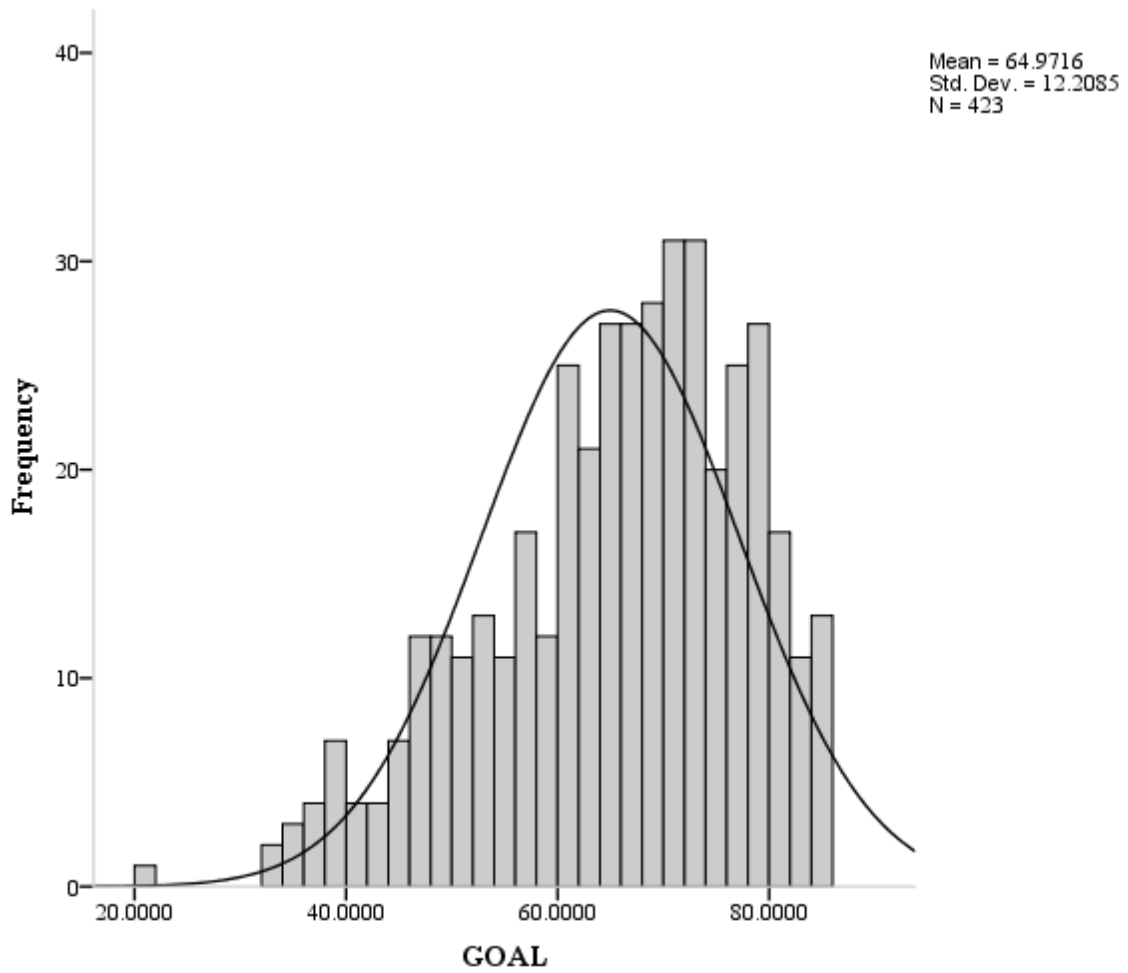




Figure 4

*Frequency histogram of Goal scores on the Working Alliance Inventory (WAI)*



Offenders were categorized by type of crime committed on their index offence (Sex Offenders = 1; Non-sexual violent = 2). Levene's test indicated that the variance for Total WAI scores was equal for Sex Offenders and Non-Sexual Violent Offenders,  $F(1, 421) = 2.25, ns$ ; as well as for scores on Task  $F(1, 421) = 0.08, ns$ , and Goal  $F(1, 421) = 1.69, ns$ , but not for Bond scores  $F(1, 421) = 3.889, p < .05$ . Analysis of WAI scores among these two groups revealed that sex offenders had lower Total WAI scores ( $M = 194.85, SD = 34.92$ ) than the nonsexual violent offenders ( $M = 198.04, SD = 28.14$ ), although this difference was not significant  $t(421) = -0.47, p > .05$ . The differences between the Task scores,  $t(421) = 0.56, p > .05$ , and the Goal scores  $t(421) = -0.40, p > .05$ , were not significant. However, there was a significant difference between Bond scores of Sexual offenders ( $M = 62.12, SD = 14.53$ ) and Nonsexual Violent offenders ( $M = 65.57, SD = 11.74$ ),  $t(421) = -1.23, p = .05$ , representing a small effect size,  $d = .26, r = .13$  (see Table 3).

Table 3

*Working Alliance Inventory scores by Offender Group*

WAI	Sex Offenders (N = 395)	Non Sexual Violent Offenders (N =28)	Total Sample (N = 423)	ES( <i>d</i> )	ES( <i>r</i> )
	Mean (SD)	Mean (SD)	Mean (SD)		
Task	67.82 (10.99)	66.61 (11.14)	67.74 (34.50)	0.11	0.05
Bond	62.12 (14.53)	65.57 (11.74)	62.35 (14.37)	0.26*	0.13*
Goal	64.91 (12.34)	65.86 (10.38)	64.97 (12.21)	0.08	0.04
Total	194.85 (34.92)	198.04 (28.14)	195.06 (34.50)	0.10	0.05

*Note:* Offenders were grouped based on their index offences.

Sex Offenders were further grouped based on the type of sexual crime they committed (1 = rapist; 2 = child molester; 3 = mixed offender; 4 = non-contact sex offender; see Table 3). Levene's test indicated that the variance for Total WAI scores was equal for all groups,  $F(3, 419) = 1.19, ns$ ; as well as for scores on Task,  $F(3, 419) = 0.636, ns$ , Bond  $F(3, 419) = 1.60, ns$  and Goal,  $F(3, 419) = 0.97, ns$ . Analysis of total WAI scores among these four groups revealed no significant differences between the various groups of sex offenders,  $F(3, 419) = 0.07, p > .05$ , but rapists had the lowest mean scores overall ( $M = 194.56, SD = 33.44$ ) and the non-contact sex offenders had the highest mean scores ( $M = 199.57, SD = 26.89$ ). Further, there were no significant differences between groups on the Task subscale,  $F(3, 419) = 0.32, p > .05$ , the Bond subscale,  $F(3, 419) = 0.45, p > .05$ , and the Goal subscale,  $F(3, 419) = 0.15, p > .05$  (see Table 4).

Table 4

*Working Alliance Inventory scores by Sex Offender Group*

<b>Sex Offender Group (n)</b>	<b>WAI Scores</b>			
	<b>Goal</b> Mean (SD)	<b>Task</b> Mean (SD)	<b>Bond</b> Mean (SD)	<b>Total</b> Mean (SD)
Rapist (216)	64.93 (11.67)	67.41 (10.76)	62.22 (14.27)	194.56 (33.44)
Child Molester (120)	65.43 (11.91)	68.12 (11.85)	62.20 (15.28)	195.75 (37.74)
Mixed Offender (80)	64.30 (11.92)	68.30 (10.26)	62.40 (13.61)	195.00 (33.30)
Non-Contact Sex Offender (7)	66.00 (11.47)	65.00 (12.85)	68.57 (10.77)	199.57 (26.89)
Total (423)	64.97 (12.20)	67.74 (10.99)	62.35 (14.37)	195.06 (35.50)

*Note:* Offenders were grouped based on their index offences.

An examination of WAI scores based on age was also conducted (see Figure 5 and Figure 6). At the time of entry to program, offenders ages ranged from 19 to 82 ( $M = 36.76$ ,  $SD = 10.18$ ). Age groupings were made based on decades (twenties, thirties, forties, fifties, and sixties). There were two offenders who were 19 years of age and two offenders who were older than 70 (i.e., 73 and 82); the former were included in the first group (i.e., twenties and under) and the latter were included in the last group (sixties and over) to aid in data analysis. Levene's test indicated that the variance for Total WAI scores were equal for all groups,  $F(4, 418) = 0.82$ , *ns*; as well as for scores on Task,  $F(4,418) = 0.76$ , *ns*, Bond  $F(4, 418) = 0.59$ , *ns* and Goal,  $F(4, 418) = 1.90$ , *ns*. Analysis of variance revealed that there was no main effect of age on Total WAI scores,  $F(4, 418) = 0.96$ ,  $p > .05$ , Task score,  $F(4, 418) = 1.59$ ,  $p > .05$ , Bond scores,  $F(4, 418) = 0.77$ ,  $p > .05$ , or Goal scores,  $F(4, 418) = 0.972$ ,  $p > .05$  (see Figure 7). When examined continuously, age at admission was significantly positively correlated with Total WAI ( $r = .10$ ,  $p < .05$ ) and Task scores ( $r = .13$ ,  $p < .01$ ) but not Bond ( $r = .08$ ,  $p > .05$ ) or Goal scores ( $r = .06$ ,  $p > .05$ ).

Figure 5

*Frequency Histogram of Age at time of Program Admission*

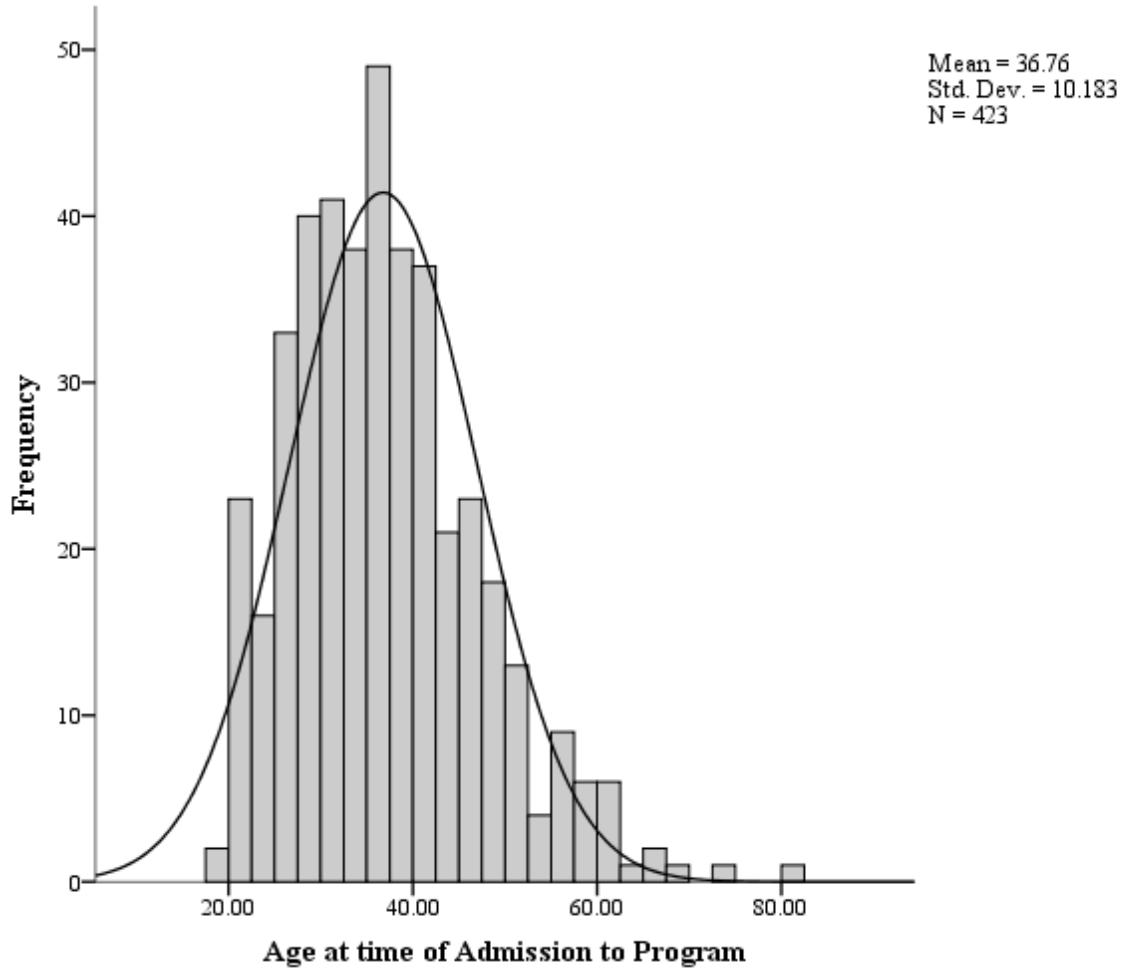


Figure 6

*Mean WAI scores of Various Age Groupings*

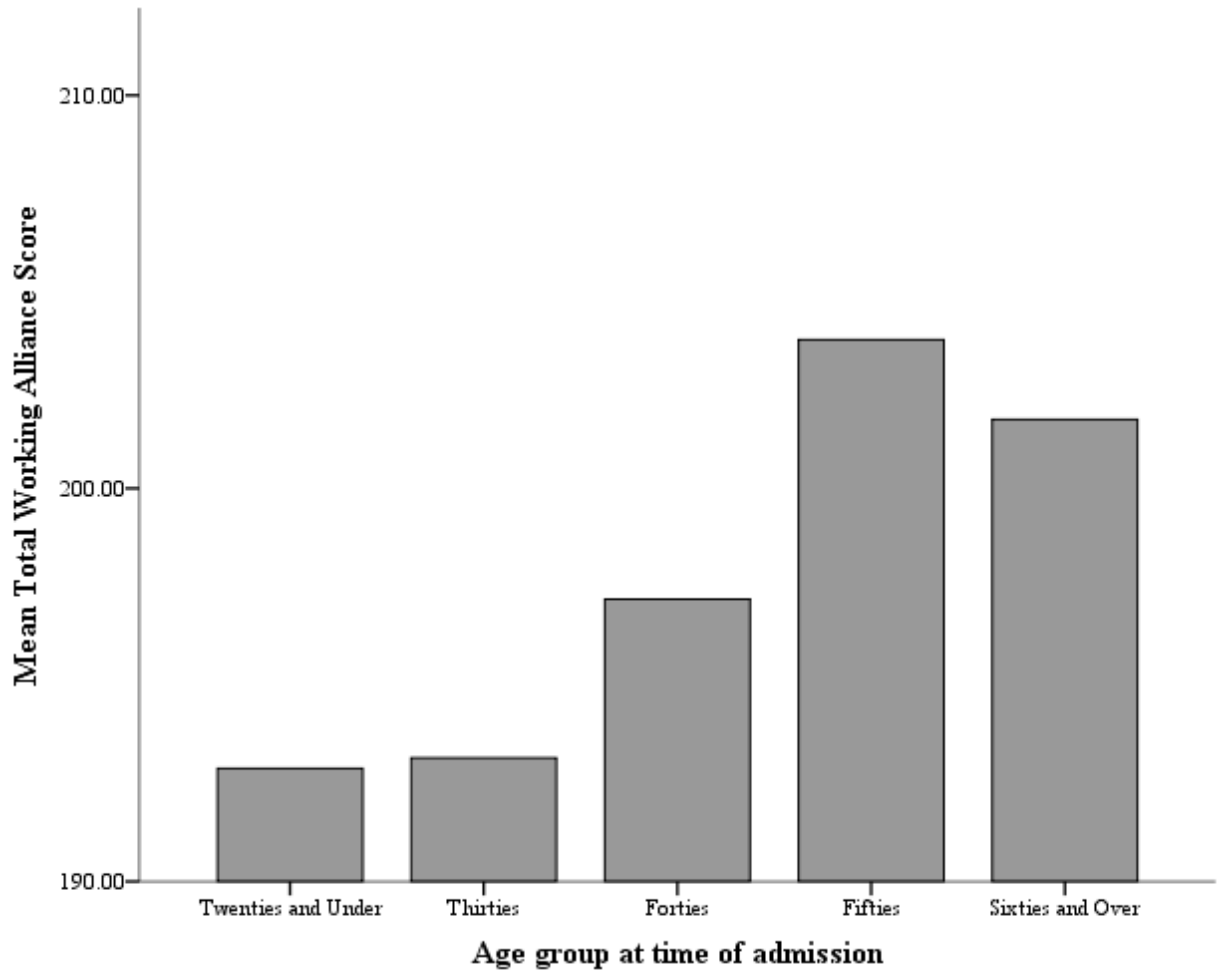
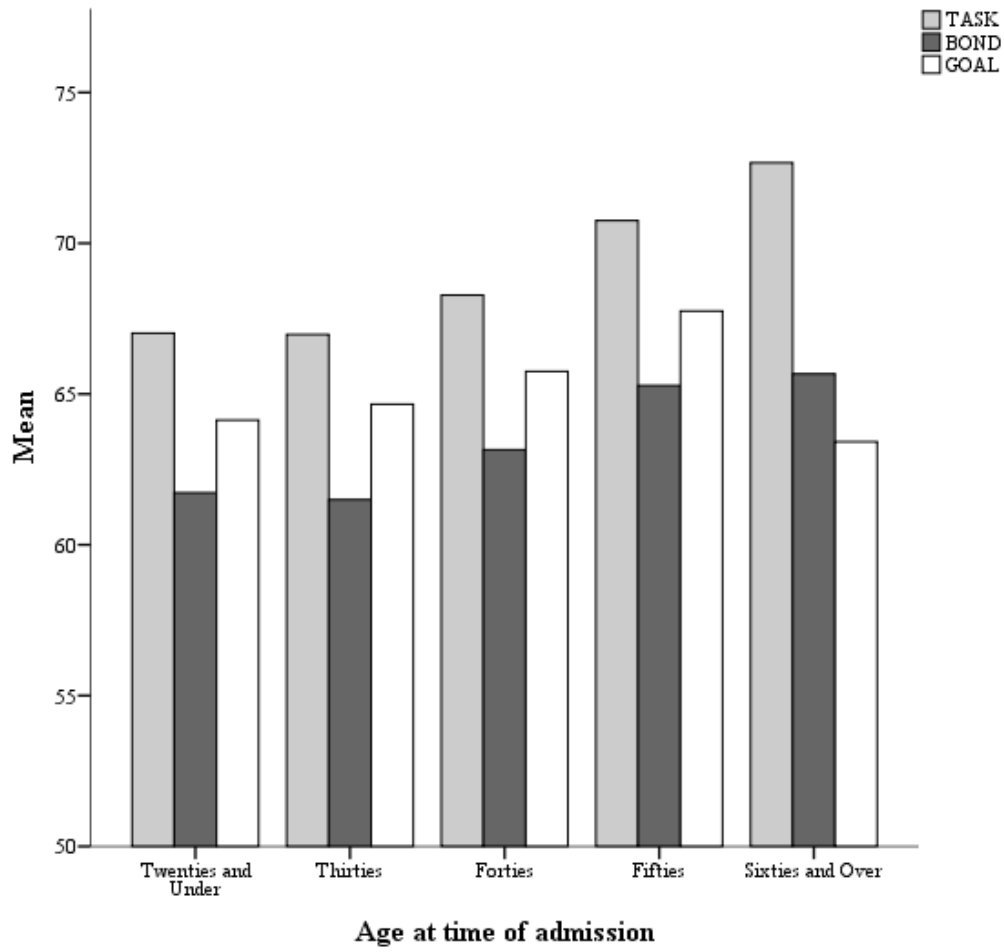




Figure 7

Mean WAI subscale scores as a function of Age



One case was missing program completion information. Once again, in order to correct for this error, regression was used to estimate the value of the missing case. Analysis of P-P plots and histograms revealed a non-normal distribution,  $D(423) = .11, p < .001$ . The majority of the cases ranged from 42 days to 345 days ( $N = 405$ ); however, there were three cases that spent less than 42 days in treatment (range of 21 – 41) and 15 cases that spent more than 345 days (range of 346 – 698; see Figure 8). In order to compensate for the few extreme outliers, a “one-year maximum” variable was created whereby the time spent in program could not exceed one year. Those offenders who spent more than 365 days in treatment (ranged from 370 – 698,  $N = 10$ ) were capped at 365 days.

Basic descriptive statistics related to number of days spent in treatment are presented in Table 2 and 5. The mean number of days spent in treatment was approximately 205 days ( $M = 204.71, SD = 68.17$ ), with Aboriginal participants spending slightly less time in treatment than the non-Aboriginal offenders, although this difference was not significant,  $F(1, 421) = .110, p > .5$ .

Sex offenders spent significantly more time in treatment than the nonsexual violent offenders,  $F(1, 421) = 4.96, p < .05$ . When sex offender groups were examined, Child Molesters spent the least amount of time in treatment on average,  $M = 199.87, SD = 56.42$ , and Mixed offenders spent the most amount of time in treatment,  $M = 216.73, SD = 89.82$ , although there were no significant differences among the various Sex Offender groups,  $F(3, 419) = 1.08, p > .05$ .

