NORMATIVE CHANGE AND PREDICTORS OF INDIVIDUAL CHANGE IN THE WORKING ALLIANCE OVER THE COURSE OF SEXUAL OFFENDER TREATMENT

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by

Brianne A. Kane

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APPROVED:

Brandy L. Blasko, PhD
Thesis Director

Jeffrey A. Bouffard, PhD
Committee Member

Holly A. Miller, PhD
Committee Member

Phillip M. Lyons, Jr., JD, PhD
Dean, College of Criminal Justice

ABSTRACT

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The working alliance has proven integral to treatment outcomes even in forensic settings; however there remains little understanding related to the formation of the working alliance in sexual offender treatment specifically. The current study examined whether sexual offenders report a better or worse working alliance with their therapists over the course of participation in sexual offender treatment. Sexual offenders enrolled in 19 consecutive treatment cohorts of a prison-based sexual offender treatment program completed the Working Alliance Inventory (WAI; Horvath & Greenberg, 1989) three months into the program and again upon completion of the program. Relying on data collected from a sample of 202 adult male sexual offenders, the study examined normative change in sexual offenders' perceptions of the working alliance over the course of treatment. To further understand changes in the working alliance, the study also examined whether selected client factors predict individual change in the working alliance over the course of treatment. Therapist demographics were also considered. Findings reveal an overall improvement in the working alliance during the course of sexual offender treatment. Furthermore, several factors were found to impact changes, but these vary among offender risk-level and WAI dimensions. Findings from the study pose specific implications for approaches to the treatment of sexual offenders as well as present important implications for criminal justice outcomes more broadly.

KEYWORDS: Sex offender; Sexual offender treatment; Working alliance; Working Alliance Inventory; Prison; Offender rehabilitation

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CHAPTER I

Introduction

Over the past two decades sexual violence has remained a consistent area of concern for the general public, for the media, and in criminal justice policy making (Schmucker & Lösel, 2015). Although sexual offenders have one of the lowest sexual recidivism rates, their risk is consistently overestimated by both the media and general public (Bureau of Justice Statistics, 2003; Langan & Levin, 2002; Levenson, Branon, Fortney, & Baker, 2007). For example, one survey of community residents estimated this number at 75% (Levenson et al., 2007) despite that most research has found this number to be between 5 and 24%. Over the past two decades sexual violence has also remained at the center of the national debate on criminal justice policy. Crime control efforts have led to numerous new specialized sexual offender policies aimed at reducing sexual violence, however ongoing debate about these efforts center on their effectiveness (Calkins et al., 2014). In addition to these punitive measures, policies have focused on treatment of sexual offenders to reduce recidivism.

The treatment of sexual offenders in North American began in the late 1960s and early 1970s. Early treatment focused on two approaches: cognitive-behavioral treatment (CBT) and relapse prevention (RP; Abel et al., 1970; Marshall, 1971, 1973; Pithers et al., 1983). Research has consistently shown the RP approach as ineffective in treatment, leaving CBT as the primary approach (Linley & Joseph, 2004; Snyder & Lopez, 2005). Nearly four decades after the introduction of sexual offender treatment, research continues to be conducted to determine best practices.

Current best practice in the treatment of sexual offenders includes the use of cognitive-behavioral interventions that target offender risk and adhere to the principles of effective correctional intervention (Andrews & Bonta, 2010; Hanson, Bourgon, Helmus, & Hodgson, 2009; Yates, 2004). Research demonstrates that cognitive-behavioral treatments are the most effective in reducing risk among sexual offenders (Hanson & Bussiere, 1998; Hanson et al., 2002; Lösel & Schmucker, 2005; Schmucker & Lösel, 2015). Hanson and colleagues' (2002) meta-analysis of 43 sexual offender treatment outcome studies showed that 9.9% of sex offenders who participated in cognitive behavioral therapy committed a subsequent offense, compared to 12.3% of sex offenders who completed any sexual offender treatment. Schmucker and Lösel's (2015) recent meta-analysis of 27 sexual offender treatment outcome studies found that CBT reduced sexual recidivism by 26.3%.

Among the general offender population, research overwhelmingly suggests that interventions are most effective at reducing recidivism when they adhere to principles described within the Risk-Need-Responsivity (RNR) framework (Andrews & Bonta, 2010; Andrews, Bonta, & Hoge, 1990; Andrews & Dowden, 2006; Lowenkamp, Latessa, & Holsinger, 2006). According to the RNR model, those at highest risk for recidivism should receive the most intensive programming; offender programs should target dynamic criminogenic needs; and correctional interventions should be tailored to meet the individual needs of offenders. Evidence suggests that the principles delineated in the RNR framework also apply to treatment outcomes for interventions with sexual offenders. In their meta-analysis of sexual offender recidivism studies, Hanson and colleagues (2009) found that when sexual offenders participated in treatment programs

adhering to principles of the RNR model they were less likely to reoffend sexually. Moreover, their meta-analysis showed that for each additional principle adhered to by programs (e.g., only the risk principle, both the risk and need principle) there was a subsequent increase in program effectiveness as demonstrated by reductions in sexual recidivism (Hanson, Bourgon, Helmus, & Hodgson, 2009).

Of the three RNR principles, the responsivity principle has been given the least empirical attention (Andrews & Bonta, 2010). This principle is meant to provide guidance about *how* to treat offenders to effectively reduce risk of reoffending. Andrews and Bonta (2010) divide the responsivity principle in two parts: general responsivity and specific responsivity. The general responsivity principle posits that when CBT techniques are used, a program will have increased success at targeting criminogenic needs (Andrews et al., 1990); whereas the specific responsivity principle stipulates that the CBT techniques must be tailored to individual characteristics of offenders. This should include, for example, providing correctional programming that is responsive to learning ability, is sensitive to the treatment setting, and responds to the therapeutic nature of the offender-client relationship. There is also growing evidence that several process-related factors are important, including group composition and therapeutic climate (Beech & Fordham, 1997; Beech & Hamilton-Giachritsis, 2005; Harkins & Beech, 2007). Andrews and Bonta (2010) acknowledge that the specific responsivity principle is underdeveloped and understudied. As a result, clinicians have little empirically supported direction with regard to what it means to adhere to the specific responsivity principle in the process of addressing the criminogenic needs of offenders (Dowden & Andrews, 2004).

Although the responsivity principle has often been overlooked in empirical research, one specific factor that has gained currency in treatment is the working alliance (Bordin, 1979). This relationship between client and therapist has been found to significantly impact treatment outcomes in general psychotherapy (Ackerman & Hilsenroth, 2003; Horvath & Bedi, 2002; Horvath & Symonds, 1991; Lambert & Barley, 2001; Murphy, Cramer, & Lillie, 1984; Norcross & Lambert, 2006). Due to these positive findings, researchers have begun to study the working alliance among offending populations, including sexual offenders (Beech, Fisher, & Beckett, 1998; Blasko & Jeglic, 2014; Blasko et al., 2015; Fernandez, Marshall, Lightbody, & O'Sullivan, 1999; Polaschek & Ross, 2010; Skeem et al., 2007; Tatman & Love, 2010). To date, research has found that sexual offenders can form a strong working alliance with their therapist (Blasko & Jeglic, 2014; Polaschek & Ross, 2010; Tatman & Love, 2010). In addition, several therapist factors and one client factor have been found to predict the quality of the working alliance within sexual offender treatment (Marshall et al., 1999; Marshall et al., 2002; Walton, Jeglic & Blasko, 2016). However, additional research is needed to better understand this relationship.

The current study sought to better understand the impact of the working alliance in sexual offender treatment by examining normative change and predictors of individual change among 202 adult male sexual offenders. Although research has demonstrated the working alliance's impact on treatment outcomes within general offending populations, determining if the quality of the working alliance is a static or dynamic factor is essential for further improving treatment outcomes. If the working alliance were found to be a dynamic factor that changes, then treatment can be adjusted to improve the working

alliance among all those in sexual offender treatment. The current study contributes to the body of research by examining if the working alliance changes over the course of sexual offender treatment and, if so, what individual client and therapist factors predict these changes.

