Forming Therapeutic Alliances across the Milieu: Clinical Implications and Challenges of Working with Adjudicated Adolescent Males in Residential Treatment

by

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Abstract

Forming a positive and collaborative relationship with a therapist is perceived to be one of the key change agents in the psychotherapeutic process (Bordin, 1979). While a limited number of studies have examined the factors that predict alliance formation with children and adolescents, even fewer studies consider the effects of systems-based care (Hogue et al., 2006; Shirk & Karver, 2003). The current study aims to tell the story of how adjudicated adolescents form healing, collaborative, and therapeutic relationships with various adults within the structured, clinical context of residential treatment. We examine the formation and maintenance of therapeutic alliances across the milieu by identifying the strength of alliances formed over time in counseling and the residential setting. We also explore how the TA varies based on adolescents' history of trauma exposure and level of psychiatric distress. Participants included 32 adolescent males convicted of illegal sexual behavior in the state of Alabama and mandated to receive treatment in a secure residential treatment center. Each month, adolescents and adults evaluated the quality of their relationship using the Working Alliance Inventory, Short Form (Tracey & Kokotovic, 1989). Data analysis focused on describing the phenomenon of TA within the existing treatment program. Results indicate that youth form positive relationships with their therapists, but alliances with residential staff members deteriorate over time. In order to improve the adolescents' day-to-day experience in the program and maximize their long-term clinical gains, recommendations for how to improve alliances in the milieu are offered. We hope to provide empirical evidence that will support and encourage systems to invest fiscal and human resources in building positive, collaborative, and genuine relationships with at risk youth.

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Gratitude

TO BARRY BURKHART

for assuming the mantle with tenacity, wisdom, and grace;

for teaching me the strength in vulnerability.

TO MY PARENTS

for offering endless love and support;

for raising me to believe that anything was possible.

TO MY HUSBAND

for perpetual friendship and caring;

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List of Abbreviations

ABSOP Accountability Based Sex Offender Program

AGIB Adolescent with General Illegal Behaviors

AISB Adolescent with Illegal Sexual Behaviors

BASC-2 Behavioral Assessment System for Children, Second Edition

CARE Children and Residential Experiences

CBT Cognitive-Behavioral Therapy

DYS Department of Youth Services

JPO Juvenile Probation Officer

RTC Residential Treatment Center

SRP Self Report Version

TA Therapeutic Alliance

TF-CBT Trauma-focused Cognitive Behavioral Therapy

TSCC Trauma Symptom Checklist for Children

WAI Working Alliance Inventory

WAI-SF Working Alliance Inventory, Short Form—Revised

Introduction

Therapeutic Alliance

Research has consistently demonstrated that the therapeutic alliance (TA) accounts for a significant proportion of variance in treatment outcome, consistently predicting improvement in children and adults regardless of the orientation or specific therapeutic techniques employed in session (Horvath, 2001; Martin, Garske, & Davis, 2000; Norcross, 2011; Shirk & Saiz, 1992). The TA has been defined as the degree of agreement between counselor and client relative to the goals, tasks, and affective bond between parties (Bordin, 1979). A strong, positive TA reflects agreement or attunement within the dyad along with acceptance and mutual respect (Brown, Holloway, Akakpo, & Aalsma, 2014; Drisko, 2004). Additionally, a positive therapeutic relationship is often characterized by therapists' displays of warmth, openness, honesty, empathy, trust, and validation (Drisko, 2004; Duppong Hurley, Lambert, Van Ryzin, Sullivan, & Stevens, 2013). By engaging with these principles and styles of interaction, the counselor and client form a collaborative working alliance that serves as a vehicle for positive psychological change (Bordin, 1979; Ross, Polaschek, & Ward, 2008).

Theorists believe that formation of a mutually trusting and respectful relationship serves as one of the key change agents in the psychotherapeutic process, with some scholars boldly asserting that the TA is the largest curative factor in all of psychotherapy (Bordin, 1979; Orlinsky, Grawe, & Parks, 1994). Through active engagement and encouragement, the TA is thought to provide the foundation that supports and allows clients to feel safe enough to express or explore the nature of their difficulties and work toward improvement (Bordin, 1979; Drisko,

2004; Florsheim, Shotorbani, Guest-Warnick, Barratt, & Hwang, 2000) Thus, the TA is not a bond forged by success or gratitude for accomplishing therapeutic goals, but is the process that makes success possible by encouraging clients to attend, adhere, and engage in treatment despite the challenges inherent in confronting their interpersonal or symptomatic difficulties (Bordin, 1979; Savicki, 2007; Tsai et al., 2010).

Across studies in the adult psychotherapy literature, the average alliance-outcome correlation ranges from .22 to .28, indicating that there is a moderately strong and consistent relationship between client-therapist alliance and therapeutic outcome (Horvath, Del Re, Flückiger, & Symonds, 2011; Martin et al., 2000). Statistically, this association is a small to moderate effect size. However, because therapeutic improvement is complex and influenced by many factors including initial symptom severity, presenting issue, length of treatment, and type of service provided, even a small association is important—particularly if it can be modified and enhanced by the therapist in order to capitalize on its effect. Furthermore, given its non-specific nature and commonality across therapeutic modalities, the TA is considered to be among the most well-established and consistent predictors of clinical improvement (Norcross, 2011; Zack, Castonguay, & Boswell, 2007).

Child and Adolescent Therapy

Despite prolific findings for adults, only a small body of research has examined the TA in child psychotherapy. In a meta-analysis of 16 studies, Shirk and colleagues (2011) found that the average correlation between alliance and therapeutic outcome was .22 in pediatric psychotherapy. Findings are consistent with results from the adult psychotherapy literature with the TA accounting for 19 - 55% of the variance in ratings of child symptomatic improvement over time

(Handwerk et al., 2008; Hogue, Dauber, Stambaugh, Cecero, & Liddle, 2006; Horvath et al., 2011; Kazdin, Marciano, & Whitley, 2005; Martin et al., 2000; Shirk & Karver, 2003).

However, in addition to limitations presented by a paucity of published studies, the scientific base for the TA with children and adolescents is further limited by discrepant and inconsistent findings (e.g., McLeod, 2011; Shirk, Karver, & Brown, 2011). For example, the magnitude and effect of the TA depends on who is evaluating the alliance (i.e., therapist, parent, or child). Hawley and Weisz (2005) discovered that youths' self-report of the TA was significantly related to symptomatic improvement, whereas parent ratings of the alliance were unrelated to outcome. Similarly, discrepancies often exist between adolescent and therapist perceptions of the alliance (e.g., Garner, Godley, & Funk, 2008; Hawley & Garland, 2008; Levin, Henderson, & Ehrenreich-May, 2012; Shelef & Diamond, 2008). Specifically, adolescents' ratings of the alliance are often consistently higher than therapists' ratings (Handwerk et al., 2008), whereas counselors are more tempered in their evaluations of the TA.

Therapists may tend to underrate the strength of their alliance with adolescents because of biases and implicit challenges when working with teenagers. As evidence of this effect, therapists typically perceive their relationships with younger children to be more positive than their relationships with adolescents (Bickman et al., 2004). According to Oetzel and Scherer (2003), many practitioners feel intimidated by working with teenage clients. Feelings of apprehension, discomfort, or dislike alter expectations and impede the establishment of a positive TA. Beyond the therapist, client factors may also negatively contribute to the alliance. For instance, there are a number of age-specific behaviors, attitudes, and beliefs common during adolescence that significantly influence the TA including an increased desire for autonomy and questioning authority. Therefore, given their unique developmental context, it cannot be assumed

that adolescents will approach therapy or develop alliances in the same fashion as children or adults (Karver et al., 2008; Karver, Handelsman, Fields, & Bickman, 2006; Shirk & Saiz, 1992; Storer, 2010; Zack et al., 2007).

Regardless of how challenging it may be to form and maintain a positive working alliance with adolescents, the TA is still highly relevant to the therapeutic process with teenagers given that therapists and youthful clients alike value the therapeutic alliance. In a survey of practitioners, over 90% of child and adolescent specialists reported that the alliance was extremely important to the therapeutic change process (Kazdin, Siegel, & Bass, 1990). Likewise, among youth completing a cognitive-behavioral therapy (CBT) program for anxiety, clients reported that the therapeutic relationship was the most important component of their treatment (Kendall & Southam-Gerow, 1996).

Therefore, well-forged and informed theories of the therapeutic change process will consider the anecdotal and evidence-based importance of the TA. Theories will also consider the relative impact of development and be formatted specifically for application with youth (Hogue et al., 2006). In particular, treatment models will explicitly define the conditions within which the TA is enhanced or limited when working with children and adolescents in order to maximize efficacy and efficiency in the therapeutic process during this sensitive period of development.

Special Populations

Given the intrinsic and extrinsic challenges in forming a working relationship with adolescents, research that evaluates which factors promote or hinder the formation and maintenance of TA with adolescents is crucial. With applied knowledge, practitioners would be able to identify individuals at risk for poor alliance formation and subsequently adapt their treatment approaches to build rapport and capitalize on the effect of alliance formation. Research

efforts and best practice should also consider how the alliance differs across groups or special populations of adolescents who may have unique psychiatric needs, interpersonal styles, or other contextual factors that affect their approach to treatment.

Delinquent behavior. Adolescents involved in the juvenile justice system are at particular risk for forming poor alliances and, ultimately, nearly half fail to complete treatment or fail to make clinically significant changes in their emotional and behavioral presentation (Florsheim et al., 2000). Enhancing therapeutic outcomes among delinquent adolescents is critical to rehabilitating youth and reducing future criminal behavior. Consequences for augmenting the treatment and rehabilitation of juvenile offenders are two-fold: (a) improving the quality of life for the individual child and (b) reducing the cost and burden placed on correctional facilities, mental health systems, and society in general (Bickman et al., 2012).

Although the implications and possibilities for improvement are great, working with youths who have a history of aggressive or antisocial behaviors can be extremely challenging and often inspires therapeutic pessimism (Rockett, Murrie, & Boccaccini, 2007). Bickman and colleagues (2004) demonstrated that child aggressive behavior directly influences clinician ratings of the TA in a negative direction. Additionally, adolescents in the juvenile justice system or residential treatment facilities are often mandated to participate in treatment. The involuntary nature of attendance and participation in treatment may produce disinterested, unmotivated, or resistant behaviors during session that only further contaminate opportunities for attachment and positive engagement in therapy. Alternatively, adolescents may be willing to participate in treatment, but identify goals that are discrepant from their caregivers' or the systems that serve them (DiGiuseppe, Linscott, & Jilton, 1996; Oetzel & Scherer, 2003; Zack et al., 2007).

DiGiuseppe, Linscott, and Jilton (1996) assert that agreement on the goals and tasks of alliance become particularly relevant to working with adolescents. Findings reported by Holmqvist and colleagues (2007) also emphasized the importance of agreement on therapeutic tasks over relational warmth. In their study, adolescents demonstrated the greatest improvement when they perceived therapy to be useful and purposeful (Holmqvist, Hill, & Lang, 2007). Therapists are recommended to develop a collaborative relationship with adolescents in order to craft a therapy program that is perceived to be useful to the client. If the therapist appears too assertive or directive in the formation of therapeutic goals, adolescents may perceive the therapist's behaviors as attempts to control or undermine their intelligence and sense of autonomy. Attempts to control the session may also result in the client believing that the therapist will behave like other authority figures in their lives, such as their parents (DiGiuseppe et al., 1996; Oetzel & Scherer, 2003). Children and adolescents with conduct disorder or other behavior problems may be particularly susceptible to this misinterpretation or exaggerated response to authority and may ultimately fail to "buy in" to the utility of therapy, increasing their risk of limited therapeutic engagement (Kazdin & Wassell, 1999; Levin, 2011). Therefore, juveniles with externalizing behavior problems and delinquent behaviors are at a disadvantage with a distinct set of barriers to forming positive alliances and subsequently experiencing clinical improvement (Ross et al., 2008).

Despite perceived challenges, evidence suggests that the TA is particularly important in the treatment of juveniles who have engaged in criminal activity (Richards & Sullivan, 1996). Florsheim and colleagues (2000) identified that positive TA measured 3 months into treatment with juvenile delinquents was predictive of lower rates of recidivism one-year after release. Similarly, among court-involved youth with substance abuse, client-rated working alliance

predicted therapeutic gains and abstinence immediately post-treatment as well as during 3-month and 6-month follow-up assessments (Diamond et al., 2006; Tetzlaff et al., 2005). While encouraging, results from the aforementioned studies with delinquent youths identify several notable discrepancies from TA studies in the general population and highlight the need for additional, clarifying research that considers how the therapeutic process varies within specific groups or special populations.

For instance, contrary to findings in community samples of children and adults, initially positive ratings of TA predicted worse outcomes for delinquent adolescents at treatment completion. Among juveniles enrolled in community-based residential treatment programs, positive therapist- and youth-rated perceptions of the TA during the first session (i.e., two weeks after intake) were related to increased internalizing behavior, externalizing behavior, and recidivism. According to the authors, youth may have been "faking good" at intake or engaging in socially desirable behaviors that could not be maintained over the course of treatment (Florsheim et al., 2000). Alternatively, youth may have been depressed or withdrawn following adjudication and disruption in placement, but "for specific groups of adolescent clients, an early working alliance may be a poor indicator of a youth's ability to make use of treatment, underscoring the importance of tracking the development of the working alliance over time" (Florsheim et al., 2000, p. 104).

Alliance ratings over time. Delinquent youth whose alliance scores increased over the course of treatment were more likely to demonstrate meaningful clinical improvement and reduced risk of future criminal activity (Florsheim et al., 2000). Hogue and colleagues (2006) corroborated the importance of growth in alliance ratings over time. Adolescents who demonstrated improvements in alliance and therapeutic bond by mid-treatment were more likely

to experience marked reductions in externalizing symptoms than adolescents whose alliance ratings declined over time. Thus, adolescents who become increasingly open, engaged, and invested in the treatment process may have superior outcome and prognosis, even if they are initially withdrawn or non-compliant. Additionally, alliance strength increases as each component of the TA is enhanced including greater bond between parties, as well as agreement about the tasks or goals of therapy. Through consistent collaboration, therapeutic engagement, and clarification of treatment goals, the alliance grows in a linear fashion (Kivlighan & Shaughnessy, 2000), effectively enhancing the therapeutic effect of the alliance.

