

**The Parent-Therapist Alliance in the Psychological Treatment of Children**

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## Overview

This thesis explores the association between therapeutic process factors and outcomes in the psychological treatment of children. Specifically, it addresses a relatively under-researched area of process research: the therapeutic alliance between therapist and parent(s) and its impact on child outcomes.

Part one is a literature review that explores the role of the parent-therapist alliance in child and family treatment with a particular focus on child outcomes. It considers the importance of parental involvement in child treatment, across problem type, measurement method (measurement scale, rater, time of measurement), and type of treatment.

Part two is an empirical paper exploring the association between the parent-therapist alliance and therapist adherence to child outcomes in a guided manualised self-help CBT intervention for anxious children. The results are discussed in relation to the wider process-outcome literature and presents clinical and research implications.

Part three is a critical appraisal of parts one and two, primarily reflecting on the challenges of process research in terms of measurement. It also outlines the background context to the research and discusses the potential influence of the parent-child attachment in indirect treatment.

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## **PART ONE: Literature Review**

### **The association between parent-therapist alliance and outcome in the psychological treatment of children: a systematic review**

## **Abstract**

**Aims:** Meta-analytic reviews of the therapeutic alliance in child and adult psychological treatment have found consistent moderate alliance-outcome associations. Much less is known about the impact of the parent-therapist alliance on treatment retention and child outcomes. This systematic review aimed to address this gap in the literature with a view to inform the development and delivery of child treatment.

**Method:** Databases, reference lists and cited references were searched between 1980 and 2010 following set inclusion criteria. Twenty-two studies were identified for inclusion that spanned across various problem types and interventions.

**Results:** Heterogeneity of the studies made comparisons difficult. However, studies indicated that a strong parent-therapist alliance may be related to more successful child outcomes and treatment retention across different problem types and interventions. The parent-therapist alliance may independently predict outcomes or play a moderating role between youth-therapist alliance and outcome.

**Conclusions:** Attending to the parent-therapist alliance in the psychological treatment of children may be an important factor for retention and outcomes but should not be at the expense of the youth-therapist alliance, which can have an equally strong association with outcome, if not more so. More research is needed in this area, particularly in individual treatments such as CBT. Methodological issues are highlighted and future research and clinical implications discussed.



## Introduction

The therapeutic alliance has been an area of theoretical and research interest for more than thirty years. This interest has been maintained due to the wealth of research mainly in the adult psychological treatment literature that has consistently suggested that a positive alliance is important for treatment success, commonly explaining more of the outcome variance than technique alone (Horvarth & Bedi, 2002; Horvarth & Symonds, 1991; Martin, Garske, & Davis, 2000).

The alliance construct was initially discussed in relation to the attachment and transference relationship between the client and therapist in psychodynamic therapy (Freud, 1913). The definition of alliance later developed to include not just the transference relationship influenced by past relationships and object relations, but also the real relationship that develops moment by moment between client and therapist in the therapy (Gelso & Carter, 1985; Greenson, 1965). Gaston and Marmar (1994) offered three hypotheses about the relationship of alliance to positive change in therapy; 1) the alliance is therapeutic in and of itself, 2) the alliance is a prerequisite for interventions to be effective, and 3) success is determined by an interaction between alliance and different types of interventions. Whilst some authors have considered a positive client-therapist alliance to be necessary and sufficient to facilitate change (Bowlby, 1988; Rogers, 1965), most authors now consider the alliance to play a moderator role.

Bordin (1976, 1994) was the first to offer a pantheoretical definition of alliance in psychological therapy, and this has remained prominent in guiding alliance research and in the design of alliance measures. Bordin's definition of the client-therapist alliance comprised three components 1) mutual agreement and

collaboration on treatment goals 2) agreement and collaboration on the tasks of therapy, and 3) a positive, trusting, and supportive bond.

Bringing multiple perspectives and theories together had important implications in terms of how alliance was researched and ultimately underpinned what is now understood about the relationship between alliance and outcomes in psychological therapy, often termed ‘common factors’. Indeed, meta-analyses report a moderate but consistent alliance-outcome relationship across different types of treatment (e.g. cognitive-behavioural, psychodynamic), length of treatment, problem type (e.g. substance use, depression, anxiety), rater of alliance and outcome measures (client, therapist, observer), and measurement points (early, middle, late in therapy) (Horvarth & Bedi, 2002; Horvarth & Symonds, 1991; Martin, et al., 2000).

In comparison to the adult literature, alliance research with children, adolescents and their families is at an early stage. Even so, meta-analyses have found moderate effect sizes for the child-therapist alliance-outcome relationship, which is comparable to those in the adult literature (Shirk & Karver, 2003; Karver, Handlesmann, Fields, & Bickmann, 2006). Whilst reviews have integrated some of the parent-therapist alliance research, as yet no reviews have specifically focused on this relationship. This is an important gap in our understanding of child outcomes because parents are almost always involved in their child’s treatment (Kazdin, Siegel, & Bass, 1990), at the very least in ensuring session attendance. This was highlighted in a review of the key issues in cognitive-behaviour therapy for young people, Stallard (2002) identified three main roles for parents in child treatment; facilitator, co-therapist and client. Firstly, when the child remains the main focus of treatment, parents can act as facilitators supporting the transmission of therapy skills into everyday life. Secondly, parents can act as co-therapists to work alongside the

therapist, such as helping or coaching their child to complete therapy tasks and monitoring progress. Thirdly, parents can be clients such as attending parenting groups to learn new skills or attending sessions to address their own anxieties. Of course, parents may play one or more of these roles throughout the course of therapy and all of which can influence the process and progress of their child's treatment.

Indeed, parental involvement has been shown to improve the effectiveness of treatment (Clarke et al., 1992; Karver et al., 2006). In a review of 29 youth treatment studies, parental willingness was associated with fewer barriers to treatment and greater treatment adherence, parent participation was associated with more cooperation and application of tasks at home, and changing parent behaviour was associated with changes in child behaviour (Karver et al., 2006).

The degree to which parents are involved and supportive of their child's treatment can also depend on how parents understand their child's difficulties, their perceived ability to cope with these difficulties, and their understanding and expectations of therapy (Morrissey-Kane & Prinz, 1999; Nock & Kazdin, 2001). However, parental involvement and influence may depend on the developmental age of the child. It is well known that in the Western World parental influence often decreases as a child progresses through puberty and adolescence and as the child begins the process of separation and individuation and peer influence increases (Buhrmester & Furman, 1990; Furman & Buhrmester, 1985). Therefore, it may be that the role and importance of the parent-therapist alliance in child outcomes also changes depending on the age of the child.

In summary, the therapeutic alliance has been shown to have a consistently robust moderate effect on outcomes in therapy for adults and young people, however, much is still to be understood about the role of the parent-therapist alliance in child

and adolescent treatment outcomes. This review aims to address this important gap in the literature. It aims to systematically review the literature in order to further understand the relationship between the parent-therapist alliance and treatment outcomes for children and adolescents. By understanding more about this relationship it aims to inform future child and family process research, the development and delivery of child and adolescent interventions, and to feed into the theoretical understanding of the process of child treatment.

## **Method**

### **Inclusion and Exclusion Criteria**

Studies were included if they met the following inclusion criteria:

1. A quantitative study assessing the effects of an intervention on outcome. This excluded qualitative studies, reviews, discussions, case studies and surveys.
2. The study measured parent-therapist alliance using a quantitative measurement scale and was rated by therapist and/or parent and/or an observer.
3. The study measured outcomes in relation to psychological well-being (e.g. changes in symptom severity or impact), behaviour (e.g. parenting practices and behaviours), treatment compliance, and/or retention/ drop out. Only studies in which the focus of treatment was on promoting positive adjustment for the young person or the whole family were included (i.e. treatment was not for the parents alone but for the benefit of the family or children in the family).
4. The study involved treatment for young people aged from birth to 18 years, which was delivered with or via parents. The child or adolescent did not have to be directly involved in treatment.

5. The study involved treatment for mental health, emotional or behavioural problems. Studies focusing on medical problems (e.g. asthma, paediatric health) were excluded.
6. The study involved any individual or family verbal psychotherapeutic intervention. Wholly group, inpatient, or multi-family treatment was excluded. However, studies were accepted if part of the intervention involved group treatment.

### **Search strategy**

Four search strategies were used. Firstly, a broad cross-database search on MetaLib was performed to identify any existing reviews in this area. No reviews were found. Secondly, three databases (PsychInfo, Web of Science, and MEDLine) were searched from 1980 to 13 August 2010 using three areas: 1) 'therapeutic alliance', 'alliance', 'parent-therapist alliance', 2) 'psychological treatment' (including: psychotherapy, cognitive-behavioural therapy, cognitive therapy, behaviour therapy, and treatment), 3) 'child', 'youth', 'adolescent'. Results from the three search strings were then combined and limited to the dates stated above, available in the English language, involved human participants, and were published in a peer reviewed journal. Thirdly a search of reference lists of identified studies was performed. Finally, a cited reference search of included studies was performed to identify any other potential papers.

Where there was a query about inclusion, a second researcher was consulted in order to reach a collaborative decision based on the inclusion criteria above.