CHAPTER II

Literature Review

The working alliance has garnered a great deal of interest in psychotherapy, however this research has been limited among criminal justice populations, including the sexual offending population. This section will define the working alliance and review previous research related to the working alliance among general offenders and sexual offenders.

The Working Alliance

The client-therapist relationship—also referred to as the working alliance (Bordin, 1979; Horvath & Greenburg, 1989), the therapeutic alliance (Blumenthal, Jones, & Krupnick, 1985; Bordin, 1989), and the helping alliance—is defined as the collaboration between client and therapist which impacts therapy success (Horvath & Symonds, 1991). The concept of the working alliance originated within psychoanalytic theory where addressing the relationship between therapist and client is central to change. Psychoanalytic theorists emphasized the importance of the relationship between client and therapist in the therapeutic process and argued that the reality based elements of a positive bond aided the process of psychoanalytic therapy (Greenson, 1971; Sterba, 1934). Although the concept of the working alliance originated in psychoanalytic theory it is now considered an integral part of most theoretical orientations, including cognitive behavioral therapy (Beck, 1976; Wambold, 2010). Findings spanning thirty years of the general psychotherapy literature have now consistently demonstrated that the working alliance positively correlates with treatment outcomes regardless of the treatment approach utilized (Horvath & Bedi, 2002; Horvath & Symonds, 1991; Lambert & Barley,

2001; Martin, Garske, & Davis, 2000; Murphy, Cramer, & Lillie, 1984; Norcross & Lambert, 2005; Shirk & Karver, 2003).

Bordin[1] (1979) was the first to quantify the working alliance. The three main factors of the client-therapist relationship are the agreement on goals of the treatment, the assignment of tasks that will aid in the client reaching their therapeutic goals, and the development of bonds through mutual trust, acceptance, and confidence between client and therapist. These factors have been examined across an array of research settings and populations and are most commonly captured using the Working Alliance Inventory (WAI; Horvath & Greenburg, 1989). Originally developed in 1981, the WAI measures the strength and quality of the relationship through client and therapist self-assessment (Horvath, 1981). On average, research has found that the client's perception of the working alliance, as opposed to the therapist's perception or an independent observer's perception, correlates more highly with treatment outcomes (Bohart, Elliott, Greenberg, & Watson, 2002; Bussieri & Tyler, 2004; Zuroff et al., 2000).

The Working Alliance and General Offenders

While general psychotherapy populations have demonstrated the efficacy of the working alliance for several decades (Horvath & Bedi, 2002; Lambert & Barley, 2001; Norcross & Lambert, 2006), more recent research findings support the importance of the working alliance in general offender treatment as well (Andrews & Bonta, 2006; Hanson et al., 2002). Empirical findings suggest offenders are able to form a good client-therapist relationship (Blasko & Jeglic, 2014; Polaschek & Ross, 2010; Tatman & Love, 2010).

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[1] Bordin (1994) defined the working alliance between client and therapist as "a mutual understanding and agreement about change goals and the necessary tasks to move toward these goals along with the establishment of bonds to maintain the partners' work" (p. 130).

This research on the role of the working alliance in criminal justice contexts spans several populations, including prisoners (Polaschek & Ross, 2010), probationers (Kennealy, Skeem, Manchek, & Louden, 2012; Skeem, Encandela, & Louden, 2003; Skeem et al., 2007), parolees (Blasko et al., 2015), and drug treatment participants (Joe, Simpson, Dansereau, & Rowan-Szal, 2001).

Skeem and colleagues (e.g., Kennealy, Skeem, Manchak, & Louden, 2012; Skeem, Encandela, & Louden, 2003; Skeem et al., 2007) have focused their work on specialized mental health caseloads within probation supervision settings. Overall this research has revealed that positive relationships between mentally ill probationers and their probation officers increase rule compliance on community supervision. These findings also hold true with non-mentally ill probationers (Kennealy, Skeem, Manchak, & Louden, 2012). The working alliance is also beneficial for parolees and their supervising officers. In their study, Blasko and colleagues (2015) randomly assigned parolees to one of two conditions: supervision as usual or a collaborative supervision intervention which involved the typical supervision by a parole officer, but who had been trained in behavioral management and motivational interviewing. Those assigned to the collaborative supervision also had a treatment counselor attend biweekly sessions to improve relationship dynamics between the parole officer and parolee. It was found that those who had been involved in the collaborative supervision intervention perceived higher quality relationships with their supervising officers. In addition, it was found that higher relationship quality was associated with less drug use days and future violations (Blasko et al., 2015). Another study on community supervision was conducted by Tatman and Love (2010). Researchers and practitioners within the Iowa Department of

Corrections used the Working Alliance Inventory-Short Form (Horvath & Greenberg, 1989) to investigate whether sexual offenders under community supervision were capable of perceiving positive relationships with their therapists and parole officers (Tatman & Love, 2010). Results showed 90 percent of sexual offenders reported high average ratings with their parole officers and therapists (Iowa Department of Corrections, 2011).

The finding of the significance of the working alliance holds true in studies of drug treatment as well. For example, Luborsky and colleagues (1997) found that a strong working alliance was associated with positive treatment outcomes among participants of three different forms of substance use treatment, including cognitive behavioral therapy, psychodynamic therapy, and standard drug counseling. The working alliance also proved significant in Joe and colleagues' (2001) study of methadone maintenance treatment outcomes.

The Working Alliance and Sexual Offenders

Most research on the working alliance among sexual offending populations has been focused on identifying therapist factors that are related to the quality of the working alliance (Blasko & Jeglic, 2014; Goldfried, Burckell, & Eubanks-Carter, 2003; Marshall, et al., 2003). Results from this body of research have found that the therapist plays a key role in the working alliance. Therapists who display empathy, warmth and directiveness, as well as reward their client's good behavior have been found to impact changes in the client-therapist relationship (Fernandez et al., 1999; Marshall et al., 2002). Specifically, it has been found that these four behaviors can have a positive impact on the perspective taking, coping skills, and relationship difficulties of sex offender clients (Marshall et al., 2003). In addition, self-disclosure suggested as a therapist behavior may also help

facilitate the working alliance (Goldfried, Burckell, & Eubanks-Carter, 2003; Marshall et al., 2003). Therapist characteristics that have been found to impact the working alliance include gender (Blasko & Jeglic, 2014), as well as age and professional training (Hersoug et al., 2009).

While therapist-based factors that impact the working alliance have been examined among sexual offending populations, client-based factors have not received the same amount of attention. However, general psychotherapy literature has found several client-based factors to impact the client's perception of this relationship. These factors include socioeconomic status (Hersoug, Hoglend, Havik, Von der Lippe, & Monsen, 2009a), gender-match (Kiesler & Watkins, 1989; Norcross, 2010; Persons, Persons, & Newmark, 1974; Wintersteen, Mensinger, & Diamond, 2005), gender (Kiesler & Watkins, 1989; Persons et al., 1974; Wintersteen et al., 2005), age (Connors et al. 2000), and personality characteristics (Psuchner, Bauer, Horowitz, & Kordy, 2005; Wallner-Samstag, Muran, Zindel, Segal, & Schuman, 1992). Lastly, client psychological factors have also been found to impact the working alliance. These include psychopathy (Wilson, 2004), personality disorders (Strauss et al., 2006), global functioning, interpersonal difficulties, and depression (Castonguay, Constantino, & Grosse Holtforth, 2006; Constantino, Arnow, Blasey, & Agras, 2005; Hersoug et al., 2009a). In addition, the client's present and past relationships, in terms of parental bonds (Mallinckrodt, 1992), current social support, attachment style (Beech & Mitchell, 2009; Earnes & Roth, 2000; Horvath, 2001; Kivlighan, Patton, & Foote, 1998; Mallinckrodt, Coble, & Gantt, 1995; Mallinckrodt, Porter, & Kivlighan, 2005; Meier, Donmall, Barrowclough, McEldruff, & Heller, 2005; Norcross, 2010; Satterfield & Lyddon, 1995), and the quality of past

relationships (Hersoug, Monsen, Havik, & Hoglend, 2001) also impact the working alliance. However, Hersoug and colleagues (2001) found that the impact of present and past relationships on the alliance decreases over time. It should also be noted that some research has failed to find a correlation between client demographic variables and the quality of the working alliance (Meier, Barrowclough, & Donmall, 2005).