Figure 8

*Frequency histogram of number of days spent in treatment.*

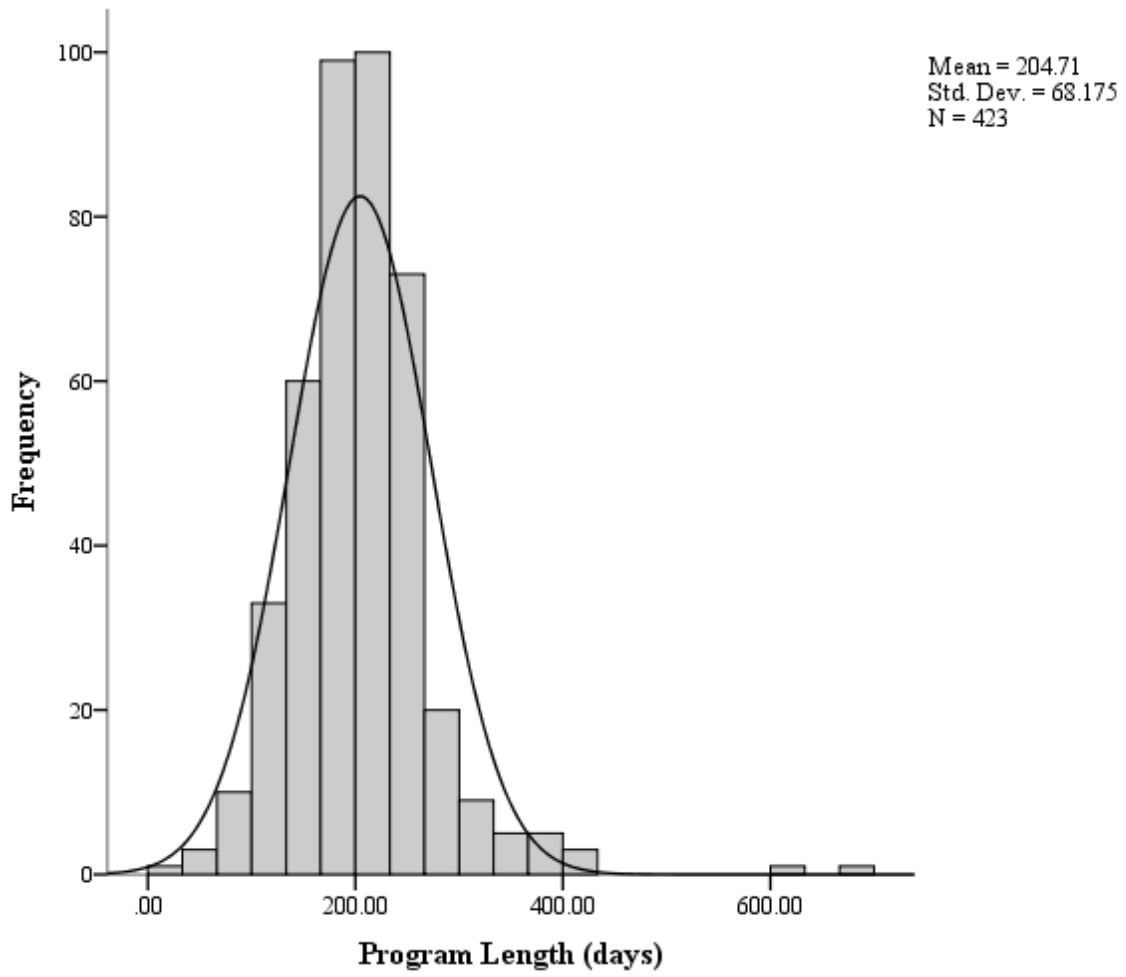


Table 5

*Descriptive statistics related to number of days spent in treatment program.*

	Number of Days in Program		
	<u>Mean (SD)</u>	<u>Minimum</u>	<u>Maximum</u>
<b>Ethnicity</b>			
Aboriginal (194)	203.52 (58.29)	37	418
Non-Aboriginal (229)	205.72 (75.66)	21	698
<b>Offender Groups</b>			
Nonsexual Violent Offenders (28)	177.11 (68.39)	21	291
Sex Offenders (395)	206.67 (67.82)	37	698
<b>Sex Offender Groups</b>			
Rapists (216)	203.09 (64.82)	21	418
Child Molesters (120)	199.87 (56.42)	86	413
Mixed Offenders (80)	216.73 (89.83)	72	698
Non-contact Sex Offenders (7)	204.71 (68.17)	83	246
<b>Age Groups</b>			
Twenties and under (114)	189.66 (64.75)	21	418
Thirties (166)	214.34 (71.47)	37	632
Forties (99)	204.34 (70.30)	100	698
Fifties (32)	208.88 (54.16)	105	381
Sixties and over (12)	206.42 (50.34)	118	292
<b>Overall Sample (423)</b>	<b>204.71 (68.17)</b>	<b>21</b>	<b>698</b>

## 4.2 Hypothesis 1: Working Alliance and Treatment Retention

In order to examine whether the strength of the working alliance had any impact on treatment noncompletion and length of time spent in treatment, point biserial correlations were calculated. As shown in Table 6, treatment noncompletion was significantly negatively correlated with all components of the WAI: Task ( $r = -.15, p < .01$ ), Bond ( $r = -.12, p < .01$ ), and Goal ( $r = -.15, p < .01$ ). Total WAI scores were also significantly negatively correlated with treatment noncompletion ( $r = -.15, p < .01$ ) suggesting that as the strength of the working alliance increased, rates of treatment noncompletion decreased. Correlations were interpreted based on Cohen's rubric of effect size where .10 is considered small, .30 is moderate and .50 is large (1988). Lifetables survival analysis (Figure 9) further indicated that those offenders with lower WAI scores had significantly higher and faster rates of program noncompletion than those with high WAI scores, Wilcoxin-Gehan (1) = 8.37  $p < .01$ . Conversely, length of time spent in treatment was positively correlated with Total WAI scores ( $r = .13, p = .01$ ), Bond ( $r = .14, p < .01$ ), and Goal ( $r = .10, p < .05$ ), but not with Task ( $r = .09, p > .05$ ). These results suggest that stronger working alliances between offender and primary therapist were associated with longer stays in treatment.

In order to test specific hypotheses and to aid in the analysis and interpretation of results some variables were dichotomized, despite the possible resulting loss of power (Howell, 2002). Specifically, Total WAI scores were re-categorized into High/Low groups by way of a median split; all scores that were at or above the median of 203 were considered "High" and all scores that fell below the median were considered "Low". Chi-Square analysis revealed that there was a significant association between High/Low WAI scores and whether or not offenders completed treatment  $\chi^2 (1) = 8.68, p = .01$ . Based on the odds ratio, the odds of completing treatment were 2.41 times higher if the offender had a high WAI score than if he had a low WAI score.

Table 6

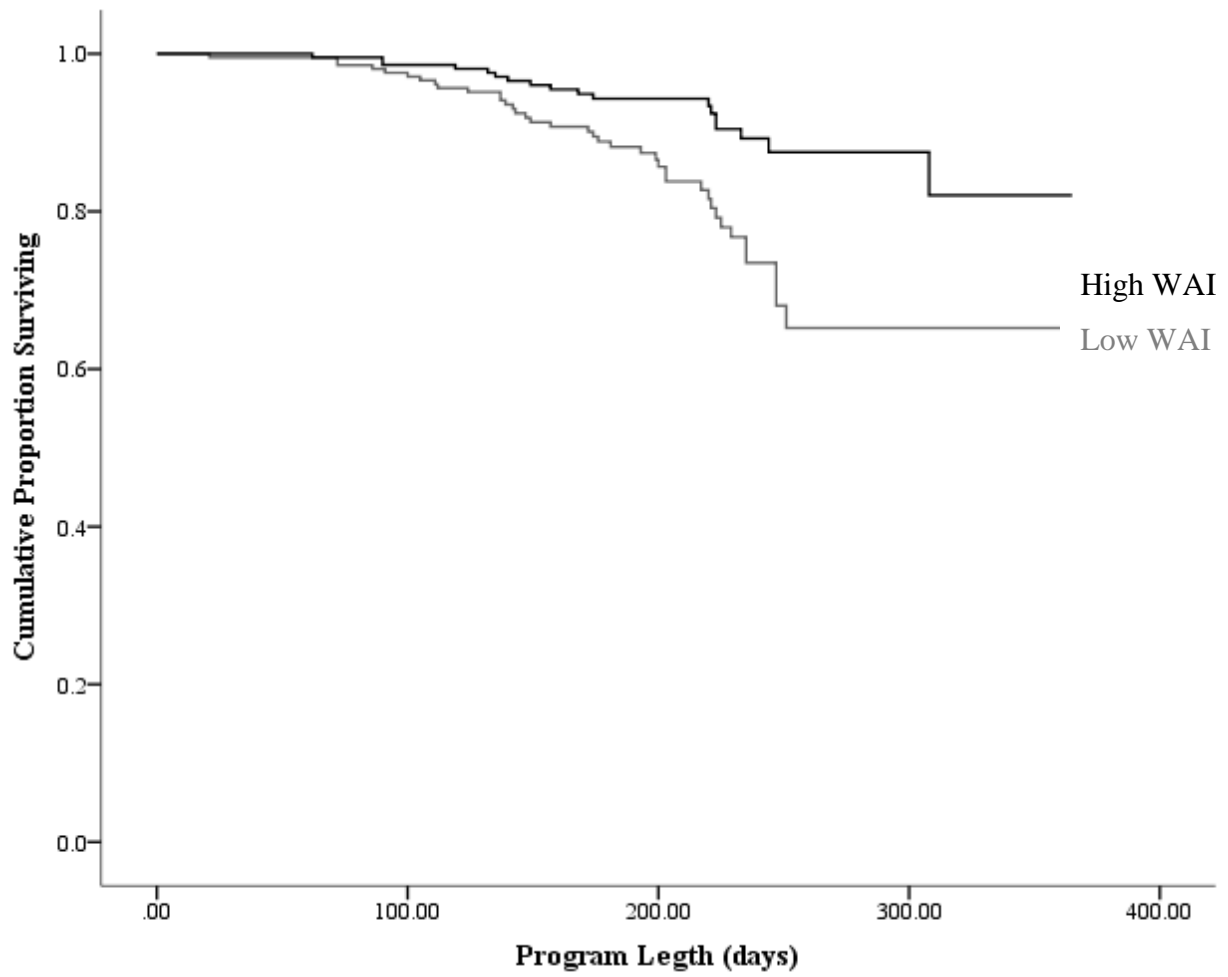
*Relationship between Working Alliance Inventory scores and treatment noncompletion and length of time spent in treatment (N = 423)*

<u>WAI Measure</u>	<u>Treatment Noncompletion</u>	<u>Length of time in program</u>
Task	-.15**	.09
Bond	-.12**	.14**
Goal	-.15**	.10*
Total	-.15**	.13**

Note: \*\*  $p < .01$ ; \*  $p < .05$

Figure 9

*Survival analysis: Rates of program attrition by high/low WAI scores*



### 4.3 Hypothesis 2: Working Alliance and Ancestry

Descriptive statistics for the WAI scores are presented in Table 7. The mean total WAI score was  $M = 195.07$ ,  $SD = 34.54$ . Independent samples  $t$ -tests were computed to determine whether there was a significant difference between the mean WAI scores for the Aboriginal and Non-Aboriginal offenders. Effect sizes were also computed using Cohen's  $d$  and  $r$  and interpreted according to the rubric of Cohen (1992). Results are presented in Table 6. As predicted, Non-Aboriginal offenders reported higher WAI scores than the Aboriginal offenders; however, these differences were not significant, with one exception. Non-Aboriginal Bond scores were significantly higher ( $M = 63.92$ ,  $SD = .95$ ) than those reported by the Aboriginal participants ( $M = 60.51$ ,  $SD = 1.02$ ),  $t(421) = -2.447$ ,  $p > .01$ , representing a small effect size ( $d = 0.24$ ).



Table 7

*Working Alliance Inventory scores by Ancestry*

WAI Measure	Non-Aboriginal (N = 229)	Aboriginal (N = 194)	Total Sample (N = 423)	ES( <i>d</i> )	ES( <i>r</i> )
	Mean (SD)	Mean (SD)	Mean (SD)		
Task	68.23 (11.08)	67.16 (10.89)	67.74 (34.50)	.10	.05
Bond	63.91 (14.39)	60.51 (14.17)	62.35 (14.37)	.24**	.12**
Goal	65.21 (12.74)	64.70 (11.57)	64.97 (12.21)	.04	.02
Total	197.35 (35.19)	192.37 (33.54)	195.07 (34.54)	.14	.07

#### **4.4 Hypothesis 3: Working Alliance, Treatment Retention, and Ancestry**

**4.5.1 Treatment completion.** Point biserial correlations revealed significant relationships between all components of the WAI when looking at the total sample of offenders and binary treatment completion (see Table 8). However, these correlations were not significant for the Aboriginal sample. On the other hand, Task, Goal, and Total WAI were significantly correlated with treatment completion for non-Aboriginal offenders. Interestingly, Bond scores were unrelated.

Table 8

*Point Biserial Correlations: Relationship between WAI scores and Treatment Noncompletion as a function Ancestry*

WAI Measure	Treatment Noncompletion		
	Non-Aboriginal n = 228	Aboriginal n= 194	Total n = 422
Task	-.23***	-.06	-.15**
Bond	-.10	-.12	-.12**
Goal	-.21***	-.09	-.15**
Total	-.19**	-.10	-.15**

Note. \*\*  $p < .01$ , \*\*\*  $p < .001$

Chi-square analysis revealed that 56 of the 423 offenders did not successfully complete treatment (13.3% of the total sample), demonstrating a low attrition rate for the Clearwater Program. Of these, 32 were of Aboriginal ancestry (57.1%) and 24 were of Non-Aboriginal ancestry (42.9%). Based on the odds ratio, the odds of completing treatment were 1.68 times higher if the offender was Non-Aboriginal than if they were Aboriginal; however, this represents a non-significant association between Ancestry and treatment completion,  $\chi^2(1) = 3.24, p = .07$ .

Linear regression was used to examine how well WAI total scores predict treatment completion for Aboriginal and non-Aboriginal groups. Results indicated that WAI total score was not a significant predictor of treatment completion for the Aboriginal offender group,  $F(1, 192) = 2.02, p > .05$ . However, it was a significant predictor for the non-Aboriginal offender group,  $F(1, 226) = 8.403, p < .01$ .

Next, examination of the High/Low WAI variable was undertaken. It was hypothesized that Aboriginal offenders who scored low (i.e., below the median) on the WAI would have higher and faster rates of treatment noncompletion and spend less time in treatment than Aboriginal offenders who had high scores (i.e., above the median) on the WAI or than non-Aboriginal offenders, irrespective of WAI scores (i.e., high and low scores; see Figure 10). To test this hypothesis, logistic regression analysis was conducted to predict treatment completion using Ancestry and High/Low WAI scores as predictors. A test of the full model against a constant only model was statistically significant, indicating that the predictors as a set, reliably distinguished between treatment completers and non-completers  $\chi^2(2) = 11.48, p < .01$ . However, Nagelkerke's  $R^2$  of .05 indicated a rather weak relationship between prediction and grouping overall. The Wald criterion demonstrated that binary (High/Low) WAI significantly independently predicted program completion while Ancestry did not (see Table 9). That is, it seemed that strength of working alliance on its own was a better predictor of program completion than ancestry.

Figure 10

*Mean number of days spent in treatment as a function of ancestry*

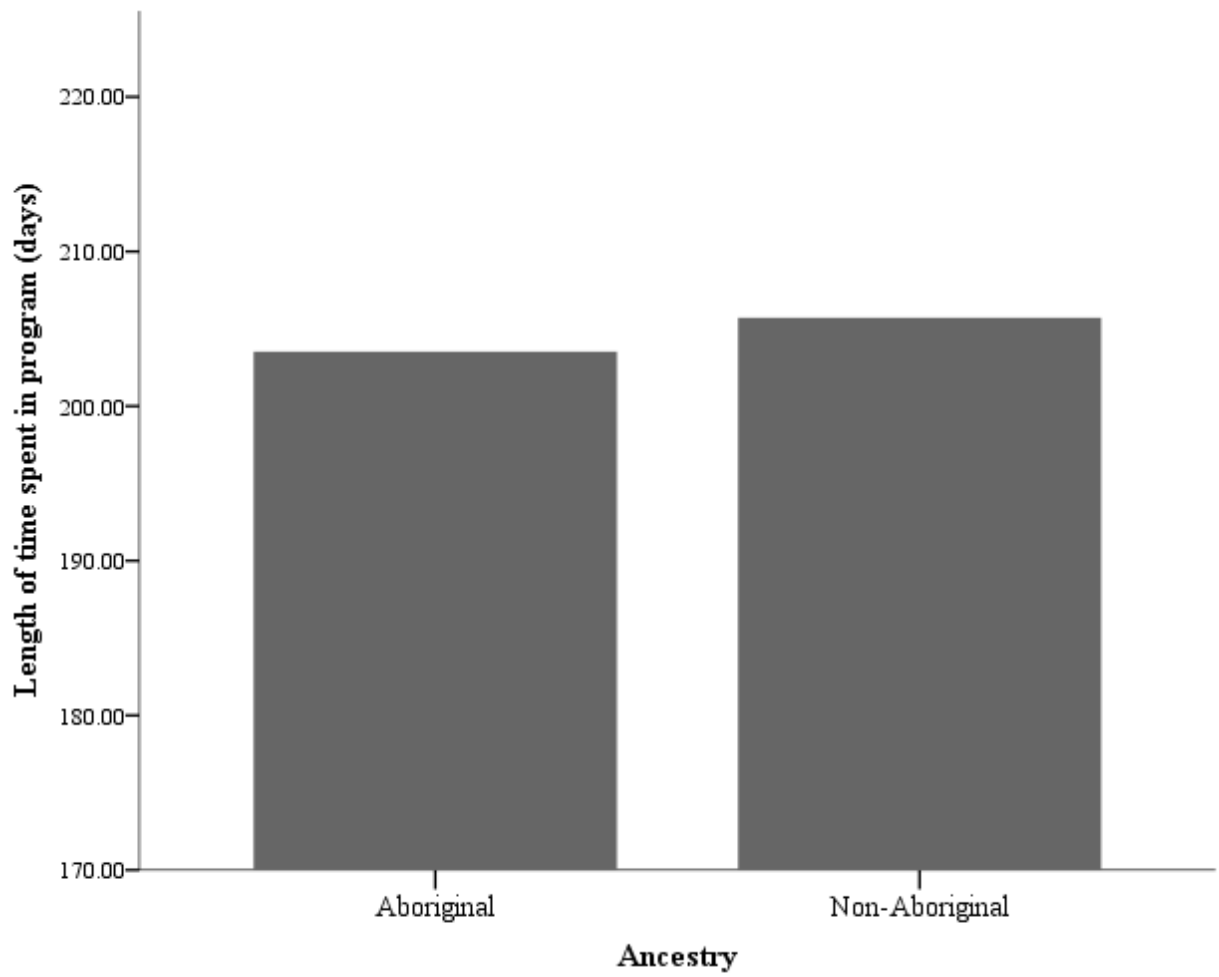


Table 9

*Logistic Regression Analyses: Relative Contributions of Ancestry and High/Low WAI scores for Predicting Program Noncompletion*

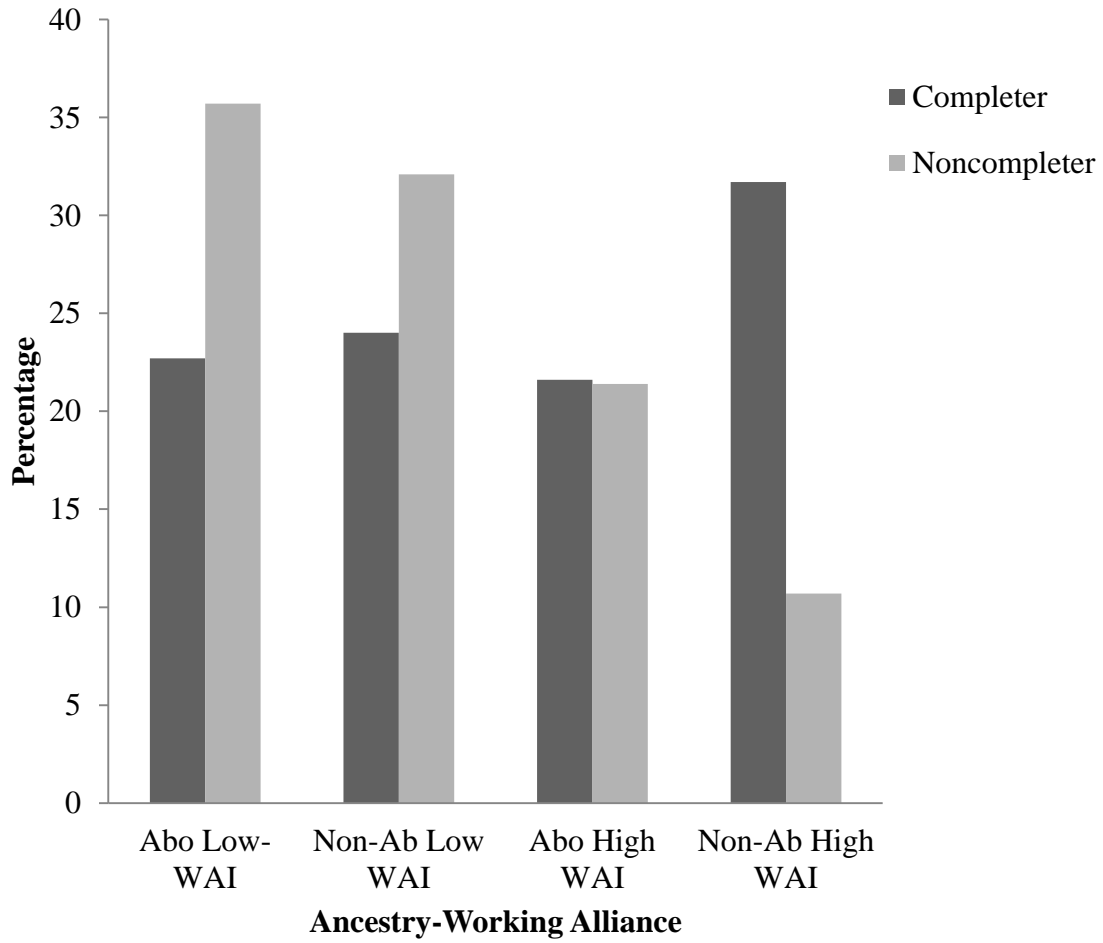
	Treatment Noncompletion					
	<i>B</i>	<i>SE</i>	Wald	<i>Exp(B)</i>	95% CI	
					Lower	Upper
Ancestry	-0.47	0.29	2.61	0.62	.351	1.11
High/Low WAI	-.085	0.31	7.73**	0.43	0.23	0.78

Note: \*\*  $p < .01$

When a new variable (Ancestry-High/Low WAI) made up of four groups (Aboriginal-High WAI; Aboriginal-Low WAI; Non-Aboriginal-High WAI; and Non-Aboriginal-Low WAI) was created, additional significant effects were found. Taking into consideration WAI scores with Ancestry, of the 56 offenders who did not complete treatment, 20 were Aboriginal offenders with Low WAI scores (35.7% of the total who did not complete); 18 were Non-Aboriginal offenders with Low WAI scores (32.1%); 12 were Aboriginal offenders with High WAI scores (21.4%); and the remaining 6 were Non-Aboriginal offenders with High WAI scores (10.7%; see Figure 11).

