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Therapeutic Alliance and Outcomes in Children and Adolescents Served in a Community Mental Health System

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Abstract

This study examined the association between the therapeutic alliance and behavioral/emotional outcomes in 350 youth receiving outpatient therapy at a community mental health clinic. Constructs of interest were measured at intake, 3 week, 2 month, 4 month and 6 month intervals. Results indicated that early therapeutic alliance ratings were not related to premature termination. Problem type was related to the formation of the alliance only at the three week time point. A relationship between age of the client and the formation of a therapeutic alliance was true only at the 6 month time point. Finally, therapist's ratings of the alliance were not correlated with psychotherapy outcome. These findings indicate that further work is needed to understand associations between therapeutic alliance and youth treatment outcomes.

Keywords: Therapeutic alliance; Youth psychotherapy; Community mental health services

Introduction

The therapeutic alliance in psychotherapy has been an area of interest for clinicians and researchers for decades [1-3]. Most studies of the alliance between child and adolescent clients and their therapists indicate the same trend in relation to therapy outcomes as that which has been found in the adult realm [4-7]. Although the overall importance of the therapeutic alliance is supported by clinical and empirical evidence, more work is needed to understand the circumstances under which therapeutic alliance is most important, the populations in which it is most influential, and the mechanisms through which it impacts therapy outcomes. For example, it is unclear at what point during the course of therapy alliance is most predictive of outcomes [8,9]. Similarly, many studies of therapeutic alliance are limited by the use of measures and methods assessing alliance or outcome that lack sensitivity to change or do not facilitate analysis of the alliance over time [8]. Although there are preliminary indications to support the notion, research has not yet been able to establish whether a poor therapeutic alliance is related to early termination or "dropout" from therapy [4,5,9,10]. Furthermore, there is a limited understanding of what factors contribute to the development, or lack of development, of a positive therapeutic bond [1-3,11]. Moreover, the great majority of studies of therapeutic alliance have been conducted with adult populations, calling into question the applicability of findings to child and adolescent populations [8]. Finally, with regard to child therapy, there is little understanding as to whether child, parent and therapist ratings of the alliance have equal predictive value [7,12].

The construct of therapeutic alliance

One of the most frequently studied common factors in psychotherapy is the therapeutic alliance. While there are varying definitions for the therapeutic alliance, the affective quality shared between the therapist and the client is a central component [5]. The most pressing reason the therapeutic alliance has received so much attention is that is has consistently demonstrated to be an influential factor in the outcome of adult treatment, and the growing body of evidence for child and adolescent treatment provides similar evidence [2,3,5].

The construct of the therapeutic alliance as it relates to child therapy carries all of the considerations of concern with adults, and adds a few more which are specific to children. Child therapy is complicated by the fact that children and adolescents are often brought to treatment against their will which changes the dynamic of the therapeutic process from the beginning of treatment [13,14]. Another distinctive challenge of child therapists is the task of building an alliance with both the parent and the child [14,15].

Therapeutic alliance and outcomes in child and adolescent psychotherapy

A 2006 meta-analysis indicated that there have only been 23 studies examining the therapeutic alliance in psychotherapy with children, as opposed to over 2000 adult studies as of 2000 [16]. In examining the studies that examined the therapeutic alliance, a correlation of .24 was found between the quality of the child-therapist alliance and therapy outcome [8,16]. Similar results (.22 alliance–outcome association) were observed in a more recent meta-analysis [3]. Although these results suggest that the variance in treatment outcomes accounted for by the therapeutic alliance is comparable for adult and child/adolescent populations, it is unclear to what extent adult research on the therapeutic alliance is generalizable to child and adolescent psychotherapy [16].

Based on 9 of the 23 studies in a 2003 review, the alliance was a stronger predictor of outcome for children who had externalizing problems compared to those who had internalizing problems [8]. This could be because the externalizing behavior treatments are more effective, or that there is a systematic difference in children with externalizing behaviors and how they relate to the therapist [8]. Further

support for this was provided by Kaufman et al. [17] who found that higher alliance ratings of depressed adolescents did not indicate better outcomes.