Changes in the Working Alliance and What Might Predict these Changes

Literature on the working alliance has found that there are three longitudinal trajectories that the client's ratings follow. These patterns include a stable alliance, a positive linear growth, or a quadratic growth where the alliance starts high, decreases, and then increases (Gelso & Carter, 1994; Horvath & Luborsky, 1993; Kivlighan & Shaughnessy, 1995, 2000; Piper et al., 1995). However, understanding the development of the working alliance is not necessarily that simple. Research that has looked at the working alliance vary in terms of time of administration. In some research, clients are administered the WAI weekly or biweekly (Polaschek & Ross, 2010; Ross, Polaschek & Wilson, 2011; Tatman & Love, 2010; Watson, Thomas & Daffern, 2015) whereas other studies do so based on module completion (Blasko & Jeglic, 2016; Taft et al., 2003) and others at seemingly random times (DeSorcy, Olver & Wormith, 2016). Furthermore, the number of times of administration also vary among studies. Due to differing procedures, findings may vary as a result.

Most research on the working alliance in sexual offender treatment has measured the working alliance at a singular point which may yield an unreliable assessment of the relationship (Walling, Suvak, Howard, Taft, & Murphy, 2012). Furthermore, research has demonstrated that the development of the working alliance may be more predictive of

outcome than the quality of the working alliance at the end of treatment (Kivlighan & Shaughnessy, 1995). As such, understanding if and how the working alliance changes over the course of sexual offender treatment is necessary to fully understand this relationship and to improve treatment outcomes.

While extensive research has examined predictors of the working alliance, there is limited research that has looked at predictors of change in the working alliance. In a series of studies conducted by Marshall and colleagues (e.g., Marshall, 2005; Marshall, Serran, Fernandez, Mulloy, Mann, & Thornton, 2003; Marshall, Serran, Moulden, Mulloy, Fernandez, Mann, & Thornton, 2002), therapist behaviors were the focus to determine how they impact client changes throughout the course of sexual offender treatment. The behaviors of interest were empathy, sincerity, warmth, respectfulness, rewardingness, confidence, directiveness, appropriate self-disclosure, appropriate time on issues, appropriate humor, appropriate body language, appropriate amount of talking, appropriate voice tone, encourages participation, encourages pro-social attitudes, non-collusive, clear communications, asks open-ended questions, deals effectively with problems, non-confrontational, and confrontational. Marshall and colleagues (2002) examined the relationship between these behaviors and client change by examining videotapes of recorded therapy sessions within five prison-based sexual offender programs. For each program, five videotapes were viewed – one recorded at the beginning of treatment, one recorded at the end of treatment, and the remaining three recorded within this time frame. A trained judge viewed each tape and rated the presence of the twenty-one therapist behaviors on a five-point Likert scale (1 = behavior not present, 3 = behavior usually occurred, 5 = behavior consistently occurred). Pearson

Product Moment correlations were calculated between the therapist behaviors and measures of client change and it was found that empathy, warmth, and directiveness significantly increased the total effects of treatment (Marshall et al., 2002). In addition, these three features and rewardingness significantly decreased the following treatment targets: victim blame, denial of responsibility, denial of premeditation, and minimization (Marshall, et al., 2002). Based on this research, it appears that the most impactful therapist behaviors are empathy, warmth, rewardingness, and directiveness (Marshall, 2005).

In another study that focused on sexual offender treatment, Blasko and Jeglic (2014) examined the impact of therapist gender on the client's rating of the working alliance. The data utilized were from 202 adult male offenders who had completed sexual offender group treatment while incarcerated in a state prison. Each group was led by one male and one female therapist. At the beginning and completion of treatment, the offenders rated their working alliance with each therapist using the WAI. It was found that higher risk offenders, as measured by the Static-99, perceived poorer bonds with their female therapist at the end of treatment as compared to their male therapist. In sum, the research of Blasko and Jeglic (2014), Marshall and colleagues (Marshall et al., 2003; Marshall et al., 2002; Marshall, 2005), and others suggest that therapist features impact the working alliance in sexual offender treatment.

Further, client psychological factors have also been found to impact changes in the working alliance. In one of the only studies that examined the impact of offender characteristics on the working alliance in sexual offender treatment, Walton, Jeglic, and Blasko (2016) examined the role of psychopathy. The study utilized the same data from

Blasko and Jeglic's (2014) study, but considered the scores from the Psychopathy Check List-Revised (PCL-R). Initially, no significantly relationship was found between PCL-R scores and WAI ratings of the client or therapist. However, when those clients participating in aftercare treatment were excluded, it was found that higher PCL-R scores were negatively related with ratings of the bonds subscale by clients. In another study, Walling and colleagues (2012) focused on client race and ethnicity as a predictor of change. Using a sample of 107 perpetrators of intimate partner violence, the quality of the working alliance was measured four times over the course of therapy. Findings revealed that minority participants did not experience a change in the working alliance, whereas Caucasian participants experienced a significant increase over the course of therapy. Overall, these studies and prior literature suggest that client characteristics may impact the working alliance.

The Current Study

Research demonstrates that the working alliance plays an important role in treatment outcomes for non-offending populations (e.g., Westen, Novotny, & Thompson-Brenner, 2004), as well as offending populations such as sexual offenders (Blasko & Jeglic, 2014; Marshall, et al., 2003). Encouragingly, empirical findings to date suggest sexual offenders are able to form a positive working alliance with their therapists (Blasko & Jeglic, 2014; Polaschek & Ross, 2010; Tatman & Love, 2010). To date, there is limited research on how the working alliance progresses over the course of sexual offender treatment. The current study addresses three research questions.

Research Question 1. Do sexual offenders' perceptions of the working alliance change over the course of sexual offender treatment?

Research on the working alliance has found that it often develops in a positive linear pattern or a quadratic growth (Gelso & Carter, 1994; Horvath & Luborsky, 1993; Kivlighan & Shaughnessy, 1995, 2000; Piper et al., 1995). While it has been found that a positive change in the working alliance leads to more positive client outcomes, research must address whether this change occurs for sexual offenders (Stiles et al., 2004; Vogel, Hansen, Stiles, & Götestam, 2006). In the current study, it was expected that findings would reveal a positive development of the working alliance over the course of sexual offender treatment.

Research Question 2. Do the individual factors (i.e., demographics, mental health and psychological, criminal justice, sex-offense specific) of sexual offenders impact changes in the working alliance?

No studies have examined client-based predictors of change in the working alliance during sexual offender treatment. However, Hersoug and colleagues (e.g., Hersoug, Hoglend, Havik, & von der Lippe, 2009; Hersoug, Hoglend, Havik, & Monsen, 2010; Hersoug, Monsen, Havik & Hoglend, 2001) have studied predictors of change in the working alliance among the general population. In their study that focused on early alliance predictors, Hersoug and colleagues (2001) found that the quality of past and current relationships only impacts the quality of the early working alliance. In addition, it was found that pretreatment variables do not strongly predict the working alliance and that diagnostic variables, such as DSM-IV diagnoses, symptoms, and interpersonal problems, are unrelated to the alliance. In a later study on pretreatment patient characteristics, Hersoug and colleagues (2009) assessed changes in the working alliance among 370 individuals participating in psychodynamic treatment at outpatient psychiatric

clinics. They found clients that scored high on psychodynamic functioning were more likely to begin treatment with a strong alliance and clients with strong maternal attachments were more likely to rate the alliance as high from the beginning of treatment to the end. Since research is limited on client-based predictors of change in sexual offender treatment, the current study examined an array of variables. Similar to some of the only research in this area, it was expected that at least PCL-R scores and race would predict changes. However, further research is needed to determine if additional variables predict changes in the working alliance in sexual offender treatment.

Research Question 3. Do the individual factors (i.e., age, race, education) of therapists impact changes in the working alliance?