Figure 11

*Percentage of offenders who completed treatment and did not complete treatment as a function of Ancestry-High/Low WAI*





Examination of treatment completion as a binary yes/no variable (0 = treatment completer; 1 = treatment non-completer), revealed a significant effect of Ancestry-High/Low WAI on program completion with a significant quadratic trend. Levene's test of homogeneity of variance was significant, therefore Welch's statistic was reported for this analysis, Welch's  $F(3, 212.13) = 5.59, p < .001, \omega = .15$ . Closer examination indicated that Aboriginal offenders with low WAI scores successfully completed treatment less frequently than any other group and Non-Aboriginal offenders with high WAI successfully completed most frequently.

One-Way ANOVA was used to compare program completion means. Examination of the binary treatment completion variable revealed significant differences between groups at the .001 level with a significant linear trend,  $F(3, 418) = 10.91, p < .001$  indicating a negative linear relationship between groups. Planned contrasts supported the hypothesis that Aboriginal offenders with low WAI scores would be in program for a shorter period than any other group,  $t(205.36) = -2.89, p < .01, r = .20$ . On the other hand, planned comparisons did not support the hypothesis that that Aboriginal participants with low WAI scores failed to complete treatment more frequently than any other group,  $t(148.28) = 1.79, p = 0.08, r = .14$ .

A survival analysis that examined treatment completion as a function of ancestry was conducted. As demonstrated in Figure 12, Aboriginal offenders failed to complete treatment at a higher and faster rate than the Non-Aboriginal offenders, Wilcoxon-Gehan (1) = 2.447,  $p > .05$ , though this difference did not attain significance. However, an examination of treatment completion as a function of ancestry and total working alliance score uncovered a significant difference between groups in survival time, Wilcoxon-Gehan (3) = 10.32,  $p < .05$ . Pairwise comparisons revealed that Aboriginal offenders with Low WAI scores failed to complete treatment at a higher and faster rate than both Aboriginal-High WAI (Wilcoxon-Gehan (1) = 4.03,  $p < .05$ ) and Non-Aboriginal High WAI (Wilcoxon-Gehan (1) = 8.38,  $p < .01$ ), groups. The only other significant difference between groups occurred between the Non-Aboriginal Low WAI group and the Non-Aboriginal High WAI group, Wilcoxon-Gehan (1) = 4.84,  $p < .05$  (see Figure 13).

Figure 12

*Survival Analysis: Rates of program noncompletion as a function of ancestry*

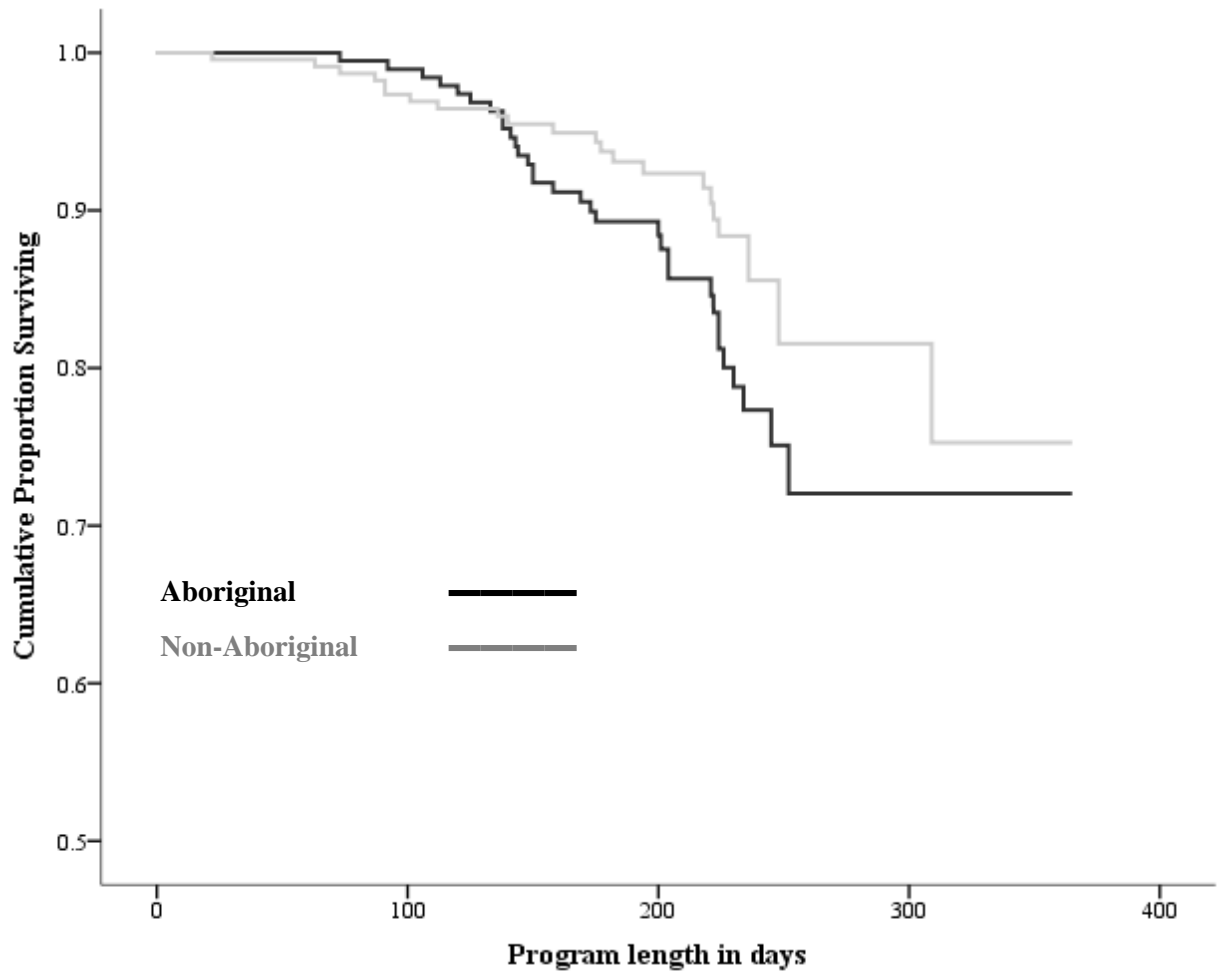
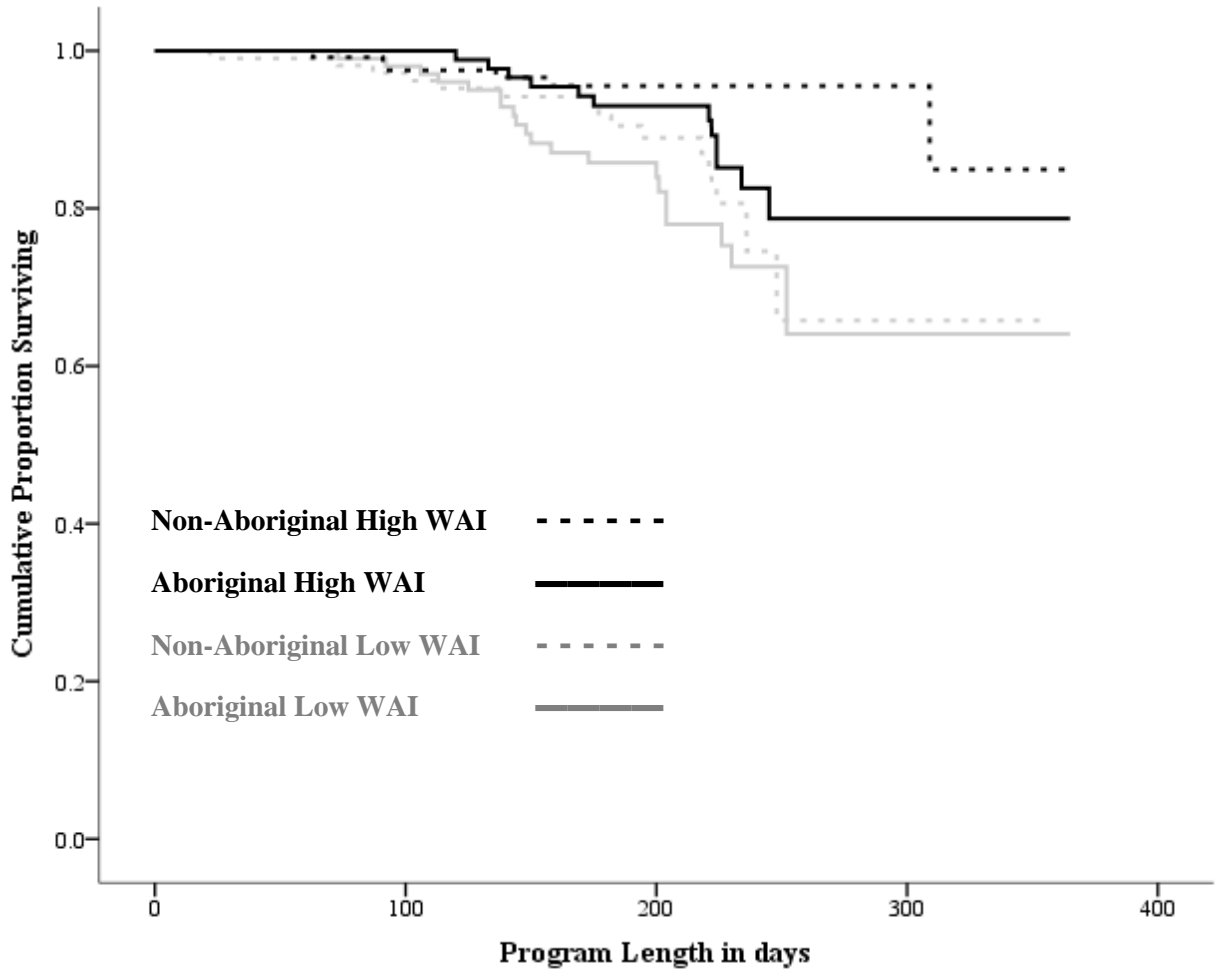


Figure 13

*Survival Analysis: Rates of program noncompletion as a function of working alliance (WAI score) and Aboriginal vs. non-Aboriginal ancestry*



A two-way contingency table analysis was conducted to further evaluate whether there was any relation between the strength of the WAI and Ancestry on rates of treatment non-completion irrespective of length of stay in treatment. The two variables were the Ancestry-High/Low WAI and binary treatment completion. Results indicated a significant relationship between strength of working alliance and ancestry,  $\chi^2(3) = 12.05, p = .007$ . Offenders with high WAI scores were more likely to complete treatment successfully than those with low WAI, regardless of Ancestry. The effect size was  $\phi = .169$  indicating a 17 percentage point difference in the rate of treatment noncompletion between high and low scorers on the WAI.

**4.5.2 Treatment retention.** Pearson correlations revealed significant relationships between Total WAI scores ( $r = .13, p < .01$ ), Bond ( $r = .14, p < .01$ ) and Goal ( $r = .10, p < .05$ ) subscales, with length of time spent in treatment when looking at the total sample of offenders (see Table 10). Unlike the results of the binary treatment variable, there were significant correlations between time spent in treatment and all components of the WAI for the Aboriginal offenders but no significant correlations for the non-Aboriginal offenders. These results suggest that, for, Aboriginal offenders, higher WAI scores were associated with more time spent in treatment but not for non-Aboriginal offenders.

Table 10

*Correlations: Relationship between WAI scores and Length of Time Spent in Treatment as a function Ancestry*

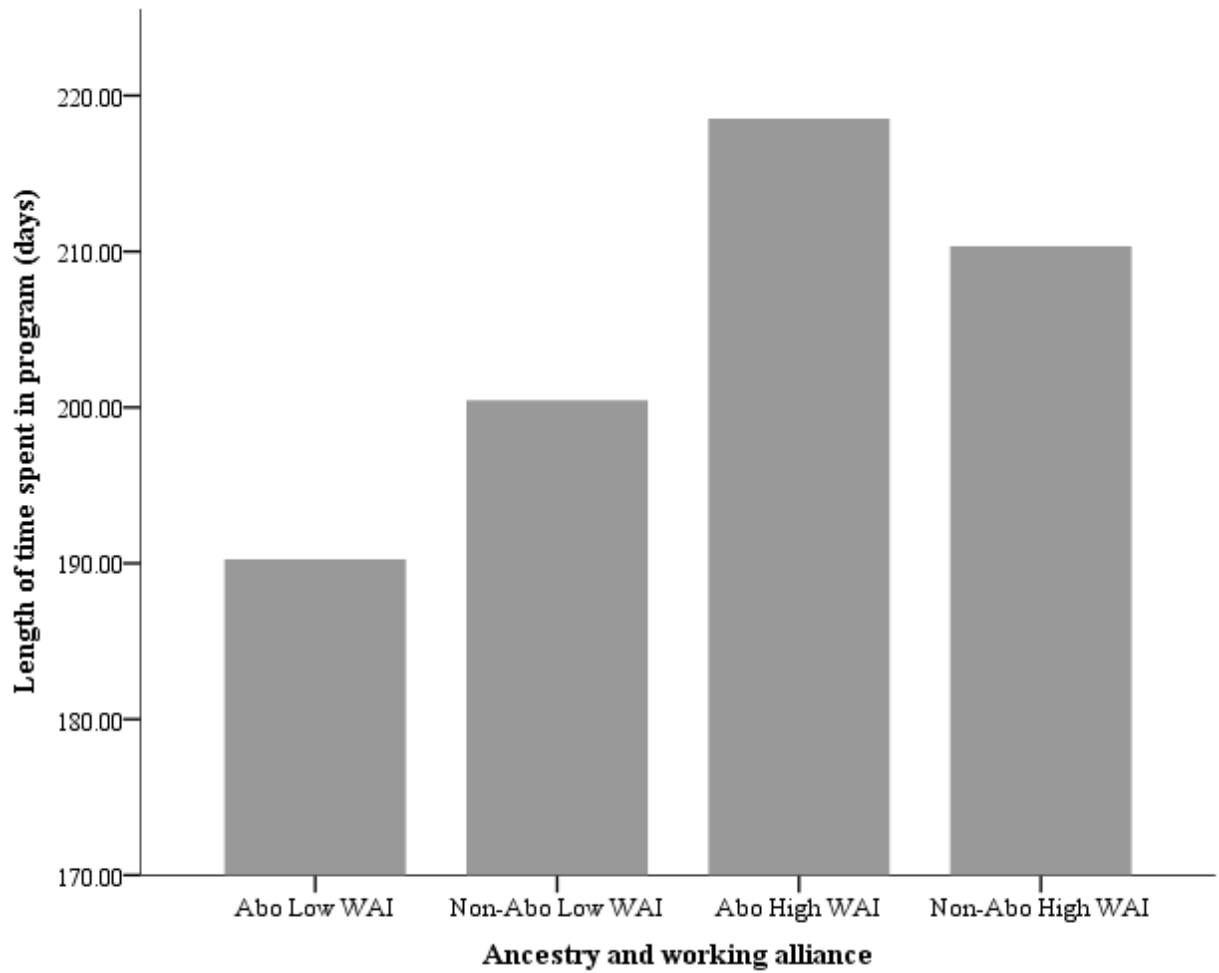
WAI Measure	Length of time in Program		
	Non-Aboriginal n = 229	Aboriginal n= 194	Total n = 423
Task	.03	.17**	.09
Bond	.11	.20**	.14**
Goal	.04	.21**	.10*
Total	.07	.21**	.13**

*Note: \*  $p < .05$ , \*\*  $p < .01$*

The results of a one-way ANOVA with the Ancestry-High/Low WAI variable as the independent variable, indicated significant differences in length of treatment stay among the four groups,  $F(3, 419) = 3.70, p = .01$ . Because of the differing sample sizes and possible unequal variances, Games-Howell procedure was used for post-hoc tests. According to Field (2009), this procedure is the most powerful and accurate in this type of situation. Results of post hoc multiple comparisons indicated that indeed, Aboriginal offenders with low WAI scores stayed in program for the least number of days ( $M = 190.26$ ). Perhaps unexpectedly, Aboriginals with high WAI scores remained in program for the longest duration of the four groups ( $M = 218.52$ ; see Figure 14). Planned contrasts revealed that Aboriginal offenders with Low WAI spent significantly less time in treatment than any other group,  $t(419) = 2.66, p < .01$ . However, when both High and Low Aboriginal offender groups were compared against High and Low non-Aboriginal offender groups, Aboriginal offenders spent significantly more time in treatment on average, than non-Aboriginal offenders,  $t(419) = -3.29, p = .001$ .

Figure 14

*Number of Days spent in treatment as a function of Ancestry-High/Low WAI*



**4.5.3 Conclusion.** In general, we see that working alliance is moderately related to treatment retention and noncompletion. That is, the higher the WAI score, the more likely one is to complete treatment and remain in program. When we look at how this unfolds with non-Aboriginal offenders, we see that the trend is evident for treatment completion, but not for length of time spent in treatment. On the other hand, when examining scores for Aboriginal offenders, we see the exact opposite. WAI is not related to treatment completion but does appear to be related to length of time spent in treatment, that is, the higher the WAI score, the longer the client is likely to remain in the program.