While alliances can grow naturally and spontaneously, dyads also benefit from conscientious effort and working toward improvement—particularly after experiencing a misunderstanding, misattribution, or misstep in the relationship (Drisko, 2004). Following a rupture in their alliance, dyads are presented with the opportunity to engage in a process of recovery and repair (Safran, Muran, Samstag, & Stevens, 2001). Dyads who exhibit a brief quadratic or high-low-high pattern in their alliance experience greater improvement than individuals who experience stable and consistently positive relationships (Kivlighan & Shaughnessy, 2000; Stiles et al., 2004).

The clinical importance of building alliance over time has been replicated with delinquent adolescents as aforementioned (e.g., Florsheim et al., 2000; Hogue et al., 2006) and other diverse populations of youth, including children with anxiety and children with a history of maltreatment (e.g., Chiu, McLeod, Har, & Wood, 2009; Eltz et al., 1995). Although the bulk of literature examining longitudinal patterns of the TA have been conducted with adult samples (e.g., Kivlighan & Shaughnessy, 2000), preliminary findings reveal that a quadratic or V-shaped pattern may be common when working with at risk children and adolescents. For example,

Rauktis and colleagues (2005) described the developmental trajectory of the TA with caregivers within a small sample of 25 youth enrolled in therapeutic foster care. Adolescent ratings of the therapeutic alliance changed over time. Ratings were consistently elevated at the start of services, declined, and then slowly rebounded over the course of treatment (Rauktis, Andrade, Doucette, McDonough, & Reinhart, 2005).

Researchers posited that declining scores over the course of treatment were the result of challenges implicit to serving at risk youth in juvenile justice and residential settings. That is, residential caregivers in these settings are often required to serve in parental or disciplinarian type roles with children in their care by promoting adherence to programmatic rules and administering negative consequences. Such experiences can produce disagreements, tension, or conflict in the working relationship. Outpatient therapists are just subjected to the same challenges or role confusion and, as such, the alliance is protected and consistently positive (Duppong Hurley et al., 2013; Rauktis et al., 2005). Thus, given the unique demands placed upon providers in alternative therapeutic contexts, it is imperative that future research examines setting-specific trajectories in the therapeutic alliance.

Additionally, researchers and providers alike are encouraged to conceptualize the TA as a process that changes and varies over time. Through this conceptualization, researchers can conduct longitudinal studies that monitor both the strength and pattern of the alliance over time (Bickman et al., 2012; Duppong Hurley, Ryzin, Lambert, & Stevens, 2015). Analysis of longitudinal patterns and trajectories will reveal which variables enhance or disrupt the TA and inform which factors predict treatment success or failure across populations (Ross et al., 2008; Savicki, 2007). Future research may also reveal if there are any characteristics, subgroups, or special populations of youth that respond to therapeutic services and providers in unique ways.

History of maltreatment. For instance, children and adolescents who have experienced abuse and neglect warrant special consideration in order to understand how their past experiences alter their approach to treatment and the pathways to effective intervention (Zelechoski et al., 2013). The relative impact of childhood maltreatment is especially important to consider in samples of delinquent youth given that 90% of youth in juvenile detention facilities report having been exposed to at least one traumatic event (Abram et al., 2004; Ford, Hartman, Hawke, & Chapman, 2008).

Maltreatment may lead to symptoms of posttraumatic stress including intrusive thoughts, avoidance, emotional dysregulation, distorted thinking, and hypervigilance (American Psychiatric Association, 2013). Additionally, adverse experiences with adults increase a child's risk for emotional, behavioral, and interpersonal difficulties later in life. Negative events include direct acts of violence and witnessing parental conflict, as well as indirect harm that may be encountered through parent-child communication deficits, inadequate supervision, and inconsistent or permissive parenting (Stouthamer-Loeber, Loeber, Wei, Farrington, & Wikström, 2002). Subsequently, trauma exposure can create a decreased sense of safety and trust in authority figures, which can alter expectations and assumptions of interpersonal relationships (Bowlby, 1976). Such experiences also reduce a child's interest or ability to form future attachments with caregivers, including therapists and helping professionals (Eltz et al., 1995; Oetzel & Scherer, 2003; Ross et al., 2008).

Despite challenges in forming alliances with trauma-exposed youth, the task remains critical. Eltz and colleagues (1995) surveyed 38 male and female adolescents during extended placement in a psychiatric unit. Chart reviews were conducted for pertinent background information and patients completed measures related to alliance, symptomatic distress, and

interpersonal problems at two time points: within one-week of admission and one-week prior to discharge. Individual therapy was completed three times per week. Children with a history of maltreatment were less likely to develop positive alliances early in the therapeutic process than non-maltreated youths, even after controlling for symptom severity. The type of maltreatment (e.g., physical abuse, sexual abuse) was not a significant predictor of TA, but adolescents with a personal history of complex trauma (i.e., frequent, pervasive, and attachment-based maltreatment) were perceived by therapists to be the most limited in their initial alliance formation. Accordingly, the specific act of violence may be less relevant than its resulting impact on the child's sense of self, others, and the world (Eltz et al., 1995). Despite initial hesitations, many maltreated children experienced growth in their TA and achieved symptomatic improvement during their stay in the facility. Children and adolescents who failed to develop a positive TA demonstrated the least amount of clinical improvement (Eltz et al., 1995). Therefore, establishing a positive attachment with a treatment provider may be essential to healing children and adolescents with a history of trauma exposure.

Treatment Setting

Although delinquent adolescents and children with a history of trauma exposure each present with their own unique considerations for alliance formation and the therapeutic process, they share additional challenges as systems-involved youth who are frequently placed in institutional care. The number of youths placed in institutional and residential care has increased significantly from 1980 and peaked in the mid-2000s (Child Welfare League of American, 2005; Connor, Doerfler, Toscano, Volungis, & Steingard, 2004; Warner & Pottick, 2003). In 2006, as many as 92,721 youths resided in juvenile detention, correctional, or intensive residential facilities (Sickmund, Sladky, Kang, & Puzzanchera, 2015).

Residential treatment centers (RTCs) for children and adolescents are designed to provide stability and structure in order to treat a variety of severe emotional and behavioral issues (e.g., depression, anxiety, oppositional defiant disorder, substance abuse). Youth are typically enrolled in RTC when they require greater access to treatment and cannot be managed in less restrictive settings or when community treatment options are limited (e.g., community care, foster care, group home).

Despite serving a considerable number of troubled children and adolescents, centers of inpatient or residential care for children and adolescents have been largely neglected by the rigor of scientific study. As is true for the majority of psychotherapy outcome and efficacy studies, TA research with children and adolescents has attempted to define clean margins and execute experimental control. The majority of research to date has focused on the relationship between child and therapist within outpatient settings (Florsheim et al., 2000), but preliminary analyses reveal that the magnitude of the TA effect depends upon the setting and context of treatment provision (Handwerk et al., 2008).

Inpatient and residential care. In their 2003 review, Shirk and Karver identified 32 studies examining the TA with children and adolescents. Of these studies, only two were conducted in RTCs and considered fewer than 150 participants in total. Since 2003, very few studies have further examined therapeutic relationships in residential settings (e.g., Duppong Hurley et al., 2013, 2015; Manso, Rauktis, & Boyd, 2008; Zegers, Schuengel, van IJzendoorn, & Janssens, 2006). Research considering the TA in residential settings has been limited by the sensitive nature of the populations served within the community. Additionally, there is a lack of consensus and standard definition of RTC because the structure, methods, and therapeutic paradigm of programs differ considerably, making it difficult to assess and compare programs

systematically. Therefore, studies conducted in residential settings have varied widely in their methodology and treatment setting.

For example, Manso and colleagues (2008) conducted focus groups with 11 youth enrolled in a therapeutic wilderness camp in the northeastern United States for boys with externalizing behavior problems. Results from their discussions and surveys revealed that youth formed stronger alliances with their program counselors based on their adult's personal characteristics (e.g., caring), behaviors (e.g., listening), and relational factors (e.g., respect). Youth also preferred for adults to assume a professional, but parental type role (Manso et al., 2008). Duppong Hurley and colleagues (2013) conducted a longitudinal analysis of the TA with a larger sample of 135 adolescents in residential treatment. However, youth were enrolled in a group home-style program where they resided with a married couple. In that particular study, the therapeutic relationship in question was the relationship forged their surrogate parents thereby limiting the generalizability of findings to other, non-parental treatment providers (Duppong Hurley et al., 2013). In the Netherlands, Zegers et al. (2006) examined the preferences and patterns of interaction among 81 boys and girls court-ordered to receive treatment. Adolescents with secure attachment styles exhibited more frequent dyadic engagement with their residential staff members and demonstrated improved behavioral outcomes. Similarly, adults who reported experiencing their own secure attachments were perceived by the adolescents as available, safe, and able to meet the child's needs (Zegers et al., 2006). Taken at face value, results are promising and suggest that youth in a variety of residential treatment programs can form positive alliances and healthy attachments to the rapeutic benefit.

However, conclusions garnered from these descriptive studies are limited by their sampling and methodology. Therefore, many questions remain regarding the impact of

therapeutic alliance across treatment contexts (Holmqvist et al., 2007). Practitioners and researchers should strive to examine the effect of various treatment contexts, program models, staff characteristics, client characteristics, and study methodologies in order to better understand which variables contribute to the therapeutic process and improvement in residential treatment centers—where children receive treatment 24 hours a day, 7 days a week for weeks to months at a time.

Working alliance with staff members across the institution. Within inpatient and residential treatment facilities, the hour spent in counseling each week is only one component of clinical service and, as such, is not the principal mode of treatment delivery (Handwerk et al., 2008). In a study of adolescents enrolled a residential group home, the TA formed with a mental health counselor accounted for only 3% of the variance in client symptomatic improvement—a marked reduction compared to other published studies with children and adults. The lack of significant findings does not suggest that the TA is unimportant for counselor and client dyads; instead, when striving to produce meaningful change in adolescents with severe emotional or behavioral disturbance, results suggest that other factors or other relationships are equally if not more important than the specific relationship between therapist and adolescent (Handwerk et al., 2008).

Children and adolescents in RTCs frequently interact with various therapists, case managers, psychiatrists, nurses, teachers, residential staff members, and administrators across the institution. They also form an alliance and relationship with the institution itself. Therefore, each relationship and every interaction within the system presents an opportunity for alliance formation, attachment, and positive growth. In a study conducted by Florsheim et al. (2000), researchers found that the formation of a single positive relationship between a staff member and

child improved individual functioning. Interestingly, early alliance (i.e., 3 weeks) was not predictive of outcome post-treatment, but a positive relationship 3-months into treatment was associated with significant long-term gains.

In order to make a meaningful and lasting impact on children and adolescents in institutional care, practitioners must understand which factors and therapeutic techniques evoke a more positive prognosis and promote the greatest improvement in social, emotional, or behavioral functioning. The therapeutic or working alliance is one factor that has demonstrated a relatively consistent—albeit modest—impact on treatment outcome. Furthermore, even one single positive relationship with a residential staff member or therapist can augment treatment gains (Florsheim et al., 2000). However, limited information is available at this time about the ease with which adolescents and adults can form healing relationships in the context of residential treatment or which adolescent, staff, and program characteristics promote positive alliance formation.

Historically, research into the efficacy of residential programs has primarily focused on the practical and procedural structure of the RTC. In order to enhance the utility and value of residential programs, it is important to consider the preconditions and mechanisms of effective treatment (Holmqvist et al., 2007). Additionally, the lack of empirical analysis in institutional care is extremely concerning, given that many inpatient or residential centers devote significant resources to building and maintaining quality relationships between their staff and clientele (Duppong Hurley et al., 2013; Handwerk et al., 2008).

In recognizing the important role the relationship between residents and therapeutic staff plays in facilitating the therapeutic process (Handwerk et al., 2008), RTCs often emphasize the formation of positive alliances with their youths by devoting considerable fiscal, temporal, and

emotional resources to building relationships (e.g., Holden, Endres, Gabarino, Gibson, & Holden, 2009). Research should mirror and—ideally—support the allocation of such resources. Further, consideration and effort should be applied across program models, components, contexts, and personnel in order to identify positive and negative influences on therapeutic experiences of children and adolescents in residential treatment. If any barriers are identified, empirically based strategies can be applied to promote resiliency and clinical improvement among children and adolescents in need.

Purpose

Although the importance of the TA is supported by preliminary evidence, more research is needed to understand the patterns and predictive utility of the alliance with children and adolescents in residential settings. Therefore, the purpose of this study was to address the paucity of research by describing the TA with adjudicated adolescent males in residential care. In recognition of the therapeutic importance of forming a positive relationship with a single caring adult (Florsheim et al., 2000), the current study was designed to describe the landscape of the TA across the residential milieu and assess the extent to which our program is able to provide healing relationships in the context of a secured RTC.

To better understand the formation and maintenance of positive alliances in this context, this study presents findings from the first phase of an on-going project at a facility for adjudicated adolescents with illegal sexual behaviors (AISBs) who were mandated to receive treatment. Specifically, we assessed whether adolescents were able to establish positive relationships with counselors and residential mentors over the course of treatment. To assess how relationships may differ across the milieu, we utilized a mixed repeated measures design in which the same adolescents were assessed over time across different components of the

therapeutic program (i.e., in individual mental health counseling and in the residence) and in different relationships (i.e., with therapist and residential mentor).