In contrast, Bickman et al. [4] found that children in their study with more aggressive behavior patterns reported lower alliance ratings and poorer outcomes. A study examining alliance formation in children who had been previously abused indicated that severity of interpersonal problems was the best predictor of poorer outcomes in the children they examined [18]. Because of the importance of the development of the alliance and outcomes it has been recommended that this area of research be continued [4,8,18].

In child psychotherapy research only preliminary data are currently available regarding the consistency of therapeutic alliance ratings. At this time, there is support for the notion that the child alliance ratings remain stable once established and do not fluctuate during the course of treatment. In a literature review of the few studies on the alliance with children, it was suggested that overall the quality of the alliance from the child's perspective does not change significantly over time [19]. Other researchers have also supported the notion that there is consistency in the child's ratings of the alliance over time [4,17].

Some attention in the literature has been directed at the question of the influence of age in developing an alliance with children and adolescents. Several authors have noted the inherent difficulty in working with adolescent clients due to developmental needs for autonomy [4,8,20]. Many therapists report feeling intimidated by teenage clients, which can also hinder the development of a positive therapeutic alliance [20]. It has been reported that many adolescents begin therapy in the pre-contemplative stage, making it all the more important for the therapist to quickly develop a positive relationship in order to maintain engagement [20]. In spite of these findings, meta-analytic reviews suggest that thus far there is no consistent relationship between the age of the child and the alliance-outcome relationship [3,8]. Given the lack of uniformity with regard to the alliance and outcome measures in the studies included in the analyses, it may be that underlying relationships have been obscured by divergent evaluations of the constructs of interest.

Some studies have examined whether alliance and child outcome can be better predicted by including multiple rater's view of the relationship. One study has given preliminary support for the association of a better parent-therapist relationship leading to improvements in child therapeutic outcome [21]. Further, it assumed that the therapeutic alliance may influence the extent to which parenting practices improve [21]. While much more investigation is needed to clarify this point, Kazdin et al. [16] emphasized the importance of evaluating more than one perspective when assessing alliance ratings and outcome in child therapy.

Because multiple parties are influential in the child therapeutic process, some have focused on whose ratings of the alliance are the most predictive. Parents, children and therapists have all been identified as believing that the alliance is important to outcome, yet it is still unknown if child ratings, therapist ratings or parent ratings are more predictive of outcome for child and adolescent therapy [4]. Based on the few studies that have compared different raters, it seems that different informants of child functioning show only modest agreement [7,16]. With regard to therapist ratings of the alliance, so far there is minimal support for their predictive value of outcome [4,7]. With regard to parent ratings of the alliance there is preliminary support for the importance of positive parent ratings of the therapist

in therapy retention (i.e. family participation, dropouts, cancellations) whereas youth alliance ratings were not associated with retention [12]. This finding is intuitive given that the parent plays the primary role in the child receiving mental health services, and this may play a factor in the relatively high attrition rates observed in child therapy [12]. While parents generally maintain the primary responsibility for continuation in therapy, the youth has an important role in engaging in the therapeutic process in a meaningful manner and the alliance can be a major factor in promoting treatment compliance from a child [12]. A few studies have indicated that those children who rated the alliance as stronger exhibited greater therapeutic change [12,16].

In summary, the limited available research on the therapeutic alliance in child and adolescent psychotherapy suggest that youth–therapist and parent–therapist alliances may be associated with therapy maintenance and symptom improvement. Although many other areas of research still need attention, the alliance should not be disregarded as an important contributor to the understanding of child therapy processes.

Hypotheses

First, it was hypothesized that those adolescent participants who reported low alliance ratings at the 3 week data collection point would be more likely to prematurely terminate from therapy and/or exhibit no reliable change. Second, it was hypothesized that participants with externalizing problems would have lower alliance ratings as compared to those participants with internalizing problems. Third, it was hypothesized that therapists would report lower ratings of the therapeutic alliance for adolescents as opposed to children. Fourth, it was hypothesized that the adolescent participant's ratings of the alliance would have the highest correlation to outcome as compared to the therapist's ratings of the alliance.