## Results

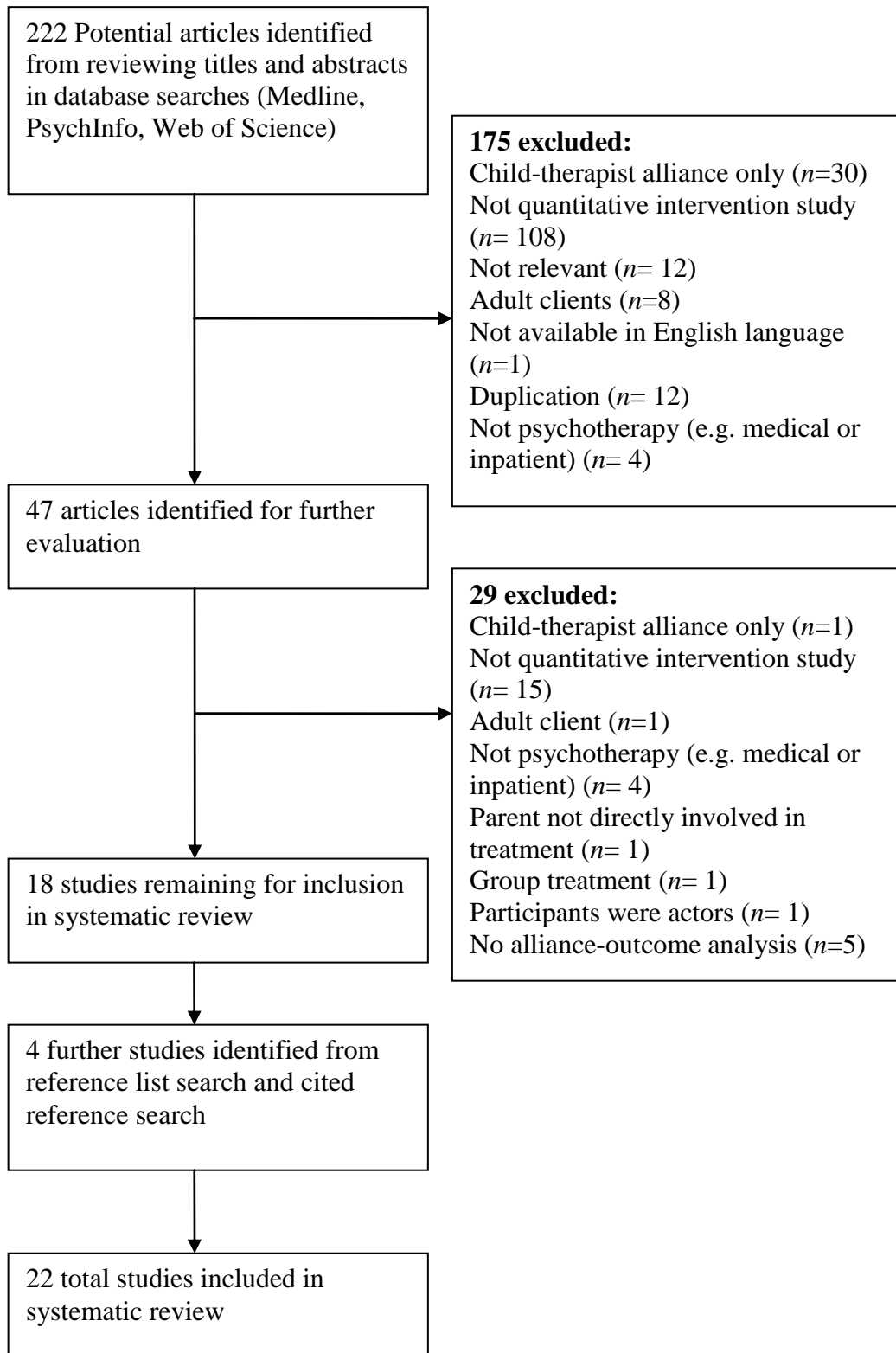
Twenty-two studies met the inclusion criteria for the review (see Fig. 1), of the 222 (210 after removing duplications) studies originally identified from the database searches. The main reason for exclusion was the study design not meeting criteria for a quantitative intervention study. Other reasons for exclusion included studies in which the alliance was only measured for the child, medical or inpatient studies, and where the parent was not directly involved in treatment or where the measured outcome was for the adult only.

Of the studies remaining, interventions included family therapy ( $n = 12$ ), issue specific family counselling ( $n = 1$ ), preventative interventions ( $n = 2$ ), parent management training ( $n = 3$ ), play therapy ( $n = 1$ ), and outpatient therapy in community contexts ( $n = 3$ ).

Several studies were related by research group, or were part of the same larger trial, or took their sample from the same existing databases.

Studies included children and/or families with presenting problems such as: substance use and behavioural problems ( $n=6$ ), children at risk of abuse, neglect or offending ( $n=4$ ), externalising problems ( $n=4$ ), internalising problems ( $n=1$ ), epilepsy ( $n=1$ ), and Anorexia Nervosa ( $n=1$ ). Four studies did not have specific inclusion criteria based on presenting problem. Participants were mostly community outpatient samples.

Figure 1. Flow diagram of studies included and excluded



## **Alliance Measures**

A variety of alliance measures were used across the reviewed studies. A description and theoretical background to each measure is given in Table 1. Descriptions of each scale were not always consistent across studies, which was likely to reflect study-specific adaptations, for example, some studies only used part of a scale (Flicker, Turner, Waldron, Brody & Ozechowski, 2008; Harvey, 2008; Johnson, Wright, & Ketring, 2002; Robbins, Mayorga, Mitrani, Szapocznik, Turner et al., 2008). The other main adaptation was changes to the language used, either simplifications or rater specific wording. Acceptable psychometric properties were reported for modified scales, which was consistent with reviews finding adequate reliability across multiple scales (Martin et al., 2000). With these adaptations in mind, the descriptions given in Table 1 were those most commonly reported in the reviewed studies but may be different to descriptions elsewhere (Elvins & Green, 2008; Martin et al., 2000).

Several studies used revised versions of existing standardised and established scales. Four studies developed and tested new measurement scales. Versions of the Vanderbilt Therapeutic Alliance Scale (VTAS; Hartley & Strupp, 1983) and Working Alliance Inventory (WAI; Horvath & Greenberg, 1989) were the most frequently used, cited in six studies each. The next most commonly used scales were; the Family Therapy Alliance Scale (FTAS; Pinsof & Catherall, 1986) used in three studies, and the System for Observing Family Therapy Alliances (SOFTA-O; Friedlander et al., 2006; Friedlander, Escudero, Horvath, et al., 2006) used in two studies. Other measurement scales were used in one study each; the revised Helping Alliance Questionnaire (HAq-II; Luborsky et al., 1996), Therapeutic Alliance Scale; (TAS; Douchette & Bickman, 2001), Therapeutic Alliance Scale for Children (TASC;



Shirk & Saiz, 1992), the Therapy Process Observational Coding System — Alliance scale (TPOCS-A; McLeod & Weisz, 2005), relationship with interventionist and programme satisfaction (Tolan, Hanish, McKay & Dickey, 1992), and semi-structured log books (Stolk et al., 2008). However, some studies used different alliance measures for different raters and therefore categories are not mutually exclusive.

Despite the variety of measures used, meta-analyses indicate that most measures substantially inter-correlate, yet slightly differ in terms of the underpinning definition and conceptualisation of alliance (Horvarth & Symonds, 1991).

Historically, there were five main schools of research that developed the earlier and now well established alliance measurement scales, three of which were used in the reviewed studies; the Vanderbilt school (VTAS); the British Columbia school (WAI), and the Pennsylvania school (HAq-II). In a thorough review of alliance measures, both the VTAS and WAI were found to be most comprehensive in terms of capturing the complex construct of alliance as applied to adult populations (Elvins & Green, 2008). However, despite the different schools, the theoretical bases for each measure substantially overlap. Bordin's (1976, 1994) pantheoretical definition and Luborsky's (1994) psychodynamic conceptualisation (consisting of the client's experience of the therapy as helpful and supportive, and goal collaboration) of the alliance were most cited. Scales developed specifically for use in child research (TASC, TPOCS) additionally drew on child alliance research, particularly a review of the clinical, developmental and empirical research by Shirk and Saiz (1992) that highlighted the importance of collaboration in child treatment for successful outcomes. Two scales were developed in the context of family therapy (FTAS, SOFTA) and therefore integrated findings from family therapy alliance research,

particularly qualitative findings relating to within family dynamics and the balance of alliances between therapist and family members. Two measures did not provide background theoretical information (Douchette & Bickman, 2001; Stolk et al., 2008). All scales were scored on a Likert-type scale, with higher scores indicating a stronger alliance.

Eight studies measured alliance using an observer perspective and twelve used an individual perspective. Only two studies used a combination of individual and observer alliance assessments. The earlier meta-analysis of 24 adult studies by Horvarth and Symonds (1991) suggested that client self-report was the most robust in relation to its associations with outcome, with an effect size of .21, followed by therapist .17, and observer .10. However, a later meta-analysis of 79 adult studies found comparable reliability and consistency across raters (Martin et al., 2000). In the child research, ratings by the therapist were preferable as children tended to rate positively leading to limited variability and ceiling effects (Shirk & Karver, 2003). However, other considerations may be important when selecting an alliance rater. Observer ratings allow for replication and may be less influenced by outside factors likely to bias ratings from the individual, such as social desirability but it takes time to train observers to adequate reliability, and can require a complex inferential process about what the client and/or therapist is thinking and feeling. The SOFTA-O aimed to tackle this problem by developing a scale that measured the frequency of observed behaviours thought to indicate a positive or negative alliance. Observational assessment alone may also miss the subjective experience of clients and therapists that can provide important and unique insights into the alliance. Therefore, gathering data from multiple perspectives is preferable but does not appear necessary from research findings to date.

Table 1. Summary of alliance measures

<b>Measure and author</b>	<b>Description</b>	<b>Background/ theoretical origins</b>	<b>Number of studies using measure</b>
Vanderbilt Therapeutic Alliance Scale (VTAS; Hartley & Strupp, 1983)	Observer rated measure containing 44 items rated on a 6-point Likert-type scale, from 0 (Not at all) to 5 (A great deal). The scale contains three dimensions: therapist's contribution, client's contribution, and client-therapist interaction. The revised version (VTAS-R; Diamond, Liddle, Hogue, & Dakof, 1999) contains 26 items and does not include the therapist contribution dimension. Higher scores indicate a stronger alliance.	Based on Bordin's theory of the alliance, dynamic and integrative theories of the alliance (Strupp & Binder, 1984), and theories of Greenson (1965) and Luborsky (1976). Developed to measure alliance in adult psychotherapy.	6
Working Alliance Inventory (WAI; Horvarth & Greenberg, 1989)	Client/ therapist self-report measure containing 36 items rated on a 7-point Likert-type scale from 1 (Never) to 7 (Always). The scale contains three subscales: bond, task, and goal, containing 12 items each. There is a short version of the scale containing 12-items (Tracey & Kokotvic, 1989), and an observer form (WAI-O; Tichenor & Hill, 1989) containing 36 items.	Based on Bordin's pantheoretical theory of alliance. Developed for use in adult psychotherapy.	6

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Family Therapy Alliance Scale (FTAS; Pinosof & Catherall, 1986).	Client self-report measure containing 40 items rated on a 7-point Likert-type scale ranging from 1 (Completely disagree) to 7 (Completely agree). The scale contains three subscales: content and interpersonal system. 15 items are reverse scored.	Based on an adaption of Bordin's theory to include qualitative findings in family therapy research. Developed to assess alliance in family therapy.	3
System for Observing Family Therapy Alliances (SOFTA-o; Friedlander et al., 2006)	Observer rated scale containing 44 items. The frequency of specific positive and negative alliance-related behaviours is rated from -3 (Extremely problematic) to +3 (Extremely strong). A score of zero is given if the behaviour is not present or is 'Neutral'. The scale contains four dimensions: engagement in the therapeutic process, emotional connection with the therapist, safety within the therapeutic system, and shared sense of purpose within the family. Each family member receives an individual rating on engagement, emotional connection and safety, and the family as a whole receives a score on shared sense of purpose.	Based on a combination of Bordin's theory of alliance and family therapy alliance research. Developed to assess alliance behaviours in couple and family therapy.	2