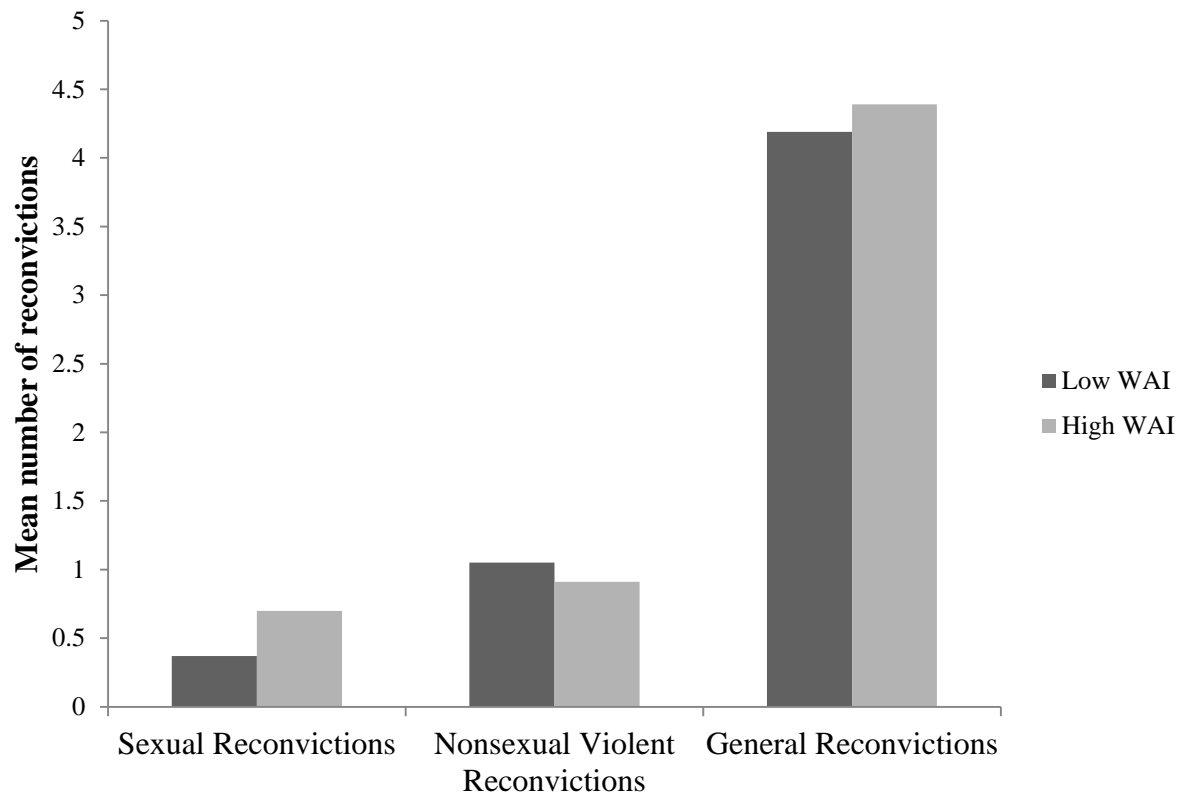


#### **4.5 Hypothesis 4: Working Alliance, Ancestry, and Recidivism**

**4.5.1 WAI and recidivism.** The sample was followed up (i.e., time of release to time of data collection) for a mean 10.39 years ( $SD = 3.18$ ) post-treatment discharge. Of 395 individuals released with outcome data, 24.8% were convicted for a new sex offense, 37.5% for a new violent non-sexual offense, and 66% for any new offense. In turn, it was hypothesized that offenders with high working alliance scores would have lower rates of recidivism than those who reported having weaker alliances. Results did not support this hypothesis. On average, offenders who scored High on the WAI overall reoffended sexually more often ( $M = .70$ ,  $SD = 2.21$ ) than those with Low WAI total scores ( $M = .37$ ,  $SD = .84$ ; see Figure 15). This difference was significant  $t(258.03) = -1.98$ ,  $p = .05$ , representing a small effect size  $r = .12$ . The differences among WAI scores for those who recidivated in a violent, non-sexual manner, were non-significant  $t(392) = .75$ ,  $p > .05$ , as were the WAI scores for general recidivists,  $t(391) = -0.29$ ,  $p > .05$ .

Figure 15

*Mean number of reconviction rates as a function of WAI score.*



Mean rates of recidivism across both Aboriginal and non-Aboriginal offenders and Low versus High WAI groups are shown in Table 11 and Figure 16. Significant differences were found between the Aboriginal and Non-Aboriginal groups in number of non-sexual violent reconvictions,  $F(1, 393) = 25.36, p < .000$ , and general recidivism,  $F(1, 392) = 17.99, p < .000$ , but not sexual reconvictions,  $F(1, 394) = .94, ns$ .

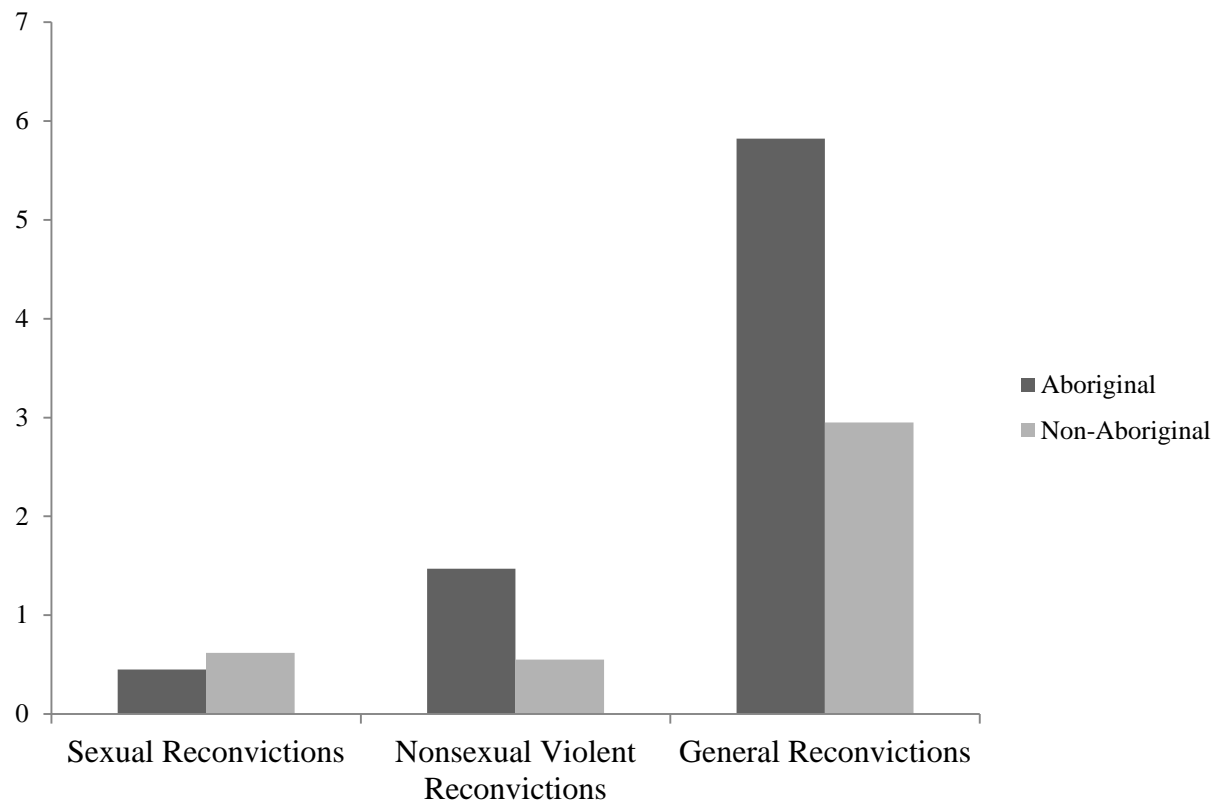
Table 11

*Mean number of reconviction rates as a function of Ancestry and WAI scores*

	Sexual Recidivism	Non-Sexual Violent Recidivism	General Recidivism
	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
Aboriginal	<i>N</i> = 184 0.45 (1.11)	<i>N</i> = 184 1.47 (2.26)	<i>N</i> = 184 5.82 (7.98)
Non-Aboriginal	<i>N</i> = 211 0.62 (2.07)	<i>N</i> = 210 .55 (1.32)	<i>N</i> = 209 2.95 (5.28)
Low WAI	<i>N</i> = 194 .37 (.84)	<i>N</i> = 193 1.05 (1.98)	<i>N</i> = 194 4.19 (7.05)
High WAI	<i>N</i> = 201 .70 (2.21)	<i>N</i> = 201 .91 (1.77)	<i>N</i> = 199 4.39 (6.61)

Figure 16

*Mean number of reconvictions as a function of Ancestry.*



*Note:* Total N of offenders who had sexual reconvictions = 98, nonsexual violent reconvictions = 148, and general reconvictions = 260

Pearson correlations were calculated to determine whether there was any relationship between WAI total scores and subscale scores with rates of general, sexual, and non-sexual violent recidivism. Results are reported in Table 12. No significant correlations were noted across the entire sample, or among the Aboriginal and Non-Aboriginal groups.

Table 12

*Pearson Correlations: Relationship between WAI and Recidivism as a Function of Ancestry*

	WAI Measure			Total WAI
	Task	Bond	Goal	
Non-Aboriginal (N = 210)				
Sexual	.07	.02	.07	.05
Violent	.00	.01	-.02	-.00
General	.02	-.00	.02	.01
Aboriginal (N = 184)				
Sexual	.03	.08	.08	.07
Violent	.00	.00	-.04	-.01
General	.02	.09	.03	.06
Total (N = 394)				
Sexual	.06	.04	.07	.06
Violent	-.01	-.03	-.03	-.03
General	.01	.02	.02	.02

*Note:* No significant correlations

In order to test whether WAI total scores could predict recidivism for both Aboriginal and Non-Aboriginal offender groups, simple regressions were conducted. First, the entire sample was included in a linear regression with WAI total scores as the predictor variable and total number of new sexual offences as the outcome variable. Consistent with point biserial correlational analyses, results indicated that WAI scores did not significantly predict sexual recidivism in the overall sample,  $F(1, 393) = 1.45, p > .05$ . Moreover, WAI scores did not predict sexual recidivism for either ancestral group (Aboriginal:  $F(1, 182) = 0.95, p > .05$ ; Non-Aboriginal:  $F(1, 209) = 0.59, p > .05$ ). With the overall sample, similar results were found for non-sexual violent recidivism,  $F(1, 392) = 0.30, p > .05$  and for general recidivism,  $F(1, 391) = 0.15, p > .05$ , suggesting that WAI scores are not a good predictor of any type of recidivism.

Furthermore, the predictive accuracy of the WAI's total score and its three subscales were examined for the Aboriginal and non-Aboriginal offender groups via operating characteristic (ROC) curves. ROC's generate an area under the curve (AUC) statistic which ranges in value from 0 to 1.0. Given the direction of the WAI scoring (i.e., higher scores are positive while lower scores are negative) the values can be interpreted as the probability that a randomly selected recidivist would have a higher score on the WAI than a randomly selected non-recidivist; values below .50 would be expected for an inverse relationship as this. Compared to the regression analyses, results were similar for ROC's, which tend to be less affected by fluctuations in base rates. Results are presented in Table 13.



Table 13

*Predictive accuracy of WAI scores on rates of sexual, non-violent sexual and general recidivism*

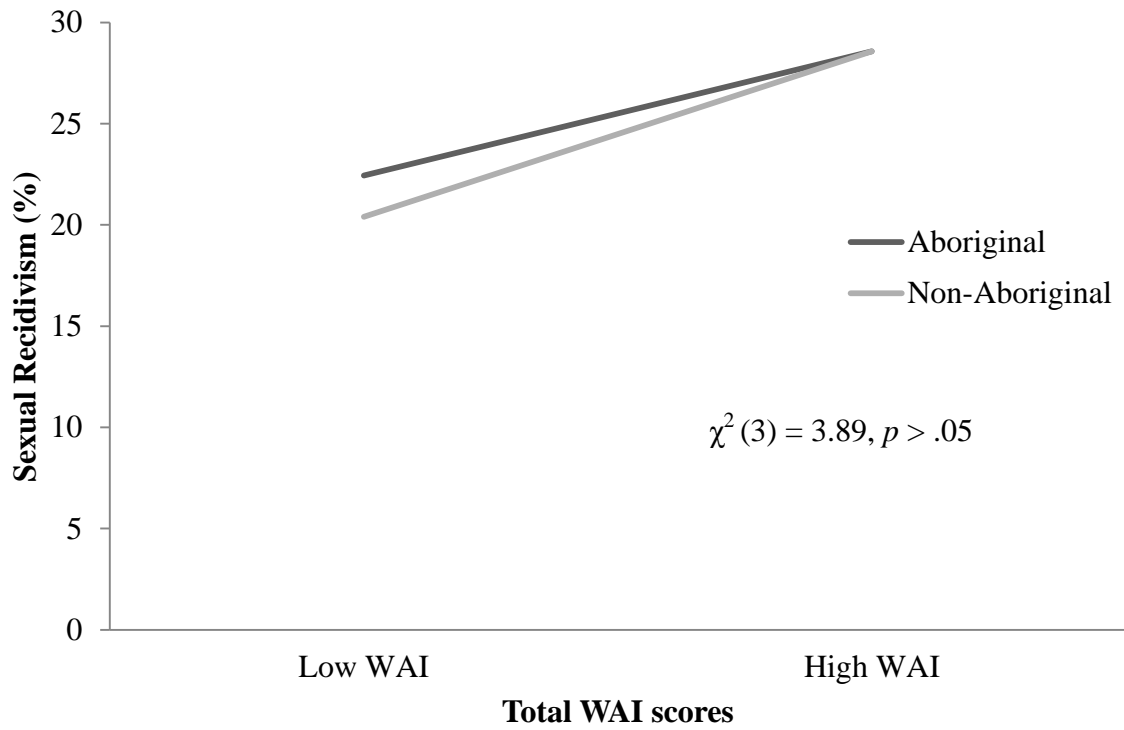
WAI	Aboriginal (N = 184)			Non-aboriginal (N = 211)		
	<i>d</i>	AUC	95% CI	<i>d</i>	AUC	95% CI
	Sexual Recidivism					
<b>Total</b>	.28	.58	.49, .68	.10	.52	[.43, .61]
Task	.19	.56	.47, .65	.19	.56	[.46, .65]
Bond	.34	.59	.49, .68	.03	.49	[.40, .58]
Goal	.21	.56	.47, .65	.15	.53	[.44, .63]
	Non-sexual Violent Recidivism					
<b>Total</b>	.05	.48	[.40, .57]	.06	.52	[.43, .61]
Task	.07	.48	[.40, .57]	.07	.52	[.44, .61]
Bond	.05	.52	[.44, .60]	.09	.54	[.47, .64]
Goal	.15	.45	[.37, .54]	.00	.50	[.41, .59]
	General Recidivism					
<b>Total</b>	.15	.46	[.36, .55]	.01	.50	[.42, .58]
Task	.07	.48	[.39, .58]	.04	.52	[.44, .60]
Bond	.08	.49	[.39, .58]	.03	.49	[.41, .57]
Goal	.27	.42	[.33, .52]	.02	.51	[.43, .59]

*Note:*  $p > .05$  for all area under the curve (AUC) values.

Cohen's *d* was also calculated to provide a measure of effect size to evaluate the magnitude of the difference in SD's between recidivists and non-recidivists on their WAI scores. According to Rice and Harris (2005) and Cohen (1992), respectively, results are interpreted in terms of small (AUC = .56, *d* = .20), medium (AUC = .64, *d* = .50) and large (AUC = .71, *d* = .80) effects. Results of the current analyses suggest that there was a small effect size for WAI total and subscale scores among Aboriginal sexual recidivists. This was consistent with a chi square analyses that revealed that those offenders who sexually recidivated and reported high WAI scores, had more sexual re-offences than those who reported low alliances, for both Aboriginal and Non-Aboriginal groups (Figure 17). However, the results were not significant overall,  $\chi^2(3) = 3.89, p > .05$ , or when split into Aboriginal,  $\chi^2(1) = 2.37, p > .05$  and Non-Aboriginal groups,  $\chi^2(1) = 0.37, p > .05$ . Furthermore, chi-square analysis (see Figure 18 and Figure 19) revealed a significant association between the Ancestry and High-Low WAI scores and whether or not an offender would incur any nonsexual violent re-offenses,  $\chi^2(3) = 29.60, p < .001$  or whether or not they would incur any new convictions in general,  $\chi^2(3) = 16.00, p = .001$ .

Figure 17

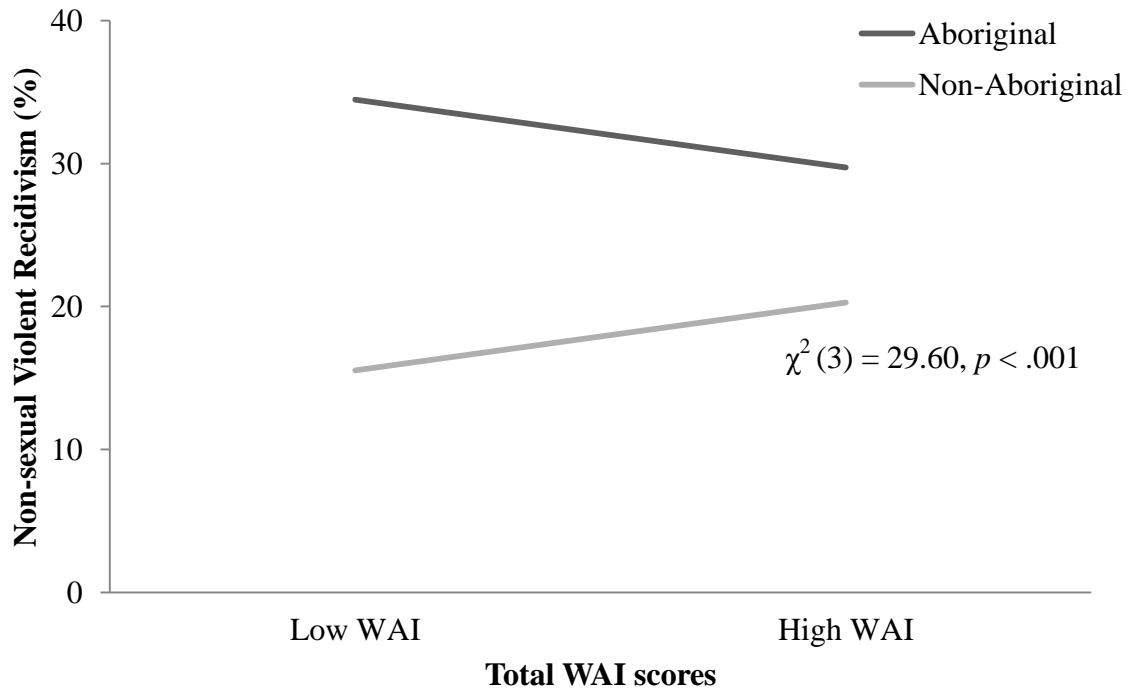
*Percentage of offenders with sexual reconvictions as a function of WAI total score and Ancestry*



*Note:* Total N of offenders who had sexual reconvictions = 98

Figure 18

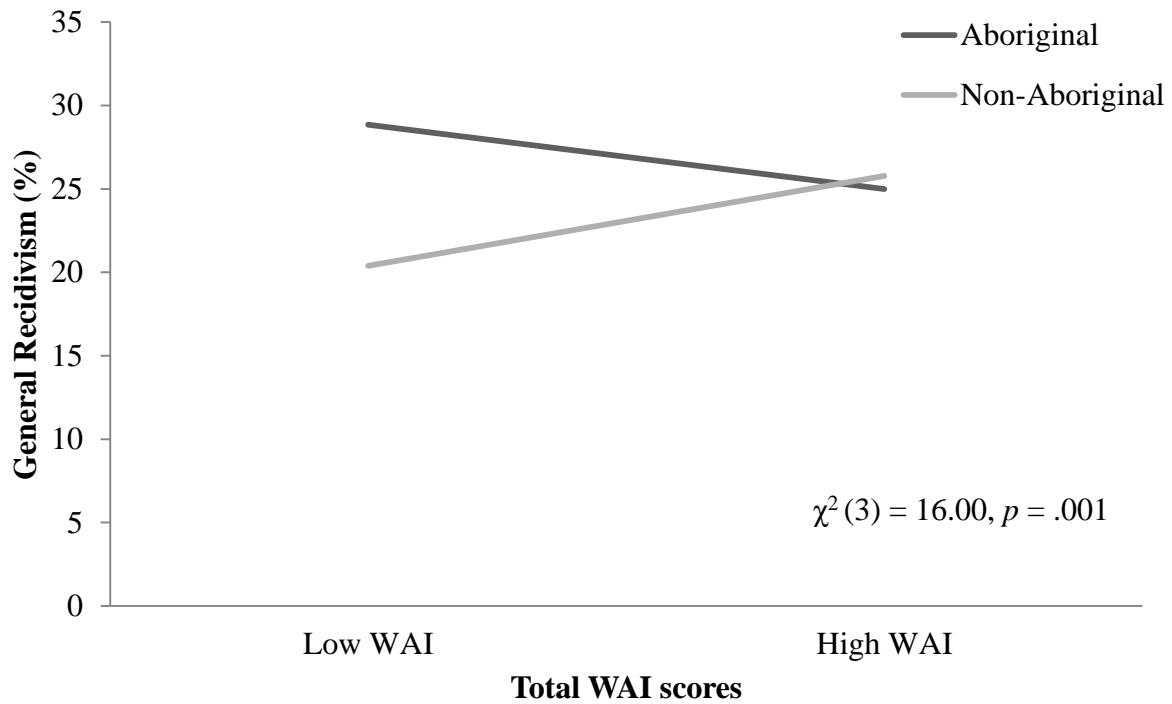
*Percentage of offenders with nonsexual violent reconvictions as a function of WAI total score and ancestry*



*Note:* Total N of offenders who had nonsexual violent reconvictions = 148

Figure 19

Percentage of offenders who recidivated generally as a function of WAI total score and ancestry



Note: Total N of offenders who had general reconvictions = 260

**4.5.2 Ancestry and recidivism.** To test whether there were any differences between types of recidivism and ancestry a one-way ANOVA was conducted. Levene's test of homogeneity of variance was significant for all outcomes (sexual recidivism  $p < .05$ , non-sexual violent recidivism  $p < .001$ , and general recidivism,  $p < .001$ ). As a result, Welch's F is reported. There was a significant main effect of ancestry on the number of nonsexual violent reconviictions,  $F(1, 287.08) = 23.77, p < .001, r = .24, d = .50$ , and on the number of general reconviictions  $F(1, 310.64) = 17.11, p < .001, r = .21, d = .42$ , but not for sexual reconviictions  $F(1, 329.76) = 1.01, p > .05, r = .05, d = .10$ .