Accordingly, this study details the formation, development, and maintenance of the TA within these different contexts over the first few months of treatment. While the therapeutic process continues for upwards of one year for boys enrolled in the program, previous research has demonstrated that a positive TA measured 3-months after program intake is predictive of therapeutic improvement at treatment completion and reduced recidivism at 12-month follow-up (Florsheim et al., 2000). Such findings allow us to place confidence in the value and clinical utility of data captured during this initial phase of measurement. Measures were collected longitudinally over the course of therapy to examine trajectories of the alliance and changes in relationships over time. Additionally, we elected to use a TA measure that could describe the working relationship between the adolescent (i.e., client) and his counselor, as well as between the adolescent (i.e., resident) and his residential mentor. Both adolescents and adult in each dyad completed the measures each month to evaluate on-going agreement in their perceptions of the relationship.

In addition to describing the working alliance across the milieu, we also conducted exploratory analyses to assess the relationship between TA and treatment outcome by examining correlations between alliance ratings and estimates of socioemotional functioning. Research of this nature can be used to identify factors that facilitate or preclude the TA and, subsequently, serve to enhance or detract from therapeutic progress. It is imperative that scholars consider factors that are unique to this special—albeit sometimes challenging—population in order to better serve and rehabilitate adolescents in residential care.

Hypotheses

The phenomenon under investigation in this study includes a variety of psychosocial variables including: TA with therapists, TA with residential staff members, and estimates of behavioral and emotional functioning. Although numerous relationships are possible among the variables under consideration, the hypotheses of interest in this study included:

- Quality of TA. Participants will typically form positive working alliances with
 various staff members over time. Given the therapeutic importance of individual
 counseling and experiences in the milieu, therapists and residential staff members are
 each expected to form positive relationships with adolescents enrolled in the
 treatment program.
- 2. Inter-rater agreement. Ratings completed by adolescents and adults will be correlated, following similar trajectories and patterns over time. However, when evaluating the same dyad, adolescents will consistently rate the alliance more favorably than adults.
- 3. Components of the TA. While typically correlated, adolescents' and adults' perceptions of the alliance will differ across components of the alliance. Specifically, agreement about the strength of the affective bond between child and adult will be more common than agreement about the tasks or goals to achieve in treatment. Given the programmatic framework, adolescents are more likely to agree about the tasks and goals to achieve in therapy than in the residential setting where expectations for behavior are likely to differ between adolescents and adults.
- **4. Influence of trauma exposure**. The formation and relative strength of an alliance early in treatment will be related to specific predisposing factors, including a history

of childhood maltreatment. Previous findings (e.g., Eltz et al., 1995) suggest that youth with a history of trauma exposure will be initially inhibited in their formation of therapeutic alliance and may experience growth in their alliance over time.

5. Relationship with psychiatric functioning. Initial ratings of the alliance will provide a weak prediction of socioemotional functioning and estimate of clinical outcome. Instead, alliance ratings collected later in the course of treatment will demonstrate a stronger association and greater ability to predict clinical improvement. Given the amount of time spent in the residential program, the TA with a staff member will be associated more closely with socioemotional functioning than the singular alliance with a therapist.

Method

Program Description

Setting. Beginning in 1999, the state of Alabama passed legislation that required treatment for all AISBs. In order to meet state requirements, the Department of Youth Services (DYS) forged partnerships with various organizations willing to provide comprehensive psychological services to AISB, including the Department of Psychology at Auburn University and the School of Social Work at the University of Alabama (Burkhart, Peaton, & Sumrall, 2009). The Accountability Based Sex Offender Program (ABSOP) was established and has continued to evolve into a second iteration, referred to as ABSOP-II.

ABSOP-II is a residential treatment program housed within a secured juvenile detention facility. Male adolescents are enrolled in ABSOP-II after being adjudicated for illegal sexual behaviors (e.g., rape, sexual abuse, sexual misconduct, etc) in the state of Alabama. ABSOP-II is capable of housing 60 AISBs, but it is only one of the three programs contained within the

Mount Meigs Complex in Montgomery, Alabama. Thus, the facility also includes a general juvenile correctional facility, capable of housing over 120 adjudicated males and a specialized alcohol or drug addictions program for up to 48 adolescents with substance abuse problems. Given distinct needs and presenting concerns, AISBs and adolescents with general illegal behaviors (AGIBs) are housed separately on campus allowing for tailored programming and consideration of their distinct developmental needs.

Successful completion of ABSOP-II historically required a commitment of one year but efforts have been made to streamline the program and reduce the length of stay to approximately 6 - 10 months. The length of stay varies depending on the severity of offense, court sentencing, identification of subsequent placement, and therapeutic needs for each case. Throughout their stay in the facility, AISBs are exposed to a multimodal, multidisciplinary treatment approach in which they encounter a variety of therapeutic and rehabilitative programming. The program is guided by principles of community safety, holism, and empiricism. It is designed to promote health, safety, and prosocial behavior for each adolescent through comprehensive assessment, best-practice treatment, and trauma informed care. Consistent with these goals, AISBs attend school daily and participate in a variety of community or extra-curricular activities including creative writing, music, sports, gardening, knitting, and more.

Counseling program. Additionally, mental health treatment for AISBs is provided in a variety of modalities across the program including individual counseling, group counseling, and family therapy. Treatment follows an eclectic orientation including psychoeducational, supportive, developmental, interpersonal, and cognitive-behavioral approaches. The treatment model also utilizes components of the Good Lives Model (Yates, Prescott, & Ward, 2010) to emphasize positive psychology and rehabilitation. Based on clinical presentation and needs,

adolescents may also be enrolled in special evidence-based treatment programs such as traumafocused cognitive behavioral therapy (TF-CBT; Cohen, Mannarino, & Deblinger, 2006; 2012)

Boys participate in individual counseling with their primary therapist for one hour twice a week. Therapists typically have a master's degree in counseling, social work, or other mental health related field. In addition to providing direct treatment services, therapists assume a variety of other important responsibilities including, but not limited to: overseeing and coordinating clients' case-related paperwork; maintaining regular communication with family members, juvenile probation officers (JPOs), and other auxiliary contacts; and collaborating with other staff members to coordinate care and progress across the program. Therapists play an additional important role in the lives of youth in residential treatment by facilitating community meetings in the residence hall and occasionally serving as group leaders. Boys are enrolled in approximately two or three psychoeducational and process-oriented therapeutic groups every nine weeks. All boys are required to complete Sex Ed, but additional groups are selected based on therapeutic need including: Family Focus Therapy, Empathy, Healthy Relationships, and Emotional Management, among a number of other groups

Residential program. Treatment is also provided in the residential program in which boys are expected to adhere to an ascribed set of rules and expectations for their behavior. In the residential program, AISBs are assigned to one of four residential cottages based on their developmental age. Prior to assignment and identification of the appropriate cottage, adolescents remain in an orientation dormitory that houses all boys during intake and early enrollment.

Cottages contain an individual bedroom for each adolescent and a shared community space for completing homework, socializing, and relaxing. Additional space is available for mealtime and

recreational activities (e.g., basketball courts). Outside school hours (i.e., 8:00 am - 2:30 pm), the boys are in their assigned cottage and under the supervision of their residential staff.

While in the residence, adolescents are cared for by staff members who include a unit manager and 8 to 10 residential specialists. Broadly, a "residential specialist" is a non-professional shift worker who is responsible for the observation, supervision, security, and rehabilitation of youth in the group living environment. Residential specialists are required to have a high school diploma or equivalent. Each AISB was assigned a "residential mentor." The mentor is an identified member of the staff who is assigned to an adolescent in order to serve as a role model and go-to support person in the cottage. Assignment was unsystematic, although in some cases adolescents collaborated with the unit manager to identify and request a specific residential staff member who the child connected with or preferred. Mentors are explicitly instructed to develop positive attachments with their assigned adolescents and, within each cottage, fidelity to the mentorship program is monitored by the unit manager.

All residential staff members are trained to implement the *Children and Residential Experiences: Creating Conditions for Change* (CARE) practice model (Holden et al., 2009).

Within the CARE framework, services provided across the residential program are designed to provide a context that is sensitive to the multifaceted needs of emotionally and/or behaviorally disturbed youth and seeks to minimize interpersonal conflict between children and adults.

Accordingly, the guiding principles of CARE dictate that residential treatment is developmentally focused, family involved, relationship based, competence centered, trauma informed, and ecologically oriented (Holden et al., 2009). Thus, the culture of ABSOP-II is built on a foundation of caregiving and attachment. Considerable effort is given to training staff in these organizational values because:

the job of the organization and every residential care worker is to provide an environment where children can succeed. The factors in the environment to consider include the physical environment, routines, activities, instruction, opportunities to participate and contribute, and the quality of relationships with adults and children. The heart of residential care is the milieu. The milieu is the environment where structure, activities, and interactions take place. "The milieu is the surround or environment that someone lives in and is influenced by" (*The Encarta World English Dictionary, 2006*). In residential settings, the milieu is the place where attachments form, trust grows, relationships develop, and the foundation for growth and change is laid. (Holden et al., 2009, p. 47)

Ensuring adherence to these principles across the milieu is essential for establishing a well-functioning, responsive, and effective system of care. Alternatively, violations of these principles would break the treatment frame and truncate improvement by creating tension at the intraindividual, interpersonal, or systemic level.

For more detailed information regarding organizational values or operations, please contact the primary author.

Participants

The initial sample included 32 adolescent males adjudicated for illegal sexual behaviors in the state of Alabama and subsequently mandated to enroll in the residential treatment program. Adolescents included in this study were admitted into the facility during the period of time ranging from November 2014 to August 2015. Participants typically completed treatment within 7.13 months on average (SD = 1.61), but may have remained in residence longer while awaiting declaration of their next placement and authorization from the courts. Boys ranged in age from

13.31 to 18.76 years with a mean age of 15.84 years. Per self-report, 53.3% of participants identified as White, 36.7% Black, 6.7% Latino, and 3.3% Biracial. Estimates of Full Scale Intelligent Quotient (FSIQ) were calculated through the Wechsler Abbreviated Scale of Intelligence (WASI; Wechsler, 1999). Adolescents performed within a range of 65 to 126, with a mean score of 87.13 (SD = 13.23) and 50% of boys scored between 78 and 94.

In addition to the inappropriate behavior resulting in involvement with the judicial system, many youth in the facility also reported having a pre-existing psychiatric or emotional difficulties. Approximately 40% of youth endorsed taking prescribed psychotropic medication at intake. Many participants also were affected by experiences of childhood maltreatment. Over 70% of AISBs in the sample experienced at least one traumatic event in their lifetime, with many incurring compounded and chronic exposure. The following percentages are printed as estimates of their experiences. However, estimates are generated based on self-disclosure during the pretreatment interview using a non-standardized measure. Therefore, scores are likely underestimates of actual experiences, but were described as follows: 23.3% sexual abuse, 6.7% physical abuse, 40.0% witness domestic violence, 16.7% neglect, and 50.0% other (e.g., car accident). Previous research has revealed that approximately 93% of juvenile offenders have encountered at least one traumatic event (Abram et al., 2004).

Measures

Clinical interview. As part of the pre-treatment assessment battery, each participant completed a semi-structured clinical interview designed to gather pertinent background data including demographic information and details of their home environment, educational background, trauma history, criminal history, history of sexual behavior, and more. For purposes of this study, emphasis was given to variables relating to demographic information and history of

maltreatment (e.g., physical abuse, sexual abuse, witnessing domestic violence, neglect). The interview and subsequent instruments were selected based on review of empirical literature regarding evidence-based assessment and treatment of AISBs. Graduate clinicians receive extensive training in assessment procedures and techniques prior to administration and scoring. Interview-based variables were coded and scored via computer program or manual computation prior to entering information into a comprehensive database. Audits were conducted periodically to assess reliability and ensure accuracy of data entry.

Therapeutic alliance. The Working Alliance Inventory (WAI; Horvath & Greenberg, 1989) is one of the most widely used measures of TA and has received considerable empirical support (Elvins & Green, 2008; Martin et al., 2000). Studies of the WAI support strong psychometric properties, including strong reliability estimates (Tracey & Kokotovic, 1989) and positive correlations with a variety of outcome measures (Martin et al., 2000).

Designed to measure agreement on the goals, tasks, and affective bond, the WAI is theoretically consistent with Bordin's (1979) conceptualization of the working alliance. Factor analytic studies support the distinction of Bordin's three-factor model (i.e., goals, tasks, bond) within the original 36-item version, with demonstrated high internal consistency and appropriate scale intercorrelations (Elvins & Green, 2008; Horvath & Greenberg, 1989; Tracey & Kokotovic, 1989).

Items within each factor reflect the agreement shared between the adolescent and adult regarding the goals of treatment (e.g., "We have established a good understanding of the kind of changes that would be good for me"); the activities or tasks of treatment (e.g., "What I am doing in treatment gives me new ways of looking at my problems"); and their affective bond (e.g., "I believe _____ likes me"). Sample items provided are from the adolescent's perspective. When

completing the rating scale, respondents evaluate emotional and cognitive components of the alliance on a 7-point Likert scale ranging from 1 (*never*) to 7 (*always*).

The three-factor model is also supported within an abbreviated, 12-item version of the WAI (Tracey & Kokotovic, 1989). When compared to the full version, the short form (WAI-SF) has demonstrated equivalent reliability and validity (Busseri & Tyler, 2003; Hatcher & Gillaspy, 2006) and can be used in confidence to conserve time and cost.

Additionally, the WAI and WAI-SF have demonstrated discriminant validity through their use within various populations and contexts to differing levels of alliance strength (Elvins & Green, 2008). Administration is supported among client populations of varying developmental levels and ages, including common usage in child and adolescent studies of therapeutic alliance (e.g., Florsheim et al., 2000; Karver et al., 2008; Shelef, Diamond, Diamond, & Liddle, 2005; Tetzlaff et al., 2005).

Florsheim and colleagues (2000) administered the WAI to delinquent boys in community-based residential programs. Youth were allowed to self-select the staff member whom they wished to evaluate, intending to capitalize on the youth's selection of individuals who they were in frequent contact with and who additionally provided them with support (Florsheim et al., 2000). In the current study, participants used a similar modification of the WAI-SF in which they were instructed to write-in the name of the target individual under consideration, facilitating measurement and subsequent comparisons of within-subject ratings over time. Additional modifications were made to clarify and define which setting (i.e., therapy vs. milieu) and relationship (i.e., therapist vs. residential mentor) were under consideration and to facilitate comparisons of the working alliance across raters.