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The Helping Alliance Questionnaire - Revised (HAQ-II; Luborsky et al., 1996)	Self-report measure containing 19 items rated on a 5-point Likert-type scale from 1 (Strongly disagree) to 5 (Strongly agree). Higher scores indicate a more positive alliance.	Based on Luborsky's (1984) psychodynamic conceptualisation of the helping alliance; type 1: the client's experience of the therapy as helpful and supportive, and type 2: client and therapist are working on shared goals. Developed for individual psychotherapy.	1
The Therapy Process Observational Coding System — Alliance scale (TPOCS-A; McLeod & Weisz, 2005)	Observer rated measure containing nine items rated on a 6-point Likert-type scale from 0 (Not at all) to 5 (A great deal). The scale contains two subscales: bond and task. Higher scores indicate a stronger alliance.	Based on a combination of existing established alliance measures and child alliance research (Shirk & Russell, 1998; Shirk & Saiz, 1992). Developed to measure the child–therapist and parent–therapist alliance in child psychotherapy.	1
Therapeutic Alliance Scale for Children (TASC, Shirk & Saiz, 1992).	Client self-report measure containing 7 items rated on a 4-point Likert-type scale from 1 (Not like me) to 4 (very much like me). Assesses positive and negative aspects of the therapeutic alliance. A longer therapist version contains 12 items rated on a 7-point Likert-type scale from 1 (Never) to 7 (Always).	Based on Bordin's pantheoretical theory of alliance. Developed for use with children and adolescents.	1

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Therapeutic Alliance Scale (TAS; Douchette & Bickman, 2001)	Client self-report measure containing 30 items rated on a 3-point response scale (Disagree, Somewhat Agree, Agree). The scale has 2 dimensions; the therapeutic relationship (collaboration, empathy), and resistance. Developed with a youth and parent form.	Background not given.	1
Relationship with Interventionist and Program Satisfaction (Tolan et al., 2002)	Two client self-report measures containing 13 items about the client's relationship with the interventionist and 10 items about satisfaction with the program. Scoring scale not given. Relationship with the interventionist included questions about the client's emotional bond with the interventionist, therapist helpfulness, and technical ability of the interventionist.	The researchers refer to Bordin's theory of the alliance and research by Diamond and Liddle (1996), although do not explicitly identify how these fed into the development of the scale. Items were adapted from existing scales (not specified) and modified according to type of family intervention.	1
Semi-structured log books (Stolk et al., 2008)	Interventionist rated semi-structured scale containing 4 closed-ended questions rated on a 1 – 5 scale, with 5 being more positive. Questions refer to the attitude of the mother and pleasantness of the interventionist-mother interaction.	The researchers do not provide any background information about the choice of questions used.	1

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## **Reviewed Studies**

### **Family Therapy**

Fourteen studies assessed the parent-therapist alliance and outcomes in family therapy. Given the relatively large number of these studies they are further divided by alliance measure; VTAS ( $n = 6$ ), FTAS ( $n = 3$ ), SOFTA-O ( $n = 2$ ), WAI ( $n = 2$ ). One study used an unnamed alliance measure and is and therefore headed ‘miscellaneous’. A summary of results can be seen in Table 2.

#### *Vanderbilt Therapeutic Alliance Scale- Revised*

##### *Conjoint Family Therapy*

Three studies measured the association between parent-therapist alliance and treatment retention in the context of conjoint family therapy (brief strategic family therapy and functional family therapy) for young people with substance use and dependency problems. Samples were taken from existing databases in which cases were coded as treatment completers or drop outs. In each study, video recordings of 20 minute segments of session one were used to code alliance by trained observers using a revised version of the Vanderbilt Therapeutic Alliance Scale (VTAS; Hartley & Strupp, 1983; VTAS-R; Diamond et al., 1996), with the exception of Flicker et al. (2008) who only sampled the middle segment of session one, which they argued was the most important segment in functional family therapy for managing family conflict and establishing relationships with family members.

The overall alliance predicted drop out in two studies (Robbins, Turner, Alexander & Perez, 2003; Robbins et al., 2008), but in different directions. The alliance-retention association was in the expected direction for Robbins et al. (2008) who found that a lower overall alliance predicted drop out, but this was in the opposite direction in Robbins et al. (2003) in which families who dropped out of

treatment had higher observed alliance ratings in session one than those families completing treatment. The researchers propose that this effect may have been due to the therapist's lack of experience in this study (graduate trainee therapists seeing their first cases), which may have made them vulnerable to aligning with parents at the detriment of their alliance with the adolescent. This is a common challenge when in the early stages of working with families whose children are presenting with externalising behaviour problems and substance abuse (Flicker et al., 2008; Robbins et al., 2003). The effect of this could have been that the parent-therapist alliance may have increased whilst also increasing the alliance imbalance between family members and therapists, which has been associated with dropping out of treatment.

In each of the three studies, a greater imbalance between adolescent's alliance with the therapist and parent's alliance with the therapist predicted drop out from treatment, with subtle differences. Robbins et al. (2003) sampled 34 families from ethnically diverse backgrounds and found that drop out was predicted by adolescent-father and adolescent-parent imbalanced alliances with the therapist but adolescent-mother imbalances did not predict drop out. However, Robbins et al. (2008) found the opposite, that a greater adolescent-mother imbalanced alliance with the therapist predicted drop out, but not for fathers, in their study of 31 Hispanic families. Robbins et al. (2008) also found a greater imbalance between mother's and father's alliance with the therapist predicted drop out.

Flicker et al. (2008) specifically examined the influence of ethnicity on treatment retention for 43 Hispanic and 43 Caucasian families. Whilst like in the first two studies a greater imbalance between parents and adolescents alliance with the therapist predicted drop out, this was found for Hispanic families only. It was unclear why Caucasian families dropped out of treatment and this was not explained by the



alliance. Alliance was averaged across parents and so the family role effect within each ethnic group could not be further disentangled. The temporal nature of effects was also different across studies. Robbins et al. (2008) found the imbalance effect only over time within session one, whereas Robbins et al. (2003) found this effect to be consistent over time. Therefore, unbalanced alliances may influence treatment retention but this may vary across participant populations.

These studies suggest that attending to alliance from session one, and the balance of alliance between the therapist and different family members may help to keep families engaged in conjoint family therapy for adolescents who abuse substances. However, these findings are not yet robust as indicated by the varying results found for two parent families (Robbins et al., 2008), family role (Robbins et al., 2003; Robbins et al., 2008), temporal associations (Robbins et al., 2003; Robbins et al., 2008), and families of different ethnicities (Flicker et al., 2008; Robbins et al., 2003; Robbins et al., 2008). All three studies were limited by restricting the measurement of alliance to segments of session one, and even less so in Flicker et al. (2008) who only sampled the middle segment of session one which may not accurately reflect the content and process of the treatment as a whole.

#### *Vanderbilt Therapeutic Alliance Scale- Revised*

#### *Multi-Dimensional Family Therapy*

A further three studies measured the parent-therapist alliance in family therapy for adolescents with substance use and dependency problems, using multi-dimensional family therapy (MDFT). Two studies again looked at the association between alliance and treatment retention (Robbins, Liddle, Turner, Dakof, Alexander, et al., 2006; Shelef, Diamond, Diamond, & Liddle, 2005) and two studies expanded on this to include the association between parent-therapist alliance and outcome

(Hogue, Dauber, Cecero, Stambaugh & Liddle, 2006; Shelef et al., 2005). As in the previous three studies, alliance was coded observationally using the VTAS-R for one early session (Hogue et al, 2006; Shelef et al, 2005) or 20 minute segments of session one and two (Robbins et al, 2006).

As in the conjoint family therapy studies, relationships were found between parent-therapist alliance and treatment retention. Robbins et al. (2006) found that as with Robbins et al. (2008) shifts in the alliance over time were associated with drop out. In the earlier study reductions in overall alliance over time (from session one to two) was associated with drop out, and in the later study a greater alliance imbalance between family members over time was associated with drop out. In contrast to the conjoint family therapy studies, Shelef et al. (2005) found that a stronger parent-therapist alliance predicted treatment retention and this was not moderated by adolescent alliance. This may be treatment specific because in contrast to conjoint family therapy, MDFT typically works ecologically with a wider system and with different session contexts and constellations (Liddle, 2002).

Hogue et al. (2006) expanded their analysis to examine the relationship between alliance and outcome. They drew their sample of 44 adolescents (mean age = 15.47, SD = 1.31) and their families from a larger study in which adolescents and their parents participated in a randomised controlled trial comparing cognitive-behavioural therapy and MDFT in the treatment of adolescent substance misuse. This was the same study from which Robbins et al. (2006) also drew their sample ( $n = 30$ , mean age = 14.93, SD = 1.11). Parent-therapist alliance was measured in the MDFT condition only. They found a better parent-therapist alliance predicted a reduction in adolescent drug use and parent reported externalising behaviour post-treatment. Counter-intuitively, a strong parent alliance also moderated the association between a

good adolescent-therapist alliance and more parent reported internalising symptoms at post treatment. When the researchers explored this further by looking at mid treatment alliance, they found that alliance declined over time for adolescents who did not improve and increased for those who did improve, partially explaining these findings. This finding together with the temporal alliance-retention associations of Robbins et al. (2006) and Robbins et al. (2008) suggest value in attending to the maintenance of a good alliance over the course of therapy and the rupture-repair cycles across this process (Pinsof, 1994).

Shelef et al. (2005) also found a moderating effect of parent alliance on outcome in their large multi-centre study of 65 adolescents (aged 12 to 18 years) and their families. The adolescent-therapist alliance predicted fewer abuse and dependency symptoms at post treatment (explaining 7% of the variance), moderated by a high or moderate parent-therapist alliance, which explained a further 6% of the variance. However, adolescent-therapist alliance was the best predictor of adolescent reported cannabis use at 3 month follow up, explaining 14% of the variance, regardless of the strength of the parent-therapist alliance. The researchers argued that in this context establishing an alliance with the parent may be important for treatment retention and in order to support adolescents with their treatment (explaining the moderating effect), but ensuring a good alliance with the adolescent is most important for a good outcome, at least in the short term. This hypothesis could also be partially supported by the imbalance findings noted earlier; that neglecting the adolescent alliance could lead to greater family role alliance imbalances which may increase the risk of dropping out of treatment.

Taken together, the six studies using the VTAS alliance measure illustrated the complexity of alliances in family therapy with adolescents who abuse substances

and their families, and highlight the importance of attending to the adolescent-therapist alliance as well as the parent-therapist alliance.

Results of the MDFT studies suggested that establishing and maintaining alliances over time with individual family members may be important for treatment retention (Robbins et al, 2006; Shelef et al., 2005), to engage adolescents in the change process (Hogue et al., 2006), and to engage parents in supporting this change (Shelef et al, 2005).