**4.5.3 Ancestry, WAI, and recidivism.** A logistic regression analysis was conducted to predict recidivism using Ancestry-High/Low WAI scores as a predictor (Table 14). A test of the full model against a constant only model was not statistically significant for sexual recidivism, indicating that belonging to one of the four categories of the Ancestry-High/Low WAI variable did not reliably distinguish between those who recidivated and those who did not ( $\chi^2(3) = 3.76, p > .05$ ). Nagelkerke's  $R^2$  of .01 indicated that there was almost no relationship between prediction and grouping. The Wald criterion demonstrated that Ancestry-High/Low WAI made no significant contributions to prediction.

Table 14

*Logistic Regression Analyses: Relative Contributions of Ancestry-High/Low WAI scores for Predicting Recidivism using Indicator Contrasts*

	<b>Sexual Recidivism</b>					
	<i>B</i>	<i>SE</i>	Wald	<i>Exp(B)</i>	95% CI	
					Lower	Upper
Non-Aboriginal High WAI			3.84			
Aboriginal Low WAI	-0.11	0.33	0.11	0.90	0.48	1.7
Non-Aboriginal Low WAI	-0.2	0.33	0.37	0.82	0.43	1.57
Aboriginal High WAI	0.41	0.32	1.61	1.50	0.81	2.79
constant	-1.13	0.22	27.23***	0.32		

$R^2 = .01$  (Cox & Snell), .01 (Nagelkerke). Model  $\chi^2(3) = 3.76, p > .05$

	<b>Non-sexual Violent Recidivism</b>					
	<i>B</i>	<i>SE</i>	Wald	<i>Exp(B)</i>	95% CI	
					Lower	Upper
Non-Aboriginal High WAI			28.62***			
Aboriginal Low WAI	1.12	0.29	14.67***	3.07	1.73	5.46
Non-Aboriginal Low WAI	-0.11	0.32	0.13	0.89	0.48	1.67
Aboriginal High WAI	1.09	0.3	12.92***	2.97	1.64	5.37
constant	-1.04	0.21	24.05***	0.35		

$R^2 = .07$  (Cox & Snell), .10 (Nagelkerke). Model  $\chi^2(3) = 29.91, p < .001$

	<b>General Recidivism</b>					
	<i>B</i>	<i>SE</i>	Wald	<i>Exp(B)</i>	95% CI	
					Lower	Upper
Non-Aboriginal High WAI			15.63**			
Aboriginal Low WAI	0.83	0.31	7.36***	2.29	1.26	4.16
Non-Aboriginal Low WAI	-0.15	0.28	0.27	0.87	0.5	1.5
Aboriginal High WAI	0.78	0.32	6.06*	2.17	1.17	4.03
constant	0.36	0.19	3.47	1.43		

$R^2 = .04$  (Cox & Snell), .06 (Nagelkerke). Model  $\chi^2(3) = 16.23, p < .01$

*Note:* \*\*\*  $p < .001$ , \*\*  $p < .01$ , \*  $p < .05$ . Reference group for comparison via indicator contrasts is Non-Aboriginal High WAI. Asterisks indicate significant differences in binary recidivism between the group listed and this reference group.

Similarly, logistic regression was conducted to predict non-sexual violent recidivism using the same predictor. A test of the full model against a constant only model was statistically significant for non-sexual violent recidivism, indicating that the belonging to one of the four categories of the Ancestry-High/Low WAI variable did reliably distinguish between those who recidivated and those who did not ( $\chi^2(3) = 29.91, p < .001$ ). Nagelkerke's  $R^2$  of .10 indicated that there was a weak relationship between prediction and grouping. Indicator contrasts evaluated with the Wald criterion demonstrated the Non-Aboriginal High WAI group had lower rates of violent non-sexual recidivism than either Aboriginal group irrespective of WAI score; no differences were noted, however, between high and low WAI Non-Aboriginal scorers. The exponentiated beta ( $EXP(B)$ ) values indicate that the Aboriginal - Low WAI group was 3.07 times more likely to violently recidivate and Aboriginal - High WAI group, 2.97 times more likely compared to the Non-Aboriginal-High WAI offender group.

Finally, logistic regression was conducted to predict general recidivism using the same predictor. A test of the full model against a constant only model was statistically significant for general recidivism, indicating that belonging to one of the four categories of the Ancestry-High/Low WAI variable did reliably distinguish between those who recidivated and those who did not ( $\chi^2(3) = 16.23, p = .001$ ). Nagelkerke's  $R^2$  of .06 again indicated that there was a weak relationship between prediction and grouping. As with previous analyses, the Wald criterion demonstrated that Non-Aboriginal High WAI offenders had lower rates of general reconviction than the Aboriginal Low WAI ( $p < .01$ ) and Aboriginal High WAI ( $p = .01$ ), but not Non-Aboriginal - Low WAI. The  $EXP(B)$  values indicate that Aboriginal - Low WAI were 2.29 times more likely to recidivate and Aboriginal - High WAI are 2.17 times more likely than the Non-Aboriginal-High WAI offender group.



#### 4.6 Hypothesis 5: Working Alliance and Psychopathy

Mean PCL-R scores of both Aboriginal and Non-Aboriginal offenders are presented in Table 15. Significant differences were found between the two groups on the Lifestyle facet,  $t(105) = 2.89, p < .01$ , with Aboriginal offenders scoring higher on average ( $M = 7.42, SD = 1.68$ ) than the non-Aboriginal offenders ( $M = 6.22, SD = 2.50$ ), representing a medium effect size  $d = .56$ . The differences on the Antisocial facet were approaching significance with Aboriginals scoring higher ( $M = 6.62, SD = 2.23$ ) than the non-Aboriginal offenders ( $M = 5.65, SD = 2.96$ ),  $t(105) = 1.91, p = .06$ , representing a medium effect size  $d = .37$ . It is interesting to note the differences on the Factor level. That is, non-Aboriginal offenders scored higher on Factor 1 ( $M = 8.49, SD = 3.19$ ), than the Aboriginal offenders ( $M = 7.64, SD = 3.69$ ), though this difference was not significant. Conversely, Aboriginal offenders scored significantly higher on Factor 2 on average ( $M = 14.03, SD = 3.18$ ) than the non-Aboriginal offenders ( $M = 11.89, SD = 4.88$ ).  $t(105) = 2.71, p < .01$  representing a medium effect size  $d = .52$ .

Table 15

*Mean PCL-R scores as a function of Ancestry*

PCL-R Scores	Aboriginal n = 53	Non- Aboriginal n = 54	Total Sample n = 107	ES( <i>d</i> )	ES( <i>r</i> )
Factors	Mean (SD)	Mean (SD)	Mean (SD)		
1	7.64 (3.69)	8.49 (3.19)	8.07 (3.46)	0.25	0.12
2	14.03 (3.18)	11.89 (4.88)	12.94 (4.24)	0.52***	0.25***
<b>Facets</b>					
Interpersonal	2.86 (2.07)	3.57 (1.89)	3.22 (2.00)	0.36	0.18
Emotional	4.78 (2.14)	4.92 (2.13)	4.85 (2.12)	0.07	0.03
Lifestyle	7.42 (1.68)	6.22 (2.50)	6.81 (2.21)	0.56**	0.27**
Antisocial	6.62 (2.23)	5.65 (2.96)	6.13 (2.65)	0.37*	0.18*
Total	24.21 (6.00)	23.18 (6.37)	23.67 (6.19)	0.17	0.08

Note: \*\*\*  $p < .001$ ; \*\*  $p < .01$ ; \*  $p < .05$

As a validity check, an analysis of the predictive accuracy of the PCL-R was completed. Results were consistent with the findings from Olver and Wong (2006) who found that the PCL-R was a relatively weaker predictor of sexual recidivism but consistently predicted non-sexual violent recidivism and general recidivism, mainly via Factor 2 (see Table 16). Analysis of the four facets of the PCL-R indicated that it was the Lifestyle and Antisocial components of this measure that predicted non-sexual violent and general recidivism. The Lifestyle facet had moderate to large correlations with nonsexual violent recidivism  $r = .39$ ,  $AUC = .73$ , while the Antisocial facet was also moderately related,  $r = .21$ ,  $AUC = .60$ . Moreover, the Lifestyle facet was moderately and significantly correlated with general recidivism,  $r = .28$ ,  $AUC = .65$ ; as was the Antisocial facet  $r = .21$ ,  $AUC = .59$ . The PCL-R facets, factors, and total score did not significantly predict sexual recidivism in either ancestral group nor did they predict violent non-sexual recidivism in the Aboriginal group; however, Factor 2 and its constituent facets predicted this outcome in the non-Aboriginal group (see Table 17). For general recidivism, Factor 1 but not 2 predicted this outcome in the Aboriginal group, while the reverse was found in non-Aboriginal offenders. Although moderate predictive accuracies were observed for three of the four facets and the total score in the prediction of general recidivism in the Aboriginal subsample, none of these were significant, perhaps owing to limited power ( $n = 50$ ). The PCL-R total score and Lifestyle facet significantly predicted this outcome in the non-Aboriginal group.

Table 16

*Predictive accuracy of the PCL-R*

PCL-R Scores	Sexual		Total Sample Violent		General	
	<i>r</i>	AUC	<i>r</i>	AUC	<i>r</i>	AUC
<b>Factors</b>						
1	.05	.54	.07	.54	.22*	.63*
2	.00	.49	.33**	.69**	.28**	.65*
<b>Facets</b>						
Interpersonal	.07	.54	.01	.50	.17	.59
Emotional	.03	.51	.10	.56	.20*	.61
Lifestyle	-.06	.44	.39***	.73***	.28**	.65**
Antisocial	.05	.53	.21*	.60	.21*	.59
Total	.07	.52	.27**	.66**	.30**	.67**

Note: \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*,  $p < .001$

Table 17

*Predictive accuracy of the PCL-R as a function of Ancestry*

PCL-R Scores Factors	Aboriginal						non-Aboriginal					
	Sexual		Violent		General		Sexual		Violent		General	
	<i>r</i>	AUC	<i>r</i>	AUC	<i>r</i>	AUC	<i>r</i>	AUC	<i>r</i>	AUC	<i>r</i>	AUC
1	.07	.54	.12	.56	.28*	.68	.04	.51	.09	.54	.20	.60
2	-.01	.51	.12	.56	.22	.63	-.01	.46	.42**	.78***	.28**	.64
Facets												
Interpersonal	.08	.54	.11	.55	.25	.65	.08	.55	.00	.51	.17	.59
Emotional	.05	.53	.10	.56	.25	.67	.00	.50	.12	.57	.15	.59
Lifestyle	-.13	.42	.11	.59	.09	.57	-.04	.46	.53***	.84***	.35**	.69*
Antisocial	.09	.56	.08	.53	.23	.63	.02	.51	.25	.64	.17	.55
Total	.07	.52	.12	.56	.22	.67	-.01	.48	.42**	.76**	.28**	.66*

Note: n Aboriginal group = 50, n non-Aboriginal = 53 except PCL-R total, n = 57 \* p < .05, \*\* p < .01, \*\*\*, p < .001

**4.6.1 WAI and psychopathy.** When analysed at the factor level of the PCL-R, no significant correlations were found with WAI scores. However, Pearson correlations revealed some significant negative correlations at the facet level (Table 18). Specifically, the Emotional ( $r = -.20, p < .05$ ) and Lifestyle ( $r = -.19, p < .05$ ) facets of the PCL-R were significantly related to Total WAI score when examining the whole sample. Not surprisingly, this suggests that those who lack empathy, are callous, and emotionally detached tend to form poorer alliances with their therapists. On the other hand, the Interpersonal facet was not significantly related to Total WAI score given that high scores on this facet incorporate traits such as glibness, superficial charm, grandiosity, pathological lying, and manipulateness. Given these characteristics, one might have expected a strong negative correlation between the two.

Table 18

*Pearson Correlations: Relationship between WAI Score and Psychopathy*

PCL-R Scores	WAI Scores			
	Task	Bond	Goal	Total
Factor 1	-.04	-.11	-.09	-.09
Interpersonal	.09	.01	.07	.06
Emotional	-.14	-.19*	-.21*	-.20*
Factor 2	-.12	-.08	-.05	-.09
Lifestyle	-.21*	-.15	-.17	-.19*
Antisocial	-.02	.00	.06	.02
Total	-.06	-.09	-.05	-.07

*Note:* N = 107 for factor and facet scores, N = 111 for PCL-R total scores

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*,  $p < .001$

Similar results were observed when the sample was split into Ancestry, specifically for the non-Aboriginal group (Table 19). Both the Emotional and Lifestyle facets were negatively related to WAI, suggesting again that callous-unemotional traits and lifestyle antisociality were associated with weaker alliance. Interestingly, this was not evident with the Aboriginal sample, suggesting that other factors aside from levels of psychopathy are associated with working alliance in this broad ancestral group. Possible explanations for this are explored in further detail in the Discussion section of this document.



Table 19

*Correlations: Relationship between WAI Score and Psychopathy as a function of Ancestry*

	WAI Scores			
	Task	Bond	Goal	Total
Non-Aboriginal n = 54				
Interpersonal	.01	.00	-.02	-.01
Emotional	-.29*	-.25	-.37**	-.32*
Lifestyle	-.35**	-.23	-.19	-.27*
Antisocial	-.08	.03	.08	.01
Total	-.20	-.10	-.10	-.13
Aboriginal n = 53				
Interpersonal	.14	-.01	.15	.10
Emotional	.00	-.13	-.03	-.07
Lifestyle	.00	.03	-.16	-.04
Antisocial	.09	.00	.04	.04
Total	.09	-.05	.02	.02

*Note: \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*,  $p < .001$*

In the present study, it was hypothesized that WAI scores would be significantly lower in psychopaths (PCL-R > 25) than in non-psychopaths (PCL-R < 25). Although the results were in the desired direction, there were no significant differences between total WAI scores for those deemed psychopathic ( $M = 191.96$ ,  $SE = 5.35$ ) versus non-psychopathic ( $M = 197.25$ ,  $SE = 3.99$ ),  $t(109) = .807$ ,  $p > .05$ , as with the correlational analyses with PCL-R total scores. This represented a small effect size  $r = .08$ , Cohen's  $d = .15$ . Similar non-significant differences were found between Task Bond, and Goal scores (see Table 20).

Table 20

*Mean WAI scores as a function of Psychopathy*

WAI Measure	Psychopaths	Non- Psychopaths	ES ( <i>d</i> )	ES ( <i>r</i> )	Total
	N = 51 <i>M (SD)</i>	N = 60 <i>M (SD)</i>			N = 111 <i>M (SD)</i>
Task	67.16 (11.70)	68.89 (9.78)	0.16	0.08	68.08 (10.67)
Bond	60.16 (15.09)	62.73 (12.72)	0.19	0.09	61.55 (13.86)
Goal	64.65 (13.44)	65.63 (11.91)	0.08	0.04	65.18 (12.59)
Total	191.96 (38.22)	197.25 (30.88)	0.15	0.08	194.82 (34.38)

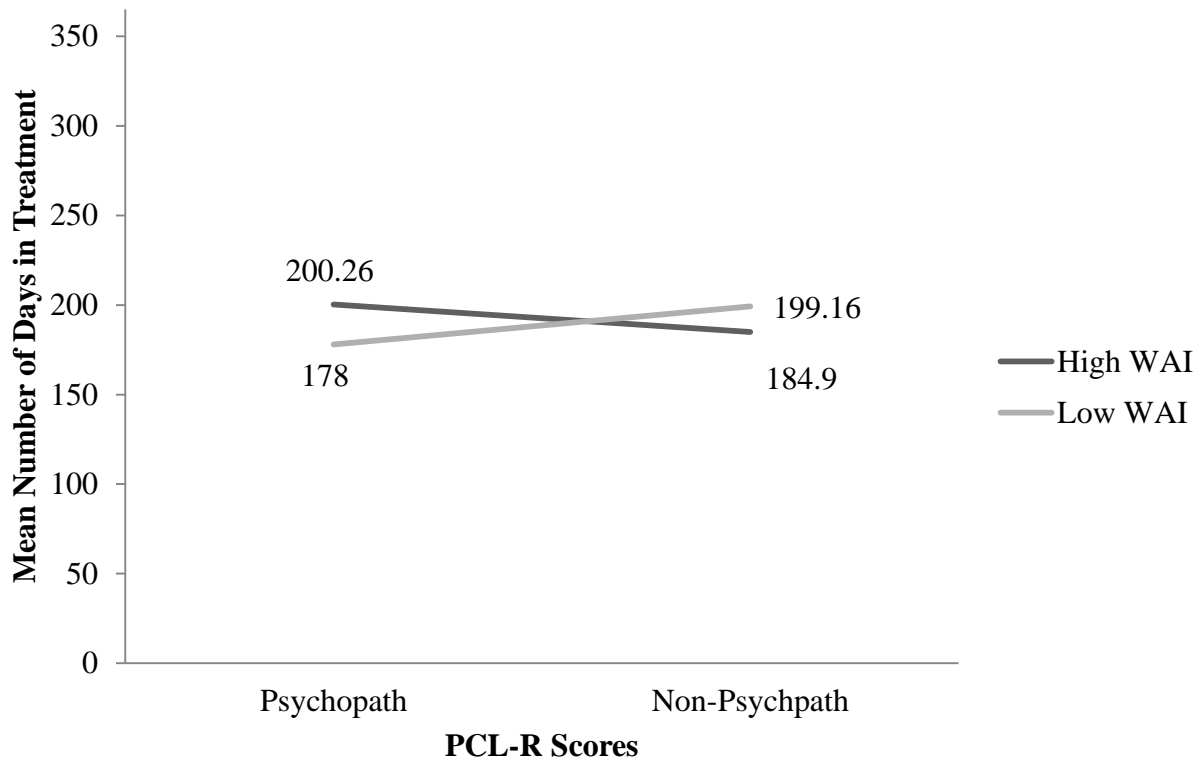
## 4.7 Hypotheses 6 and 7: Working Alliance, Treatment Outcome, Ancestry, and Psychopathy

**4.7.1 Treatment completion.** Dimensional PCL-R total score was non-significantly associated with noncompletion ( $r = .15, p > .05$ ) as was binary diagnosis (psychopaths 15.7% noncompletion vs. non-psychopaths, 6.8%). Interestingly, the PCL-R appeared to be a better predictor of noncompletion among Aboriginal ( $r = .24, p = .085$ ) than non-Aboriginal ( $r = -.10, ns$ ) offenders.

It was further hypothesized that psychopathic offenders who had low WAI scores would have higher rates of treatment noncompletion than other offenders. In order to test this hypothesis, factorial ANOVA was applied with binary treatment completion as the dependent variable and the binary High/Low WAI and Psychopath/Non-Psychopath as the independent variables. Results indicated no significant main effect of High/Low WAI,  $F(1, 106) = 0.185, p > .05$  and Psychopathy,  $F(1, 106) = 2.21, p > .05$ . The interaction between these two variables was also not significant,  $F(1, 106) = 0.547, p > .05$ . In essence, these results suggest that psychopathic offenders did not necessarily fail to complete sex offender treatment more often than non-psychopathic offenders, irrespective of WAI ratings. These analyses were repeated, this time using continuous program length as the dependent variable. Similar patterns emerged in that no significant main effects were observed for psychopathy,  $F(1, 106) = 0.070, p > .05$ , or WAI,  $F(1, 106) = 0.151, p > .05$ , categories; interestingly, the interaction approached significance  $F(1, 106) = 2.96, p = .088$ , suggesting high WAI scores to be associated with increased length of program stay among psychopathic offenders, but decreased length of stay among non-psychopathic offenders (see Figure 20).

Figure 20

*Length of program stay as a function of working alliance and psychopathy*



Logistic regression was subsequently run in order to test whether the continuous WAI and PCL-R scores could predict program completion, first on the entire sample, and then separately for both Aboriginal and non-Aboriginal groups. Results indicated that for the entire sample, WAI and PCL-R scores did not jointly predict program completion,  $\chi^2(2) = 4.041, p > .05$ , Nagelkerke  $R^2 = .072$ , nor did they individually (Wald = 1.36,  $p > .05$ ,  $ExpB = 1.01$  Wald = 2.56,  $p > .05$ ,  $ExpB = 1.10$ , respectively). Furthermore, these variables could not significantly predict program completion for Aboriginal offenders,  $\chi^2(2) = 4.757, p > .05$ , Nagelkerke  $R^2 = .134$ , or for non-Aboriginal offenders,  $\chi^2(2) = 0.848, p > .05$ , Nagelkerke  $R^2 = .091$ .

To test the hypothesis that psychopathic offenders who had low WAI ratings would have the highest rates of noncompletion, survival analysis was run among all four groups. Results were non-significant, Wilcoxon-Gehan (3) = 2.205,  $p > .05$  (see Figure 21). However, when further broken down into Ancestry, the survival curve became significant, Wilcoxon-Gehan (7) = 14.03,  $p = .05$  (Figure 22). Pairwise comparisons revealed several significant differences. The first was between Non-Aboriginal, Low WAI, Non-Psychopath and Aboriginal, Low WAI, Psychopath, Wilcoxon-Gehan (1) = 4.36,  $p < .05$ . The second was between Non-Aboriginal, Low WAI, Psychopath and Aboriginal, Low WAI, Psychopath, Wilcoxon-Gehan (1) = 3.77,  $p = .05$ . The final significant difference was between Non-Aboriginal, High WAI, Psychopath and Aboriginal, Low WAI, Psychopath Wilcoxon-Gehan (1) = 4.63,  $p < .05$ . All other comparisons were non-significant.