Research on therapist-based predictors of change is more extensive. The research of Marshall and colleagues (Marshall, 2005; Marshall, Serran, Fernandez, Mulloy, Mann, & Thornton, 2003; Marshall, Serran, Moulden, Mulloy, Fernandez, Mann, & Thornton, 2002) has found that therapist empathy, warmth, and directiveness significantly impact changes in the working alliance. While this research is focused on therapist behaviors, little research has looked at therapist characteristics as predictors of change. The research that has looked at it has found that therapist age and professional training predicts changes in the working alliance (Hersoug, Hoglend, Havik, & von der Lippe, 2009a, 2009b). In the current study, it was expected that findings would be similar to those of Hersoug and colleagues (2009a, 2009b) where age and education predict changes.

CHAPTER III

Data and Method

This chapter presents the data and methodology for the current study. The chapter begins with a description of the study setting—the prison-based sexual offender treatment program—in order to provide background information and then the sexual offender sample is presented. Next the study instruments and variables, including the Working Alliance Inventory (Horvath & Greenburg, 1989), are discussed, as well as an overview of the procedures used for data collection. The chapter concludes with the analytic plan for the current study.

Program Description

Data were collected over a three-year period from male sexual offender treatment participants incarcerated within the Pennsylvania Department of Corrections (PADOC). The sexual offender treatment program was a manualized cognitive behavioral treatment (CBT) program for sexual offenders conducted in a group format. Before beginning the program, risk was assessed using the Static-99 (Hanson & Thornton, 2000) and results guided sexual offender group placement as per PADOC policy. Those with a score of three or below were placed in a low intensity treatment group whereas those with a score of four or above were placed in a moderate-high intensity treatment group. Following PADOC policy, sexual offenders could be placed in higher level of treatment due to dynamic risk factors (see Blasko, Jeglic, & Mercado, 2011 for a description of this process). As per PADOC policy all sexual offenders also participated in a clinical interview to score the Psychopathy Check List-Revised (PCL-R; Hare, 1991).

Low intensity programming lasted between 12 and 14 months in duration and comprised of three modules: (a) responsibility taking, (b) sex education, and (c) relapse prevention and life management plans. Moderate-high intensity programming was between 24 and 30 months in duration and comprised of seven modules: (a) responsibility taking, (b) behavioral techniques, (c) emotional wellbeing, (d) victim empathy, (e) anger management, (f) sex education, and (g) relapse prevention and life management plans. At the completion of each treatment module an individual session was scheduled between the sexual offender and both therapists. Attendance in the program was voluntary; however, participation in treatment likely contributed to early release on parole.

A total of 10 therapists (5 female, 5 male) facilitated groups for the sexual offender treatment program. Each group had a primary and a secondary therapist. Their ages ranged from 26 to 44 years (M = 33.17, SD = 5.76) and most were White, non-Hispanic (70.00%). All therapists had a graduate degree in a human services field; two were licensed psychologists with doctorate degrees, one was a psychiatrist, and seven were master-level clinicians. Aside from one who, as a Licensed Clinical Social Worker (LCSW) had been trained with the humanistic orientation, the remaining therapists were trained to provide cognitive-behavioral therapy. Prior to leading their own groups, all therapists attended a 5-day intensive training and, subsequently, observed previously trained therapists facilitate the manualized program for a minimum of one year. All therapists were required to participate in a weekly supervision group. At the time of this study, all therapists had at least three years of experience conducting manualized group interventions with sexual offenders.

Participants

The sample for the current study comprised of 202 adult male sexual offenders serving sentences in a maximum-security state prison. Over the three-year study period, the sexual offenders enrolled in 19 consecutive treatment cohorts. Of the 202 sexual offenders, 94 (47%) successfully completed low intensity programming and 108 (53%) successfully completed moderate-high intensity programming. No offenders dropped out of treatment. Table 1 provides officially sanctioned criminal history and victim information on the participants.

Table 1

Criminal History and Victim Information

	M/%	SD	Min	Max
Previous Adult Convictions	53.40	-	-	-
Sexual Offense	22.90	-	-	-
Violent Offense	47.60	-	-	-
Juvenile Convictions	48.50	-	-	-
Sexually Related Offense	9.00	-	-	-
Non-sexual Offense	39.50	-	-	-
Relationship to Victim				
Stranger	32.67	-	-	-
Acquaintance	41.58	-	-	-
Wife/Girlfriend	7.43	-	-	-
Relative	18.32	-	-	-
Number of Victims	1.61	1.35	1	15
Victim Type				
Adult victim	40.10	-	-	-
Child victim	55.94	-	-	-
Both	3.96	-	-	-

Note. N = 202, M = mean, SD = standard deviation.

Procedures and Measures

After sexual offenders who were enrolled in the low intensity groups had completed modules 1 and 3, and after those who were enrolled in the moderate-high intensity groups had completed modules 1 and 7, they were asked to rate their primary therapist using the Working Alliance Inventory-Client Form (WAI; Horvath & Greenberg, 1989). Therapists were not in the room at the time of the WAI administration. As the WAI was used for research purposes, all sexual offenders completed an informed consent and agreed to have their data used for research purposes. Administrative data were also collected from the sexual offenders' prison files. One hundred percent of the sexual offenders enrolled in programming at the time of the study agreed to participate. Although program attendance was voluntary, it likely influenced an early discretionary release. The study received approval from both the DOC research review committee and affiliated university institutional review board.

Working Alliance Inventory. The Working Alliance Inventory (WAI; Horvath & Greenberg, 1989) was designed to measure the quality of the therapeutic relationship between the therapist and client from the perspective of the client. Form C of the WAI is comprised of 36 items total, consisting of three subscales of 12 items each. The subscales measure specific features of the working alliance: the therapeutic bond (e.g., "I appreciate my therapist as a person"), task agreement (e.g., "My therapist and I agree about the steps to be taken to improve my situation), and agreement on the goals (e.g., "I have doubts about what we are trying to accomplish in counseling"). These subscales are operationalized according to Bordin's (1979, 1994) theoretical conceptualization of the working alliance. The answer to each question is measured on a 7-point Likert-type scale

(1 = *never*, 2 = *rarely*, 3 = *occasionally*, 4 = *sometimes*, 5 = *often*, 6 = *very often*, 7 = *always*). The WAI has been used extensively in both research and practice over the past 30 years and has been found to be both a valid and reliable measure of the working alliance (Horvath & Greenburg, 1986, 1989, 1994). In the current study, the Cronbach alpha coefficient was .78 for Time 1 and .89 for Time 2.

Client Specific Predictors. In terms of predictors, the categories include demographics, mental health and psychological, criminal justice, and sexual offense-specific. Within these categories are several factors of interest. See Table 2 for descriptive information.

Demographic Factors. Participant demographics of interest are age in years and education (high school diploma/equivalent or above = 1, other = 0). Race (non-Black = 0, Black = 1) was also included and was operationalized in accordance to commonly used methods in the state of Pennsylvania.

Mental Health and Psychology Factors. Mental health factors of interest include (a) whether the participant was diagnosed with a personality disorder (1 = yes, 0 = no) according to the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR: American Psychiatric Association, 2000), psychopathy as assessed by (b) Factor 1 and (c) Factor 2 scores on the Psychopathy Check List-Revised (PCL-R; Hare, 1991), and whether the participant was receiving additional mental health treatment at the time of the study (yes = 1, no = 0). Participants' level of intelligence is also of interest. Participants' level of intelligence was measured using the Beta-III (Kellogg & Morton, 1974) and the Wide Range Achievement Test (WRAT3; Wilkinson, 1993).

Criminal Justice Factors. Criminal justice factors of interest include items that captured the extent of criminal justice involvement—(a) whether the participant had a prior conviction and (b) whether the participant had a prior sexual offense conviction as an adult or juvenile.

Sexual Offense-Specific Factors. Three sexual offense specific items of interest are (a) being a victim of prior sexual abuse, (b) the type of victim in current case, and criminal justice risk as captured by (c) scores on the Static-99 (Hanson & Thornton, 2000).