Socioemotional functioning. Current behavior and emotional functioning was assessed using the Behavior Assessment System for Children, Second Edition (BASC-2; Reynolds & Kamphaus, 2004). Participants completed the adolescent self-report version (SRP) at treatment entry and mid-treatment. The SRP is a 176-item multidimensional measure appropriate for use with young adults aged 12 to 21 years. On the BASC-2 raters are asked to evaluate the presence of a behavior (i.e., *True* or *False*) or the frequency of occurrence: N (*never*), S (*sometimes*), O (*often*), or A (*almost always*). From item scores, 16 primary scales and 5 composite scales are generated (Reynolds & Kamphaus, 2004).

The BASC-2 SRP has demonstrated adequate internal consistency (.78 to .94) and test-retest reliability (.81; Reynolds & Kamphaus, 2004). Additionally, the BASC-2 has demonstrated sensitivity to change and adequate discrimination among distinct psychiatric concerns (McClendon et al., 2011).

In a study conducted with adolescents in residential programs, the original BASC SRP (Reynolds & Kamphaus, 1998) demonstrated adequate convergent and discriminant validity with the Minnesota Multiphasic Personality Inventory, Adolescent (MMPI-A; Butcher et al., 1992). Comparisons supported a three-factor structure of clinical composite scales: Clinical Maladjustment, School Maladjustment, and Personal Maladjustment (Weis & Smenner, 2007). Correlations between the SRP versions of the BASC and BASC-2 are strong, ranging from .65 to .79 and supporting their conceptual similarity. However, research conducted by the test developers supported a four-factor structure of clinical problems on the BASC-2 SRP over the three-factor model identified in the first iteration, adding an externalizing variable comprised of concerns related to hyperactivity and inattention. The BASC-2 SRP also provides a composite measurement of adaptive skills deficits for a total of 5 composite scales. Thus, the composite

factors considered in this study were: Internalizing Problems, Inattention/Hyperactivity,
Emotional Symptoms Index, School Problems, and Personal Adjustment (Reynolds & Kamphaus,
2004).

BASC-2 clinical composite scale descriptions are provided to aid interpretation. The Internalizing Problems composite scale reflects concerns related to anxiety, mood disruption, and somatic complaints; Inattention/Hyperactivity describes symptoms consistent with attention deficit/hyperactivity disorder including difficulty concentrating and an inability to sit still; Emotional Symptoms Index captures adolescents' concerns regarding their internalized experiences as well as their self-esteem; School Problems identifies maladjusted attitudes toward the education system and teachers; and Personal Adjustment illustrates concerns related to adaptive skills and social skills. For all clinical scales except Personal Adjustment, t-scores at or above 70 are clinically significant with scores ranging from 60 to 69 are considered to be at risk. On the Personal Adjustment scale, t-scores are inverted; scores ranging from 31 to 40 are at risk and scores at or below 30 are clinically significant (Reynolds & Kamphaus, 2004).

Trauma history. Information regarding whether a participant had witnessed or experienced a traumatic event was collected in the pre-treatment clinical interview. Participants were also administered the Trauma Symptom Checklist for Children (TSCC) to assess symptoms of posttraumatic stress and estimate current functioning. The TSCC is a 54-item self-report questionnaire intended to evaluate children 8 to 16 years old, with validated and normative extensions for older adolescents as well. Items derive two validity indices and six clinical scales: Anxiety, Depression, Anger, Posttraumatic Stress, Dissociation, and Sexual Concerns. Clinical scale titles are accurately named and can be interpreted at face validity. Scores on the clinical scales are reported as t-scores with elevated scores reflecting psychiatric distress. For all clinical

scales except Sexual Concerns, t-scores at or above 65 are clinically significant while scores ranging from 60 to 64 are considered to be at risk. On the Sexual Concerns scale, t-scores at or above 70 are clinically significant (Briere, 1996).

In the standardization sample, Cronbach's alpha reliability estimates ranged from .58 to .89 (Briere, 1996). Moderate correlations with broadband measures of socioemotional functioning and specific measures of symptomatic experiencing have provided evidence of concurrent and convergent validity (Lanktree et al., 2008). The posttraumatic stress subscale has demonstrated particular strength as a discriminative tool in identifying children and adolescents who are experiencing distress after instances of maltreatment (Sadowski & Friedrich, 2000).

Procedure

Data for this dissertation was collected as part of an on-going contract-funded research project designed to assess adjudicated males before and after completion of the residential program. Every juvenile enrolled in the program is administered a comprehensive psychological battery in order to assess functioning at program entry. The pre-treatment assessment battery includes the clinical interview, BASC-2, and TSCC among other measures in order to evaluate behavioral and emotional functioning. The pre-treatment battery and intake process requires approximately one month to complete. Details about the overarching project have been omitted in favor of describing procedures specific to this study, but additional information can be provided upon request. All procedures for this study were approved by the university's Human Research Protection Program and Institutional Review Board (IRB). For an overview of study timelines and procedures, refer to Table 1.

Scores obtained from the standard pre-treatment assessment process were later combined with study specific variables after obtaining appropriate consent and assent for study

participation. Determination of the adolescent's ability to assent and participate in research was at the discretion of a DYS representative (i.e., custodial agent). After receiving consent from the legal guardian, adolescents were recruited for participation in the therapeutic alliance study. Recruits engaged in a collaborative discussion with study investigators to discuss the nature and purpose of research. Participants were notified that they could withdraw from the study at any time without incurring consequences for withdrawal. Similarly, they were informed that participation in the study would not influence their standing in the program. Recruits were informed of their right to confidentiality and provided with the opportunity to ask questions about participation. During this time, participants were also instructed how to complete the WAI-SF.

Following a detailed explanation of study procedures and protections, adolescents could assent. Eighty-seven percent of AISBs who were recruited for participation agreed to do so.

Refusal to participate may have been the result of lower cognitive functioning, mood disruption, discomfort with task demands, disinclination to do more work, or simply because they were presented with a choice and opportunity to say no within an otherwise highly restricted environment.

Therapists and mentors received training on how to complete the WAI-SF during a staff meeting. Additional written instructions were provided with each subsequent administration. Written consent was not obtained from adults under the assumption that regular evaluation of adolescents' behavior and completion of rating scales is within the expectations of their employment. Participating personnel also were reminded that the purpose of this study was to understand adolescents' beliefs and behaviors as a way to enhance treatment progress and therapeutic change—not to evaluate staff member ability or aptitude. All participants were

encouraged to respond to items openly and honestly. They were reminded that the quality of interpersonal relationships varies across individuals and over time.

In each interpersonal dyad, adolescents and adults both completed ratings of the TA to assess inter-rater agreement. Hereafter, dyads will be referred to as client/therapist and resident/residential mentor. The terms "client" and "resident" reflect the same adolescent participant, but were selected to help distinguish the context and relationship under consideration.

In order to complete the WAI-SF, therapists and residential mentors were provided with a manila envelope filled with the required rating scales for each participating dyad. Adults were responsible for completing their own ratings of the working alliance in a timely manner, in addition to facilitating adolescents' completion. Adolescents and adults were instructed to complete their rating scale within context (i.e., during therapy session or in the cottage) in order to support state-dependent memory and learning. However, careful instructions were provided to promote independent ratings and confidentiality. Specifically, ratings were not to be shared with the other party. After answering each question on the WAI-SF, the individual was expected to seal the completed rating form in a standard white envelope. Then, sealed individual envelopes were placed in the larger manila envelope for subsequent collection and data entry by the research team.

WAI-SF ratings were collected once a month for each participant in each setting (i.e., therapy and residence hall). Monthly administration of the WAI-SF began once case assignment was completed for each adolescent and the individual therapist was determined. Case assignment typically occurred 1-month after program entry. Researchers targeted initial WAI-SF completion (i.e., Time 0) during the first or second individual therapy session, but the exact timing could not be predicted in each case. Similarly, WAI-SF ratings in the milieu were initiated after an AISB

transferred to his permanent cottage and identification of his designated mentor on the unit. The timing of transfers was dependent on available staff and space on the unit, but ideally cohered with initiation of therapy.

While ratings continued to be collected over the duration of adolescents' 8 to 10 month enrollment in ABSOP-II, analysis of longitudinal data is beyond the scope of this project.

Moreover, previous research has demonstrated that longitudinal data is not necessary because TA scores collected 3-months after intake have previously predicted long-term improvement among delinquent youth (Florsheim et al., 2000). With this precedent, we intended to evaluate the equivalent of 3-months active treatment. However, recall that therapist assignment and transfer to the assigned residential cottage is often delayed 1-month after program entry, resulting in 4-months cumulative time. Favorably, the 4-month mark also approximates mid treatment given the average time it takes AISB to complete the program successfully.

Accordingly, a mid-treatment evaluation was introduced at the 16-week mark. The BASC-2 was re-completed at this time to estimate improvements in socioemotional functioning since intake. Corresponding WAI-SF data were gathered through week 20 yielding a total of five WAI-SF collection points in this data capture. WAI-SF collection was extended beyond the pre-defined mid point to capture variability and inconsistencies in time.

Every effort was made to collect rating scales regularly and for the timing of ratings to correspond across contexts. However, completion of the assigned rating scales was inconsistent—particularly in the residential program—resulting in missing data. In order to minimize loss of information, missing data was handled via pairwise-deletion when available. For any given WAI-SF administration (i.e., week 4 through 20), the number of completed rating

scales ranged from 10 to 29 (N = 32). Barriers to completion were periodically assessed and addressed accordingly with program staff.

Results

Analyses

The current project aimed to gain a better understanding of the working alliance with adolescents in residential care. Existing literature is minimal, but has demonstrated a small association between therapist alliance and clinical improvement at completion of the residential treatment program. Considerably less published literature has evaluated alliance formed across the residential milieu. Residential staff members spend more time with adolescents than therapists and, subsequently, are likely to play a significant role in the lives of these adolescents and contribute to their change process. The current study contributes to the existing literature by telling the story of relationships within our residential treatment center and describing patterns of alliance formation across the milieu over time.

Moreover, by examining patterns of alliance formation within our existing treatment program, we are able to understand the effectiveness of institutional efforts to establish a sensitive, relationship driven programmatic culture. Through careful consideration of identified patterns, we can identify areas of strength and opportunities for growth within the organization.

To this aim, the analyses conducted as part of this study were primarily descriptive in order to better understand the existing alliances between clients and therapists, residents and residential mentors. Analyses also included Pearson's correlations, independent-samples t-tests, paired-samples t-tests, multiple regressions, and one-way analysis of variance (ANOVA) to characterize statistical similarities, differences, and relationships between variables over time. The following data are presented to address each hypothesis and area of interest.

Research Questions

Quality of TA. Means (M) and standard deviations (SD) of WAI-SF scores are presented in Table 2 for each rater over time with a visual depiction provided by Figure 1. Higher WAI-SF scores indicated higher, more positive TA. Inspection of average WAI-SF scores over time revealed that the majority of adolescents and adults consistently reported a score of 67 or greater. With a maximum possible score of 84, these scores earned the equivalent of an 80% or B-average. Several working alliance scores earned a C-average and demonstrated room for improvement. Specifically, adolescents perceived the relationship with a residential mentor as less favorable at Time 2 and 4. Resident ratings at Time 4 represent an area of normative weakness, falling more than 1.5 SD below the total WAI-SF sample mean (M = 70.65, SD = 5.64).

To better understand differences in working alliance scores in context, follow-up analyses were conducted to compare and contrast ratings across settings. Results from Pearson's correlations and paired samples t-tests are printed in Table 3. Adolescents and adults alike perceived the working alliance to be significantly more positive in the context of counseling than in the residential setting. Specifically, AISBs perceived their relationships with residential mentors to be poorer than with their therapists; likewise, mentors viewed the boys more negatively than therapists. In fact, therapists and mentors consistently differed in their perceptions of the same adolescents. Residential mentors evaluated the quality of their relationships with AISBs as significantly lower than therapists over time.

Inter-rater agreement. Figure 2 provides a graphic representation of the trends and trajectories in alliance scores over time. Visual inspection of the data revealed that WAI-SF scores remain closely correlated and consistently positive between client and therapist, but tend

to deteriorate in the residential setting. Ratings of the TA provided by residents and mentors appear discrepant at first, but tend to cohere over time as adolescents and adults reach agreement about the quality of their relationship.

To examine patterns in a more systematic fashion, Table 4 details statistical comparisons in adolescent and adult agreement about their working alliance. Clients and therapists agreed consistently across the course of treatment, following the same trajectories over time; whereas residents and residential mentors differed in their perceptions of the alliance at the onset of treatment, but became increasingly attuned and correlated with one another as mid-treatment approached.

While the majority of adolescent and adult ratings are significantly correlated and indicative of inter-rater agreement, several notable discrepancies emerged. For one, adolescent ratings are consistently higher than adult ratings in the context of therapy. Clients' ratings remained significantly elevated and divergent from therapists' ratings over the course of several months. In the residential setting, adolescent and adult relationships take a different course. Initial WAI-SF ratings were significantly different [t(11) = 2.21, p = .05] with adolescents perceiving the relationship significantly more favorably (M = 71.58, SD = 5.71) than residential mentors (M = 63.38, SD = 11.09). Over time, the gap between adolescent and adult ratings in this context decreased as adolescent ratings of the working alliance deteriorated to match the consistently lower ratings of their mentors.

Components of the TA. In order to better understand the structure of the working alliance and identify specific areas for growth, we examined the three factors of the WAI-SF (i.e., goals, tasks, bond). Composite scores for each component are presented in Table 5. Across individuals and settings, scores on the tasks and affective bond components were higher than the

goals component of the WAI-SF.