Figure 21

*Sex offender program noncompletion as a function of psychopathy and working alliance*

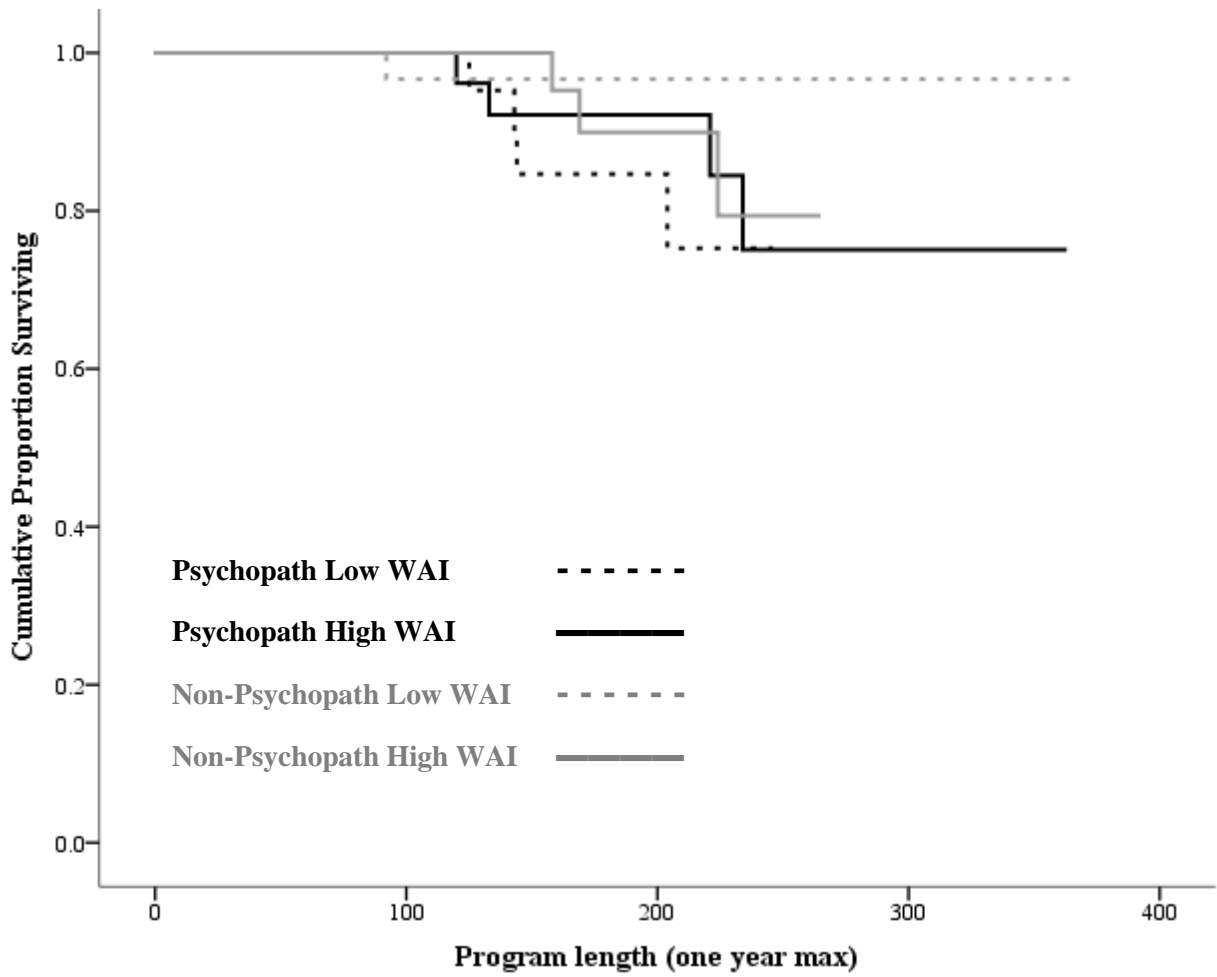
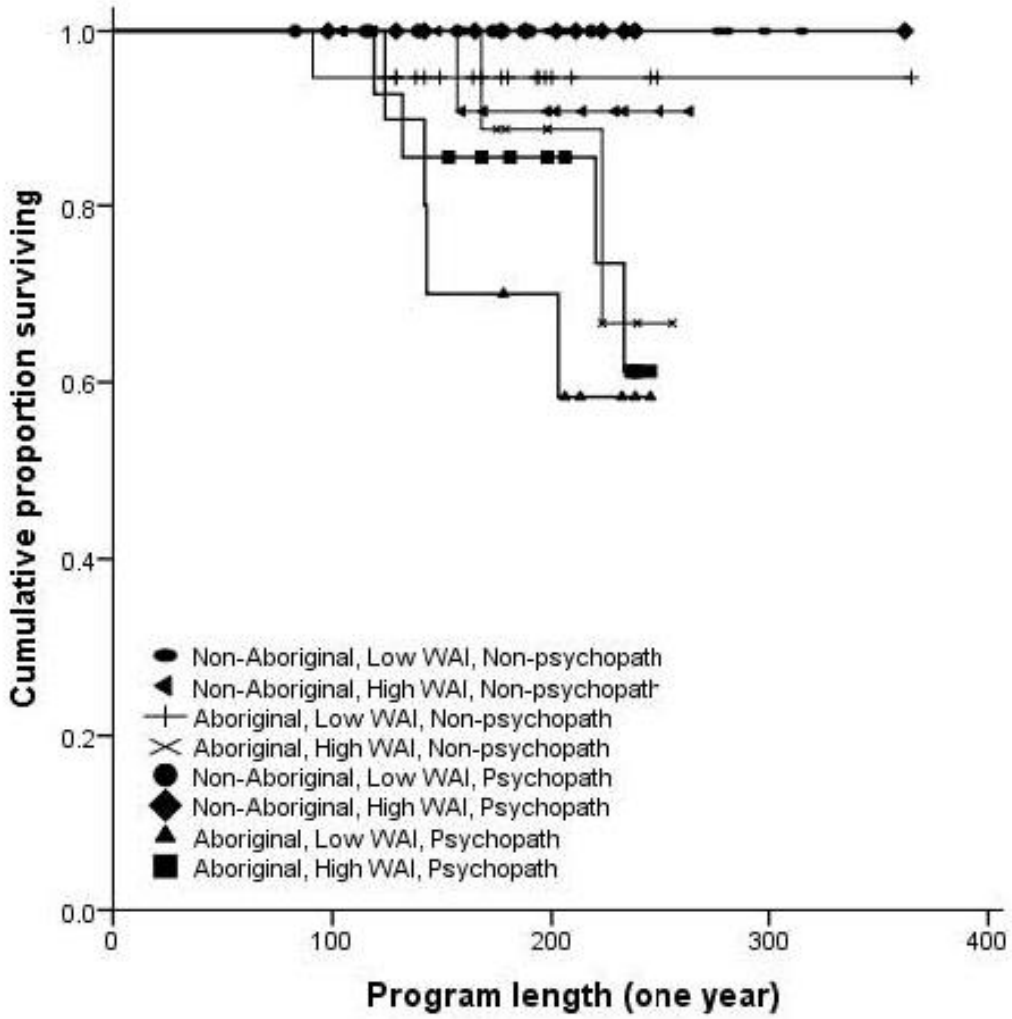


Figure 22

*Sex offender program completion as a function of Ancestry, Psychopathy, and WAI*





Cox regression analysis was used first in the combined sample of Aboriginal and non-Aboriginal offenders, and then for each group separately. This was conducted to see how well these two variables (WAI and PCL-R) uniquely predict outcome (treatment dropout) as a function of ancestry. The extent to which the WAI scores and the PCL-R scores made unique contributions to the prediction of treatment completion as a function of Aboriginal and non-Aboriginal groups was examined through Cox regression survival analysis. Continuous WAI and PCL-R scores were entered as predictors with binary treatment completion as the dependent variable. There were no significant independent contributions noted for either ancestral group (Aboriginal,  $\chi^2(3) = 3.55, p > .05$ ; non-Aboriginal,  $\chi^2(3) = 1.80, p > .05$ ) or for the sample as a whole  $\chi^2(3) = 4.27, p > .05$  (See Table 21).

Table 21

*Cox regression analysis: WAI and PCL-R scores as a function of Ancestry*

		Treatment Completion					
		<i>B</i>	<i>SE</i>	Wald	<i>Exp(B)</i>	95% CI	
						Lower	Upper
Total Sample							
	Total WAI	0.09	0.05	2.48	1.09	0.98	1.21
	PCL-R	0.63	0.38	2.75	1.89	0.89	3.99
	PCL-R x total WAI	0.00	0.00	2.17	0.98	0.99	1.00
Aboriginal							
	Total WAI	0.07	0.06	1.32	1.07	0.95	1.20
	PCL-R	0.49	0.40	1.51	1.64	0.75	3.59
	PCL-R x total WAI	0.00	0.00	1.06	0.10	0.99	1.00
Non-Aboriginal							
	Total WAI	0.03	0.16	0.04	1.03	0.76	1.41
	PCL-R	-0.14	1.73	0.01	0.87	0.03	25.91
	PCL-R x total WAI	0.00	0.01	0.00	1.00	0.99	1.01

**4.7.2 Sexual Recidivism.** It was further hypothesized that psychopathic offenders who had low WAI scores would sexually recidivate more frequently than non-psychopathic offenders with high WAI scores. To test this hypothesis, factorial ANOVA was applied with number of sexual re-offences as the dependent variable and the binary High/Low WAI and Psychopath/Non-Psychopath as the independent variables. Results indicated no significant main effect of High/Low WAI,  $F(1, 103) = .128, p > .05$  and Psychopathy,  $F(1, 103) = 0.04, p > .05$ ; nor was the interaction between these two variables significant,  $F(1, 103) = 0.03, p > .05$ . These results suggest that psychopathic offenders did not sexually recidivate more frequently than non-psychopathic offenders irrespective of WAI ratings (see Table 22 for mean number of reconvictions among the four groups).

Logistic regression was run in order to test whether the continuous PCL-R and WAI scores could predict sexual recidivism, first on the entire sample, and then separately for both Aboriginal and non-Aboriginal groups. Results indicated that for those offenders who were rated on the PCL-R ( $n = 107$ ), WAI had a small positive correlation with sexual recidivism,  $r = .19, p < .05$ . PCL-R scores were not significantly correlated with sexual recidivism,  $r = .07, p > .05$ . Together, these two variables did not significantly predict sexual recidivism,  $\chi^2(2) = 3.483, p > .05$ , Nagelkerke  $R^2 = .045$ . In addition, these variables could not significantly predict sexual recidivism for Aboriginal offenders,  $\chi^2(2) = 0.391, ns$ , Nagelkerke  $R^2 = .011$ . When examining the results for non-Aboriginal offenders, PCL-R and WAI scores approached but did not attain significance,  $\chi^2(2) = 4.451, p = .108$ , Nagelkerke  $R^2 = .107$ , suggesting that WAI and PCL-R scores may provide somewhat better joint prediction of sexual recidivism for non-Aboriginal offenders.

Table 22

*Mean rates of recidivism as a function of Psychopathy and WAI*

WAI scores	Psychopaths	Non- Psychopaths	ES ( <i>d</i> )	ES ( <i>r</i> )
	N = 51 <i>M (SD)</i>	N = 60 <i>M (SD)</i>		
	<i>Sexual Recidivism</i>			
High	0.58 (0.95)	0.66 (1.49)	0.06	0.03
Low	0.38 (0.86)	0.39 (0.68)	0.01	0.00
	<i>Non-Sexual Violent Recidivism</i>			
High	1.50 (1.88)	0.28 (0.80)	-0.88	0.40
Low	2.19 (2.86)	1.13 (2.22)	-0.43	0.21
	<i>General Recidivism</i>			
High	7.00 (8.43)	1.89 (3.13)	-0.83	0.38
Low	6.00 (8.44)	3.16 (5.54)	-0.41	0.20

**4.7.3 Non-sexual violent recidivism.** Factorial ANOVA was applied to examine if there were any differences in the number of non-sexual violent re-offences between groups. Number of reconvictions was used as the dependent variable and the binary High/Low WAI and Psychopath/Non-Psychopath as the independent variables. Results indicated a significant main effect of High/Low WAI,  $F(1, 103) = 3.851, p = .05$  and Psychopathy,  $F(1, 103) = 8.44, p < .01$ . However, the interaction between the two variables was not significant,  $F(1, 103) = .04, p > .05$ , suggesting these main effects were independent (see Table 22 for mean number of reconvictions among the four groups).

Logistic regression was run in order to test whether the continuous PCL-R and WAI scores could predict non-sexual violent recidivism, first on the entire sample, and then separately for both Aboriginal and non-Aboriginal groups. Results indicated that for those offenders who were rated on the PCL-R ( $n = 107$ ), WAI had a small negative correlation with non-sexual violent recidivism,  $r = -.22, p < .05$  while PCL-R scores were significantly positively correlated to it,  $r = .23, p < .01$ . Together, these two variables were able to significantly predict non-sexual violent recidivism,  $\chi^2(2) = 10.060, p < .01$ , Nagelkerke  $R^2 = .121$ .

This model did not significantly predict violent non-sexual recidivism for Aboriginal offenders,  $\chi^2(2) = 3.510, p > .05$ , Nagelkerke  $R^2 = .091$ . However, when examining the results for non-Aboriginal offenders, PCL-R and WAI scores did significantly predict this outcome,  $\chi^2(2) = 10.861, p < .01$ , Nagelkerke  $R^2 = .243$ . This suggests that WAI and PCL-R scores are better able to predict non-sexual violent recidivism for non-Aboriginal offenders than for Aboriginal offenders.

**4.7.3 General recidivism.** Factorial ANOVA was applied to examine if there were any between group differences in the number of general reconvictions. Number of reconvictions was used as the dependent variable and the binary High/Low WAI and Psychopath/Non-Psychopath as the independent variables. Results indicated that the High/Low WAI variable was non-significant,  $F(1, 102) = 0.01, p > .05$  but that the Psychopathy variable was significant,  $F(1, 102) = 9.52, p < .01$ . The interaction between the two variables was not significant,  $F(1, 103) = 0.78, p > .05$ . These results suggest that there were differences between the number of reconvictions between psychopaths and non-psychopaths, but not in WAI scores (see Table 22 for mean number of reconvictions among the four groups).

Logistic regression was run in order to test whether the continuous PCL-R and WAI scores could predict general recidivism, first on the entire sample, and then separately for both Aboriginal and non-Aboriginal groups. Results indicated that for those offenders who were rated on the PCL-R ( $n = 107$ ), WAI scores were not significantly correlated with general recidivism,  $r = -0.02$ ,  $p > .05$  while PCL-R scores were significantly positively correlated,  $r = .31$ ,  $p < .01$ . Together, these two variables significantly predicted general recidivism,  $\chi^2(2) = 9.666$ ,  $p < .01$ , Nagelkerke  $R^2 = .120$ .

Analysis of the Aboriginal group scores indicated that PCL-R and WAI scores together significantly predicted recidivism for this group of offenders,  $\chi^2(2) = 6.870$ ,  $p < .05$ , Nagelkerke  $R^2 = .185$ . The same trend was also observed when examining the results for non-Aboriginal offenders,  $\chi^2(2) = 6.092$ ,  $p < .05$ , Nagelkerke  $R^2 = .139$ . This suggests that WAI and PCL-R scores jointly predicted general recidivism in the expected direction for both Aboriginal and non-Aboriginal offenders.

## CHAPTER FIVE: DISCUSSION

### 5.1 General Discussion

The present research was an attempt to answer questions related to how the relationship that develops between an offender and his primary therapist impacts treatment completion and recidivism. More specifically, the objective of this research was to examine the strength of the alliance in offenders of Aboriginal ancestry and in offenders who were also deemed psychopathic. Although there is a plethora of research studies on the therapeutic alliance, there are few that explore this relationship in offenders of Aboriginal ancestry. The present research was an attempt to fill that void.

In an effort to answer some of these questions, responses to the Working Alliance Inventory of 423 offenders who were in a sex offender program were examined. A smaller subset of offenders was also scored on the PCL-R. In general, analyses consisted of examining the scores of the total sample on these measures and also dividing the offenders into groups based on Ancestry (Aboriginal or non-Aboriginal) and psychopathy. Various hypotheses were proposed in light of current literature in the area. Although many of the questions asked in the present research have not been studied empirically, they are relevant to current correctional practice and treatment of offenders. Bolstering an understanding of how various groups of people form and maintain relationships with treatment providers can only serve to improve current treatment practices.

**5.1.1 Working alliance group comparisons.** Initial analysis involved comparing WAI scores, first, more broadly, comparing two offender groups (sex offenders and non-sexual violent offenders) and secondly, and more specifically, comparing various sex offender sub-groups within the larger sample (rapist, child, molesters, mixed offenders, and non-contact sex offenders). Results indicated that sexual offenders had lower total WAI scores overall than the non-sexual violent offenders. Upon closer examination, the greatest difference in scores occurred for the Bond scores; Task and Goal scores were not significantly different. These results are consistent with one study that examined the factor structure of the Working Alliance Inventory – Short form (WAI-S) (Ross, Polaschek, & Wilson 2010). Specifically, the authors found that reliability of the WAI-S was improved when the Tasks and Goals subscales were

combined, suggesting that a two factor structure that differentiated between the “relationship-oriented bond factor from the more technically oriented goals and tasks factors” (Ross, et al., 2010, p. 11).

The concept of bonding involves having the ability to develop trust, confidence, and acceptance. In order to be able to form a bond with someone, one must have adequate interpersonal skills. Studies have shown that both intrapersonal and interpersonal skills of the client have significant effects on the alliance (Horvath & Luborsky, 1993). Often sex offenders are lacking in their ability to relate to others, which may help to explain or contribute to their sexual offending. In their review, Hudson and Ward (2000) described a series of etiological frameworks that paint the sexual offender, “as being socially inept, sexually preoccupied, socially isolated or at least having limited skills with respect to close relationships, and having a hostile, unempathic style of relating to others, particularly women” (p. 497). As such, it is not surprising that the sex offenders in the current sample reported having lower Bond scores than the non-sexual violent offenders.

Of the various sex offender subgroups, no significant differences in WAI scores were noted. However, rapists reported the lowest overall WAI scores and the non-contact sex-offenders reported the highest scores. This is not surprising given that the act of forced sexual contact upon an unwilling victim stands in sharp contrast to those qualities that one would assume are inherent to forming relationships with others (e.g. empathy, trust, respect, etc.). Previous studies that examined typologies of sex offenders found some subtypes of rapists to be motivated by anger and violence, beyond the sexual aspects of the crimes (Barbaree, Seto, Serin, Amos, & Preston, 1994) and they tend to have more serious histories of antisocial behaviour and be more assertive than molesters, for instance (Prentky & Knight, 1991). Although having these characteristics does not preclude an individual from forming relationships with others, it does suggest that this might be more difficult for this group of offenders. Particularly because the offenders are attempting to form relationships with people who are trying to get them to alter or reframe their cognitions associated with their criminal behaviours.

There were no significant differences in WAI scores based on age. Although not statistically significant, the results suggested that as offenders aged, the strength of their alliance increased, but only to a certain point; there was a drop in total score for offenders in the sixty and over category. Interestingly, examination of subscales revealed that only the Goal subscale



decreased; Tasks and Bond scales remained level. One interpretation could be that those offenders who were sixty years and older, had different goals for therapy than their primary therapists. Research on age and crime consistently shows that general criminal behaviors decline with age. However, regarding sexual offending, statistics indicate that sexual offenders are slightly older than the general population (Canadian Centre for Justice Statistics, 1999). In a study that examined the relationship of age to sexual recidivism, Hanson (2002) suggested that “older sexual offenders may be more (or less) persistent than are younger sexual offenders” (Hanson, 2002, p. 1047). Varying motivation could potentially account for the differences found between age cohorts. Perhaps the goals of the older offenders are more closely related to achieving parole than being rehabilitated, a question for future research. It is also possible such differences may be little more than chance variation, given the small proportion of offenders in this age group. Although no specific hypotheses regarding age of offender and WAI scores were made in the current study, results from the present analysis suggest an area of for potential future research.