All of the above six studies included families mainly residing in disadvantaged inner city areas, adolescents were mainly male, and referrals for treatment largely from the youth justice system. This may present specific and unique challenges to the establishment and maintenance of alliance in this context.

#### *Family Therapy Alliance Scales*

The alliance-outcome association was explored by three similar studies of families, but in rural rather than urban communities who were at risk of having a child removed primarily due to abuse or neglect. Similar to two of the previous studies (Hogue et al., 2005; Shelef et al., 2005) alliance was associated with outcomes, specifically; a better family-rated family-therapist alliance at the end of therapy was associated with family reported post-treatment reductions in symptom distress.

Families received home based ecosystems family therapy, an approach developed by the researchers (Johnson & Ketring, 2000). They describe this approach as ‘designed to facilitate individual development, improve family patterns, and increase the family’s interaction with community resources’. In each study the family unit rated alliance at the end of therapy using the Family Therapy Alliance

Scale (FTAS; Pinsof & Catherall, 1986). This did not allow for a distinction to be made between adolescent-therapist and parent-therapist alliances. All three studies were potentially limited by the self-reported alliance and outcome measure because effects may have been inflated by common rater variance. Measuring alliance solely at the end of therapy from the client's perspective is also problematic because it is hard to distinguish how much ratings are influenced by symptom improvement (although previous meta-analyses have indicated that alliance is generally equally predictive across the course of therapy; Horvarth & Symonds, 1991; Martin et al., 2000).

With these cautions in mind, both the first study (Johnson, Wright & Ketring, 2002) of 43 families with children aged 11-18 years, and the second similar but much larger study ( $n = 225$ , mean child age = 14.4) (Johnson & Ketring, 2006) found better family alliance ratings predicted reductions in family reported post-treatment symptom distress. In the first study, a better family-therapist alliance predicted a reduction in post-treatment symptom distress as rated by mothers, fathers and adolescents explaining 19%, 55% and 39% of the variance in outcome respectively. Analyses at the alliance subscale level revealed agreement on the tasks of therapy was the strongest predictor of outcome for mothers and adolescents, and agreement on goals for fathers. In addition, Johnson and Ketring (2006) explored family-therapist alliance-outcome associations for family violence. They found that greater family-therapist agreement on the goals of therapy predicted a reduction in family reported post-treatment levels of family violence. However, if families reported high levels of violence at intake then a stronger family-therapist bond was needed in order for a reduced level of violence at post-treatment.

Whilst the alliance-outcome relationship was also found in the third study (Johnson, Ketring, Rohacs & Brewer, 2006), it was more complex. In their study of 27 families (mean child age = 14.3), they found family agreement on the tasks of therapy predicted reductions in family rated post-treatment symptom distress but only when adolescents reported a more trusting relationship with their parents. They also found that families who dropped out of treatment were more distressed at pre-treatment than those who remained in treatment, which contrasts with Robbins et al., (2006) who found the opposite.

In summary, all three studies found an association between a strong family-rated family-therapist alliance at the end of therapy and post-treatment reductions in family-rated family distress. However, these findings may be partially explained by common rater variance, problem improvement, and social desirability (as families were referred into treatment because of concerns of child abuse). Two studies suggested that trust within the family or between the family and the therapist may have influenced the strength of the alliance and outcomes, which may be particularly relevant for families presenting with these kinds of problems. It was not possible to know who rated alliance for the family and whether this expressed the views of the whole family or only the individual family member who completed the measure.

#### *System for Observing Family Therapy Alliances*

The following two studies again found associations between alliance and outcome, specifically; a better observed alliance was associated with family and therapist rated problem improvement. They furthered the previously reviewed studies by measuring alliance longitudinally across the course of therapy. They used a new

alliance measure designed to capture within family alliance in conjoint family therapy.

Friedlander et al. (2006) developed an observational measure of alliance; the System for Observing Family Therapy Alliances (SOFTA-O) that contained two dimensions; one measured family member's alliance with the therapist (engagement with the therapist, and emotional connection with the therapist), and one that measured alliance within the family (shared sense of safety, and shared sense of purpose).

In the development of the SOFTA, Friedlander et al. (2006) briefly reported three studies in which the reliability of the measure was tested, one of which was relevant to this review. They reported a small community study that included 22 low income mainly Caucasian families; with 'at risk' children aged 6 to 18 years. Whilst the risk was unspecified, they excluded families in which there were ongoing substance use problems, psychosis and/or family violence. This unfortunately limited comparability to the studies previously reviewed that directly included families with these problems. Ratings of problem improvement were limited to therapists and client's (over the age of 12 years) ratings on one global improvement question on the Penn Helping Alliance Questionnaire (HAq; Laborsky, Crits-Cristoph, Alexander, Margolis, & Cohen, 1983). These ratings were made after session three, six and nine and trained observers rated the alliance from video recordings of the same sessions. Families received a maximum of ten sessions of free family counselling.

Alliance-outcome associations were somewhat complex because alliance-outcome associations were reported at the alliance subscale level and at each of the three time points. Three of four alliance subscales (engagement and emotional

connection with the therapist, and shared purpose within the family) were associated with client-rated improvement at mid treatment only. Therapist rated improvement was associated with feelings of safety within the family at session three and six, and engagement with the therapist at sessions six and nine. Distinctions between family role were not specified.

Escudero, Friedlander, Varela, and Abascal (2008) report a larger study using the same alliance measure and similar outcome measure (HAq-II; Luborsky, Barber, Siqueland, Johnson, Najavits et al., 1996). They improved on the previous design by establishing criteria for families to be classed as ‘improved’ (if therapists and all family members reported improvements and reductions in problem severity). Thirty-seven Caucasian Spanish couples and families (age range 13-72 years old, mean = 37.8 years old) received brief family therapy following an integrative systems model. Whilst presenting problems were described as predominantly ‘family focused’, no distinction was made between those who received help for adult problems and those relating to their children, restricting comparability with studies focusing on child outcomes.

Escudero et al. (2008) found alliance was relatively consistent across time, except shared sense of purpose within the family, which improved. As in the previous study (Friedlander et al., 2006), client and therapist rated improvement was associated with higher observed alliance ratings. Specifically, client-rated improvement was associated with a shared sense of purpose within the family at session three and six and an emotional connection with the therapist at session six. Therapist rated improvement was associated with shared purpose within the family, engagement, and emotional connection with the therapist at session three, and shared purpose within the family at session six. Observed alliance predicted client rated



improvement at session six, and therapist rated improvement at session three and six. Critical indicators for families being classified as 'improved' were; emotional connection and engagement with the therapist, and shared purpose within the family at session three, and shared purpose alone at session six. They reported 70% of family's outcomes were correctly predicted from linear combinations of the four alliance subscales in the SOFTA-O. The researchers hypothesise that individual family members' alliance with the therapist is more important earlier in therapy and within family alliance more important later on.

Results of these two studies add support to there being a significant parent-therapist alliance-outcome association as reported in other family therapy studies (Hogue et al, 2005; Johnson & Ketring, 2006; Johnson et al, 2002; Glueckauf et al, 2002).

#### *Miscellaneous*

A significant alliance-outcome association was also found in a large study of 78 families from low income urban areas with children aged 8-17 years at risk of school failure and antisocial behaviour (Tolan, Hanish, McKay, & Dickey, 2002). The researchers developed and tested a set of family process measures, which were unnamed. Their alliance measure comprised of relationship with the interventionist and program satisfaction. Parents and children rated their alliance with the therapist at five time points and outcomes were also rated at these time points (measures of parenting practices, and child anti-social, pro-social and aggressive behaviour). Outcomes were rated by interventionists and parents. Unlike other studies in this review, families received a combination of individual family and group sessions over 22 weeks. Families were seen in groups one in every three sessions.

Consistent with meta-analyses and other longitudinal studies, the parent-therapist alliance was consistent across time. They also found that a strong parent-therapist alliance at time three predicted a positive change in parent and interventionist rated parenting practices at time four, which then positively impacted on parent and interventionist rated child cooperation, pro-social behaviour and aggression at time five. Unlike previous studies (Hogue et al., 2005; Shelef et al., 2005), child-therapist alliance was not associated with outcomes, although this might be related to younger mean child ages in this study, possibly suggesting a developmental factor in the alliance-outcome association.

#### *Working Alliance Inventory*

In contrast to the studies already reviewed, parent-therapist alliance had a weaker association to outcome in two studies using versions of the WAI in family therapy. Neither study found a strong relationship between parent-therapist alliance and outcomes alone. In both studies, adolescent-therapist alliance was an important factor for positive change.

Both studies used the Working Alliance Inventory (WAI; Horvarth & Greenberg, 1989; WAI-O; Tichenor & Hill, 1989) to measure alliance-outcome associations in family therapy. Alliance was either self-reported (Glueckauf et al., 2002) or observer rated (Pereira, Lock, & Oggins, 2006). Both studies were part of larger randomised trials and included mainly adolescents and their families and both measured alliance at two time points across therapy. Glueckauf et al. (2002) included 19 adolescents (mean age = 13.9 years, SD = 1.37) with epilepsy and significant psychosocial or educational difficulties who received issue specific family counselling (IFCM; Long, Glueckauf, & Rasmussen, 1998; Glueckauf, 1993).

Pereira et al. (2006) included 41 young people (aged 12-18 years) with a primary diagnosis of Anorexia Nervosa.

In Glueckauf et al., (2002) no significant association was found between mothers' self-reported total alliance score and family outcomes. Mother-therapist agreement on the goals of therapy was weakly associated with reductions in issue severity when both were rated by mothers. Similarly, adolescent-therapist agreement on goals was associated with adolescent reported reductions in issue severity and adolescent-therapist task and bond scores were associated with adolescent rated positive issue change.

The parent-therapist alliance also demonstrated weak associations with outcomes for young people with Anorexia Nervosa in the Pereira et al (2006) study. Parent-therapist agreement on the goals of therapy was important for families to remain in treatment. However, whilst late parent-therapist alliance was associated with total weight gain, early weight gain was the best predictor of psychological change. Early weight gain was associated with a better adolescent-therapist early alliance, as was fewer weight, shape and eating concerns at baseline. The researchers hypothesise that early weight gain may be partially mediated by parent-therapist and adolescent-therapist alliance but early weight gain was more important for a good outcome. This finding was somewhat similar to Shelef et al. (2005) who also found the parent-therapist alliance was important for retention and the adolescent-therapist alliance was related to outcome.