Table 2

Client Descriptive Statistics at First Administration

Variables	M/%	SD	Min	Max
Demographics				
Age	40.80	11.62	23	72
Black	44.20	-	-	-
HS diploma/GED and above	37.90	-	-	-
Intelligence				
Intellectual Functioning Beta	88.06	13.83	60	131
WRAT3 Score	7.74	3.29	0	13
Mental Health				
Diagnosed Personality Disorders	15.00	-	-	-
Psychopathy				
PCL-R Factor 1	7.89	4.62	1	16
PCL-R Factor 2	10.71	3.47	2	18
Mental Health Treatment*	39.30	-	-	-
Criminal Justice				
Prior Adult Convictions	65.50	-	-	-

(continued)

Variables	M/%	SD	Min	Max
Prior Sex Offense				
Adult	21.80	-	-	-
Juvenile	8.70	-	-	-
Sex Offense, Specific				
Prior Sexual Abuse	19.40	-	-	-
Victim Type				
Adult victim	26.20	-	-	-
Juvenile victim	73.80	-	-	-
Static-99	3.60	1.74	0	7

Note. $N = 202$; M = mean, SD = standard deviation; PCL-R = Psychopathy Check List-Revised; *In current treatment other than sexual offender treatment

Therapist Specific Predictors. Only primary therapist characteristics were of interest since clients completed the WAI for the relationship with this therapist. In terms of therapist predictors, only demographic factors were integrated. These factors are (a) age in years, (b) race (non-Black = 0, Black = 1), and (c) education (Master's = 0, Doctorate = 1). See Table 3 for descriptive information.

Table 3

Therapist Descriptive Statistics

Variables	M/%	SD	Min	Max
Age	33.17	5.76	26	44
Black	24.10	-	-	-
Doctorate	7.50	-	-	-

Note. $N = 5$; M = mean, SD = standard deviation.

Analytic Plan

The first research question for the study is: Do sexual offenders' perceptions of the working alliance change over the course of sex offender treatment? To assess normative change in the working alliance over the period of sexual offender treatment, mean differences between month three (WAI1) and the end of treatment (WAI2) WAI scores were compared using paired-samples *t*-tests.

The second research question is: Do the individual factors (i.e., demographics, mental health and psychological, criminal justice, sex-offense specific) of offenders impact changes in the working alliance? To test what predicts changes in the working alliance, difference scores were created (WAI2 – WAI1) for each of the WAI dimensions and total scores. To examine how each predictor related to changes in the scores, a series of linear regressions were conducted using the change score as the criterion. Initial level of the total WAI score was included as a control variable in each regression analysis.

The third research question is: Do the individual factors (i.e., age, race, education) of therapists impact changes in the working alliance? To test how each therapist factor is related to changes in the working alliance dimension scores and total score, a series of linear regressions were conducted using the change score as the criterion and the initial level of the total WAI score as the control variable.

To determine if findings vary among treatment groups, each analysis was conducted for moderate-high risk offenders, low risk offenders and all offenders.

CHAPTER IV

Results

This chapter presents the results of the current study. First, the results of the paired-samples *t*-test are analyzed to assess normative change in the working alliance over the course of sexual offender treatment. Then the results of the linear regressions are examined to determine what client-based and therapist-based factors predict individual change in the working alliance.

Normative Change in the Working Alliance over the Course of Sexual Offender Treatment

Mean difference scores were calculated by subtracting the mean score on the Working Alliance Inventory taken at month three (WAI1) from the mean score on the Working Alliance Inventory taken at the end of treatment (WAI2). The same was done for each of the three subscales of the working alliance. These difference scores were then compared using paired-samples *t*-tests and results revealed a significant positive change in the working alliance and all three subscales from the start of treatment (WAI1) to the end of treatment (WAI2).

Table 4 focuses on the moderate-high risk offender group. On average, moderate-high risk participants experienced a significantly greater total working alliance at the end of treatment ($M = 200.91$, $SE = 2.97$) as compared to the start of treatment ($M = 186.68$, $SE = 3.60$), $t(107) = -4.54$, $p < .00$, $r = .56$ and a medium effect size was found ($d = .414$) per the classifications established by Cohen (1988). The same was found for all three scales on the WAI. On average, moderate-high risk participants rated goals as significantly greater at the end of treatment ($M = 66.86$, $SE = .98$) than at the beginning

of treatment (M = 62.29, SE =1.17), $t(107) = 4.30$, $p < .00$, $r = .52$. A medium effect size was found ($d = .407$). Moderate-high risk participants also, on average, rated tasks as significantly greater at the end of treatment (M = 67.53, SE = 1.15) than at the beginning of treatment (M = 63.12, SE = 1.40), $t(107) = -4.09$, $p < .00$, $r = .66$. A small effect size was found ($d = .330$). Lastly, moderate-high risk participants also, on average, experienced a significantly greater bond at the end of treatment (M = 67.12, SE = 1.11) as compared to the start of treatment (M = 61.21, SE = 1.32), $t(107) = -4.90$, $p < .00$, $r = .52$. A medium effect size was found (d =.466).

Table 4

Normative Change in the Working Alliance over the Course of Sexual Offender Treatment for Moderate-High Risk Offenders

	Normative Change							Individual Differences
	Time 1 *M* (*SD*)	Time 2 *M* (*SD*)	Difference *M* (*SD*)	*t*-value	*p*	Cohen's *d*	*r* Times 1 & 2	Time 1 predicting difference score
WAI Total Score	186.68 (37.39)	200.91 (30.90)	14.23 (32.56)	-4.54***	.000	.414	.56	-.619
Goal Scale	62.29 (12.16)	66.86 (10.20)	4.56 (11.02)	-4.30***	.000	.407	.52	-.617
Task Scale	63.12 (14.55)	67.53 (12.03)	4.40 (11.18)	-4.09***	.000	.330	.66	-.590
Bond Scale	61.21 (13.72)	67.12 (11.55)	5.91 (12.53)	-4.90***	.000	.466	.52	-.616

Notes. Difference = Time 2 minus Time 1. N = 108; *M* = Mean, *SD* = Standard deviation, WAI = Working Alliance Inventory. ***$p < .001$. **$p < .01$. *$p < .05$.

Table 5 focuses on the low risk offender group. On average, low risk participants experienced a significantly greater total working alliance at the end of treatment (M = 205.03, SE = 3.98) as compared to the start of treatment (M = 193.05, SE = 3.69), $t(93)$ = -3.16, $p < .00$, r = .51. A small effect size was found (d = .325). The same was found for all three scales on the WAI. On average, low risk participants rated goals as significantly greater at the end of treatment (M = 69.08, SE = 1.33) than at the beginning of treatment (M = 65.40, SE =1.27), $t(93)$ = -2.91, $p < .00$, r = .53. A small effect size was found (d = .293). Participants also, on averaged, rated tasks as significantly greater at the end of treatment (M = 69.04, SE = 1.30) than at the beginning of treatment (M = 66.40, SE = .1.32), $t(93)$ = -1.98, $p < .00$, r = .49. A small effect size was found (d = .209). Lastly, participants also, on average, experienced a significantly greater bond at the end of treatment (M = 66.95, SE = .1.56) as compared to the start of treatment (M = 61.22, SE = 1.49), $t(93)$ = -3.64, $p < .00$, r = .47. A small effect size was found (d = .390).

Table 5

Normative Change in the Working Alliance over the Course of Sexual Offender Treatment for Low Risk Offenders

	Normative Change						Individual Differences	
	Time 1 *M* (*SD*)	Time 2 *M* (*SD*)	Difference *M* (*SD*)	*t*-value	*p*	Cohen's *d*	*r* Times 1 & 2	Time 1 predicting difference score
WAI Total Score	193.05 (35.41)	205.03 (38.22)	11.97 (36.27)	-3.16***	.000	.325	.51	-.431
Goal Scale	65.40 (12.23)	69.08 (12.84)	3.68 (12.11)	-2.91***	.000	.293	.53	-.444

(continued)

	Normative Change						Individual Differences	
	Time 1 *M* (*SD*)	Time 2 *M* (*SD*)	Difference *M* (*SD*)	*t*-value	*p*	Cohen's *d*	*r* Times 1 & 2	Time 1 predicting difference score
Task Scale	66.40 (12.71)	69.04 (12.55)	2.64 (12.76)	-1.98***	.000	.209	.49	-.514
Bond Scale	61.22 (14.30)	66.95 (15.04)	5.72 (15.06)	-3.64***	.000	.390	.47	-.476

Notes. Difference = Time 2 minus Time 1. N = 108; *M* = Mean, *SD* = Standard deviation, WAI = Working Alliance Inventory. ***$p < .001$. **$p < .01$. *$p < .05$.