Method

Participants

Participants were recruited as part of a broader study on youth psychotherapy outcomes. Three hundred fifty participants were recruited in order to meet requirements for data analysis. Eleven participants were excluded because their treatment was medication management only. The remaining participating youth in the study were 143 females (44%) and 196 males (56%). Their ages ranged from 4 to 17 years old with a mean age of 11.38 years old. Participating youth's parents reported the following ethnicity characteristics: 255 (75.2%) participants identified themselves as White, 55 (16.2%) as Hispanic, 19 (5.6%) as Black, 2 (.59%) as Asian, 1 (.03%) as Native American, 1 (.03%) as Pacific Islander and the 6 (1.8%) remaining participants identified themselves as "Other". All participants who completed measures were able to speak, read and write in English. The average income for participants who disclosed this information (N=209) was $948 per month.

Participants received a variety of clinician-assigned primary diagnoses with the most frequent being Attention-Deficit Hyperactivity Disorder (n=97, 28.6%), Oppositional Defiant Disorder (n=27, 7.9%), Depressive Disorder NOS (n=19, 5.6%), Posttraumatic Stress Disorder (n=15, 4.4%) and Adjustment Disorder (n=15, 4.4%). Two-hundred twenty nine (67.6%) participants had a co-morbid diagnosis. The therapists reported representing disciplines including social work, social services workers, licensed professional counselors and psychologists. Twelve therapists indicated they were masters level clinicians (60%),

3 indicated they did not hold masters degrees (15%), and 5 (25%) therapists indicated they held no bachelors/associate degrees.

Measures

Psychotherapy outcome

The Youth Outcome Questionnaire 2.01 (Y-OQ-2.1) and Youth Outcome Questionnaire Self –Report (Y-OQ-SR) were used over the course of treatment as measures of psychosocial distress for participating children and adolescents, aged 4-17 years old, receiving mental health services [22]. The Y-OQ-2.1 is an outcome measure intended to track changes during the course of psychotherapy and was constructed to be sensitive to change over short periods of time, be brief, and maintain validity and reliability at a high level [22]. Based on clinical and non-treatment community norms, a cutoff score of 46 on the Y-OQ distinguishes individuals in treatment from non-treated individuals in the normal population. A Reliable Change Index (RCI) score of 13 points has been calculated for the Y-OQ, which is used to judge whether changes exhibited by individuals during treatment are reliable [22].

Therapeutic alliance

The Therapeutic Alliance Scale for Children-revised (TASC-r) was used as a measure of therapeutic alliance across treatment. The TASC is a 12-item, 4-point Likert-type scale completed by the adolescent participant aged 12-18, and there is a parallel version for the therapist to complete. Each item is rated on a 4 point scale ranging from 1 (not at all) to 4 (very much). The total score equals the ratings of the 12 items on the scale. The TASC is unique among alliance measures in that it was designed specifically for use with youth and assesses both positive and negative qualities of the relationship. The TASC has demonstrated adequate internal consistency reliability (a=.72 to .74) in previous investigations [5].

Procedure

A brief description of the study was given to the parent or guardian of the child, by the clinic case worker, during their initial phone call for scheduling of the intake session. The parent or guardians were approached by trained research assistants during the standard clinic intake session. During the description of the study the potential participants were informed that they would be financially compensated for their participation in this study: for the first set of questionnaires completed they received $10 in gift certificates and the opportunity to choose a gift from a "grab bag" consisting of small prizes, gift certificates, or coupons. In addition, a light lunch was provided to the participants during data collection. The potential participants were notified that if they chose to participate, they would be approached again at 3 weeks, 2 months, 4 months and 6 months after intake, to complete the same packet of questionnaires. They were also notified that if they chose to participate in the subsequent data collections they will be compensated with $5 and a choice from the "grab bag" for each packet of questionnaires. The response rate for participation among families recruited at intake was above 60%. Only participating children aged 12 years old and older completed the self-report version of the Y-OQ and TASC and therapists for all clients completed their version of the TASC.