As with previous research, parents in the Pereira study were rated as having stronger alliances with the therapist than adolescents (although this was not the case in the Glueckauf study), alliance was consistent over time, and dropping out of

treatment was associated with poorer parent-therapist alliance but only for agreement on the goals of therapy. Additionally, mothers who dropped out of therapy in the Glueckauf study were less educated, and like Robbins et al. (2003) adolescents who dropped out were older.

### *Summary*

The family therapy studies reported above assessed alliance-retention and alliance-outcome associations across a broad range of populations, presenting problems, and treatment contexts. Alliance was assessed from different perspectives, at different time points and using well established alliance measures, except the Friedlander studies and Tolan et al. (2002) who developed and used new alliance measures. This variability limited the comparability of findings.

However, several complimentary results were found. In almost all studies that assessed alliance-outcome associations, a better parent-therapist alliance was found to predict outcomes (Escudero et al., 2008; Friedlander et al., 2006; Glueckauf et al., 2002; Hogue et al., 2006; Johnson et al., 2006; Johnson & Ketring, 2006; Johnson et al., 2002; Pereira et al., 2005; Tolan et al., 2002). In some studies the parent-therapist alliance moderated or mediated alliance-outcome effects (Hogue et al., 2005; Pereira et al., 2005; Shelef et al., 2005) and in one study adolescent's trust in their parents moderated the parent-therapist alliance-outcome association (Johnson et al., 2006). Dropping out of treatment was associated with; imbalanced alliances in conjoint family therapy (Flicker et al., 2008; Robbins et al., 2003; Robbins et al., 2008), or a poorer alliance or a negative shift in the alliance (Pereira et al., 2005; Robbins et al., 2003; Robbins et al., 2006; Robbins et al., 2008; Shelef et al., 2005).

Pre-treatment factors may also increase the risk of dropping out of treatment, such as older age of the adolescent (Glueckauf et al., 2002; Robbins et al., 2006),

fewer symptoms at baseline (Robbins et al., 2006), lower maternal education (Glueckauf et al., 2002), or more distress at baseline (Johnson et al., 2006) but this was not a consistent finding and most pre-treatment factors did not influence alliance or outcomes or dilute the alliance-outcome association. Some studies found that pre-treatment factors influenced the strength of the alliance, such as mother-child attachment (Johnson et al., 2006), early behaviour change (Pereira et al., 2005), degree of symptom related concerns at baseline (Pereira et al., 2005), or level of family violence (Johnson & Kettring, 2006) but this seemed to be problem specific. Finally, all but one study (Glueckauf et al., 2002) reported a stronger parent-therapist alliance in comparison to adolescent-therapist alliance.

These findings illustrated the complexity of the parent-therapist alliance in family therapy for treatment retention and outcomes. There may be unique challenges in this context and when working with adolescents as they exert a powerful influence on the success of treatment that may be less profound for younger children where parental alliance may be of particular importance. However, there was a paucity of research with younger children so this hypothesis is tentative. Never-the-less, these studies suggest that establishing an alliance with adolescents in treatment can be equally important for a successful outcome as engaging with parents.

Table 2. Summary of results for family therapy

Author (year)	Main presenting problem	Population & sample size	Intervention and interventionist	Study design	Alliance measure and rater	Other outcome measures	Significant results
Table 2. Summary of results for family therapy					TAS-R (2 of 3 subscales)	Retention/ drop-out (attended <8 sessions, therapist did not agree to termination)	Parents had higher mean alliances than adolescents.  Completers had higher alliances than drop outs and greater mother-father alliance imbalance.  Mother - adolescent unbalanced alliance associated with dropout over time.
		(mean 15.46, SD = 1.08) and their families		(2 groups: completers and drop outs)	20 minute segments of session one  Observer rated		
Robbins et al. (2003)	Substance abuse	34 families. Adolescents aged 12-18 years	Functional Family therapy	Treatment retention study (2 groups: completers and drop outs)	VTAS-R  20 minute segments of session one  Observer rated	Retention/ drop-out (attended <8 sessions, therapist did not agree to termination)	Parent's alliance higher than adolescents.  Father and parent-adolescent unbalanced alliance associated with dropout.  Dropout families had higher alliance ratings than completers.

<b>Author (year)</b>	<b>Main presenting problem</b>	<b>Population &amp; sample size</b>	<b>Intervention and interventionist</b>	<b>Study design</b>	<b>Alliance measure and rater</b>	<b>Other outcome measures</b>	<b>Significant results</b>
Flicker et al. (2008)	Substance abuse	86 adolescents aged 13-19 years (mean = 15.7 years) and their families	Functional family therapy	Treatment retention study (2 groups: completers and drop outs)	VTAS-R (2 of 3 subscales) 20 minute segment from middle of session one.  Observer rated	Retention (completion of all sessions)  TLFB	Hispanic families who dropped out of treatment had a higher alliance imbalance between parents and adolescents than completer families. There was no difference for Anglo families.
Robbins et al. (2006)	Substance abuse	30 adolescents (mean=14.93 years, SD=1.11) and their families	Multi-dimensional family therapy	Treatment retention study (2 groups: completers and drop outs)	VTAS-R (2 of 3 subscales) 20 minute segments of sessions 1&2.  Observer rated	Retention/ drop-out (attended <8 sessions, therapist did not agree to termination)	Parents' alliance was higher than adolescents'.  Alliance dropped from session one to session two for families who dropped out (for parents and adolescents).
Hogue et al. (2006)	Substance abuse	44 adolescents (mean= 15.47 years, SD=1.31)	Multi-dimensional family therapy  5 experienced therapists (mean=7.7 years' experience)	Pre-post-6 months outcome study	VTAS-R One early session coded (mostly session two)  Observer rated	TLFB  CBCL  YSL	Parents' alliance was stronger than adolescents'.  Stronger parent alliance predicted parent reported reduced drug use and externalising behaviour at post treat.

<b>Author (year)</b>	<b>Main presenting problem</b>	<b>Population &amp; sample size</b>	<b>Intervention and interventionist</b>	<b>Study design</b>	<b>Alliance measure and rater</b>	<b>Other outcome measures</b>	<b>Significant results</b>
Shelef et al. (2005)	Substance abuse	65 adolescents (aged 12-18 years) and their families	Multi-dimensional family therapy  3 experienced therapists with over 5 years' experience	Pre-post-follow up	VTAS-R (2 of 3 subscales)  WAI (for adolescent alliance)  One session coded between sessions 2-5  Observer rated	GAIN  TLFB  Retention/ drop out ( attended <7 sessions)	Stronger parent alliance predicts retention.  Adolescent alliance predicted fewer abuse and dependency symptoms at post treatment, moderated by stronger parent alliance.  Adolescent observed alliance was the best predictor at 3 month follow up.



<b>Author (year)</b>	<b>Main presenting problem</b>	<b>Population &amp; sample size</b>	<b>Intervention and interventionist</b>	<b>Study design</b>	<b>Alliance measure and rater</b>	<b>Other outcome measures</b>	<b>Significant results</b>
Johnson, Wright & Ketring (2002)	Child abuse, neglect or juvenile offending	43 families with children aged 11-18 years	Home based family therapy  Ecosystems approach (Johnson & Ketring, 2000)  Doctoral student co-therapy teams	Pre-post	FTAS (selected questions)  Client self-report at the end of therapy	OQ-45.2 (symptom distress and interpersonal relations subscales)  F-COPES	Positive alliance predicted reductions in symptom distress for mothers, fathers and adolescents.  Alliance task subscale was most influential for mothers and adolescents, and goals for fathers.  Alliance scores did not predict changes in family coping or interpersonal relations.
Johnson & Ketring (2006)	Child abuse and neglect	225 families. Mean age for children = 14.4 years  Rural communities	Home based family therapy  Ecosystems approach (Johnson & Ketring, 2000)  Multiple therapists across three agencies with a range of experience	Pre-post	FTAS  Client self-report at the end of therapy	OQ (symptom distress subscale)  CTS-PAS	Family alliance was related to reductions in symptom distress and family violence at post-treatment.  A stronger bond moderated change for more violent families at intake.

<b>Author (year)</b>	<b>Main presenting problem</b>	<b>Population &amp; sample size</b>	<b>Intervention and interventionist</b>	<b>Study design</b>	<b>Alliance measure and rater</b>	<b>Other outcome measures</b>	<b>Significant results</b>
Johnson et al. (2006)	Child abuse and neglect	27 families of 23 adolescents (mean age = 14.3)  Rural communities	Home based Family therapy  Ecosystems approach (Johnson & Ketring, 2000)  Multiple therapists with a range of experience	Pre-post	FTAS  Client self-report at the end of therapy	OQ (symptom distress subscale)  IPPA  R-IPA	Adolescents' trust in their parents, moderated the relationship between the tasks subscale of alliance and post treatment symptom distress.
Friedlander et al. (2006)	'At risk'	22 families. Youth aged 6-18 years.  20 Caucasian, low income families.	Various Family Therapy models Decided by therapist  8 therapists (mean = 8.4 years' experience)	Pre-post Community study	SOFTA  Session three, six and nine.  Observer rated	SEQ  HAq (one improvement item rated by client)  Rated after sessions 3,6,9	Client rated improvement was associated with engagement, emotional connection, and shared purpose alliance subscales.  Therapist rated improvement was associated with safety at session three and six, and engagement at sessions six and nine.

<b>Author (year)</b>	<b>Main presenting problem</b>	<b>Population &amp; sample size</b>	<b>Intervention and interventionist</b>	<b>Study design</b>	<b>Alliance measure and rater</b>	<b>Other outcome measures</b>	<b>Significant results</b>
Escudero et al. (2008)	Various 'family focused' problems	37 families (age 13-72 years, mean = 37.8 years)  All Spanish Caucasian participants	Integrative systems model of Brief family therapy  6 therapists with a range of experience. Qualified to at least MSc	Longitudinal pre-post	SOFTA-o  HAQ-II  Sessions three and six.  Client rated and observer rated	HAq-II (one improvement item rated by client and therapist)  Client and therapist rated progress	Client rated improvement related to shared purpose at session three, and shared purpose and emotional connection at session six.  Therapist rated improvement associated with shared purpose, engagement and emotional connection at session three, and shared purpose at session six.  Observed alliance at session six predicted client rated improvement.  Therapist rated improvement was predicted from observed alliance at session three and six.