Follow-up analyses revealed more specific information about where adolescents and adults tended to agree or disagree. In counseling, clients and therapists typically agreed on the goals of treatment [t(125) = 1.75, p = .08], but not on the tasks [t(122) = 6.56, p < .001]. Surprisingly, clients and therapists also disagreed about the quality of their affective bond [t(126) = 3.93, p < .001]. Consistent with analysis of total scores, adolescents evaluated the affective bond more positively than their adult counterparts.

In the milieu, residents and mentors typically agreed on the affective bond within the dyad [t(73) = .42, p = .67] and the established goals [t(73) = .06, p = .95]. However, similar to client and therapist dyads, adolescents and their residential mentors also disagreed about the tasks of the residential program [t(72) = 2.75, p < .01]. Therefore, therapists and residential mentors alike can work toward improving the TA through enhanced agreement about the types of activities and tasks that are necessary for achieving desired treatment outcomes.

Influence of trauma exposure. Researchers predicted that adolescents with a history of childhood maltreatment would be inhibited in their initial approach to the TA. Figure 3 depicts WAI-SF ratings over the course of treatment in the subsample of trauma-exposed adolescents. AISBs with a history of maltreatment were perceived to be hesitant in their approach to the TA in counseling, earning significantly lower WAI-SF scores as rated by the therapist at Time 0 (M = 71.89, SD = 11.42) and Time 1 (M = 70.50, SD = 13.65) when compared to subsequent evaluation at Time 2 (M = 78.06, SD = 6.59). Scores reflect significant growth in the relationship as therapy progresses [respectively, t(15) = 2.41, p = .03; t(15) = 2.28, p = .04] and are consistent with trends reported in the general sample.

Alternatively, while adults' perceptions of the WAI-SF increased in the context of counseling, the relationship followed a different trajectory in the milieu. In the residence, trauma-exposed adolescents initially approached their staff with positive expectations and perceptions of alliance formation (Time 0: M = 73.10, SD = 4.92), but ratings tended to deteriorate over time (Time 4: M = 59.54, SD = 24.61). Conclusions are tentative, however, given that missing data limited the power to detect statistical differences.

In recognition of the sequelae of interpersonal difficulties common after trauma exposure, we were also curious if boys who witnessed or experienced a traumatic event approached the TA differently than typically developing (i.e., non-exposed) adolescents. Table 6 presents descriptive statistics for adolescents who did and did not endorse a personal history of trauma exposure. No statistical differences were observed in the context of counseling. However, in the residential setting, trauma-exposed adolescents were able to form more positive alliances than their non-exposed peers. When compared to their typically developing peers, maltreated youth endorsed higher WAI-SF ratings with residential mentors at Time 0 [t(7.11) = 4.91, p < .01] and Time 2 [t(9) = 2.39, p = .04]. Mentors agreed with the adolescents at Time 2, reporting significantly more positive alliances with trauma-exposed youth (M = 66.38, SD = 1.81) than non-exposed (M = 44.33, SD = 17.67), t(9) = 2.81, p = .02. Therefore, while residents' experiences of the relationship in the residential setting generally deteriorate over time, adolescents with a history of maltreatment experience more positive TA and are perceived to form more favorable relationships with their mentors than typically developing (i.e., non-exposed) adolescents.

Relationship with psychiatric functioning. Estimates of AISB socioemotional functioning as measured by self-report on the BASC-2 and TSCC are presented in Table 7. BASC-2 scores decrease from pre- to mid-treatment, suggesting clinical improvement and

reductions in psychiatric distress. Similarly, the variability and range of scores diminish from pre- to mid-treatment, indicating that more AISBs fall within a healthy range of functioning as they progress through the program.

A series of multiple regression analyses were run to predict domains of socioemotional functioning using WAI-SF scores. At each time point, multiple raters' WAI-SF scores were entered into the regression analysis to evaluate their association with adolescents' self-reported functioning on the TSCC and BASC-2 at intake and mid-treatment. Results revealed which areas of socioemotional functioning are most susceptible to the influence of the TA in this sample. In particular, WAI-SF ratings were sensitive to adolescents' self-reported sexual concerns and adaptive functioning. Initial WAI-SF ratings collected at Time 0 significantly predicted scores on the TSCC Sexual Concerns scale $[F(4, 5) = 20.66, p < .01, R^2 = .94]$ such that adolescents who reported elevated concerns achieved stronger alliances. WAI-SF ratings from all four raters (i.e., adolescents and adults across contexts) were significantly predictive of Sexual Concerns (p < .05).

Additionally, WAI-SF ratings predicted adaptive functioning across time. Pre-treatment BASC-2 Personal Adjustment scores were predicted by WAI-SF ratings at Time 4 [$F(4, 13) = 3.24, p = .04, R^2 = .50$]. Ratings from the residential setting contributed significantly to the model (p < .05) when predicting initial evaluations of adaptive skills. Alternatively, midtreatment adaptive functioning was predicted by client and therapist ratings (p < .05) at Time 3 [$F(4, 12) = 3.94, p = .03, R^2 = .57$].

While multiple regression analyses revealed a narrow window of predictive utility for WAI-SF scores, follow-up correlations revealed additional direct and specific relationships between the TA and socioemotional functioning. Significant correlations between WAI-SF

ratings and the five clinical composite scales of the BASC-2 and six TSCC scales are presented in Table 8. Although a large number of correlations were possible, only a handful was significant.

At intake, WAI-SF scores are associated with psychosocial functioning in multiple domains including anxiety, depression, posttraumatic stress symptoms, and sexual concerns. Contrary to expectations and despite observed improvement in socioemotional functioning (see Table 7), ratings on the WAI-SF collected later in the course of treatment demonstrated fewer associations and less predictive utility than initial ratings. Therapists demonstrated the highest number of associations with 6 significant correlations between WAI-SF ratings and socioemotional functioning, whereas residential mentors exhibited 3 significant correlations. No significant correlations were observed between residential mentors and socioemotional functioning at mid-treatment.

Interestingly, data revealed that the relationship between TA and psychiatric impairment was positive at intake (i.e., more impairment, more positive working alliance). The exception to this finding is the relationship with Personal Adjustment in which poor adaptive skills are associated with lower working alliance ratings. However, given the positive direction of the pretreatment associations, the lack of significant correlations at mid-treatment may reflect a shift in the alliance toward attunement such that improved functioning (i.e., less distress) is associated with better quality alliances.

Exploratory case analyses were also conducted to examine the potentially deleterious effect of a negative TA. Visual inspection of scatterplots revealed a number of adolescents who perceived their alliances as exceptionally weak or strong (i.e., \pm 1.5 SD). As described previously, adolescents' early ratings of the TA with therapists and residential mentors were consistently positive across settings; however, by Time 4, several participants' ratings had shifted toward the

extremes. One participant reported that he was unable to form a positive TA in either counseling or the residential setting; and 10 adolescents identified a significant discrepancy in the strength of their alliance, forming positively valenced relationships in therapy with poor relationships in the residence. Comparisons were drawn between participants who failed to form a positive TA in at least one context and those who reported consistently favorable experiences with program staff. There was a statistically significant difference between groups in BASC-2 Personal Adjustment pre-treatment scores as determined by one-way ANOVA [F(1, 13) = 6.00, p = .03]. Follow-up t-tests revealed that Personal Adjustment scores were significantly lower among participants with poor TA in the residential setting (M = 31.50, SD = 13.50) than among adolescents who experienced positive alliances across contexts (M = 56.29, SD = 5.91).

Results are consistent with previous findings regarding the predictive utility and contribution of adaptive functioning abilities in understanding WAI-SF scores. Additionally, while no statistically significant groups differences can be calculated for the young man who perceived poor relations with adults in both therapy and the residence (n = 1), individual case analysis revealed that his FSIQ fell within the intellectually disabled range. Individuals with intellectual or developmental disabilities typically exhibit considerable deficits in adaptive functioning skills.

Discussion

The current study intended to capture the dynamic processes of how adjudicated adolescents form healing, collaborative, and therapeutic relationships with various adults in the context of residential treatment and, from these data, tell the story of their engagement and healing. In this study, we aimed to describe the formation and maintenance of therapeutic alliances (TA) across the milieu by identifying the strength and dyadic agreement about alliances

formed over time in counseling and the residential setting. We also considered how the TA varied based on adolescents' history of trauma exposure and level of psychiatric distress.

Youth enrolled in residential treatment centers (RTCs) typically exhibit severe emotional or behavioral deficits resulting in psychiatric distress and often have experienced childhood maltreatment or adversity. Masten and Reed (2002) assert that the single best predictor of resilience following adversity is a close, stable bond with an adult. The protective factors garnered from the presence of a positive attachment with an adult are not exclusive to parents and can be acquired from the formation of an alliance with any supportive adult who is prosocial, competent, and caring (Masten & Reed, 2002). Similarly, previous research in residential treatment demonstrated that the formation of a single TA forged between an adolescent and staff member resulted in clinical improvement and reduced recidivism (Florsheim et al., 2000).

Through this study, we examined the extent to which adolescents and staff members in our existing RTC for adolescents with illegal sexual behaviors (AISBs) are able to form positive working alliances consistent with current best practices of developmentally focused, relationship driven, and trauma informed principles of care (Holden et al., 2009). Data captured for inclusion in this study serve to describe boys' experiences with various staff members during their first few months in the treatment program and are part of a larger, on-going research protocol.

We hypothesized that adolescents in our facility would typically form positive alliances with various staff members (i.e., therapists and residential mentors) throughout their time in the program. We believed that adolescent and adult ratings of the TA would be correlated, reflecting attunement and agreement in their relationship, but that adolescents would consistently rate the alliance more favorably than adults. Similarly, we wanted to understand where adolescents and adults agreed or disagreed about the quality of the TA. We expected that agreement was common

regarding the affective bond shared between dyads, but differed in perceptions of the specific goals or tasks to achieve in the program. We anticipated that a history of trauma exposure would effect youth's approach to relationships with caregivers and that AISBs with a history of maltreatment would be initially inhibited in their formation of a working alliance, but would experience growth in their relationships over time. Finally, we presumed that TA ratings would be associated with adolescents' socioemotional functioning and level of psychiatric distress. Given the amount of time spent together in the residential setting, we estimated that residential mentors' TA ratings would be more sensitive and reflective of adolescents' current level of functioning.

In order to examine our hypotheses more specifically and systematically, we evaluated the formation and maintenance of the multiple therapeutic alliances forged within ABSOP-II by using the Working Alliance Inventory, Short Form (WAI-SF) across raters, contexts, and time. Our findings describe the trends, trajectories, and predictive utility of the TA in each aspect of the program—identifying areas of current strength as well as opportunities for improvement.

Quality of the Therapeutic Alliance within ABSOP-II

Strength. In support of our primary hypothesis, we are pleased to report that the majority of adolescents formed a positive alliance with at least one adult throughout the course of their enrollment in ABSOP-II. As expected and consistent with previous studies, adolescents typically perceived the TA as more favorable than their adult counterparts (Handwerk et al., 2008), but they tended to agree with adults about the overall quality of their dyadic working relationship.

Components. Follow-up analyses revealed which components of the TA were the strongest. Total scores on the WAI-SF reflect agreement and collaboration on three smaller parts of the TA including the shared goals, tasks, and bond within the dyadic relationship. The

affective bond reflects perceptions of mutual like and respect for one another. The remaining two factors reflect agreement about the structure and plan for treatment, as well as belief that the program can be effective. Specifically, the goals factor of the WAI-SF describes agreement on the presenting concerns and desired outcomes of treatment, whereas the tasks component reflects the treatment plan and agreement about what needs to be accomplished to achieve the desired outcomes (Andrusyna, Tang, DeRubeis, & Luborsky, 2001; Bordin, 1979; Tracey & Kokotovic, 1989).

Consistent with our hypothesis, across raters and settings, the affective bond between adolescents and adults earned the highest score of any factor, whereas the lowest scores were commonly attributed to the agreed upon goals to achieve. Adolescents and adults disagreed significantly about the tasks to achieve in treatment. Thus, while perceptions of the goals of the treatment program may be consistently lower than other components of the working alliance, adolescents and adults disagree most often about the tasks of treatment.

Therefore, in order to elevate WAI-SF scores and augment the overall strength of the alliance, more attention could be applied to discussing and converging on the agreed upon targets for treatment as well as clarifying how the day-to-day activities of the treatment program will help adolescents' accomplish their goals. Previous research has demonstrated that disagreements about the tasks of therapy are the most common challenges to the therapeutic relationship. In a study of children and adolescents who terminated outpatient treatment prematurely, families reported that their therapists did not seem to be talking about or doing the right things to help the youth (Garcia & Weisz, 2002). Despite the fact that AISBs are mandated to treatment and cannot drop out, these factors may strain the TA and cause them to wish they could terminate.

In addition to improving the strength of the alliance, agreement about the goals and tasks to achieve in ABSOP-II may enhance program effectiveness. In a study conducted by Holmqvist and colleagues (2007), adolescents demonstrated the greatest clinical improvement when they perceived therapy to be useful and purposeful, such as reflected within the tasks and goals components of the WAI-SF. Likewise, Handwerk et al. (2008) concluded that the TA in residential treatment was a necessary but not sufficient condition for change, whereas the tactics and interventions used in treatment were more important than whether clients liked their therapists or vice versa.

To address these issues within the RTC, therapists and residential mentors can use the WAI-SF as a prompt or tool to facilitate conversation about the alliance and treatment planning. Simple questions such as, "Are we working on the right things?" or "Do you think we are making progress toward your goals?" could validate the youth's experience and indicate to the adolescent that his opinion matters (Byers & Lutz, 2015). Similar techniques can be used in counseling and the residential setting.

Context. While there is undoubtedly room to improve in each setting, the overall quality and strength of alliances appears to be context dependent. Adolescents formed at least one positive TA with an adult in ABSOP-II, but that relationship is most often experienced in the context of counseling. Average WAI-SF ratings completed by adolescents indicated that they formed consistently positive relationships with their therapists, but there is considerable room for improvement in the residential setting.