Table 6 focuses on all offenders. On average, participants experienced a significantly greater total working alliance at the end of treatment ($M = 203.05$, $SE = 2.42$) as compared to the start of treatment ($M = 189.70$, $SE = 2.56$), $t(201) = -5.56$, $p < .00$, $r = .54$. A small effect size was found ($d = .377$). The same was found for all three scales on the WAI. On average, participants rated goals as significantly greater at the end of treatment ($M = 67.98$, $SE = .81$) than at the beginning of treatment ($M = 63.77$, $SE = .86$), $t(201) = 5.52$, $p < .00$, $r = .53$. A small effect size was found ($d = .354$). Participants also, on averaged, rated tasks as significantly greater at the end of treatment ($M = 68.25$, $SE = .86$) than at the beginning of treatment ($M = 64.63$, $SE = .97$), $t(201) = -4.33$, $p < .00$, $r = .59$. A small effect size was found ($d = .278$). Lastly, participants also, on average, experienced a significantly greater bond at the end of treatment ($M = 67.18$, $SE = .93$) as compared to the start of treatment ($M = 61.26$, $SE = .98$), $t(201) = -6.14$, $p < .00$, $r = .49$. A medium effect size was found ($d = .436$).

Table 6

Normative Change in the Working Alliance over the Course of Sexual Offender Treatment for All Offenders

	Normative Change						Individual Differences	
	Time 1 *M* (*SD*)	Time 2 *M* (*SD*)	Difference *M* (*SD*)	*t*-value	*p*	Cohen's *d*	*r* Times 1 & 2	Time 1 predicting difference score
WAI Total Score	189.70 (36.43)	203.05 (34.36)	13.35 (34.12)	-5.56***	.000	.377	.54	-.527
Goal Scale	63.77 (12.22)	67.98 (11.50)	4.21 (11.47)	-5.52***	.000	.354	.53	-.530
Task Scale	64.63 (13.74)	68.25 (12.21)	3.62 (11.88)	-4.33***	.000	.278	.59	-.554
Bond Scale	61.26 (13.90)	67.18 (13.24)	5.92 (13.69)	-6.14***	.000	.436	.49	-.540

Notes. Difference = Time 2 minus Time 1. N = 108; *M* = Mean, *SD* = Standard deviation, WAI = Working Alliance Inventory. ***$p < .001$. **$p < .01$. *$p < .05$.

Individual Change in the Working Alliance over the Course of Sexual Offender Treatment with Client-Based Predictors

To examine predictors of individual change in the working alliance using client-based factors as predictors, a series of linear regressions were conducted. Table 7 focuses on the moderate-high risk offender group and summarizes the beta values and significant values for changes in the WAI total scores and sub-scale scores when predicted by the variables of interest. Client age was found to significantly predict individual change in

the Goal subscale scores ($F(2, 105) = 35.90$, $p < .05$), with an R^2 of .406. Younger participants were significantly more likely to experience a positive change in the Goal subscale over the course of treatment. No other client-based factors were found to predict individual change for moderate-high risk offenders.

Table 8 focuses on the low risk offender group. It was found that Factor 1 scores on the PCL-R significantly predict individual change in the Task subscale scores ($F(2, 13) = 11.99$, $p < .01$), with an R^2 of .594. In addition, the PCL-R Factor 2 was found to significantly predict individual change in the total WAI total scores ($F(2, 13) = 5.37$, $p < .05$), with an R^2 of .368 and in the Task subscale scores ($F(2, 13) = 9.83$, $p < .01$), with an R^2 of .541. Participants with higher psychopathy scores were less likely to experience a change in the total working alliance and task subscale over the course of treatment. No other client-based factors were found to predict individual change for low risk offenders.

Table 9 focuses on all offenders. It was found that age significantly predicts individual change in the Goal subscale scores ($F(2, 200) = 43.57$, $p < .05$), with an R^2 of .297. Again, younger participants were significantly more likely to experience a change in the Goal subscale over the course of treatment. No other client-based factors were found to predict individual change for all offenders.

Table 7

Results of Linear Regression Models Examining Client Predictors of Change in the Working Alliance over the Course of Sexual Offender Treatment for Moderate-High Risk Offenders

	WAI Total		**WAI Goal Total**		**WAI Task Total**		**WAI Bond Total**	
	β	***p***	**β**	***p***	**β**	***p***	**β**	***p***
Demographics								
Age in years	-.136†	.084	-.172*	.026	-.031	.703	-.093	.243
Black	.067	.382	.002	.976	.087	.271	.029	.706
Education	.022	.791	-.005	.955	.043	.615	-.007	.936
Intelligence								
Intellectual Functioning Beta	.060	.435	.103	.180	-.033	.674	.093	.225
WRAT3 Score	-.017	.876	.067	.532	-.067	.546	.097	.384
Mental Health								
Personality disorder	.011	.894	-.060	.451	.043	.606	-.013	.874
PCL-R Factor 1	-.022	.795	.062	.450	-.104	.234	-.052	.558
PCL-R Factor 2	-.104	.210	-.054	.511	-.085	.323	-.126	.146
Receiving current treatment	-.013	.865	-.033	.669	.025	.753	-.056	.475
Criminal Justice Factors								
Prior Adult Convictions	.113	.175	.093	.260	.108	.212	.092	.273
Prior sex offense	-.003	.970	.050	.520	-.021	.794	.044	.571
Length of current sentence								
Sex Offense, Specific								
Prior Sexual Abuse	.145†	.060	.111	.147	.127	.112	.144†	.063
Age of victim	-.004	.956	-.080	.301	-.035	.659	.041	.592

Notes. $N = 108$; WAI = Working Alliance Inventory, PCL-R = Psychopathy Check List-Revised. ***$p < .001$. **$p < .01$. *$p < .05$. † < .10.

Table 8

Results of Linear Regression Models Examining Client Predictors of Change in the Working Alliance over the Course of Sexual Offender Treatment for Low Risk Offenders

	WAI Total		WAI Goal Total		WAI Task Total		WAI Bond Total	
	β	**p**	**β**	**p**	**β**	**p**	**β**	**p**
Demographics								
Age in years	-.086	.363	-.047	.623	-.047	.597	-.137	.137
Black	-.088	.346	-.089	.336	-.012	.888	-.116	.204
Education	.100	.298	.079	.410	.154†	.083	.042	.654
Intelligence								
Intellectual Functioning Beta	.063	.516	.053	.585	.069	.448	.062	.508
WRAT3 Score	.123	.695	.165	.609	.162	.358	.218	.482
Mental Health								
Personality disorder	.072	.462	-.009	.921	.067	.460	.099	.304
PCL-R Factor 1	-.455†	.059	-.237	.333	-.560**	.007	-.371	.141
PCL-R Factor 2	-.455*	.047	-.353	.139	-.486**	.016	-.472	.073
Receiving current treatment	-.062	.529	-.045	.648	.013	.885	-.133	.169
Criminal Justice Factors								
Prior Adult Convictions	.087	.385	.088	.379	.034	.715	.106	.280
Prior sex offense	-.069	.469	-.024	.796	-.060	.495	-.102	.274
Sex Offense, Specific								
Prior Sexual Abuse	.056	.554	.063	.498	-.033	.713	.010	.917
Age of victim	-.107	.258	-.075	.425	-.092	.298	-.095	.304

Notes. $N = 94$; WAI = Working Alliance Inventory, PCL-R = Psychopathy Check List-Revised. ***$p < .001$. **$p < .01$. *$p < .05$. † < .10.