<b>Author (year)</b>	<b>Main presenting problem</b>	<b>Population &amp; sample size</b>	<b>Intervention and interventionist</b>	<b>Study design</b>	<b>Alliance measure and rater</b>	<b>Other outcome measures</b>	<b>Significant results</b>
Pereira et al. (2006)	Anorexia Nervosa	41 adolescents (aged 12-18) and their families  91% female	Family based therapy	Pre-post Longitudinal (context of RCT)	WAI-O  Two sessions coded: one early (session 4-9) and one late (session 12-17)  Audio rated by three clinical psychology doctorate students	Weight  EDE-12.OD	Less agreement on goals predicted drop out.  Adolescent early alliance was associated with early weight gain.  Late parent alliance was associated with total weight gain.
Glueckauf et al. (2002)	Epilepsy (and significant psychosocial or educational difficulties)	19 adolescents (aged 12-19) and their families	Issue specific single family counselling (IFCM)  2 graduate student co-therapists with over 2 years experience	Longitudinal pre-post	WAI (modified)  Sessions 3 & 6  Client self-report	ISS  ICS  IFS  FTOI	Agreement on goals was associated with issue severity when both were rated by mothers or adolescents.  Adolescent task and bond scores were associated with positive issue change.

<b>Author (year)</b>	<b>Main presenting problem</b>	<b>Population &amp; sample size</b>	<b>Intervention and interventionist</b>	<b>Study design</b>	<b>Alliance measure and rater</b>	<b>Other outcome measures</b>	<b>Significant results</b>
Tolan et al. (2002)	Children at risk of school failure and antisocial behaviour	78 Children (aged 8-17 years) and their families  Outpatients in low income urban area	22 week family preventative intervention  Therapist details not given	Longitudinal prevention study	Relationship with interventionist and program satisfaction  5 time points (sessions 6, 9, 12, 15, 20)  Self-rated by parent, child and interventionist	Shifts in parenting practices  Child anti-social and pro-social behaviour	Parent alliance stable over 5 time points.  Parenting at time one and parenting at time four was mediated by parent alliance at time 3.

*Note:*

CBCL: Child behaviour check list and YSR: Youth symptom- Report (Achenbach, & Edelbrock, 1991a, 1991b) consist of 112 items assessing problem symptoms on a continuum. The CBCL contains groupings of externalizing and internalizing symptoms.

CTS-PAS: Conflict Tactics Scale—Physical Aggression Subscale (Straus, 1979) a self report measure of physical violence.

EDE-12.OD: The Eating Disorder Examination (Cooper & Fairburn, 1987) is a semi-structured interview with four subscales (restraint, eating concerns, shape concerns, and weight concerns) used to assess eating disorder psychopathology.

F-COPES: The Family Crisis Oriented Personal Evaluation Scale (McCubbin, Olson, & Larsen, 1981) is a 30 item self-report measure of problem solving and behavioural strategies that families use in stressful situations.

FTOI: Family Therapy Outcome Index (Glueckauf, Picha, & Webb, 1994) is a 19 point scale of overall problem improvement comprised of the Issue Severity Scale (ISS), Issue Change Scale (ICS), and Issue Frequency Scale (IFS).

GAIN: Global Appraisal of Individual Needs (Dennis, 1999) a standardized clinical assessment battery covering eight main domains (background, substance use, physical health, risk behaviours, mental health, environment, legal, and vocational)

HAq: Penn Helping Alliance Questionnaire (Luborsky et al., 1983) a 19 item brief self-report measure of the working alliance, designed for individual psychotherapy

HAq-II: The revised Helping Alliance Questionnaire (HAq-II; Luborsky et al., 1996)

IPPA: The Inventory of Parent and Peer Attachment (Armsden & Greenberg, 1987) a 25-item questionnaire that measures cognitive and affective attachment on three subscales: trust, communication, and alienation

OQ-45.2: Outcome Questionnaire (Lambert et al., 1996) a self-report assessment comprised of 45 items with three subscales: symptom distress, interpersonal relations, and social role

R-IPA: The Revised Inventory of Parent Attachment (Johnson, Ketring, & Abshire, 2003) a revised version of the IPPA with 30 items and two factors: trust/avoidance and communication

SEQ: The Session Evaluation Questionnaire (Stiles & Snow, 1984) a self-report measure designed to assess the depth and smoothness of therapy sessions.

TLFB: Time line follow back interview (Sobell & Sobell, 1996) a semi structured retrospective interview measuring quantity and frequency of daily consumption of substances

## **Parenting Focused Interventions**

Four studies explored the parent-therapist alliance outcome association in parenting focused interventions. A summary of results can be seen in Table 3.

### *Parent Management Training*

In three similar studies Kazdin, Marciano and Whitley (2005), Kazdin, Whitley and Marciano (2006), and Kazdin and Whitley (2006) used the Working Alliance Inventory to assess parent-therapist alliance as rated by therapists and parents receiving treatment in large specialist outpatient clinics. All three studies included children referred for oppositional, aggressive, and anti-social behaviour. Alliance was measured one third and two thirds through the 12 week treatment, involving evidence based parent management training alone or in combination with cognitive problem solving skills training for children aged seven years or older. The studies included 185 children aged three to fourteen years, 77 children aged six to fourteen years, and 218 children aged two to fourteen years respectively, and their families.

As in several of the family therapy studies reported above, two of the studies found parents who dropped out of treatment had a poorer parent-therapist alliance early in treatment (Kazdin et al., 2006; Kazdin & Whitley, 2006). Also similar to previous findings in this review and in the wider literature, alliance ratings were consistent over time.

Across all three studies, a better parent-therapist alliance was associated with more positive outcomes across rater (therapist, child, parent). Specifically, greater improvement (Kazdin et al., 2005; Kazdin et al., 2006), better parenting practices as rated by parents and therapists (Kazdin et al., 2006; Kazdin & Whitley, 2006), fewer therapist and parent rated barriers to participation (Kazdin et al., 2005), and more

treatment acceptability when rated by parents (Kazdin et al., 2005). Effect sizes were in the small to medium range which echo those found in alliance meta analyses in the adult and child literature (Martin et al., 2000; Shirk & Karver, 2003).

Study three (Kazdin & Whitley, 2006) also found that better parent reported pre-treatment social relations (family relationships and social support) predicted a stronger parent-therapist alliance and parent and therapist rated improvement. Furthermore, pre-treatment parent social relations explained part of the alliance-outcome association but only for therapist rated improvement.

The above studies provide further evidence that a better parent-therapist alliance is associated with treatment retention and outcome. Studies were well designed with large sample sizes and data was gathered from multiple perspectives, which increased the reliability of findings, at least for parent management training for child oppositional, aggressive and anti-social behaviour. However, some children (those over 7 years of age) received problem solving skills training in addition to parent management training and it is unclear to what extent this may have influenced alliance and outcome, particularly as the combined treatment was found to be more effective (Kazdin, 2003).

#### *Video Feedback Intervention to Promote Positive Parenting*

Mother-therapist alliance was significantly associated with outcome in another parenting focused intervention. Specifically; in a Dutch randomised case control intervention study conducted by Stolk, Mesman, van Zeijl, Alink, Bakermans-Kranenburg, et al. (2008) for children aged one to three years with high levels of externalising problems, a better mother-therapist alliance was associated with improved post-treatment maternal sensitivity (more supportive presence and



less intrusiveness). However a better alliance was not associated with better post-treatment maternal discipline.

Stolk et al. (2008) included 120 mostly highly educated mothers who received six home visits over eight months. This followed the protocol for video-feedback intervention to promote positive parenting and sensitive discipline (VIPP; Juffer, Bakermans-Kranenburg, & van Ijendoorn, 2008). Alliance was measured after session one using a subjective and un-standardised measure in which interveners rated four closed questions on a five point Likert scale. Pre and post-treatment maternal sensitivity and discipline were assessed by a more thorough battery of observed mother-infant tasks in a laboratory setting.

Whilst this large study presented the only alliance-outcome findings for very young children in this review, comparability and generalisability was unfortunately limited by the brief un-standardised alliance measure used. Whilst different researchers completed post-treatment assessments in this study, the initial assessments were conducted by the intervener which may have influenced their judgements of the alliance.

Table 3. Summary of results for parenting focused interventions

<b>Author (year)</b>	<b>Main presenting problem</b>	<b>Population &amp; sample size</b>	<b>Intervention and interventionist</b>	<b>Study design</b>	<b>Alliance measure and rater</b>	<b>Other outcome measures</b>	<b>Significant results</b>
Kazdin et al. (2005)	Oppositional, aggressive & anti-social behaviour	185 children (aged 3-14) and their families	Parent management training alone or in combination with cognitive problem-solving skills training (for children 7 years and older).  12 therapists qualified to at least MSc. Further trained for study	Longitudinal Pre - post	WAI  Session 4 & 8  Rated by parent and therapist	Treatment Improvement Scale (rated by therapist, parent & child)  Barriers to participation scale (6 relationship items excluded) (rated by parent & therapist)  Treatment evaluation inventory (rated by child & parent)	Parent rated alliance predicted therapist, child and parent evaluations of child improvement, parent and therapist rated barriers to participation, and parent rated acceptability of intervention.

<b>Author (year)</b>	<b>Main presenting problem</b>	<b>Population &amp; sample size</b>	<b>Intervention and interventionist</b>	<b>Study design</b>	<b>Alliance measure and rater</b>	<b>Other outcome measures</b>	<b>Significant results</b>
Kazdin et al. (2006)	Oppositional, aggressive and antisocial behaviour	77 children (aged 6-14) and their families	Parent management training alone or in combination with cognitive problem-solving skills training (for children 7 years and older)  11 therapists qualified to at least MSc . Further trained for the study	Longitudinal Pre-post	WAI  Session 4 & 8.  Rated by parent and therapist	Treatment Improvement Scale (rated by therapist, parent & child)	Parent alliance was lower for families who dropped out.  Parent rated alliance was associated with all raters judgements of improvement and positive changes in parenting skills and interactions as rated by parents and therapists.

<b>Author (year)</b>	<b>Main presenting problem</b>	<b>Population &amp; sample size</b>	<b>Intervention and interventionist</b>	<b>Study design</b>	<b>Alliance measure and rater</b>	<b>Other outcome measures</b>	<b>Significant results</b>
Kazdin & Whitley (2006)	Oppositional, aggressive, and anti-social behaviour	218 children (aged 2-14) and their families	Parent management training alone or in combination with cognitive problem-solving skills training (for children 7 years and older)  11 therapists qualified to at least MSc . Further trained for the study	Longitudinal Pre-post	WAI  Session 4 & 8  Rated by parent and therapist	Treatment Improvement scale – parenting practices subscale (rated by parent and therapist)	Parent alliance was lower for families who dropped out.  Positive parent alliance rated by parents and therapists was associated with improvements in parent and therapist rated parenting practices.  Pre-treatment social relations explained part of the alliance-outcome association for therapist rated outcomes.