Both adolescents and adults perceived alliances in milieu more negatively than in the context of counseling. That is, AISBs perceived their relationships with staff to be poorer than with their therapists; and likewise, residential mentors viewed boys more negatively than

therapists. Therapists and mentors also consistently differed in their perceptions of the same adolescents as residential staff members evaluated the quality of their relationships with AISBs consistently lower than therapists.

Improving Alliances in the Milieu

Negative interpersonal experiences in the residential setting are particularly unfortunate given that boys spend the majority of their time in the cottage and with their residential staff. In order to enhance the therapeutic and rehabilitative effect of the program more broadly, we need to work toward improving the quality of relationships formed in the milieu. Improvement begins with curiosity and consideration of the underlying mechanisms that drive such negative perceptions, attitudes, and interpersonal interactions. Therefore, throughout this discussion we will identify several different factors associated with poor working alliance scores in our population. We will also describe several theories as to how these factors limit or restrict alliance formation and offer recommendations for intervention.

TA changes over time. The quality of the TA in the residential program differs across time. WAI-SF scores remain consistently favorable between client and therapist, whereas residents' ratings of the TA with their mentors were initially positive, but deteriorated as boys approached mid-treatment. Over time, adolescents' favorable opinions of their alliances with residential mentors declined as they became more attuned with their staff members—joining their mentors in their poor perceptions of the TA. Residents' ratings on the WAI-SF with residential mentors at Time 4 represented an area of particular weakness, earning the lowest scores in the entire sample. Results are consistent with previous studies that have demonstrated TA scores vary and change over time (e.g., Eltz et al., 1995). Additionally, alliance ratings often

start high, decline, and then ideally begin to increase again as treatment progresses (e.g., Rauktis et al., 2005).

One interpretation of these findings is that it is easy for adolescents to form positive alliances in the residential setting when first placed in their assigned cottage, but challenging to sustain these positive perceptions and relationships with their residential mentors over time. Florsheim and colleagues (2000) proposed that initially positive TA ratings among delinquent youth reflected a "honeymoon period" where youth were faking good or engaging in socially desirable behaviors that cannot be maintained over the course of treatment.

While this explanation appears satisfying at first, data presented from this study do not support this theory given that the observed deterioration occurs exclusively in adolescents' ratings of the alliance. If TA ratings were driven exclusively by negative behaviors exhibited by the adolescents, adults would also perceive the "honeymoon" period and subsequent change in functioning. Consequently, adults' evaluations of the TA would follow a similar trajectory over time. However, the data indicated that residential mentors' perceptions of AISBs in the cottage began low and remained on the lower end across the duration of treatment. Therefore, an alternative explanation for this effect is more likely.

TA reflects attunement. Alternatively, WAI-SF ratings may deteriorate as AISBs approach mid treatment because adolescents' expectations for attachment, care, and warmth are not met in the milieu. Adolescents may have entered into their relationships with residential mentors full of hope and positive expectations, seeking a parental figure (Manso et al., 2008), and experiencing a "halo effect" after perceiving all adults in ABSOP-II as caring and supportive (Handwerk et al., 2008). However, as they spent more time in the residential setting, boys may have experienced a rupture in their relationship with their mentors (Safran et al., 2001), or

become increasingly aware of and attuned to staff's negative expectations, perceptions, attitudes, or beliefs about the youth.

As described previously, many adults experience apprehension and discomfort when working with teenagers (Oetzel & Scherer, 2003). Feelings of discomfort only increase as we layer on considerations unique to special population, including their age, psychiatric concerns, and behavior problems. Children and adolescents with a history of behavior problems, violence, or antisocial tendencies tend to be met with fear and negative expectations—even by mental health providers (Bickman et al., 2004; Oetzel & Scherer, 2003; Rockett et al., 2007).

Additionally, boys enrolled in ABSOP-II were adjudicated for illegal sexual behaviors which often evoke reactions of fear, frustration, and sadness (Chaffin, 2008). Previous studies have demonstrated that perceptions of resentment and hostility produce mutual, reciprocal feelings between children and institutional staff members. For example, if staff members perceive children as antagonistic, manipulative, or resistant then the children in turn report receiving less understanding and empathy from their staff and begin to react accordingly (Green et al., 2001).

The human tendency to engage in reciprocal actions and reactions may be at the heart of the negative WAI-SF ratings in the residential setting. Under this assumption, modifying the attitudes and behaviors of both adults and adolescents in this context can create advancement and growth in the TA. With each member of the dyad contributing to the alliance, it is unclear which is the chicken and which the egg. However, attachment-based theories and interventions place the burden for change on the adult by suggesting that caregivers should delight in the child and provide structure as necessary, but ultimately be bigger, stronger, wiser, and kind (Marvin, Cooper, Hoffman, & Powell, 2002). Adults can also improve their attachments with the adolescents by promoting positivity and learning to manage their own reflexive emotions or

responses (Blaustein & Kinniburgh, 2007). If adults can learn to regulate their own emotions, they will be enhancing the adolescents' capacity for self-regulation through social learning.

Learning is activated within the context of a relationship with a caregiver through adult modeling and coaching, as well as by providing adolescents a safe context to experiment with new skills (Ford & Blaustein, 2013; Holden et al., 2009).

Beyond affect regulation and effective modeling of desired behaviors, previous studies have identified a number of staff characteristics and behaviors that are associated with improved alliances. Exhibitions of mutual respect, collaboration, trust, and investment of time or interest are at the heart of forming positive relationships with teenagers (Martin, Romas, Medford, Leffert, & Hatcher, 2006; Sommers-Flanagan & Sommers-Flanagan, 1995). Practitioners are advised to greet adolescents with direct communication; to be involved, engaged, and interested while still maintaining safe and professional boundaries; as well as to respond appropriately to challenging or resistant behaviors manifested by the youth (Jalbert, 2010; Richards & Sullivan, 1996).

With these recommendations in mind, organization and individual staff members may wish to employ principles of motivational interviewing which provide a framework for effective communication and positive interaction. Relevant practices include reflective listening, affirmation, rolling with resistance, and managing counter-transference (Feldstein & Ginsburg, 2006, 2007). Traditionally, RTC staff members are trained in behavior management techniques, rather than strategies for interpersonal communication, engagement, or how to respond to a child in distress (Ford & Blaustein, 2013). Thus, alterations to the therapeutic approach or programmatic culture would need to occur from the top-down in order to provide the necessary education, supervision, and support to all members of the organization (Holden et al., 2009).

TA is influenced by trauma exposure. Adults' feelings of resentment or hostility may be real or only perceived by the adolescent. That is, even if an adult has the best intentions, youth may misinterpret their words or actions as an interpersonal slight or rejection. Alternatively, they may perceive non-verbal cues and subtle undertones as overly harsh, critical, punitive, or demeaning (Burack et al., 2006; Price & Glad, 2003). These types of misattributions, biases, and generally poor social skills are particularly common among children and adolescents who have experienced maltreatment.

Children and adolescents who have experienced trauma are at risk for developing a host of interpersonal difficulties including, but not limited to: insecure attachment styles, mistrust, expectations of danger, hostile attribution bias, limited interpersonal effectiveness, social skills deficits, diminished perspective-taking abilities, and poor boundaries (Burack et al., 2006; D'Andrea, Ford, Stolbach, Spinazzola, & van der Kolk, 2012).

Any one of these interpersonal difficulties could impede the formation and maintenance of the TA. As a consequence, previous findings (e.g., Eltz et al., 1995) have discovered that youth with a history of trauma exposure are initially impaired or inhibited in their formation of the TA and, as such, have room to grow into their alliances over time. However, the results from this study are mixed. WAI-SF scores in the client-therapist relationship support this hypothesis with boys earning significantly lower TA scores during early therapy sessions than later in the course of treatment, suggesting that they achieve growth in their alliance. On the other hand, maltreated youth in the residential setting report the strongest alliances with their milieu staff at initial measurement and then ratings decline steadily over time. The deterioration of the residential experience over time is consistent with patterns observed in the general sample. Within our sample, over 70% of participants endorsed witnessing or experiencing at least one

traumatic event during childhood. Therefore, it is unclear whether these worsening effects in the residential setting are specific to the sequelae of trauma or represent the broader tendencies of AISBs in the program.

Accordingly, comparisons were drawn between groups of boys who experienced maltreatment and non-exposed youth. Few meaningful differences were detected between groups, suggesting that the effects of maltreatment may not directly alter the quality of relationships in our facility. In fact, our findings suggest there may be something protective about the trauma sequelae or style of interpersonal interactions employed by trauma-exposed youth. Specifically, in the residential setting, although there is an overall trend toward depletion of WAI-SF scores, trauma exposed youth received more positive ratings from staff than non-exposed youth. Youth who did not endorse a personal history of trauma exposure reported deeper lows and extremely poor alliances with their residential mentors.

Ratings imply that there is room to improve perceptions and relations of all adolescents in the residential setting, but particularly with non-trauma exposed youth. Through trauma-informed care (e.g., Holden et al., 2009), staff members may be more empathic, understanding, and sensitive to the needs of maltreated youth whereas similar interaction styles may be more difficult to employ with youth who are conceptualized exclusively by their behavior and conduct problems (Rockett et al., 2007). Thus, additional research should be conducted in order to understand why adolescents flourish in one context or with one set of adults, but not another. Exploration of alternative predisposing factors (e.g., depression, callous-unemotional traits) should be conducted in order to identify the characteristics of non-exposed adolescents who have considerable difficulty forming positive alliances.

For example, positive relationships may be easier to maintain if staff members can shift their conceptualization of problematic behaviors away from an externalizing perspective and toward an understanding of the psychiatric distress that underlies the behaviors. Additionally, the facility may be able to achieve better outcomes if they learn to value relationship-centered care and strive to form positive attachments with all adolescents regardless of various client characteristics (e.g., trauma-exposed vs. non-exposed youth; behavior deficiencies vs. well-mannered).

TA as it relates to psychosocial and adaptive functioning. While previous explanations of the TA in the residential setting focus on areas for improvement in adult behavior, alternative theories should consider the relative impact of client factors and behaviors on the TA. For instance, adolescents' emotional or behavioral difficulties may impede the formation of a positive alliance. As expressed previously, behavior problems may evoke natural feelings of frustration, anger, or hostility from staff members (Green et al., 2001; Rockett et al., 2007). Emotional problems may evoke similar responses of hostility, frustration, or confusion—particularly if displays of affect are unpredictable, atypical for that individual, or otherwise intense.

On a broadband self-report measure of socioemotional functioning, scores suggested that many participants were experiencing impairments at intake. Results are consistent with previous studies, which reveal that the majority of youth in the juvenile justice system qualify for one or more psychiatric diagnoses (Feldstein & Ginsburg, 2006). Within our sample, early WAI-SF ratings were frequently associated with estimates of socioemotional functioning. In particular, adolescents who reported more psychiatric distress on the TSCC at intake experienced more positive alliances with their therapists and residential mentors.

Across all raters, higher WAI-SF scores significantly predicted elevated levels of sexual concerns as measured by the TSCC. Results are consistent with the goals of ABSOP-II and are considered in light of fact that study participants were mandated to treatment for illegal sexual behaviors. Therefore, it is possible that therapists and staff perceived AISBs with sexual concerns as individuals who were open to engaging in treatment and could successfully take accountability for their inappropriate behaviors. Similarly, adolescents' psychiatric distress may have inspired their therapists to feel hopeful and as if participation in the treatment program would be beneficial.

We had hypothesized that the TA with a residential mentor would be associated more closely with socioemotional functioning than a therapist due to the increased amount of time AISBs spend in the residential program and the increased opportunities to estimate, observe, or react to their current level of functioning. Contrary to expectations, therapists' ratings of the alliance were more sensitive to boys' psychosocial functioning. As self-report measures, the BASC-2 and TSCC tend to capture more internalized distress than observable behavior problems. Through their professional training and experience, it may be easier for therapists to assess and monitor symptoms of depression, anxiety, posttraumatic stress, or other psychiatric condition as compared to residential mentors who tend to focus on externalizing behaviors and program adherence.

Previous research in RTCs has demonstrated that initial alliance ratings were not predictive of outcome at program completion, but that a growth in the relationship and a positive TA approximately 3-months into treatment were related to long-term benefits (Eltz et al., 1995; Florsheim et al., 2000). Therefore, we examined the relationship between socioemotional functioning and alliance scores collected during the initial phase of treatment and over time.

Consistent with previous studies conducted in residential care settings (e.g., Handwerk et al., 2008), youth improved over the course of treatment. However, mean scores on mid-treatment measures of functioning reflected that many adolescents were still experiencing psychiatric symptoms. Preliminary analyses detected a weak relationship between working alliance scores and socioemotional functioning at mid-treatment. Therefore, the TA may be necessary, but not sufficient for change.

A lack of significant findings and predictive utility at mid-treatment may be the result of the low sample size as well as inappropriate or insensitive outcome measure. Adolescent self-report of functioning may be discrepant from adult or caregiver evaluations of current functioning. Specifically, while adolescents may be on the path to wellness and experiencing less subjective distress than when they entered the program, AISBs are still a work in progress at mid-treatment. Analysis of functioning after successful completion of the program may be more revealing and indicative of stable effects given that boys' behavior can appear dysregulated or inconsistent at mid-treatment as they vacillate between improvement and regression, reconciling past behaviors and future goals.

For example, as boys approach mid-treatment, they enter into a demanding portion of therapy in which they are challenged emotionally and cognitively. Typically during this period, clients are in the throws of discussing their adjudicated offense in detail. Adolescents who endorsed experiencing childhood maltreatment may also be in the midst of processing their personal trauma histories. By processing such sensitive and difficult material in therapy, it is possible that boys are triggered, emotionally raw, or exhausted by the time they return to the cottage. Even though they are on the ultimate path to wellness, they may experience a resurgence in emotional or behavioral difficulties during this phase of treatment with a limited capacity to

effectively manage their emotions. Subsequently, adolescents bring their distress home to the cottage to "show and tell" with their residential caregivers.