Data Analysis

Given that one goal of this study was to examine the therapeutic alliance ratings and premature termination, the logistic regression examined whether early alliance ratings, from the 3-week data collection point, were a significant predictor of premature termination from therapy. Two sets of analyses were conducted using different operationalizations of premature termination. For the first set of analyses, premature termination was operationalized as the client having discontinued treatment before reliable symptom change was observed. In the second set of analyses, premature termination was based on a subjective clinician judgment as to whether the client had dropped out of treatment prematurely.

For the first set of analyses, reliable symptom change was assessed using the Reliable Change Index (RCI) criteria developed by Jacobson and Truax [23]. Evaluation of change was based on the clients' Y-OQ scores, and the developers of the scale have calculated the RCI value of the Y-OQ as 13 points [22]. A cutoff score was used to determine whether the client's distress level was representative of an individual in the clinical population versus the community normal range. The cutoff score assigned participants to one of four categories: Recovered (reliable change, and below cut off score), Improved (reliable change only), Unchanged (criteria for reliable change not met) or Deteriorated (reliably worse) [23]. Premature terminators from therapy were defined as individuals who discontinued treatment and met criteria for the Unchanged or Deteriorated groups. The client's scores were examined at their final Y-OQ provided, meaning either the last one taken before premature termination or at the final data collection point. For the second set of analyses on premature termination, therapist judgment of premature termination was obtained from archival discharge data. As part of routine clinic procedures when a case is closed, the primary clinician is asked to provide a judgment as to whether the client discontinued treatment prematurely. This dichotomous judgment was used as the dependent variable in a logistic regression.

The definitions of premature termination are varied in the literature. Many previous investigators have chosen criteria for premature termination that are not founded in the progression of the client throughout the therapeutic process. Rather, these studies base "completion" of therapy on more arbitrary definitions such as therapist opinion of whether termination was "timely" or "advised" [24,25]. Another means by which premature termination has been often defined is a preset number of sessions required, without consideration of the particular client's needs or progression throughout the therapeutic process [26]. Given that it is possible that clients achieve adequate symptom relief after a varied number of sessions, it seems reasonable to seek a more empirical definition of premature termination from therapy. In the current study premature termination was defined by criteria rooted in both pragmatic and empirical methods. Defining premature termination in the manner utilized in this study, based on both clinician judgment and self-reported symptom reduction, is advantageous as it allows for a more individualized and specific appraisal of where each client was when they discontinued treatment.

The second question addressed in this study was whether children with externalizing problems had lower alliance ratings as compared to those with internalizing problems. Behavior type was classified by examining the six domains of the Y-OQ to determine the level of internalizing or externalizing for participants who had contributed at the respective time points. Each participant's responses to the Y-OQ provided internalizing and externalizing subscale scores. Both of these scores for each participant were utilized in the analysis to avoid an arbitrary split into two separate groups given that there was a high level of comorbidity in diagnoses in this sample. The relationship between problem type and alliance formation was examined, at each data

collection time point, using a multiple regression statistical technique to determine if either internalizing or externalizing had an influence on ratings of the alliance.

The third question addressed in this study was whether therapists reported lower alliance ratings for teenage participants (12 years old and older) as opposed to child participants (under 12 years old.) Dividing the participants in this manner allowed for comparisons between two different age groups within the youth sample as therapists may have differing approaches to alliance formation with them. The therapist's ratings of the alliance were examined at each of the data collection points for differences between groups. This comparison was also conducted by using a multiple regression statistical technique.

Finally, this study examined the hypothesis that the adolescent participants' ratings had the highest correlation to psychotherapy outcome as compared to the therapists' ratings. A correlation of the child and therapists' ratings of the alliance and outcome change scores was examined to assess for differences between the two raters.

Results

Table 1 includes means and standard deviations of intake Y-OQ scores from the youth and parents, and alliance ratings from youth and therapists. Intake Y-OQ and Y-OQ-SR scores are comparable to those found at intake in previous investigations [27,28]. Based on the YOQ RCI value of 13, 16% of cases showed significant worsening of symptoms (deteriorated) and 31% of cases showed no reliable change in symptoms (unchanged); these were classified in the premature termination category for the first set of premature termination analyses. Of the 194 cases for which discharge data were available, 89 cases (46%) were judged by the primary therapist to have discontinued treatment prematurely.