#### **5.1.2 Working alliance and considerations with respect to Aboriginal ancestry.**

Regarding differences related to Ancestry, it was hypothesized that WAI scores would be significantly lower in Aboriginal compared to non-Aboriginal offenders and that Aboriginal offenders would have higher rates of treatment drop-out and recidivism than non-Aboriginal offenders, irrespective of WAI scores. These hypotheses were partly supported. First, when comparing the total WAI scores of the Aboriginal offenders to the non-Aboriginal offenders, no significant differences were noted overall. However, analysis of subscales revealed that Aboriginal offenders had significantly lower Bond scores than the non-Aboriginal offenders. The difference, about a quarter of a standard deviation ( $d = .24$ ) could be described as fairly small in magnitude. This suggests that although the bonds between Aboriginal offenders and primary therapists were not as strong as they were between non-Aboriginal offenders and therapists, Aboriginal offenders were still able to identify and agree on the goals and the tasks of the treatment. Based on the scores of the Task and Goals scales, the results otherwise may suggest that Aboriginal offenders were in agreement with the purpose or goals of treatment and how to arrive at these goals with their therapists, without necessarily forming a strong attachment with the treatment provider.

There are many possible reasons for what would seem to be a relative lack of bonding, including, perhaps, the men perceiving the program to have a lack of cultural awareness. An ethnographic study (Waldram, 2012) that examined the culture and practices of the Clearwater Program (the same program from which the data for the current study was collected) offered some interesting insight into the specific program components. Although the program was largely populated with Aboriginal men (Waldram noted that “at any given point during the research period, roughly half of all program inmates were “Aboriginal”; the others were mostly “white” (p. 52)), “Aboriginality” (p. 52) played mainly an insignificant role in the program. Waldram further observed that treatment facilitators made little to no effort to incorporate any cultural differences that might have existed between offenders. Although it would be easy to accuse the staff of not being culturally sensitive to the differences, Waldram also reported that the Aboriginal men rarely emphasized these differences or made them an issue. Based on his observations, one can conclude that the men in this particular program were not significantly affected or disturbed by the differences in ancestry between offenders and treatment staff or the lack of a cultural component to the program. With that being said the current research points to a difference in how offenders of Aboriginal ancestry bond with their primary therapist. One can infer from these studies that although Aboriginal offenders can successfully complete the sex offender treatment program despite the lack of a cultural component, the connections (as measured by the WAI) the offenders were making with their therapists were not as strong as they were for non-Aboriginal offenders. Perhaps a future qualitative study that examined the bond between offenders and treatment providers would help to delineate and understand the differences that were observed in the current study.

Another possible explanation for this weaker bonding between therapists and Aboriginal offenders could be less overt and relate more to specific program components. The sex offender program on the Clearwater unit is a CBT-based, group program that aims to reframe offenders’ thought patterns that lead them to commit crimes, and develop plans to avoid the same behaviours in the future. There are three major therapeutic tasks required of patients by the program that include presenting to the group of co-patients and staff an Autobiography, a Crime Cycle, and lastly a Relapse Prevention Plan. The first component, the Autobiography is not a traditional life story, per se. Rather, the majority of the focus is on the sexual crimes for which the offender is currently in program. That is, there is a minimal focus on historical details, with

the majority of the Autobiography focusing on the events that led up to and contributed to the commission of the sex offence or offences. The Crime Cycle component involves looking at the offences more specifically and the context in which they occurred in order to identify a “cycle” that leads to their criminal behaviour. The idea is to help the offender gain some insight into his cycle of behavior so that he can identify it in the future and act to make changes in that cycle. Finally, the Relapse Prevention Plan builds on the crime cycle in that it helps the offender identify specific triggers to his criminal behaviour (e.g., alcohol or drugs) and then identify specific strategies to help prevent such behaviors from re-occurring (e.g., ways to avoid the use of alcohol or drugs). According to Olver, Wong, Nicholaichuk, (2009), offenders who completed this program reoffended less than a treatment control group after a 10-year follow-up period, suggesting that this is an effective approach to rehabilitating and treating sexual offenders in terms of recidivism reduction. Although evidence supporting this program has been demonstrated, to date, there have been no studies that examined any differences in rates of recidivism for various cultural groups.

When considering Aboriginal offenders, it is difficult to generalize cultural practices as there are an abundance of Aboriginal groups in North America that have diverse cultural beliefs and practices. However, according to Sue and Sue (1999), there are a certain set of values that can be generalized to all Aboriginal groups. Some of these values include sharing and giving in order to gain honor and respect. The authors also identify cooperation, which they define as a reluctance to compete and show individuality, in order to maintain harmony and avoid any discord. Furthermore, others have stated that Aboriginal peoples are taught from an early age to view themselves as part of a greater, more complex web of people (i.e., community) versus the western approach of focusing on individual autonomy (Mason, 2000). Another value that Sue and Sue (1999) identified as common to Aboriginal groups is a focus on the present. They state that Aboriginals tend to focus on the “here and now” rather than on planning for the future. This stems from a belief that things are done according to a natural order and to interfere or plan for things in the future would represent a sort of egotism.

When we consider these three sets of values as they apply to the sex offender program, we can see how some Aboriginal offenders might have difficulty or struggle with some of the program components. For instance, although the offenders are expected to share extremely personal details of their lives with the other members of the group in their autobiographies and

crime cycles, treatment providers rarely, if ever, share any details of their own lives. It is common in western styles of mental health treatment to avoid providing any type of self-disclosure. Although it is common practice in western treatment modalities for therapists to avoid speaking or sharing of themselves, this can be seen as selfish or as a violation of a core value among many Aboriginal people.

A second value that can be counter to westernized modes of treatment is the notion of cooperation. In order to pass the program or be deemed to have ‘successfully completed’, the offender must fulfill certain requirements that include the previously mentioned Autobiography, Crime Cycle, and Relapse Prevention Plan. The offenders are expected to work on these three major therapeutic projects/presentations when outside of group sessions with the help of their primary therapists. The assignments are to follow a certain template and are required to include specific pieces of information. Although the offenders are told that these assignments are to be personal to them and include their personal narratives, it is often the case, as outlined in Waldram’s ethnography (2012), that offenders often do not say or include the proper details required for these assignments and are told to incorporate them. Although this is ultimately meant to help the offender gain insight into their thoughts and behaviors, it is possible that some Aboriginal offenders disagree with these inclusions but because of their cultural practice of cooperation, they quietly move on. However, this does not necessarily mean that the offender “buys into” these changes; just that he has not opposed his therapist. Moreover, the focus of these activities is placed on the individual and his actions, which can be seen as contradictory to viewing the self as part of a greater whole.

The third value that Sue and Sue (1999) described pertains to time orientation. They state that Aboriginals tend to live in the present and that any plans for the future are seen as self-centered. This is in direct contradiction to the Relapse Prevention Plan, which is entirely focused on future goals and behaviors. It may be difficult for those who have been acculturated to think in the present to shift their focus on the future, even if they are told it is in their best interest. Using these three values as examples, it is evident that it can be challenging for individuals with varied cultural beliefs and practices to alter their worldview and incorporate the differing values inherent in the CBT program to successfully complete the program. Waldram (2012) clearly stated in his book that the Aboriginal offenders he observed did not make culture, or lack thereof, an issue. However, according to Sue and Sue (1999), stating dissatisfaction would violate some

Aboriginal people's practice of cooperation. Therefore, it is possible that despite their ability to complete treatment, some of these issues are affecting the Aboriginal offenders' ability to form strong bonds with the treatment facilitators or their primary therapists. This is in line with the conclusions reached by Vicary and Bishop (2005) who reported that some of the problems that many Aboriginals face in dealing with mental health service providers relates to "stigma, cultural misunderstanding, involuntary confinement, and the failure of past mental health approaches" (p. 8).

In addition to the belief that focusing on the future is egocentric, Ellerby (2000) noted that many Elders who work in correctional settings with sexual offenders believe that there is too much focus on the past in westernized treatment (i.e., the criminal offence). Ellerby clarified by stating that the Elders he interviewed for his qualitative study felt that a focus on past events tends to hinder any movement forward and negatively impacts the healing process. This was supported in Mason's (2000) review of CBT and Aboriginal healing programs in a federal prison. He noted that some of his participants had the perception that the focus on historical events "had a tendency to steal too much energy away from the present and future" (p. 150). Moreover, he noted that reviewing the past in such detail maintains a focus on negativity, and fills the offender with hopelessness about the future (Mason, 2000). Rather, a focus on the future would provide the offenders with a more optimistic and promising view of their lives outside of prison. The Elders and offenders who participated in these studies would possibly argue that the relationships offenders form with treatment providers are impacted by the negativity that focusing on the past creates.

In the current study, the hypothesis that Aboriginal offenders would have lower total WAI scores than Non-Aboriginal offenders was not supported. However, closer examination of WAI subscale scores revealed that Non-Aboriginal offenders identified having stronger bonds with their primary therapists than Aboriginal offenders. Although specific hypotheses regarding the subscales of the WAI were not made, this finding is in line with the original hypothesis that Aboriginal participants would have lower WAI scores than their counterparts.

As previously delineated, Mason's (2000) qualitative study of eleven federally incarcerated Aboriginal men who participated in both cognitive behavioral treatment and traditional Aboriginal Sweat Lodge ceremonies found that offenders saw many similarities between these two types of treatment programs. However, Mason noted that respondents viewed

the programs as more dissimilar than similar, particularly in regards to therapeutic alliance and engagement. He outlined differences related to feelings of respect from staff and Elders and reported that offenders often felt judged by CBT treatment facilitators. Applying Mason's results to the current study offers a possible explanation as to why the Aboriginal offenders demonstrated weaker bonds than their counterparts.

All told, the current results revealed a difference between Aboriginal and non-Aboriginal WAI scores; specifically, the bonds between the Aboriginal offenders and their primary therapists as measured by the WAI, were not as strong as the bonds between the non-Aboriginal offenders and their primary therapists. However, does this imply then that outcome is different? Are Aboriginals more like to drop out of treatment and recidivate more because they have weaker bonds? Conversely, is it possible that poor bonding does not result in any differences between offenders and that those with low WAI scores can demonstrate successful program completion and subsequently lower rates of recidivism? An attempt to answer these questions was undertaken.

**5.1.3 Working Alliance and its Relationship to Treatment Completion and Retention.** Results of the current study revealed that Aboriginal offenders did not spend significantly less time in treatment than non-Aboriginal offenders, though results were in the expected direction. Considering the WAI and length of time spent in program, results indicated that WAI scores, in particular the Bond scores, were associated with longer length of stay in the program. As WAI was measured at one time point fairly early into the program, it is possible that men who developed stronger alliances with their primary therapists were more likely to last longer in treatment; however, a causal inference cannot be made given that posttreatment WAI scores were not available. This finding may contextualize some of the differences between Aboriginal and non-Aboriginal offenders as we saw that Aboriginal offenders spent slightly less time in treatment than the non-Aboriginal offenders, which may have some link to the development of weaker bonds.

Furthermore, results indicated that as WAI scores increased, rates of program non-completion also decreased, supporting the hypothesis that WAI scores would be negatively correlated with treatment noncompletion. This held true for all components of the WAI (i.e., task, bond, and goal). Moreover, those offenders with low scores tended to drop out of treatment more frequently and sooner than those with higher WAI scores. This is consistent with results

from a recent meta-analysis of 11 studies (Sharf, Primavera, & Diener, 2010). These authors looked at the relationship between therapeutic alliance and treatment drop-out in adults engaged in individual psychotherapy and found that the weaker the therapeutic alliance, the more likely clients were to drop out of treatment (Sharf et al., 2010). Similarly, as individuals spent more time in treatment, the bond and goals components of the WAI became stronger. Overall, results of the present study are consistent with the notion that offenders who were able to develop stronger therapeutic alliances would also be more likely to stay in and complete treatment (Castonguay et al., 2006).

These results highlight the need to develop and maintain positive relationships with offenders. Given that many sex offenders have deficits in interpersonal competence, it follows that the treatment providers involved must practice patience and understanding in order to foster positive relationships. Sex offenders also face the disadvantage of being discriminated against based on their crimes. It can be difficult for even the most skilled clinicians to overlook or avoid being influenced by the nature of the crimes committed. However, in order to encourage treatment completion, it is imperative that the therapist exude unconditional positive regard. With that being said, the therapeutic relationship requires both parties to take part. In other words, it is not solely up to the treatment provider to engage the offender and develop a rapport, the offender must also be active in order for the relationship to strengthen; something that is apt to occur more frequently if the offender feels that he is being respected and treated fairly. Previous research has shown that offenders have a difficult time trusting treatment staff. There are myriad reasons for this distrust that likely begins the moment a person is accused of a crime. According to Marshall and Serran (2004) offenders expect to be judged harshly which in turn contributes to their lack of trust in professionals and further escalates any expectation of being rejected because of their ‘unacceptable’ criminal histories. Given this initial distrust, it is vital that treatment providers work with offenders to foster and develop trust and mutual regard in order to develop a working alliance and ultimately for treatment to be successful.

**5.1.4 Aboriginal retention and completion.** As outlined above, results indicated that WAI was related to treatment retention and completion. The follow up question asked if the same would hold true for Aboriginal offenders. We know from the research literature and also from the results of the current study that Aboriginal offenders are more likely to discontinue treatment than non-Aboriginal offenders; particularly if they are deemed high risk (Wormith &

Olver, 2002). The current study aimed to ascertain whether such a trend could be mitigated by a strong working alliance. As such, it was hypothesized that Aboriginal offenders with low WAI scores would have higher and faster rates of treatment noncompletion and recidivism than Aboriginal offenders scoring high on (i.e., above the median) on the WAI, or non-Aboriginal offenders in general, irrespective of WAI group. This hypothesis was partly supported.

Specifically, it was found that as the strength of the WAI increased, Aboriginal offenders spent more days in treatment; this was not the case for the non-Aboriginal sample. Further analysis revealed that Aboriginal offenders with low WAI scores remained in program for the least amount of time while Aboriginal offenders with high WAI scores stayed in program the longest. The possible reasons for these differences are not entirely clear. One explanation might be that it is possible for offenders to request more time and to extend their stay or repeat the program. On the other hand, it is also possible that treatment providers are not passing and discharging the Aboriginal offenders as quickly as the non-Aboriginal offenders. It would be worthwhile for future research to examine this difference. If Aboriginals are remaining in treatment longer due to problems with comprehension of program concepts for example, it would be beneficial to have a greater understanding in order to make appropriate changes to the program.

Regarding treatment completion, results indicated that the therapeutic relationship was indeed related, but only for non-Aboriginal offenders. When the relationship between WAI and treatment completion was examined at the level of Ancestry, results indicated that there was no relationship between these two factors as they related to the Aboriginal offenders. We can conclude from this that the therapeutic relationship is an important factor to keep non-Aboriginal offenders in treatment, but that there could be some other motivating factor for the Aboriginal offenders; one possibility may relate to level of acculturation, a question for further research. Regardless of their alliance with primary therapists, Aboriginal offenders were more likely to drop-out or discontinue treatment than their non-Aboriginal counterparts. Future studies would benefit from including reasons for treatment noncompletion to help clarify and understand why Aboriginal offenders tend to discontinue treatment early and the role alliance may or may not play.

With that being said, when ancestry and dichotomous WAI score were examined results indicated that Aboriginal offenders with low WAI scores and hence, weaker alliances, tended to



successfully complete treatment less frequently than any other group. Although it might not be the sole or the main factor influencing decision to stay in treatment or not for Aboriginal offenders, maintaining a strong alliance (or conversely avoiding a weak alliance) has some positive impact in this regard.

In sum, the current research found that the therapeutic relationship was related to treatment completion in that the stronger the relationship, at least from the perspective of the offender, the more likely one was to successfully complete. Furthermore, strength of alliance was associated with successfully completing treatment, but only for non-Aboriginal men. Conversely, Aboriginal offenders spend more time in treatment on average, but paradoxically, were less likely to successfully complete it. Also, Aboriginal men with weaker alliances completed program the least frequently and non-Aboriginal offenders with high alliance scores completed the most frequently.

**5.1.5 Working Alliance and Recidivism.** Outcome as it relates to treatment can be defined in a multitude of ways such as change in offender attitudes and cognitions or interpersonal skills. In the present research, outcome was measured through an examination of reconvictions as part of CSC's mandate is to protect society by "actively encouraging and assisting offenders to become law-abiding citizens" (<http://www.csc-scc.gc.ca/hist/mission-eng.shtml>). As such, measuring the extent to which offenders re-engage in crime after treatment is one appropriate method of measuring program effectiveness.

The overarching purpose of offender programming is to rehabilitate offenders; ultimately, to reduce the likelihood of future criminal behaviour. If we support the idea that individuals with stronger WAI scores are more likely to successfully complete treatment, it would stand to reason that those same individuals would also be less likely to engage in further criminal behavior. Results of the current analysis were surprising in that WAI score was not significantly predictive of any recidivism outcomes, and for some outcomes (e.g., sexual recidivism), these non-significant findings were in the opposite direction expected. In short, there did not appear to be a relationship between the strength of the alliance and whether or not offenders recommitted crimes after release.

Unlike WAI, Ancestry was related to non-sexual violent reconvictions and general reconvictions but not to sexual recidivism. In the present sample, Aboriginal offenders were almost three times more likely to engage in non-sexual violent crimes after release and almost

twice as likely to recidivate generally. When considering both Ancestry and WAI together, results indicated that offenders who were of Aboriginal ancestry and had low WAI scores were the most likely to recidivate in a non-sexual violent manner and in general, but not sexually.

Overall, these results suggested that WAI was not a good predictor of recidivism. On the other hand, being of Aboriginal ancestry placed an offender at higher risk to re-offend after being released from prison. This supports much of the current literature in the area of risk assessment. It was hoped that WAI would mediate this finding (i.e., having a strong therapeutic relationship would result in less instances of recidivism, despite Ancestry). Unfortunately, this was not the case. Rather, it appeared that the therapeutic relationship, as measured by the WAI, had little bearing on outcome for either ancestral group.

One possible explanation for these non-significant findings could relate to the notion that many of the offenders return to their parent institutions once they complete treatment; they are not necessarily being discharged from prison. Though they may have learned valuable lessons in program and vowed to make changes to their lives, returning to a more difficult setting where antisocial values and behaviors are expected and encouraged could dampen any changes the offender has made. In their 2010 review of research pertaining to treatment communities, Ware, Frost, and Hoy suggested that offenders who were directly released into the community from prison therapeutic treatment programs demonstrated better outcomes (i.e., lower rates of recidivism). Future research would be enhanced by taking into account whether offenders are being discharged to the community after treatment completion and if not, the amount of time that has passed between treatment completion and release.

Another possibility is that strength of working alliance did not necessarily translate into risk relevant changes that would otherwise have an impact on outcome. It is possible for instance, that some offenders with strong alliances still made little risk-relevant change in treatment despite having a good bond or connection with their therapist. Moreover, given that the working alliance scores were taken fairly early into treatment and measured at only one time point, it is possible that the alliances changed (for better or for worse) over the weeks and months of treatment that ensued, and perhaps posttreatment measures of alliance could be a better and certainly more proximal predictor of outcome.

**5.1.6 Psychopathy, Working Alliance, and Recidivism.** The current research also examined how psychopathy, as measured by the PCL-R, was related to the therapeutic

relationship. Briefly, the construct of psychopathy can be characterized by a “combination of personality traits and socially deviant behaviours” (Hare, 2003). Some of the traits associated with psychopathy include callousness, lack of empathy and remorse, selfishness, and grandiosity, to name just a few. Given the nature of the traits associated with psychopathy, developing strong relationships with others would seem counterintuitive. The current research attempted to examine whether any differences in WAI scores existed for those who were deemed psychopathic versus those who were not and whether this was also reflected in rates of treatment retention and completion and rates of recidivism

**5.1.6.1 Working alliance and psychopathy.** Initial analysis of global WAI and PCL-R scores revealed no significant correlations between the two measures, consistent with Nast’s 2003 study. However, further exploration uncovered significant findings at the facet level. Specifically, it was found that as scores on the Emotional and Lifestyle facets increased, WAI scores decreased. This was also evident in the non-Aboriginal offender sample, but not in the Aboriginal sample. The Emotional facet of the PCL-R includes items related to lack of remorse and empathy, shallow affect, and a failure to accept responsibility. Given these traits, it follows that individuals who score high on this facet would have difficulty forming meaningful relationships with treatment providers, as evident in the Bond subscale. Olver and Wong (2011), for instance, found that the Emotional facet was a particularly strong predictor of sex offender treatment noncompletion. Items that load onto the Lifestyle facet include impulsivity, irresponsibility, and lack of realistic goals, parasitic orientation, and stimulation seeking. It is quite possible that the negative correlation between the Lifestyle facet and the WAI, specifically the Task subscale, may reflect a poor work ethic as that facet is associated with irresponsibility, impulsivity and lack of goals. It is important to note that the reliabilities for the Affective facet and subsequently Factor 1 scores were in the lower end of acceptable, according to the Cicchetti et al. (2006), criteria which stated that interrater reliabilites between .40 - .59, are classified as “fair” and .60 - .74 are considered “good”. However, these results are not uncommon in the literature. For instance, a meta-analysis that examined youth scores on the PCL reported the lowest reliabilities on Factor 1 and the Affective and Interpersonal facets (Olver, Stockdale, & Wormith, 2009). Moreover, these results were consistent with those reported by Lewis, Olver, and Wong (2012). While these reliabilities are consistent with other studies, it would be prudent

to consider how the low scores may attenuate the relationship of the Affective facet to variables such as the WAI total and scale scores.