When adolescents' dysregulated emotions and behaviors are considered through an attachment lens, caregiver involvement is required to help youth de-escalate and regulate their emotions (Blaustein & Kinniburgh, 2007, 2010). Thus, residential mentors are recommended to notice adolescent distress and assist in the development of affect regulation skills. Unfortunately, the majority of RTC workers receive training in discipline and behavior management strategies in order to reduce negative behaviors among youth—rather than learning how to respond to youth with emotional distress in an effective and engaging manner or to promote youth competency and resilience. Likewise, staff meetings tend to emphasize the completion of objective and administrative duties like documenting critical incidents and staffing rather than providing education, supervision, and support around clinical care (Ford & Blaustein, 2013). Therapists, residential staff members, and organizations more broadly can collaborate on how to develop adolescents' and adults' skills related to affect regulation (Ford & Blaustein, 2013; Hodgdon, Kinniburgh, Gabowitz, Blaustein, & Spinazzola, 2013). Multidisciplinary collaboration is also key is helping staff members to counterbalance, predict, and prepare for dysregulation or outbursts. In particular, therapists and staff are advised to engage in frequent dialogues and teaming around each adolescent's current, individual needs and goals.

Consistent with this recommendation, staff members can do a better job at assessing and understanding the needs of youth with developmental concerns. Among individuals with lower cognitive functioning and developmental disabilities, adaptive skills deficits are common (Papazoglou, Jacobson, & Zabel, 2013). Deficits measured by the BASC-2 were consistently predicted by adolescent and adult perceptions of poor alliances. Analyses revealed that

adolescents with limited adaptive skills are at particular risk for experiencing strained relationships in the residential setting. Thus, poor TA ratings from residential mentors may reflect the difficulty or frustration they experience when working with youth who exhibit more significant impairments than typical of the ABSOP-II population. In this scenario, the organization could increase training and education about intellectual and developmental disabilities in order to assist staff members in the creation of individualized, developmentally appropriate treatment plans that recognize adolescents' individual capabilities, level of insight, and maturity in order to craft (Martin et al., 2006; Sommers-Flanagan & Sommers-Flanagan, 1995). Similarly, additional psychosocial assessments could identify areas of specific deficit and offer strategies to use in order to improve adaptive functioning and, evidently, the quality of interpersonal relationships as well.

Alternatively, the relationship between the BASC-2 adaptive scores and poor TA in the residential setting may be more indicative of the disappointment adolescents feel when they are unable to form positive relationships with their caregivers in the residential setting and the pervasive effects of such insecure attachments. The adaptive skills composite on the BASC-2 is defined by adolescents' personal perceptions of their self-esteem, self-reliance, interpersonal relations, and relationships with parents (Reynolds & Kamphaus, 2004). Given the domains covered by the adaptive composite, results reflect the weight and importance adolescents placed on forming attachments with residential mentors, such that insecure relationships led to deficient perceptions of the self and their ability to be liked or form positive relationships with others.

Conclusions

Taken together, data from this study support the notion that AISBs form a positive relationship with at least one adult within the ABSOP-II system. Results are promising given that

children and adolescents require the presence of a stable, caring adult in order to be resilient (Masten & Reed, 2002). Within our facility, different staff members across the treatment program have the opportunity to go beyond the confines of their job description and become the person who provides a secure, caring relationship that make a difference in the lives of these youth. Data indicate that adolescents form the most positive relationship with their therapists—leaving room to improve the quality of alliances in the residential setting where boys spend the majority of their time.

Rupture-repair. Following arguments or conflicts between adolescents and adults, staff members are encouraged to engage in a rupture-repair process (Eames & Roth, 2000; Safran, Muran, & Eubanks-Carter, 2011; Safran et al., 2001; Stiles et al., 2004). A rupture in the working alliance is defined as an episode of tension or breakdown in collaboration within the dyad. Ruptures may result from disagreement about the goals, tasks, or bond of the alliance (Bordin, 1979). When asked to identify predictors of ruptures, therapists reported engaging in or experiencing a lack of agreement about the utility or value of therapy, transference, countertransference, therapist mistakes, and personal issues that interfered with effective practice (Stiles et al., 2004). Subsequently, ruptures can manifest in client or professional behavior as defensiveness, resistance, limited engagement, perceived lack of understanding, violation of trust, miscommunication, or direct disagreement (Safran et al., 2001, 2011).

Once there is awareness and recognition that a rupture has occurred, there is the unique opportunity to address that weakness and repair the TA in the here-and-now of the relationship. Previous research regarding the TA has revealed that ruptures—if repaired—actually strengthen relationships. A rupture that is repaired predicts better therapeutic outcomes than ruptures that are not repaired, and also predicts greater gains than alliances with no ruptures at all (Stiles et al.,

2004). The theory behind this phenomenon suggests that ruptures present an opportunity for the clients to learn about their attachment difficulties and problems relating to others, whereas repairs provide a corrective emotional experience by communicating care and modeling the skills necessary for effective interpersonal interactions (Stiles et al., 2004).

Within the RTC, it is likely that adolescents and residential mentors experience a rupture with no repair. Instead, feelings resulting from the rupture begin to fester and damage the relationship. Adolescents may feel uncomfortable expressing dissatisfaction or disappointment with adults in the system, believing that being respectful and protecting their relationships with adults in the system is the quickest way to move through the program. It is then crucial for therapists and residential mentors to be attuned to adolescents in order to notice when the alliance is in trouble and initiate the repair process in a way that is safe for adolescents.

Specifically, in order to repair, adults are encouraged to be non-defensive and direct.

They must be must be willing to be vulnerable. In particular, it is important for adults to be open to receiving adolescents' negative thoughts and feelings about them or their work. Adults are also advised to take responsibility for their involvement and contribution to the rupture.

Additionally, by exploring and validating adolescents concerns, adults are able to promote insight and intervene around feared outcomes (Safran et al., 2001).

Finally, results from this study suggest that therapeutic ruptures are most common as adolescents approach mid-treatment. Adults are encouraged to be particularly sensitive to AISBs' experiences and therapeutic needs as they approach this phase of treatment. By anticipating ruptures, staff members will be better equipped to understand the function of adolescents' dysregulated or attachment-seeking behaviors during this period and respond accordingly. Similarly, addressing ruptures as they occur in the moment can prevent a sharp decline in the

alliance and provide a buffer or zone of positivity within which staff can address problem behaviors or provide corrective, disciplinary feedback as necessary and consistent with programmatic goals.

Systemic challenges and implementation of best practice. While ideal in practice, asking residential mentors to spend additional time and resources engaging in the rupture-repair process, anticipating youth's needs, managing their own emotions—or engaging in any of the recommendations provided throughout this discussion—may be insensitive to the very real demands placed upon an already strained system. Simply put: we know that relationship-driven, trauma-informed care facilitates improvement for children and adolescents in residential treatment (Blau, Caldwell, & Lieberman, 2014; Holden et al., 2009). However, the challenge is how to put those idealistic principles into practice and maintain their integrity despite the day-to-day challenges of working in RTC. Adults employed within the system may then be mirroring the experiences of the youth they serve and engaging in their own stress response, simply reacting to adversity and fighting to stay above water (Ford & Blaustein, 2013). Challenges include, but are not limited to: administrative demands, funding limitations, staff turnover, compassion fatigue, and youth behavior problems (Ford & Blaustein, 2013; Holden et al., 2010).

Thus, given the challenges, demands, and intensity of working within this system, personal and interpersonal difficulties are to be expected. Accordingly, maintaining consistently positive relationships can be a challenge for even the most seasoned professional (Safran et al., 2001). However, in order to promote positive alliances, move toward change, and implement best practices for RTC, the organization as a whole must find ways to create safety and validate the experiences of its youth and adults. Specifically, there is a clear role for the provision of education, structured supervision, and emotional support at every level of the system (Ford &

Blaustein, 2013). Additionally, we must continue to uphold the organizational values related to the provision of developmentally focused, family involved, relationship-based, competence centered, trauma-informed, and ecologically oriented care (Holden et al., 2009)—for residents and staff members alike. Continuous quality improvement projects should be completed to examine programmatic adherence to these foundational principles and identify areas for growth in the milieu and organizational structure more broadly.

Moreover, by working to improve the quality of alliances and fulfilling our commitment to the provision of relationship-based care, we can improve outcomes and enhance program efficacy—regardless of the actual predictive utility of the TA. Previous analyses have revealed that "the quality with which the intervention is implemented has been as strongly related to recidivism effects as the type of program, so much so that a well-implemented intervention of an inherently less efficacious type can outperform a more efficacious one that is poorly implemented" (Lipsey, 2009, p. 127).

Limitations and Future Directions

In order to speak to how to improve programmatic functioning and maximize the clinical utility of the phenomenon under investigation, we examined the TA within a real-world, therapeutic setting—rather than within an experimentally controlled environment. However, by using a naturalistic setting, we introduced a significant lack of experimental control and a number of confounding variables.

We encountered several limitations related to study design and statistical analysis. First and foremost, there was a considerable amount of data missing from the residential setting.

While efforts were made to modify procedures in order to increase successful completion of the WAI-SF by residential mentors each month, researchers are advised to continue to assess barriers

to completion and modify study methodology accordingly. Given the many demands placed on milieu staff (e.g., Ford & Blaustein, 2013), the research team should consider revising procedures to make it efficient and easy for residential mentors to respond. Similarly, the research team is encouraged to collaborate with mentors in order to identify future questions or recommendations that can improve conditions in the residential setting, address concerns, and increase job satisfaction. Additionally, by joining with residential staff members and sharing study results, researchers may encourage others to value research and engage more readily with future requests.

Methodological and statistical limitations also include small sample size, limited power, reliance on self-report of information, and lack of a control group. Future studies will be well served by expanding the number of participants in order to increase the power to detect true effects. For example, few differences were observed between adolescents who did (n = 21) and did not (n = 9) endorse a personal history of trauma exposure. However, the ability to discriminate meaningful differences may have been impaired by the small sample size and disproportionate number of group members. Additionally, as a descriptive and exploratory study, we conducted many analyses with a small sampling of data from the initial phase of an on-going project. The completion of multiple analyses may have inflated our results and likelihood of committing a type I error. Researchers should strive to achieve parsimony in future studies by identifying specific questions and a priori hypotheses in order to assess for unique contributions and discrepancies from known effects.

One major limitation of this study is that it continues a line of descriptive research examining patterns of the TA and fails to move the alliance literature into the realm of applied science and clinical intervention. Future research should strive to translate findings into

actionable steps and guidelines for how to develop, build, repair, and maintain the assorted and unique alliances that exist in residential treatment settings. With increased understanding and applied research, we will be better equipped to directly effect change and promote clinical improvement among distressed children and adolescents (Bickman et al., 2012).

While we intended to describe the TA within ABSOP-II in order to inform and improve practices within our system, researchers may wish to cross-validate the TA in other RTCs.

Examination of the phenomenon as it occurs in other programs will serve as a comparison point and reveal areas of particular strength or weakness in ABSOP-II. Future studies should also be designed to cross-validate self-report of psychiatric functioning with multiple informants such as therapists, teachers, or residential mentors. By using data from multiple informants, practitioners will obtain a more accurate snapshot of adolescents' current functioning and areas of impairment across domains and settings.

Previous research has demonstrated that the TA is a consistent, but modest predictor of socioemotional functioning and therapeutic outcome with youth (e.g., Shirk & Karver, 2003). However, results from this study provided minimal evidence of a causal, predictive relationship between the alliance and therapeutic outcome. Acquiring multi-informant ratings and additional self-report measures of socioemotional functioning may also increase our ability to detect associations between the TA and therapeutic outcome. Future research will strive to include a more comprehensive array of clinical measures. Similarly, given the overall trend toward clinical improvement within our sample, our ability to detect significant associations may have been impacted by a limited range in scores. A significant relationship between TA and outcome may have been detected in our sample if WAI-SF and BASC-2 ratings covered a broader range of scores (Handwerk et al., 2008). Follow-up analyses from the on-going research project will

reveal more about the long-term patterns and effects of forming positive alliances in residential treatment programs. Additional research can also highlight the gains associated with forming positive TA or the deleterious effects of forming poor alliances across the milieu.

We are grateful to report that many relationships formed between adolescents and adults within ABSOP are positive, supportive, and truly therapeutic in nature. However, although many things are going well within our RTC, findings from this study highlight several areas for improvement, including building better quality relationships in the milieu and supporting the continued strength of relationships over time. By employing some of the recommendations provided in this report, all adults who work in the system—be they administrators, counselors, staff members, teachers, or security guards—can learn to capitalize on the foundation of relationship-centered care that is at the heart of the ABSOP-II treatment program. By seizing the many opportunities for positive attachment that are already available in this setting—and repairing ruptures in those relationships when needed—adults will be able to improve the day-to-day experience of adolescents in the program and, hopefully, enhance the quality of their lives after program completion as well.

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Table 1

Method Timeline and Overview

Program Milestone	Goal & Plan	Timeline for Completion	Measures	Relevant Persons
Adjudication & Enrollment	Receive court sentencing. Enter ABSOP-II. Allow AISBs time to adjust and acclimate to program.	Within first 4 weeks.	n/a	Adolescent
Pre-Treatment	Complete standard pre-treatment assessment battery to evaluate socio-emotional functioning at intake.	Within first 4 weeks.	BASC-2 TSCC	Adolescent
Therapist Assignment	Establish TA and clarify goals of treatment. Collect initial TA data.	Week 4 (Time 0) or first session as available.	WAI-SF	Adolescent ("Client") Therapist
Transfer to Cottage	Assign mentor in residence hall. Gather initial TA data for mentor.	Week 4 (Time 0) or first day as available. Defined as Time 0.	WAI-SF	Adolescent ("Resident") Residential Mentor
On-Going Therapy	Complete WAI-SF ratings during initial meeting. On-going evaluation to be conducted once a month.	Week 8 (Time 1). Week 12 (Time 2). Week 16 (Time 3). Week 20 (Time 4). Etc.	WAI-SF	Adolescent ("Client") Therapist
On-Going Residence	Complete WAI-SF ratings during initial meeting. On-going evaluation to be conducted once a month.	Week 8 (Time 1). Week 12 (Time 2). Week 16 (Time 3). Week 20 (Time 4). Etc.	WAI-SF	Adolescent ("Resident") Residential Mentor
Mid- Treatment	Complete mid-point evaluation, including assessment of socio-emotional functioning.	Target completion at Week 16 (Time 3).	BASC-2	Adolescent

Note. ABSOP-II = Accountability Based Sex Offender Program; AISB = Adolescent with Illegal Sexual Behavior; TA = Therapeutic Alliance; WAI-SF = Working Alliance Inventory, Short Form; BASC-2 = Behavioral Assessment System for Children, Second Edition; TSCC = Trauma Symptom Checklist for Children.