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<b>Author (year)</b>	<b>Main presenting problem</b>	<b>Population &amp; sample size</b>	<b>Intervention and interventionist</b>	<b>Study design</b>	<b>Alliance measure and rater</b>	<b>Other outcome measures</b>	<b>Significant results</b>
Stolk et al. (2008)	Externalising problems.	120 mothers and children (1-3 years old)  Dutch. Generally highly educated.	Preventative VIPP-SD  10 trained Psychology post graduate therapists	Randomised case control intervention study (but only intervention group discussed here)	Semi-structured log books  Session one  Rated by intervener	Maternal sensitivity  Maternal discipline	Positive alliance correlated to more supportive presence and less intrusiveness.  Alliance predicted post-test supportive presence.

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## **Play Therapy**

Significant alliance-outcome associations were again found in another study of younger children (Table 4). Harvey (2008) measured parent-rated parent-therapist alliance in dynamic play therapy. The study included children aged four to twelve years (mean = 7.95 years) and their parents referred to an outpatient mental health clinic in a small community in New Zealand. There was a wide range of child presenting problems, mainly attention deficit hyperactivity disorder, behavioural problems, adjustment disorders, and emotional disorders. Eighteen parents rated the parent-therapist alliance at the end of therapy using 15 items from the Therapeutic Alliance Scale (TAS; Douchette & Bickmann, 2001).

Harvey (2008) found that as the parent-therapist alliance increased, the extent of parent rated post-treatment difficulties decreased for child externalising, internalising and overall difficulties on the Child Behaviour Checklist (CBCL; Achenbach, 1991a). However, there were several significant limitations in this study, notably; the researcher developed and delivered the intervention, completed intake assessments, conducted statistical analyses, and continued treatment until improvement had occurred. Therefore, there were multiple potential sources of bias throughout the study, particularly the potential investment of the therapist in a positive outcome. However, this bias is not restricted to this study and is a common critique of treatment trials (Wampold, 2010). Additionally, parents did not complete the alliance measure and post-treatment outcome measure until the end of treatment, and treatment was not terminated until improvement had occurred, therefore a positive outcome was a certainty. It is also unclear why only 18 of a potential 44 families were included in the study, or what characterised treatment retention or drop out.

Whilst this outcome presents further support for a significant positive alliance-outcome association, further research in this area will be important to clarify the reliability of this finding.

### **Outpatient Therapy in Community Contexts**

The final three studies that met criteria for review assessed parent-therapist alliance in community contexts delivering an eclectic mix of family and individual therapy from a range of orientations and delivered by large numbers of therapists with varied qualifications and experience (see Table 5). As such, presenting problems were multiple and varied, except for McLeod and Weisz (2005) who only included children diagnosed with internalising disorders. Outcomes were thoroughly assessed in all three studies, using several well established outcome measures. Alliance measurement and methodology was different in each study, and McLeod and Weisz (2005) introduced a new alliance measure.

Slightly different parent-therapist alliance-outcome associations were found in all three studies. Two studies found better parent-therapist alliances were associated with symptom reductions at post-treatment (Hawley & Garland, 2008; McLeod & Weisz, 2005). One study did not find a significant association but did find that a better parent-therapist alliance significantly predicted engagement and satisfaction with treatment (Hawley & Weisz, 2005). All three studies found a strong youth-therapist alliance was predictive of symptom reduction.

Table 4. Summary of results for play therapy

<b>Author (year)</b>	<b>Main presenting problem</b>	<b>Population and sample size</b>	<b>Intervention and interventionist</b>	<b>Study design</b>	<b>Alliance measure and rater</b>	<b>Other outcome measures</b>	<b>Significant results</b>
Harvey (2008)	Various	18 parents with children aged 4-12  Outpatient mental health clinic in small community (<10,000) New Zealand	Dynamic Play therapy based on attachment and atunement  Intervention developed and delivered by the author.	Pre-post	TAS (15 items)  Parent rated at the end of treatment	CBCL	Parent rated alliance was associated with improvements in externalising and internalising problems and overall scores

*Note:*

CBCL: Child behaviour check list (Achenbach, 1991a) consists of 112 items assessing problem symptoms on a continuum. The CBCL contains groupings of externalizing and internalizing symptoms.



More specifically, in Hawley and Weisz's study (2005) of 65 young people (aged 7-16 years) and their families, a better parent rated parent-therapist alliance was related to fewer session cancellations (explaining 18% of the variance), parent-therapist concurrence with treatment termination decisions (explaining 16.3% of the variance), and parent satisfaction with treatment (explaining 21.5% of the variance). Parent-therapist alliance was self-reported at the end of therapy or when they were no longer in therapy, using an adapted version of the Therapeutic Alliance Scale for Children (TASC; Shirk & Saiz, 1992). Unlike previous studies, a significant relationship was not found between parent-therapist alliance and youth satisfaction or symptom improvement, or with parent or youth reported symptom improvement. However, interestingly, youth-therapist alliance was also assessed and while the strength of the youth-therapist alliance was not associated with any of the retention measures, a better youth-therapist alliance was associated with parent and youth rated symptom improvement on the child behaviour check list (CBCL), explaining 6.1% of the variance, and Youth Symptom Report (YSR), explaining 12.4% of the variance. These findings indicated that a good parent-therapist alliance was important for treatment retention, and a good youth-therapist alliance important for positive symptom change. These findings complimented those in previous studies that found unique contributions from parents and youth in terms of treatment retention and outcomes, particularly studies finding an association between youth-therapist alliance and outcome (Glueckauf et al., 2002; Pereira et al., 2006; Shelef et al., 2005).

However in a later study by Hawley and Garland (2008) a better parent-therapist alliance was associated with outcomes; reduced total symptom scores and externalising symptoms. Like Hawley and Weisz (2005), they also found that a better youth-therapist alliance predicted a greater number of positive outcomes for both

parent and youth ratings at six months (fewer externalising symptoms, fewer internalising symptoms, better family functioning, and greater social support and treatment satisfaction) than the parent-therapist alliance. They found youth-therapist alliance accounted for 9.2% of the variance in symptom severity outcomes. Parent-therapist alliance also predicted better social support and treatment satisfaction, but only for parent reported outcomes. This partially supports the previous study's findings but suggests a greater role for parent-therapist alliance in outcomes. It may be that the large numbers of outcome measures in this study (nine in total) increased the chances of finding more significant outcomes. They also had a larger, slightly older sample of seventy-eight adolescents aged 11-18 years (mean = 13.5; SD = 1.88) and their families. It is also possible that the different findings may relate to the different alliance measure used; the 12-item short form of the Working Alliance Inventory (Horvarth & Greenberg, 1989; Tracey & Kokotovic, 1989).

As in several of the previously reviewed studies and consistent with findings by Hawley and Garland (2008), McLeod and Weisz (2005) found a better parent-therapist alliance was associated with a better child outcome. Specifically, a better parent-therapist alliance predicted post-treatment reductions in parent-rated internalising symptoms, and fewer anxiety and depressive symptoms. In contrast to the two studies above, a better child-therapist alliance was only associated with fewer anxiety symptoms at post-treatment.

Alliance was assessed at four time points across therapy using a measure developed by the researchers; the Therapy Process Observational Coding System – Alliance Scale. They included 22 children aged 8 to 14 (mean = 10.3, SD = 1.83) diagnosed with internalising disorders who were treated across five community mental health clinics. Pre-treatment characteristics did not confound alliance-

outcome associations, but children receiving cognitive-behaviour therapy reported better youth-therapist alliances with the therapist, and parents with younger children also reported better parent-therapist alliances with the therapist. This also highlights the influence of the developmental age of the child on alliance, treatment retention and outcomes.

## **Discussion**

This review aimed to explore the association between the parent-therapist alliance and outcome in the psychological treatment of children. Over 200 potential studies were identified as relevant, yet only 22 met criteria for inclusion. Family therapies were particularly well represented. This may have been because despite the frequent involvement of parents in treatment (Ollendick & Russ, 1996), it has not been commonplace to assess the parent-therapist alliance in treatments primarily focused on the child. In cognitive-behavioural therapy research, for example, the focus has traditionally been on skill development and building the evidence base and only recently attention has returned to common factors such as the alliance (Gilbert & Leahy, 2007). The inclusion criteria for this review were carefully considered in order to capture a good range of quantitative studies measuring the parent-therapist alliance in child psychological treatment using comparable alliance constructs, however, it is likely to be the case that more studies have assessed the parent-therapist alliance but the parameters of the search criteria in this review did not capture these studies, for example, the majority of excluded studies were excluded due to methodological reasons and this process unfortunately eliminated a number of psychodynamic treatment studies. While child alliance research is still in its infancy in comparison to adult alliance research, parental alliance is even more so and highlights the need for more research in this area.

Table 5. Summary of results for outpatient therapy in community contexts

<b>Author (year)</b>	<b>Main presenting problem</b>	<b>Population and sample size</b>	<b>Intervention and interventionist</b>	<b>Study design</b>	<b>Alliance measure and rater</b>	<b>Other outcome measures</b>	<b>Significant results</b>
Hawley & Weisz (2005)	Various	65 young people (aged 7-16 years) and their families	Usual Care 42 therapists ranging from trainee to licensed	Pre-post	TASC (adapted for parents)  Client rated when no longer in treatment	Treatment retention  Satisfaction.  CBCL  YSR  Youth and parent ratings at post treatment, six months, and one and two years	Positive parent alliance was related to increased family participation, fewer cancellations and no shows, agreement with the therapist on treatment termination, and treatment satisfaction.  Youth alliance was associated with parent and youth reported decreases in symptom severity. Parent alliance was not associated.

<b>Author (year)</b>	<b>Main presenting problem</b>	<b>Population and sample size</b>	<b>Intervention and interventionist</b>	<b>Study design</b>	<b>Alliance measure and rater</b>	<b>Other outcome measures</b>	<b>Significant results</b>
Hawley & Garland (2008)	Various	78 adolescents (aged 11-18 years) and their parents  2 clinics in San Diego. Included all entering outpatient therapy	Usual care  38 therapists with a range of qualifications and experience.	Pre-post and follow up	WAI short form  Session one  A small subsample rated at week 3/4 and 6 months  Rated by parent, therapist and adolescent	YSR, CBCL  RSES  VFI  CGAS  FRI  SSQ  MASS, CSQ	Alliance was stable over time.  Parent alliance was associated with decreased total symptoms on the CBCL, decreased externalising symptoms, greater parent reported social support, and increased parent satisfaction.
McLeod & Weisz (2005)	Internalising problems	22 children (aged 8-14 years) and their parents  5 community clinics.	Usual care  20 therapists with a range of qualifications and experience	Pre-post	TPOCS-A  4 sessions sampled at random: one from beginning, two from middle, one from the end  Observer rated.	DISC  CBCL  STAIC  CDI	Parent alliance predicted reductions in internalising, anxiety, and depressive symptoms at post treatment.

*Note:*

CBCL: Child behaviour check list and YSR: Youth symptom- Report (Achenbach, 1991a; 1991b) both consist of 112 items assessing problem symptoms on a continuum. The CBCL contains groupings of externalizing and internalizing symptoms.