All told, the results showed that both the Affective and Lifestyle facets were negatively related to WAI suggesting that callous-unemotional traits and lifestyle were associated with weaker alliance. Interestingly, these correlations were not evident in the Aboriginal sample suggesting that other factors, aside from levels of psychopathy, may be associated with working alliance in this broad ancestral group and add support to the idea that the PCL-R and/or the WAI may not be measuring the same constructs in Aboriginal offenders as they do in the non-Aboriginal offenders. To this researchers knowledge there are no prior studies that have examined psychopathy and working alliance with an Aboriginal population. As such, making comparison to other studies is not possible and interpretation of results is purely speculation at this point. However, the present analysis included strong criterion-related validity tests which allow the comparison of differing groups. Although the idea that the scales are measuring something different across cultures is one possible explanation for these findings, a replication of this study should be completed before drawing any definitive conclusions.

Further analysis involved making comparisons between those offenders who were deemed psychopathic against those who were deemed non-psychopathic. Traits associated with psychopathy are intuitively at odds with those expected to play a role in developing a strong therapeutic alliance (i.e., egocentricity; impulsivity; irresponsibility; shallow emotions; lack of empathy, remorse, and guilt; pathological lying; manipulativeness; and the persistent violation of social norms and expectations). As such, it was hypothesized that WAI scores would be significantly lower in psychopathic offenders (i.e., PCL-R score > 25) compared to non-psychopathic offenders (i.e., PCL-R < 25). Results were in the desired direction but were not substantially different, representing only a small effect size. Given the limited support for this hypothesis, it appears that there may be more impacting the development of this relationship than simply having psychopathic traits. Unfortunately, the current analysis does not provide any indication of what that might be. Future research in this area would benefit from adding therapist ratings and even possibly third party ratings as tests of validity in offender reporting.

**5.1.6.2 Psychopathy, treatment retention, and completion.** It was hypothesized that offenders who were deemed psychopathic and had low WAI scores would have higher rates of treatment noncompletion than other offenders. Results did not support this assertion and rather,

suggested that psychopathy was non-significant predictor of treatment attrition. Still, results were in the expected direction. It is important to note the very low rate of treatment noncompletion in the present sample, even among the psychopathic offenders; 15% did not complete treatment or conversely, 85% of the psychopathic offenders did successfully complete treatment. As such, future replication studies would do well to include a larger population of offenders who did not complete treatment to support the present findings.

It was further hypothesized that psychopathic offenders who also scored low on the WAI would have higher and faster rates of treatment drop out than other offenders. This was not supported in the present study. Furthermore, WAI and PCL-R scores did not independently predict successful program completion or drop-out in a subsample of 109 offenders. However, when taking Ancestry into account, results revealed some differences in the rate of program drop out. That is, Aboriginal offenders who were also deemed psychopathic and had low WAI scores dropped out of treatment at a higher and faster rate than any other group. The greatest differences were seen between those offenders who were Aboriginal, psychopathic, with low WAI scores and non-Aboriginal psychopaths with both high and low WAI and the non-Aboriginal, non-psychopaths with low WAI, although this interpretation is tempered by the extremely small cell sizes of these eight WAI-psychopathy-ancestry subgroups. Essentially, this demonstrated that Aboriginal offenders are more at risk to drop out of treatment prematurely, regardless of their WAI scores or a diagnosis of psychopathy.

**5.1.6.3 Psychopathy and Recidivism.** The PCL-R has been found to be a good predictor of violent and general recidivism and less predictive of sexual recidivism (Hanson & Morton-Bourgon, 2005; Olver & Wong, 2006; Leistico, Salekin, DeCoster, & Rogers, 2008). The current study supported these assertions in that both general and nonsexual violent recidivism were significantly correlated with the PCL-R, particularly the Antisocial and Lifestyle facets (Factor 2) when looking at the sample as a whole and for the non-Aboriginal sample. Although PCL-R scores were not significantly predictive of most recidivism criteria in the Aboriginal subgroup of offenders, the predictive accuracies for general recidivism tended to be moderate in magnitude and comparable to that of the non-Aboriginal offenders. Given the small size of the Aboriginal subgroup in PCL recidivism analyses ( $n = 50$ ), it is anticipated that the non-significance of these findings may represent a Type II error given their magnitude. It is important

to note that the PCL-R is used extensively in risk assessments for all federal offenders, regardless of their ancestry.

One study that examined the use of the PCL-R in determining Dangerous offender (DO) or Long-Term Offender (LTO) status concluded that this measure is frequently used to help inform these decisions (Lloyd, Clark, & Forth, 2010). Furthermore, they found that PCL-R scores were related to trial outcomes because of previous findings that suggested that PCL-R scores were highly correlated with treatment amenability. Therefore, those who were deemed psychopathic were more likely to be deemed DO's rather than LTO's because it was believed that they would be less amenable to treatment. This same study also compared the PCL-R scores of Aboriginal offenders to non-Aboriginal offenders and found that there was no significant difference in severity of scores. The authors concluded that the PCL-R testimony did not appear to target Aboriginal offenders for extended incarceration (Lloyd, Clark, & Forth, 2010). Although it is promising that experts are not biased in their ratings of PCL-R scores, given the large proportion of Aboriginal offenders in prisons, we can be sure that this measure is used frequently with this population to help determine level of risk etc. The current research suggests that this measure may not have the same predictive accuracy with the Aboriginal population as it does with a non-Aboriginal population. In her 2006 report on risk assessment of Aboriginal offenders, Rugge cites a 2004 unpublished report (which I was unable to locate) by Boer, Couture, Geddes, and Richie that makes claims that there is research to support that the PCL-R is equally valid for Aboriginal offenders; however, she goes on to state that she was not able to locate any of that research (Rugge, 2006). A 2012 study by Olver, Neumann, Wong, and Hare demonstrated that PCL-R total scores had moderate predictive accuracy for both Aboriginal and non-Aboriginal groups regarding violent, nonviolent, and general recidivism. (The PCL-R total score AUC magnitudes for general recidivism were quite comparable to those obtained for both ancestral groups in the present sample.) When disaggregated into facet scores, they found that only the Antisocial and Lifestyle facets were predictive of criminal recidivism and that the Affective and Interpersonal facets were not. Given the paucity of available evidence combined with the results of the current study, the use of such a tool to predict their potential for future violence or to help determine a lifelong status of being considered a DO or LTO merits further research. If this tool does not capture the same construct in Aboriginals as it does for a non-

Aboriginal population, then we must question its validity and its use in determining such severe sanctions.

Taking the therapeutic relationship into consideration, it was hypothesized that psychopathic offenders who had low WAI scores would recidivate more frequently than any other group. Results revealed no differences in rates of sexual recidivism for psychopaths, regardless of their WAI ratings. When examined at the level of Ancestry, results revealed that WAI and PCL-R together, were better able to predict sexual recidivism for non-Aboriginal offenders than for Aboriginal offenders. On the other hand, when looking at non-sexual violent recidivism, there was a significant difference in the number of reconvictions between those offenders with low WAI who were also psychopaths. Furthermore, results indicated that together, these two variables were able to predict non-sexual violent recidivism. However, this was only the case for non-Aboriginal offenders. Finally, when considering general recidivism, we see a different pattern of results. Specifically, there was a difference between number of reconvictions between the psychopaths and the non-psychopaths, but not for WAI scores. At the level of Ancestry, results indicated that WAI and PCL-R scores could predict general recidivism for both ancestral groups.

## **5.2 Limitations and Future Directions**

As mentioned in the preceding pages, the current research is not without its limitations. Regarding methodological concerns, the design of the current study was archival in nature. Being an archival study, I was limited by file information inconsistencies such as missing file information, in addition to having some difficulty accessing some of the follow up data. Specifically, four cases had to be removed from analysis for lack of sufficient information. Furthermore, there was one case where program start and end dates could not be located and one case with a data entry error on the WAI. As such, a statistical procedure for estimating these cases was used. Unfortunately, these problems are common to archival studies.

Another limitation of the present research relates to the manner in which the data was collected (the archival nature of the study). All of the data was collected via file review and offenders were not met with in person. Although offenders completed the WAI's themselves, they were not given other opportunities to report their experiences and provide narrative accounts of their relationships with treatment providers. Despite the validity of the tools used,

having first-hand accounts would likely have provided a richer, more accurate portrait of the relationships that developed between offenders and their primary therapists. As such, future research would benefit from incorporating offender interviews and possibly incorporating additional tools to measure the alliance as validity checks.

In a similar vein, having the primary therapists rate the WAI as well would offer another perspective of the relationship that develops while also providing another manner in which to test the validity of the offender ratings. This would be especially beneficial with the psychopathic offenders as it is speculated that perhaps they have a tendency to inflate the ratings of their relationships. Having the therapist perspective would offer insight into whether the offender is indeed trying to manipulate the results or whether the high ratings are a result of character traits such as grandiosity. However, Polaschek and Ross (2010) conducted a similar study of high-risk, violent psychopathic offenders and had offenders, therapists and third party observers all rate the alliance with the short form of the WAI. They found that offenders tended to rate the alliances higher than the other two groups overall, but concluded that one perspective was not more accurate or valid than the others. With that being said, the current research provides a sufficient measure of the therapeutic alliance, though we can assume that the scores are likely somewhat inflated from what they would be if the therapists or observers had rated them.

A related concern is that WAI scores administered at one time point, roughly three months into treatment, were only available for the present study. The working alliance is arguably a dynamic process which can ebb and flow and is also prone to rupture and repair as treatment progresses. Having WAI scores near the end of treatment would enable an examination of changes in the alliance over treatment, and if such changes (for better or for worse) were related to outcome. Unfortunately, alliance was measured and analyzed in a rather static manner, limiting the inferences that can be drawn from these results, but perhaps providing a fruitful avenue for further research.

Tools used to measure the therapeutic alliance, including the WAI, are all linear measures of the relationship. This begs the question as to what score is “enough” to start the process of change? At what point is the therapeutic alliance sufficient and what added value do a few points on a scale make, if any? It is important to keep these questions in mind when examining the results of the present study. In the current study, WAI scores were interpreted as a continuous measure of the “strength” of the alliance, but it would be helpful to know whether a specific



score is sufficient to establish a working alliance. Currently, there is no cut-off score to indicate that the working alliance is present or not or is strong enough to induce any type of change, a direction for future research.

Another limitation of current research relates to the notion that it was not possible to separate those offenders who willfully dropped out of treatment from those who were asked to leave or “expelled” from treatment. Having this information may have provided another level of analysis and possibly offered some further insight into the therapeutic relationship. Previous research by Wormith and Olver (2002) found that this was not an important distinction in non-sexual offenders but it may play a larger role with sex offenders. With that being said, there were few offenders who had dropped out of treatment in the current sample. Although distinguishing between the two groups would have added some insight into the reasons for leaving program, the small number of offenders falling into these categories was not susceptible to statistical analysis.

The manner in which the current data were analyzed implies that all Aboriginal participants in the sample are homogenous (i.e., it does not consider the variety and diversity of Aboriginal cultures present within Canada, nor does it consider the level of acculturation that may or may not be present). Clearly this is not the case, as there are more than 600 different Aboriginal cultural groups spread throughout the nation. Unfortunately, the current study did not permit an analysis of the various cultural representations; therefore, the results should be interpreted and generalized to Aboriginal people with caution. Although it may not be convenient to analyze all Aboriginal groups separately in this type of research, Sue and Sue (1999) suggest that distinguishing between Aboriginal people whose behaviors and lifestyles are more consistent with Aboriginal culture versus Aboriginal people whose lifestyles and behaviors more consistently reflect the dominant North American culture may help to overcome this limitation. One such way of distinguishing these groups might be to examine individuals who predominantly lived and were brought up on reserves versus those who lived most of their lives in urban centres.

Another limitation to the present research relates to an argument put forward by Howgego et al. (2003). These authors believe that traditional measures of therapeutic alliance may not best represent relationships with individuals who are mandated treatment. Their argument is based on the notion that traditional measures do not capture the issue of control in

these situations. Future research would benefit from considering this power imbalance, perhaps by including some qualitative interviews, and how this imbalance may or may not impact the development of these therapeutic relationships.

Finally, it is important to note that the data from the present study was drawn from a single, specialized correctional facility and program, where the correctional milieu is unique. This is particularly relevant for results derived from the assessment of working alliance and has implications for the generalizability of these findings. Furthermore, we must consider that the sample consists only of offenders who were caught and convicted of new offences and who had complete file information. It is quite likely that some of the offenders who were included in this study went on to recidivate, but were not apprehended or convicted of new crimes. Although this is a problem encountered by most, if not all recidivism research, we must consider this when generalizing results to other populations.

Future research would be served by the development of a new measure of the working alliance for Aboriginal peoples. A tool that considers the spiritual and cultural needs of this population and that has clarified the concept of the working alliance in an Aboriginal population would provide a better representation of the working alliance. Specifically, whether the Bond means something different for incarcerated Aboriginals who are doubly controlled by colonization and prison should be considered. But first, more qualitative studies are needed to investigate the experiences of Aboriginal offenders and their treatment providers to help recognize the specific factors that contribute to the development of a bond. When a better understanding of those factors that contribute to the development of the relationship, or more specifically, the bond, is acquired, the development of a tool for use with an Aboriginal population can occur.

### **5.3 Conclusion**

The goal of the present research was to provide some insight into the relationships that develop in a setting that is both therapeutic and correctional. A large proportion of offenders who participate in such programs are of Aboriginal ancestry and as such, it is imperative to understand whether current methods of treatment are successful or effective with this population.

A final goal of this study was to examine how or whether these relationships are affected when offenders are also deemed to be psychopathic.

The research presented in this document has contributed to a number of disciplines including the field of corrections and the discipline of psychology, in particular forensic psychology in a meaningful way. Specifically, it is the first of its kind in that there are no other studies to date that have examined these particular questions, specifically as they relate to Aboriginal offenders. The rigorous methods employed and the use of sensitive data analyses help to provide a foundation in which future research can replicate and extend the present findings. Having a better understanding of the therapeutic relationship that develops between therapists and offenders in general can only help to improve correctional programs, and ultimately, associated outcomes. In Canada, Aboriginal peoples are disproportionately represented in both the provincial and federal correctional systems. Furthermore, rates of recidivism in this population tend to be higher than for non-Aboriginals. As such, it is vital to begin questioning what some of the differences are in order to begin implementing changes to our correctional programs. Although the present research leaves several important questions unanswered, it does contribute to this growing body of knowledge and provides some preliminary data with which to pursue these questions.

Overall, results of the current study suggest that the Bond scores, as measured by the WAI, were consistently lower than other scores for sexual offenders and for Aboriginal offenders. As the WAI scores increased, so too did rates of treatment completion. Results also suggested that there was an inverse relationship between two facets of the PCL-R (i.e., Lifestyle and Emotional facets) and the strength of the WAI; but only for non-Aboriginal offenders. This relationship was not evident in the Aboriginal sample.

It is my hope that the present research will provide some insight into the relationship that develops between treatment providers and Aboriginal sexual offenders. There is a paucity of research in this area, despite the growing number of Aboriginal offenders in our correctional system. Perhaps having a better understanding of how to develop and promote stronger therapeutic relationships between offenders and treatment providers can help to increase treatment completion and ultimately, rates of re-offending.

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## Appendix A

Data Collection Protocol  
Demographic, Offense, and Treatment Information

### **BASIC DEMOGRAPHICS**

Date of Birth (yy/mm/dd): \_\_\_\_\_

Ethnicity:

- 1) Caucasian
- 2) Aboriginal
- 3) Asian
- 4) African Canadian
- 5) Add as Needed

Education (enter total years completed): \_\_\_\_\_

Employment Background:

- 1) Never employed
- 2) Frequently unemployed (more than 6 months of the last 1 year prior to current sentence)
- 3) Never employed a full year
- 4) Regularly employed (2-years and up)

Marital Status:

- 1) Never married
- 2) Divorced/ separated
- 3) Currently common-law/married
- 4) Widowed

### **CRIMINAL HISTORY/ INDEX OFFENSE**

**Index Offense:** *(Select all that apply)*

- 1) Sexual (contact)
- 2) Sexual (no-contact)
- 3) Non-Sexual Violent
- 4) Non-Sexual Nonviolent

**Sex Offender Type:**

- 1) Rapist
- 2) Child Molester
- 3) Mixed
- 4) Incest

**CRIMINAL HISTORY/ INDEX OFFENSE (CONT'D)**

Date of first adjudicated sexual offense (charge or conviction) (yy/mm/dd): \_\_\_\_\_

Age at first adjudicated sexual offense (DOB – Date of 1<sup>st</sup> sex offense): \_\_\_\_\_

*Offense History (Do not include index offense when rating):*

Total prior charges for sexual offenses: \_\_\_\_\_

Total prior convictions for sexual offenses: \_\_\_\_\_

Total prior sexual offenses (charges + convictions) = \_\_\_\_\_

Total prior convictions for nonsexual violent offenses: \_\_\_\_\_

Total prior nonsexual nonviolent convictions: \_\_\_\_\_

Total prior nonsexual convictions (nonsexual violent + nonsexual nonviolent) = \_\_\_\_\_

Total prior sentencing dates: \_\_\_\_\_

*Sexual Offense History (Count the index sexual offense):*

Number of male victims: \_\_\_\_\_

Number of female victims: \_\_\_\_\_

Number of unrelated victims: \_\_\_\_\_

Number of related victims: \_\_\_\_\_

**INSTITUTIONAL INFORMATION**

Name of Parent Institution: \_\_\_\_\_

Security Level:

- 1) Minimum
- 2) Medium
- 3) Maximum

Sentencing date (yy/mm/dd): \_\_\_\_\_

Index Sentence Length (years, months, and days): \_\_\_\_\_

**PROGRAM INFORMATION**

Date Admitted to Clearwater Program (yy/mm/dd): \_\_\_\_\_

Age upon admission (Admission Date - DOB): \_\_\_\_\_

Date discharged from the Clearwater Program (yy/mm/dd): \_\_\_\_\_

Total length of stay (months): \_\_\_\_\_

**PROGRAM INFORMATION (CONT'D)**

Did the offender successfully complete the program? (Please circle one) Yes/ No

Reason for discharge (if applicable):

- 1) Disruptive behavior
- 2) Low motivation/poor effort
- 3) Institutional infractions
- 4) Security concerns
- 5) Patient requested
- 6) Add as needed

Initiator of Discharge (if applicable):

- 1) Staff-initiated
- 2) Client-initiated
- 3) Mutually-initiated
- 4) System-initiated

**PSYCHIATRIC INFORMATION**

Axis I DSM diagnosis (please specify, do not include substance abuse): \_\_\_\_\_

Axis II DSM diagnosis (please specify): \_\_\_\_\_

Substance abuse diagnosis (please specify): \_\_\_\_\_

**RECIDIVISM INFORMATION**

Release Date (yy/mm/dd): \_\_\_\_\_

Date of first new conviction (yy/mm/dd): \_\_\_\_\_

Date of first new sex offense charge or conviction (yy/mm/dd): \_\_\_\_\_

Date of first new sex offense conviction only (yy/mm/dd): \_\_\_\_\_

Date of first new violent nonsexual conviction (yy/mm/dd): \_\_\_\_\_

*Recidivistic Offenses:*

Total new charges for sexual offense: \_\_\_\_\_

Total new convictions for sexual offense: \_\_\_\_\_

Total new sexual offenses (charges + convictions) = \_\_\_\_\_

Total new charges for non-sexual violent offense: \_\_\_\_\_

Total new convictions for non-sexual violent offense: \_\_\_\_\_

Total new non-sexual violent offenses (charges + convictions) = \_\_\_\_\_

Total new non-sexual convictions (non-sexual violent + non-sexual non-violent) = \_\_\_\_\_

Sentence length for first new sex offense (years, months, days): \_\_\_\_\_

Aggregate sentence length for new sex offenses (years, months, days): \_\_\_\_\_

## Appendix B

### The Psychopathy Checklist Revised (Hare, 1991, 2003)

Item	Rating		
1. Glibness/superficial charm	0	1	2
2. Grandiose sense of self worth	0	1	2
3. Need for stimulation/proneness to boredom	0	1	2
4. Pathological lying	0	1	2
5. Conning/manipulative	0	1	2
6. Lack of remorse or guilt	0	1	2
7. Shallow affect	0	1	2
8. Callous/lack of empathy	0	1	2
9. Parasitic lifestyle	0	1	2
10. Poor behavioral controls	0	1	2
11. Promiscuous sexual behavior	0	1	2
12. Early behavior problems	0	1	2
13. Lack of realistic, long-term goals	0	1	2
14. Impulsivity	0	1	2
15. Irresponsibility	0	1	2
16. Doesn't accept responsibility	0	1	2
17. Many short-term marital relationships	0	1	2
18. Juvenile delinquency	0	1	2
19. Revocation of conditional release	0	1	2
20. Criminal versatility	0	1	2

Factor 1 score: \_\_\_\_\_

Factor 2 score: \_\_\_\_\_

Total PCL-R score: \_\_\_\_\_

## Appendix C



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July 13, 2012

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Dear Ms. DeSorcy

You have permission to use the Working Alliance Inventory (WAI) for the investigation:

"Working alliance and its relationship with treatment outcome, aboriginal ancestry, and psychopathy in a sample of federal sex offenders"

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