Table 2

Full Sample WAI-SF Total Scores by Rater over Time

			Time		
	0	1	2	3	4
Rater	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)
Client	76.38 (6.68)	75.80 (11.18)	78.13 (6.84)	77.54 (9.38)	78.17 (6.51)
Therapist	71.76 (11.15)	71.40 (11.78)	77.21 (7.16)	73.96 (10.88)	73.08 (9.77)
Resident	71.58 (5.71)	70.80 (15.97)	62.58 (22.81)	65.05 (20.34)	61.63 (23.49)
Residential Mentor	63.38 (11.09)	66.00 (12.67)	64.25 (16.56)	68.05 (11.95)	66.96 (10.49)

Note. Maximum possible on the WAI-SF is 84.

Client ratings reflect youth's perceptions of the working alliance with the therapist; therapist ratings reflect adult perceptions of the adolescent in therapy. Resident ratings describe youth's perceptions of the alliance with the residential mentor; mentors scores illustrate adult perceptions of the relationship with the adolescent in the milieu.

[&]quot;Client" and "resident" are labels derived to identify the same participant in context.

Table 3 Statistical Similarities and Differences in Individual WAI-SF Scores across Contexts over Time

		Ra														
		Adolescent							Adult							
	Descriptive Statistics			Simil	larities	Γ	Differen	ices	Descript	ive Statisti	cs	Similarities		Differences		es
Time	Client M (SD)	Resident M (SD)	n	r	p	df	t	p	Therapist M (SD)	Mentor M (SD)	n	r	p	df	t	p
0	77.82 (6.35)	72.36 (5.28)	11	.64	.03	10	3.61	< .01	74.92 (10.12)	62.58 (11.19)	12	27	.40	11	2.52	.03
1	79.56 (4.78)	70.00 (16.73)	9	.17	.17	8	1.73	.12	75.36 (5.26)	65.73 (12.68)	11	.10	.78	10	2.41	.04
2	76.89 (8.25)	63.11 (24.61)	9	.58	.58	8	1.98	.08	76.33 (8.27)	64.00 (17.87)	9	.42	.26	8	2.28	.05
3	79.35 (5.75)	67.00 (19.55)	17	.36	.36	16	2.79	.01	74.74 (9.07)	68.47 (11.67)	19	15	.54	18	1.73	.10
4	77.61 (6.94)	60.72 (23.24)	18	.28	.28	17	3.21	< .01	71.52 (9.45)	65.38 (10.11)	21	.38	.09	20	2.58	.02

Note. Significant findings are printed in bold typeface.

"Client" and "resident" are labels derived to identify the same participant in context.

Table 4

Statistical Similarities and Differences in WAI-SF Scores between Adolescent and Adult Pairs over Time

								Dya	ad							
			Clie	nt and T	Therapist				Resident and Residential Mentor							
	Descrip	tive Statis	tics	Simi	larities	Γ	Differen	ices	Descrip	tive Statist	tics	Similarities		D	Differences	
Time	C M (SD)	T M(SD)	n	r	p	df	t	p	R M (SD)	RM M (SD)	n	r	p	df	t	p
0	76.38 (6.68)	71.76 (11.15)	28	.40	.03	27	2.52	.02	71.58 (5.71)	63.38 (11.09)	12	16	.62	11	2.21	.05
1	75.81 (11.18)	71.40 (11.78)	24	.76	<.01	23	2.63	.02	70.80 (15.97)	66.00 (12.67)	10	.44	.19	9	1.44	.18
2	78.13 (6.84)	77.21 (7.16)	24	.21	.33	23	0.51	.62	62.58 (22.81)	64.24 (16.56)	9	.83	<.01	8	1.07	.32
3	77.54 (9.38)	73.96 (10.88)	23	.55	<.01	22	1.70	.10	65.24 (20.34)	68.06 (11.95)	20	.44	.05	19	.05	.96
4	78.17 (6.51)	73.08 (9.77)	23	.59	<.01	22	3.09	< .01	61.64 (23.49)	66.96 (10.49)	22	.75	<.01	21	1.38	.18

Note. C = Client; T = Therapist; R = Resident; RM = Residential Mentor. Significant findings are printed in bold typeface.

Table 5

Average WAI-SF Factor Scores by Rater

	Total	Goals	Tasks	Bond
Rater	M(SD)	M(SD)	M(SD)	M(SD)
Client	76.86 (7.61)	24.36 (3.63)	26.45 (2.88)	26.40 (3.09)
Therapist	72.54 (10.78)	23.66 (4.20)	24.41 (3.93)	25.25 (3.38)
Resident	64.34 (19.45)	21.71 (5.97)	23.58 (5.96)	23.68 (6.34)
Residential Mentor	66.02 (11.19)	21.16 (4.35)	21.66 (5.09)	23.33 (3.90)

Note. Maximum possible WAI-SF score is 84; maximum score for each component is 28. "Client" and "resident" are labels derived to identify the same participant in context.

Table 6

Raters' Perceptions of the Working Alliance as a Function of Trauma Exposure

	Trauma Exposure $(n = 21)$						Typical $(n = 9)$					
	Client	Therapist	Resident	Residential		Client	Therapist	Resident	Residential			
Time	M(SD)	M(SD)	M(SD)	Mentor		M(SD)	M(SD)	M(SD)	Mentor			
				M(SD)					M(SD)			
0	77.89	71.89	73.10	61.80		73.75	72.25	64.00	68.50			
	(4.98)	(11.42)	(4.93)	(12.15)		(8.70)	(9.50)	(1.41)	(6.36)			
1	74.74	70.50	69.25	65.67		77.63	73.63	77.00	60.50			
1	(13.09)	(13.65)	(17.33)	(13.95)		(6.07)	(8.23)	(9.90)	(10.61)			
2	79.18	78.35	72.00	68.38		74.33	76.33	40.33	44.30			
2	(4.91)	(6.49)	(15.29)	(10.81)		(10.59)	(7.45)	(30.14)	(17.67)			
3	79.00	74.35	63.31	68.64		76.43	73.29	70.28	66.00			
3	(8.94)	(11.84)	(21.50)	(11.06)		(9.52)	(9.91)	(19.97)	(14.94)			
4	79.94	74.41	59.54	66.13		75.50	70.17	63.38	67.87			
4	(4.31)	(9.45)	(24.61)	(11.02)		(9.09)	(11.49)	(24.08)	(10.63)			

Note. "Client" and "resident" are labels derived to identify the same participant in context.

Table 7 AISB Self-Report of Socioemotional Functioning at Pre- and Mid-Treatment

BASC-2								
		Pre-Tr	eatment	Mid-Treatment				
		T-s	score		T-score			
Clinical Scale	Min	Max	M(SD)	Min	Max	M(SD)		
Internalizing Problems	35	99**	59.79 (15.36)	35	82**	55.46 (12.60)		
Inattention/Hyperactivity	34	90**	63.36* (15.02)	32	79**	58.96 (13.59)		
Emotional Symptoms Index	38	92**	58.79 (15.08)	36	70**	54.00 (10.32)		
School Problems	33	82**	55.61 (11.65)	29	80**	51.64 (11.85)		
Personal Adjustment	12**	67	47.21 (14.53)	30**	67	51.46 (9.29)		
TSCC								
Anxiety	39	80**	53.18 (11.24)					
Depression	39	86**	55.44 (13.51)					
Anger	35	68**	48.70 (10.17)					
Posttraumatic Stress	36	86**	57.81 (13.22)					
Dissociation	39	82**	52.70 (11.86)					
Sexual Concerns	38	100**	52.89 (12.65)					

Note. BASC-2 = Behavior Assessment System for Children, Second Edition;
TSCC = Trauma Symptom Checklist for Children.
* = At Risk; ** = Clinically Significant.

Table 8
Significant Correlations between Socioemotional Variables and WAI-SF Ratings

Pre-Treatm	nent			
Time	Rater	with Variable	r	р
0	Resident	TSCC Depression	.64	.05
		TSCC Sexual Concerns	.71	.02
1	Therapist	TSCC Anxiety	.47	.03
	_	TSCC Depression	.48	.03
		TSCC Posttraumatic Stress	.51	.02
		TSCC Dissociation	.44	.04
	Residential Mentor	BASC-2 Personal Adjustment	.74	.02
2	Residential Mentor	TSCC Depression	.62	.03
		TSCC Sexual Concerns	.62	.03
3	Client	TSCC Dissociation	55	.01
	Therapist	BASC-2 Personal Adjustment	43	.04
4	Client	TSCC Dissociation	47	.04
Mid-Treati	ment			
0	Client	BASC-2 School Problems	.40	.05
	Therapist	BASC-2 School Problems	43	.03
1	Na			
2	Na			
3	Resident	BASC-2 School Problems	45	.05
4	Resident	BASC-2 School Problems	43	.05

Note. TSCC = Trauma Symptom Checklist for Children; BASC-2 = Behavior Assessment System for Children, Second Edition; Na = not applicable.

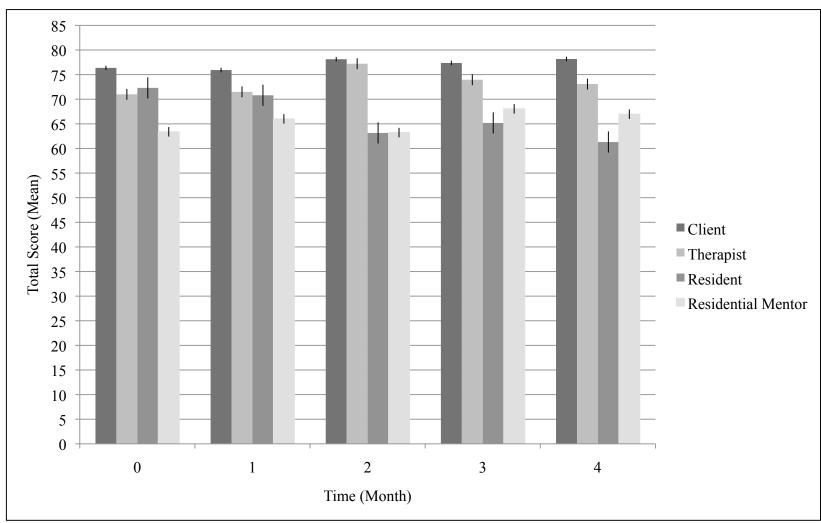


Figure 1. Comparisons of WAI-SF total scores by rater over time.

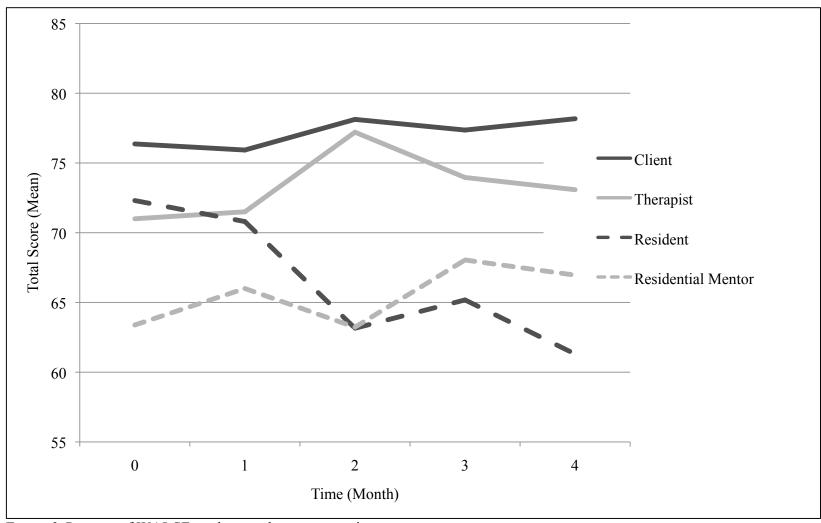


Figure 2. Patterns of WAI-SF total scores by rater over time.

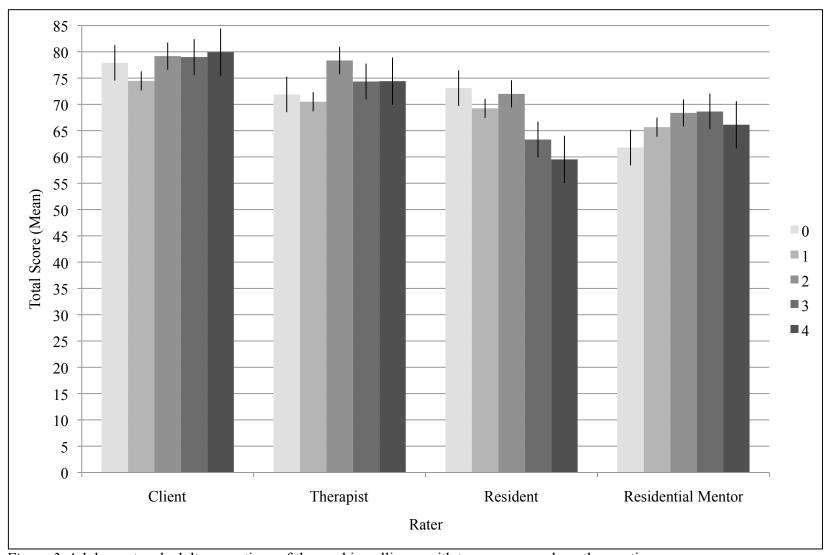


Figure 3. Adolescent and adult perceptions of the working alliance with trauma exposed youth over time.