Table 2 provides the prediction of premature termination from therapy given the client and therapist's ratings of the therapeutic alliance from the 3 week data collection point. Premature termination from therapy, as defined by symptom reduction (client discontinued treatment before reliable change was observed), was not predicted by client alliance ratings from the 3 week data collection point (p=.363), nor by therapist ratings (p=.640). Premature termination from therapy, as defined by therapist judgment, was not predicted by client alliance ratings from the 3 week data collection point (p=.641) nor did the therapist ratings (p=.176), these findings do not support the hypothesis

that client or therapist early alliance ratings would be predictive of premature termination from therapy.

The influence of client's primary behavior problem type (internalizing versus externalizing) on the therapeutic alliance, as reported by the participant, was examined by means of a multiple regression statistical technique. Analyses were conducted separately for each data collection time point and internalizing and externalizing scores for the participants who had contributed data at the respective time points were entered together. Using the Enter method, a significant model emerged for client behavior predicting ratings of the therapeutic alliance at the 3 week data collection point ($F_{3,33}$=5.538, p=.008. Adjusted R square=.206) indicating that externalizing behavior was significantly negatively associated with alliance (β=-.647, p=.005). Client's behavior type did not have a significant influence on their ratings of the alliance at the 2 month ($F_{2,26}$=1.031, p=.371), 4 month ($F_{2,18}$=.560, p=.581), or 6 month data collection points ($F_{2,15}$=.675, p=.524).

The third hypothesis was that therapists would report lower ratings of the therapeutic alliance for adolescents than for children. The association of client's age category, teenage or child, with the therapeutic alliance was examined by means of a multiple regression statistical technique for the participants who had contributed measures at each respective time point. Using the Enter method, a significant model emerged for client age and therapist's ratings of the therapeutic alliance at the 6 month data collection point ($F_{1,32}$= 4.232, p=.048; Adjusted R square=.089) indicating that the therapists rated their relationships with youth under 13 years old more favorably than youth over 13 years old (β=-.342, p=.048). Client age was not associated with therapist's ratings of the alliance at the 3 week ($F_{1,123}$=.135, p=.714), 2 month ($F_{1,94}$=.156, p=.694) or 4 month data collection points ($F_{1,55}$=.250, p=.619).

The fourth hypothesis was that participant ratings of the alliance would be more significantly correlated with the overall change in symptoms, as measured by a Y-OQ total change score, than the therapist's ratings. The Y-OQ total change score was the difference between Y-OQ at intake and the final Y-OQ available for each participant. There was no significant correlation of therapist alliance ratings at 3 weeks and children's (age < 13) Y-OQ total change score r(201)=-.08, p=.453. There was also no significant correlation of the therapist alliance ratings at 3 weeks and the youth (age ≥ 13) Y-OQ change score r(43)=-.116, p=.453. Finally, there was no significant

	Y-OQ-youth			Y-OQ-parent			TASC-youth			TASC-therapist		
	M	*SD*	*N*	*M*	*SD*	*N*	*M*	*SD*	*N*	*M*	*SD*	*N*
Intake	71.2	35.3	157	87.6	35.8	323	---	---	---	---	---	---
3 weeks	75.3	40.2	49	77.3	35.5	155	30.57	.83	39	27.35	.79	127
2 month	70.3	35.4	46	76.5	36.1	116	31.38	.82	40	27.04	.70	53
4 month	56.6	39.4	42	68.7	37.6	103	30.61	.81	23	27.79	.71	46
6 month	61.7	36.6	53	68.1	37.8	135	28.73	.96	35	26.91	.88	33

Table 1: Means, Standard Deviations, and Sample Sizes for Outcome and Alliance Measures.