Table 9

Results of Linear Regression Models Examining Client Predictors of Change in the Working Alliance over the Course of Sexual Offender Treatment for All Offenders

	WAI Total		WAI Goal Total		WAI Task Total		WAI Bond Total	
	β	**p**	**β**	**p**	**β**	**p**	**β**	**p**
Demographics								
Age in years	-.114†	.056	-.124*	.038	-.025	.675	-.104†	.083
Black	-.012	.843	-.047	.431	-.035	.549	-.038	.519
Education	.063	.319	.043	.495	.095	.119	.015	.814
Intelligence								
Intellectual Functioning Beta	.070	.246	.091	.132	.014	.812	.083	.164
WRAT3 Score	.036	.717	.116	.243	-.042	.656	.133	.183
Mental Health								
Personality disorder	.030	.622	-.045	.454	.065	.280	.045	.466
PCL-R Factor 1	-.042	.611	.047	.564	-.143†	.078	-.045	.597
PCL-R Factor 2	-.134	.096	-.082	.303	-.137†	.086	-.130	.124
Receiving current treatment	-.037	.554	-.039	.520	.019	.750	-.094	.123
Criminal Justice Factors								
Prior Adult Convictions	.097	.132	.092	.152	.064	.305	.099	.121
Prior sex offense	-.035	.563	.009	.879	-.040	.501	-.020	.742
Sex Offense, Specific								
Prior Sexual Abuse	.098	.103	.087	.143	.102†	.088	.071	.236
Age of victim	-.050	.402	-.082	.172	-.059	.313	-.017	.775

Notes. $N = 202$; WAI = Working Alliance Inventory, PCL-R = Psychopathy Check List-Revised. ***$p < .001$. **$p < .01$. *$p < .05$. † < .10.

Individual Change in the Working Alliance over the Course of Sexual Offender Treatment with Therapist-Based Predictors

To examine predictors of individual change in the working alliance using therapist-based factors as predictors, a series of linear regressions were conducted. Table 10 focuses on the moderate-high risk offender group and summarizes the beta values and significant values for changes in the WAI total scores and sub-scale scores when predicted by the variables of interest. None of the therapist-based demographics were found to predict individual client changes in the total working alliance or three subscales over the course of sexual offender treatment.

Table 10

Results of Linear Regression Models Examining Therapist Predictors of Change in the Working Alliance over the Course of Sexual Offender Treatment for Moderate-High Risk Offenders

	WAI Total		**WAI Goal Total**		**WAI Task Total**		**WAI Bond Total**	
	β	***p***	**β**	***p***	**β**	***p***	**β**	***p***
Age in years	.706	.261	.385	.534	1.00	.118	.277	.659
Black	-.762	.230	-.540	.389	-1.05	.103	-.303	.634
Education	-.054	.528	-.031	.716	-.017	.847	-.107	.221

Notes. $N = 108$; WAI = Working Alliance Inventory. ***$p < .001$. **$p < .01$. *$p < .05$. † $< .10$.

Table 11 focuses on the low risk offender group. It was found that therapist age significantly predicts individual change in the Bond subscale scores ($F(4, 87) = 9.573$, $p < .05$), with an R^2 of .306. With decreased therapist age, clients were significantly more likely to experience a change in the Bond subscale over the course of treatment.

Table 11

Results of Linear Regression Models Examining Therapist Predictors of Change in the Working Alliance over the Course of Sexual Offender Treatment for Low Risk Offenders

	WAI Total		**WAI Goal Total**		**WAI Task Total**		**WAI Bond Total**	
	β	***p***	**β**	***p***	**β**	***p***	**β**	***p***
Age in years	-.217†	.051	-.196	.078	-.177	.097	-.223*	.040
Black	-.050	.655	-.056	.619	-.018	.868	-.063	.559
Education	.140	.133	.125	.179	.157	.080	.105	.247

Notes. $N = 94$; WAI = Working Alliance Inventory. ***$p < .001$. **$p < .01$. *$p < .05$. † < .10.

Table 12 focuses on all offenders. Similar to the moderate-high risk offenders, no therapist-based demographics were found to predict individual client changes in the total working alliance or the three subscales.

Table 12

Results of Linear Regression Models Examining Therapist Predictors of Change in the Working Alliance over the Course of Sexual Offender Treatment for All Offenders

	WAI Total		**WAI Goal Total**		**WAI Task Total**		**WAI Bond Total**	
	β	***p***	**β**	***p***	**β**	***p***	**β**	***p***
Age in years	.018	.906	-.049	.736	.011	.940	.018	.904
Black	-.106	.473	-.107	.467	-.063	.664	-.083	.570
Education	.031	.610	.035	.561	.076	.206	-.022	.713

Notes. $N = 202$; WAI = Working Alliance Inventory. ***$p < .001$. **$p < .01$. *$p < .05$. † < .10.

CHAPTER V

Discussion

This chapter presents the discussion for the current study. The chapter begins with a summary of the study and its findings which are interpreted in conjunction with previous findings in other literature. Next, policy implications are derived from these findings. Limitations are also discussed and the chapter concludes with suggested directions for future research.

Summary of Findings

Research has demonstrated the positive impact the working alliance can have on treatment outcomes (Ackerman & Hilsenroth, 2003; Horvath & Bedi, 2002; Horvath & Symonds, 1991; Lambert & Barley, 2001; Murphy, Cramer, & Lillie, 1984; Norcross & Lambert, 2006). As such, in order to further improve outcomes, the current study sought to understand if and how the working alliance changes over the course of treatment. Using archival data from 202 adult males who participated in sexual offender treatment while incarcerated, normative change and individual predictors of change were examined.

In terms of normative change, findings revealed that, on average, client ratings of the total working alliance significantly changed over the course of treatment. In addition, client ratings on all three subscales significantly changed and this held true across treatment groups as well. These mean changes were all in a positive direction. These results align with previous research that has found that the working alliance often develops in a positive pattern (Kivlighan & Shaughnessy, 1995; Joyce, McCallum, & Azim, 1995). Although statistically significant, these changes were found to have small to medium effect sizes. In other words, the mean change in the working alliance and all

three subscales were unlikely the result of chance. However, the magnitude of the changes ranged from small to moderate. Although not large effect sizes, these findings are still encouraging. They demonstrate that the working alliance not only improves for most offenders over the course of treatment, but that many of these changes are medium in size. Out of the total working alliance and all the subscales, the Task subscale is the only one that consistently showed small effect sizes. It may be that offenders' and therapists' agreement on necessary tasks remain relatively consistent throughout treatment. However, additional research should be done to determine if and how this subscale can be better improved throughout treatment.

In terms of the normative change findings, it should also be discussed that the current study only measured the working alliance at two points which may allow other changes to go undetected. The study also only considered client ratings of the working alliance. As such, changes in the therapists' ratings of the working alliance are still not understood. Future research should consider measuring changes in the working alliance per offender ratings and therapist ratings and how these changes compare among groups.

Few studies have examined or found results with regards to predictors of individual change in the working alliance (Walling et al., 2012; Walton, Jeglic & Blasko, 2016). In the current study, both client factors and therapist factors were examined as predictors of change in the working alliance. It was found that among all clients, age was the only factor that was significant. Specifically, it was found that age predicted individual change in the Goal subscale, where younger clients experienced a greater change. For moderate-high risk offenders, age was again the only significant predictor of individual change. For individuals in this treatment group, younger clients experienced a

greater change in the Goal subscale. Age wasn't predictive of individual change for low risk offenders, but the PCL-R factors were. Factor 1 was found to predict individual change in the Task subscale. Factor 2 was found to predict individual change in the total working alliance and Task subscale, where those clients with a lower PCL-R score experienced a greater positive change in the working alliance.

These findings are somewhat surprising given previous research on the working alliance (Connors et al., 2000; Strauss et al., 2006; Taft et al., 2004; Walling et al., 2012; Walton, Jeglic & Blasko, 2016). In the literature that has looked at client predictors of the working alliance, age (Connors et al., 2000) and personality disorders (Strauss et al., 2006; Taft et al., 2004) have been found to predict the working alliance at a single point. Connors and colleagues (2004) found that client ratings of the working alliance increase with increased age. This relationship is opposite of what was found in the current study, where younger clients experienced a greater change. It is possible that while increased age may impact a positive working alliance at the start of treatment, a younger client may be more willing or able to change over the course of treatment. However, further research is needed to determine if this interpretation is correct.