Variable	b	SE	Wald ratio	p	Odds ratio
Symptom Reduction					
Client's alliance rating	-.075	.083	.810	.368	.928
Therapist's alliance rating	.016	.016	.218	.641	1.017
Therapist's Judgment					
Client's alliance rating	.336	.722	.216	.642	1.399
Therapist's alliance rating	.496	.369	1.803	.179	1.642

Table 2: Logistic regression predictors for premature termination.

correlation of the youth alliance ratings at 3 weeks and their Y-OQ change score $r (49)=-.203$, $p=.156$.

Discussion

In examining the range of therapeutic alliance scores obtained in this study it became apparent that there was not extensive variability in the ratings on the TASC. Low variability in the scores measuring the alliance is problematic when trying to discern a potential relationship between the alliance and psychotherapy outcomes as correlations become more difficult to find. It is possible that if there was not a restricted range in scores of the alliance that the associations examined in this study would be more pronounced. Consequently, interpretation of results should be made in the context of the limited variability observed in therapeutic alliance scores.

Contrary to the first hypothesis in this study, early therapeutic alliance ratings did not predict premature termination from therapy. Although there is support in the literature for the notion that there is a predictive relationship between early alliance ratings and completion of treatment in the adult realm [9,29] preliminary findings with youth are inconsistent [12,24,26,30]. Some child and adolescent therapy studies have cited difficulty in establishing early alliance as a predictor of premature termination [12,25]. One potential reason for the lack of a significant relationship between early alliance and premature termination in youth could be that children and adolescents may differ in the manner in which they develop the therapeutic alliance compared to adults. Youth may take longer to form a bond with their therapist and therefore early alliance may not be the most telling predictor of participation in therapy [8]. Other unique aspects of youth treatment may also explain why early alliance between the youth and therapist was not related to premature termination in this study and in some previous research. For example, given that youth rarely refer themselves for treatment, a strong alliance between the parent and the child's therapist may prolong treatment even if the child–therapist alliance is poor. Similarly, if the parent feels dissatisfied with the therapist, the parent may discontinue treatment even if the child–therapist alliance was strong [10,31]. In addition, parental commitment to therapy, finances and family dynamics are some of the many added contributors to the therapeutic process with youth [1,12,14,15]. Factors such as these may have had a greater influence on participation in therapy in this study than early alliance did. Clients may have left early from therapy for a variety of reasons, or may have continued participation in spite of a poor alliance.

With regard to the finding that externalizing clients rated the alliance lower than internalizing clients at the 3 week time point, there is some support for this finding in previous research [18,19,32]. At such an early point in the therapeutic process the externalizing clients may have had difficulty establishing a trusting bond with their therapist but eventually came to develop a relationship similar to the internalizing clients at the later time points. One reason for this finding may be the difficulty that therapists express in establishing relationships with youth who have externalizing problems [4,8,18,32]. For example, Eltz et al. [18] found that children and adolescents with interpersonal issues had more difficulty forming positive relationships with their treatment providers than youth without interpersonal issues.

Although age was hypothesized to predict alliance ratings, in this study the association was only observed at one time point. The lack of association is not surprising given the tentative nature of the relationship between age and alliance development in the literature [8,33]. In an important meta-analysis Shirk and Karver [8] identified

only 23 published studies and dissertations addressing the therapeutic alliance with youth. Although meta-analyses have found a similar effect size for alliance in youth psychotherapy as compared to the adult literature [3,8], client age has not been a reliable moderator in alliance–outcome associations. Given that many of the studies included in the meta-analyses were complicated by shortfalls in methodology, measures used, and lack real world representation, the role of age in alliance ratings and outcome requires further study.

Contrary to hypothesis, neither therapist alliance ratings nor youth alliance ratings significantly predicted change in parent-report or self-report of youth symptoms. The lack of an observed relationship between alliance and symptom change was unexpected given that several prior studies have found alliance to be influential on treatment outcomes in varying degrees [2,4,5,34-36]. The therapeutic alliance has been consistently established as an influential factor in the adult therapy realm and some research supports the alliance as the factor most predictive of outcome [2,4,35,36]; however, this relationship has not been consistently demonstrated in child and adolescent studies [8,37-39]. The variability in the findings may be due to the additional factors which influence child and adolescent psychotherapy specifically. For example, children are often compelled to attend treatment by their caregivers, therapy with youth often involves the client as well as the parents or the entire family, and children may form relationships in a different manner than adults [13,14]. It is therefore unclear to what degree we can expect to find parallel results across adult and youth research on the therapeutic alliance [16,40].