Another difference among findings in the current study and past research involves personality disorders. Although previous research has found personality disorders to predict the working alliance (Strauss et al., 2006; Taft et al., 2004), the current study did not find the same relationship. A possible explanation of this disparity may be that personality disorders impact the working alliance for the general population and offender population differently. It may also be that predictors are different when measuring changes in the working alliance rather than a single point during treatment.

Yet another difference between the findings of the current study and past research include race as a predictor (Walling et al., 2012). The current study did not find client race to be significant, yet Walling and colleagues (2012) found that, on average, white clients experienced a positive change in the working alliance over the course of treatment. Again, it is possible that race impacts sexual offenders' ratings of the working alliance differently than other offending populations.

The only finding that aligns with previous research is that concerning psychopathy. Similar to research by Walton, Jeglic & Blasko (2016), the current study found that with decreased PCL-R scores, clients experienced a positive change in the working alliance. This finding may not be surprising, given that both studies focused on the sexual offender population.

Only one therapist factor was found to predict change in the working alliance. Among low risk offenders, therapist age predicted individual change in the the Bond subscale. Clients were more likely to experience a positive change when their therapist was of a younger age. While the current study focused solely on therapist demographics, previous research has mainly examined therapist behaviors that predict change (Fernandez et al., 1999; Marshall et al., 2002). Only one study has examined therapist age as a predictor of the working alliance. Connors and colleagues (2000) found that clients experienced a positive change in the working alliance with increased therapist age. This is the opposite effect found in the current study. Again, it may be that predictors are different when examining changes in the working alliance rather than a single point during treatment. As there were only five primary therapists rated among the 202 sexual

offenders, it is also possible that other therapist characteristics specific to the younger therapists impacted these ratings aside from demographics.

Limitations and Conclusion

This study is not without limitations. The data were collected from sexual offenders who were enrolled in sexual offender treatment while incarcerated within the Pennsylvania Department of Corrections. Since data were collected from one prison, results may not be representative of all sexual offenders housed in Pennsylvania state prisons, nonetheless other prisons throughout the United States. In addition, since participation in treatment was voluntary rather than mandated, these results may not be representative of all sexual offenders. Future research should examine if these findings hold true among sexual offenders participating in mandated treatment.

This study examined changes in the working alliance which has often gone overlooked in previous research. Furthermore, this study examined these changes among a population that has received little attention within this area of research (Blasko & Jeglic, 2016; Goldfried, Burckell, & Eubanks-Carter, 2003; Marshall, et al., 2003; Walton, Jeglic & Blasko, 2016). First and foremost, the findings reveal that, not only can sexual offenders form a strong working alliance with their therapist, but, on average, this alliance improves over the course of sexual offender treatment. However, the magnitude of these changes is relatively small. Also of importance, the findings show that three client factors and one therapist factor predict these individual changes. These findings reveal several implications for future research.

While understanding that the working alliance changes over the course of sexual offender treatment is important, further research should aim to determine exactly how

this change occurs. Research has argued that the development of the working alliance is best understood when measured at four or more times over the course of treatment (Kivlighan & Shaughnessy, 2000). As such, to understand if the alliance does in fact develop in a positive linear pattern or in another pattern, future research should administer the WAI to sexual offenders on several occasions over the course of treatment.

Although several client factors and one therapist factor were found to predict changes in the working alliance, it is unlikely that these are the only factors that impact these changes. Multiple studies have found the following therapist behaviors to predict changes in the working alliance: empathy, warmth, directiveness, and rewarding the client's good behavior (Fernandez et al., 1999; Marshall et al., 2002). Future research should address if these same behaviors predict changes in the working alliance during sexual offender treatment. Additional client and therapist traits should also be considered. Learning which factors impact changes in the working alliance will contribute to findings on the specific responsivity principle and allow for more effective treatment implementation with sexual offender populations.

The working alliance is the quality of the relationship between a client and therapist; however, would this relationship be compromised or enhanced if the client and therapist are of the same or opposite race? The same question can be asked regarding age and other characteristics. Furthermore, how would these similarities and differences impact changes in the working alliance. This is beyond the scope of the current study, but future research may consider looking at these interactions.

In sum, this study leads to a better understanding of the working alliance within the sexual offender population. It allows future research to further explore this area to

determine how this relationship changes and what affects these changes. Doing so will allow for a deeper understanding of this relationship and will improve future treatment methods.

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VITA

Brianne A. Kane

EDUCATION

2015 - **Master of Arts**
Sam Houston State University, College of Criminal Justice, Huntsville, TX
Area of Study: Criminal Justice and Criminology
Thesis: Normative Change and Predictors of Individual Change Over the Course of Sexual Offender Treatment
Advisor: Brandy L. Blasko

2013 - 2015 **Bachelor of Arts**
University of Connecticut, College of Liberal Arts and Science, Storrs, CT
Major: Psychology and Crime, Law and Justice

AREAS OF INTEREST

Corrections Rehabilitation Mental Health

PUBLICATIONS

Peer Reviewed Articles

Kane, B.A., & Blasko, B.L. (Revise and Resubmit). Prison suicide: Prevalence and perceptions in the era of mass incarceration. Submitted to *International Journal of Offender Therapy and Comparative Criminology.*

Book Chapters

Blasko, B.L., & **Kane, B.A.** (forthcoming). Prisoner rehabilitation and education. In O.H. Griffin & V. Woodward (Eds.), Handbook of Corrections in the United States. New York, NY: Routledge.

Book Reviews

Kane, B.A. (2016). Book Review: The modern prison paradox: Politics, punishment, and social community. *Criminal Justice Review*. doi: 10.1177/0734016816684924

RESEARCH PRESENTATIONS

Kane, B.A., & Blasko, B.L. (March, 2017). Prisoner suicide: Prevalence and perceptions in the era of mass incarceration. Paper presented at the meeting of the Academy of Criminal Justice Sciences, Kansas City, M.O.

Kane, B.A., & Blasko, B. L. (November, 2016). *Changes in the working alliance over the course of prison-based sexual offender treatment.* Poster presented at the Annual Research and Treatment Conference of the Association for the Treatment of Sexual Abusers, Orlando, FL.

Kane, B.A., & Blasko, B. L. (November, 2016). Changes in the working alliance over the course of prison-based sexual offender treatment. In B. L. Blasko (Chair), *Relationship matters: Legitimacy, procedural justice, and the working alliance in prisons and jails.* Symposium presented at the meeting of the American Society of Criminology, New Orleans, L.A.

RELEVANT EMPLOYMENT

Graduate Research Assistant

Dr. Brandy Blasko, Sam Houston State University, 2015-Present

- Normative Change and Predictors of Individual Change in the Working Alliance Over the Course of Sexual Offender Treatment
- Prison Suicide Prevalence: Comparing Inmate and Staff Perceptions

Dr. Lisa Muftic, Sam Houston State University, 2015

- Harris County Survivors Acquiring Freedom and Empowerment (SAFE) Court

Teaching Assistant

Dr. Brandy Blasko, Sam Houston State University, 2015-Present

CRIJ 3378 - Introduction to Methods of Research
CRIJ 2365 - Correctional Systems and Practice

Dr. Erin Orrick, Sam Houston State University, 2015-Present

CRIJ 2365 - Correctional Systems and Practice
CRIJ 4377 - Critical Issues in Criminal Justice

Internship

City of Bristol Office of Adult Probation, CT (Summer 2014)

AWARDS AND SCHOLARSHIPS

2016-2017	Ellis-Gibbs Memorial Scholarship, Sam Houston State University, College of Criminal Justice
2015-2017	Graduate Assistantship, Sam Houston State University, College of Criminal Justice, Department of Criminal Justice and Criminology
2015-2017	Army ROTC Scholarship, United States Army, Cadet Command

PROFESSIONAL SOCIETIES

2016- The American Society of Criminology
2015- International Honor Society in Psychology

REFERENCES

Available upon request.