Another possible explanation for the findings in this study was that the sample was comprised of patients from an outpatient community mental health center. Historically, research on child and adolescent therapy has been conducted in university-based research clinics through controlled trials [41-43]. Many researchers and practicing clinicians have raised concerns about the lack of external validity of clinical trial studies due to important differences in how therapy is conducted in research settings compared to treatment provided in usual-care settings [38,39,41,42]. Consequently, it is unknown how well results of therapeutic alliance studies conducted in usual-care settings may compare to results obtained under more highly controlled conditions. Future research in this realm should expand upon the work which has been conducted in community mental health centers as this is a more generalizable population than controlled studies.

The present study had several strengths that warrant emphasis. One useful strength was the collection of alliance ratings from multiple perspectives including the youth participants and the therapists. Another strength of this study was that data regarding the alliance and symptom change was collected at multiple points for the duration of therapy which allowed for a more dynamic understanding of these aspects through the course of treatment. Finally, this study sampled from youth, parents, and therapists in a real-world community-based mental health system.

Although this study had several strengths, it was not without some limitations. One important limitation of the current study is the lack of variability in alliance scores rated by the adolescents as well as the therapists. The finding that the relationship was rated highly across all raters at all time points maybe due to a difference in the manner which this construct manifests in psychotherapy with youth, or may simply indicate that alliance ratings tend to be uniform and relatively high for the large majority of cases.

Additionally, high variability in the types of procedures utilized

during therapy, which is typical of practice in real-world settings, and therapist-related aspects of the treatment process such as training level and theoretic orientation were not taken into account and this may be just as influential on the therapeutic relationship and outcomes as the variables examined [8,38,39,44]. Lastly, in this study concurrent treatments were not accounted for in these analyses. It is possible that the alliance would form differently given certain extraneous factors such as participation in family therapy or usage of medications [8,30].

Due to the lack of knowledge in the field of the influences on therapy with youth more research is needed, especially on those variables outside of the therapeutic relationship. In light of the historical importance of the therapeutic alliance and client treatment it would also be desirable to expand our understanding of the various influences which are unique to child and adolescent therapy. In order to have an understanding of if and how the therapeutic alliance has an effect future researchers could include this common factor in their investigations of therapy with children and adolescents. To facilitate the understanding of the alliance influence on psychotherapy with youth future research will need to include investigations of the potential influence of age, behavior type, various raters of the relationship and the development of the relationship over time [4,8,12,17,19,45,46]. Although these areas of interest have been suggested in previous research to be potential influences on the development of the alliance, a compelling base of literature is not yet available to make these claims with certainty [8].

There has been some empirical substantiation that early ratings of the alliance are an indicator of completion of treatment in child and adolescent psychotherapy [10,33,47]. The early relationship and how the relationship changes over the course of treatment may be a determining factor of whether clients obtain the amount of treatment needed before terminating therapy. Furthermore, there has been recent corroboration for the relationship of alliance and therapeutic outcomes in youth psychotherapy [8,18]. Given that it may be possible to keep clients from prematurely terminating treatment the fundamentals of this association should be identified by future researchers in order to maximize retention in therapy.

Although some advancement in the field of child and adolescent psychotherapy research have been made in the direction of assessing therapy outside of controlled trials, more movement towards understanding the therapeutic process in real life clinics is needed [38,39,43]. To date the majority of research has been executed in settings that differ greatly from everyday clinical practice [38,39,43]. Additionally, practicing clinicians have asserted that empirical findings are of little relevance to the work they conduct with their clients [43]. If professionals in the field are not able to utilize the considerable amount of research being published then a disparity exists which needs to be addressed and by continuing research in real world settings the gap can be minimized [38,39,43].

Acknowledgements

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