CDI: Children's Depression Inventory (Kovacs, 1992) a 27-item measure of childhood depression.

CGAS: Children's Global Assessment Scale (Shaffer et al., 1983) a clinician rating of global functioning.

DISC: Diagnostic Interview Schedule for Children (Shaffer, Fisher, Dulcan, & Davies, 1996) a structured clinical interview administered that generates an array of DSM-IV diagnoses and symptom counts.

FRI: Family Relationship Index (Hoge, Andrews, Faulkner, & Robinson, 1989), a 27 item self-report subscale of the Family Environment Scale (Holahan & Moos, 1983) to assesses family cohesion, expressiveness and conflict, and provides a total composite score reflective of overall family relationship quality.

MASS: The Multidimensional Adolescent Satisfaction Scale (Garland, Saltzman, & Aarons, 2000), and CSQ (Client Satisfaction Questionnaire; Larsen, Attkisson, Hargreaves, & Nguyen, 1979) are brief self-report measures of therapy satisfaction.

RSES: Rosenberg Self Esteem Scale (Rosenberg 1986, 1989) a self-report measure of self-esteem consisting of 10 items. Higher scores indicate higher global self esteem.

SSQ: Social Support Questionnaire (Sarason, Levine, Basham, & Sarason, 1983) a 7 item self-report measure of perceived socio-emotional and instrumental support.

STAIC: State-Trait Anxiety Inventory for Children (Spielberger, 1973) a 20-item measure that assesses anxiety symptoms.

VFI: Vanderbilt Functioning Inventory (Bickman, Lambert, Karver, & Andrade, 1998), used to assess youth functioning across several contexts

In this review, making direct comparisons across studies and drawing firm conclusions about the associations between the parent-therapist alliance and treatment retention and outcomes was difficult because each study found slightly different strengths of alliance-outcome associations for different family members, measured in different ways (different measurement scales, raters and time points), for different client groups, in different contexts (specialist clinics, community outpatient settings, urban and rural areas), receiving different treatments (family therapy, parent management, community care). However, a number of complimentary associations were found and therefore, a tentative emerging hypothesis is that a strong parent-therapist alliance early in treatment has the potential to improve treatment engagement (although should not be at the expense of the child or adolescent alliance), and a strong parent-therapist alliance across treatment has the potential to improve child and family outcomes.

Treatment retention is a challenge in child treatment, with attrition rates of between 40% and 60% in community treatment (Armbruster & Kazdin, 1994). The majority of studies in this review (64%) only included treatment completers and therefore, only limited information was found about how the parent-therapist alliance influences treatment retention. There was some suggestion that in conjoint family therapy for adolescents with substance abuse problems (often co-morbid with externalising behaviour difficulties) unbalanced alliances between therapist and family members can influence dropping out of treatment (Flicker et al., 2008; Robbins et al., 2003; Robbins et al., 2008) but this was not a robust finding as associations varied by family member and culture. The researchers considered the inexperience of the therapists may have meant they were susceptible to being drawn into aligning with parents at the expense of the adolescent (thus still creating an

unbalanced alliance). This imbalance finding may be specific to problem type, child age and intervention. Adolescents are at a developmental stage where they are more able to make treatment decisions than younger children, therefore they need to be part of the collaborative process and to feel heard. When families are seen conjointly, any imbalance is highlighted and aligning with the parent may corrode the alliance with the adolescent. This can be a particular challenge early in therapy when family conflict can be greater and family members may make subtle attempts to pull the therapist into a coalition against other family members (Robbins et al., 2008).

Some authors have argued that splits are common in family therapy in which each subsystem is understood to influence each other in a process of mutual causality (Pinsof, 1994), yet this is not universally accepted and may be culturally dependent. However, across all interventions the alliance is understood as a fluctuating process of ruptures and repairs requiring on-going negotiation (Shafran & Muran, 2000). Balancing the alliance across family members may be less pressing in other contexts, treatment models, problem types, and when treatment is focused on outcomes for younger children. This seemed to be the case in other studies that found treatment retention was associated with stronger parent-therapist alliances (Kazdin et al., 2005; Kazdin et al., 2006; Kazdin & Whitley, 2006; Robbins et al., 2008, Shelef et al., 2005), or more parental agreement on the goals of therapy for one study of young people with Anorexia Nervosa (Pereira et al., 2006). A strong parent-therapist alliance was also associated with better treatment engagement and satisfaction (Hawley & Garland, 2008; Hawley & Weisz, 2005; Kazdin et al., 2005). Taken together, these findings suggest that developing a strong parent-therapist alliance early in therapy may be beneficial for treatment retention, but (particularly in



conjoint family therapy) this should not be at the expense of developing a good alliance with other family members.

Several studies also found a strong parent-therapist alliance predicted outcomes; for reductions in adolescent substance use (Hogue et al., 2005), externalising behaviours (Harvey, 2008; Hawley & Garland, 2008; Hogue et al., 2005; Kazdin, et al., 2005; Kazdin et al., 2006), internalising behaviours (Harvey, 2008; McLeod & Weisz, 2005), symptom severity (Glueckauf et al., 2002), maternal sensitivity (Stolk et al., 2008); and improved parenting practices (Kazdin et al., 2006; Tolan et al., 2002). It was harder to disentangle the parent-therapist and child-therapist alliance in studies that measured alliance by family unit. Never-the-less, these studies also demonstrated associations between a stronger family alliance and reductions in symptom distress (Johnson & Ketring, 2006; Johnson et al., 2002), and family and therapist rated improvements (Friedlander et al., 2006; Escudero et al., 2008).

The findings of the reviewed studies are promising in terms of understanding more about the importance of parent involvement in child treatment, and appear to apply across problem type, measurement method (measurement scale, rater, time of measurement), and type of treatment. However, alliance was sometimes measured at the end of therapy which raised a question about the direction of effects and whether improvement could have influenced alliance ratings. However, as in previous reviews (Martin et al., 2000) alliance was generally consistent over time, from early to later in therapy (Glueckauf et al., 2002, Kazdin, Marciano and Whitley, 2005; Kazdin, Whitley and Marciano, 2006; Kazdin and Whitley, 2006; McLeod & Weisz, 2005; Tolan et al., 2002) and this consistency was found regardless of alliance rater (Glueckauf et al., 2002, Kazdin, Marciano and Whitley, 2005; Kazdin, Whitley and

Marciano, 2006; Kazdin and Whitley, 2006). However, only 9 (41%) studies measured alliance longitudinally so these findings are preliminary. Also, not all studies demonstrated consistency and one study found negative shifts in the alliance from session one to two predicted dropping out of treatment (Robbins et al., 2006). Horvarth and Greenberg (1994) argue that early alliance is indicative of treatment success and that over the course of therapy the windows of opportunity for establishing an alliance decrease in size with each session, although they also point out that late alliance may indicate the maintenance of gains over the longer term. In contrast, Shirk and Karver (2003) found that late child-therapist alliance was more predictive of outcomes in their meta-analysis of 23 child studies. They argue that whilst this finding may be confounded by improvement, it may be that it takes more time to establish alliances with children. This is also true of clients who come to therapy with significant problems, particularly in relationships, or with reluctance, who may require longer to establish an alliance (Horvarth & Greenberg, 1994). This may have been the case for some clients in this review who were referred with significant risk issues and had not volunteered for therapy. Therefore, measuring alliance earlier in therapy could be useful to assess the alliance-retention effect, whereas it could be useful to assess alliance-outcome associations across the course of therapy. Session by session measurement of alliance and outcomes could also provide a means to further understand the temporal nature of this relationship.

Despite these cautions, the parent-therapist alliance-outcome findings taken as a whole suggest that developing a strong parent-therapist alliance in the context of child treatment has at least the potential to positively influence child and family outcomes. This hypothesis is consistent with meta-analytic reviews in the child and adult literature that found consistent moderate alliance-outcome effect sizes across

problem and intervention type. Three studies reporting effect sizes in this review were of a comparable magnitude (Kazdin et al., 2005, 2006, Kazdin & Whitley, 2006).

Whilst the child-therapist alliance was not the focus of this review, a number of studies highlighted the interrelationship of the child and parent alliance with the therapist. Both Hawley and Garland (2008) and Hawley and Weisz (2005), for example, reported that the parent-therapist alliance was more strongly associated with treatment engagement, and the adolescent-therapist alliance was a better predictor of symptom reduction. In other cases, a better parent-therapist alliance moderated the association between a good adolescent-therapist alliance and outcome (Hogue et al., 2005; Pereira et al., 2006; Shelef et al., 2005). This suggested that there may be a unique influence of each family member's alliance on outcomes as well as within system moderating effects which are likely to be complex and may depend on presenting problem and treatment type, for example, Escudero et al. (2008) hypothesised that individual family member's alliance with the therapist could be more important earlier in therapy and within family alliance (such as a shared purpose and feelings of safety) more important later on.

This highlights the need for additional research in this area to more fully understand how the parent-therapist alliance develops, its association with outcome, and the direction of causality between alliance and outcomes. It is probable that the parent-therapist alliance and youth-therapist alliance are both important for outcomes but may be associated with different outcomes and influenced by different factors. One factor may be the developmental age of the child because adolescents often rely less on their parents as they progress through the normative process of autonomy seeking (Kendall and Ollendick, 2004) and are more able to make independent

decisions about and within treatment. Two studies, for example, found that dropping out of treatment was associated with older child age (Robbins et al., 2006; Glueckauf et al., 2002). Therefore, the alliance may be understood differently with older children. The child-therapist alliance is also important because children rarely self-refer for treatment and often enter treatment at a precontemplative stage of change (DiGiuseppe, Linscott, & Jilton, 1996; Shirk & Karver, 2003). A review of the qualitative research in this area could be a useful next step in understanding more about the alliance from different perspectives.

In addition to the limitations already mentioned, it is likely that this review only captured a small proportion of the research in this area. Indeed, the definitions of the construct of alliance are multiple and varied and it has been argued that the alliance is only one aspect of the therapeutic relationship (Norcross, 2010). This is particularly problematic in child process research in which process constructs are diverse (Shirk & Karver, 2003). Future reviews could consider the inclusion of other relationship and process constructs.

This review also did not explore predictors of alliance and this may be an important and informative next step in understanding more about the development of alliance. Very few studies reported a moderating influence of pre-treatment factors on alliance as would be expected from previous reviews, and the few studies reporting effects tended to be problem specific, for example, the quality of the mother-child attachment at pre-treatment predicted the strength of the alliance and adolescents' trust in their parents moderated the alliance-outcome association in a study that included families at risk of having a child removed due to abuse or neglect (Johnson et al., 2006). In this case, the nature of the presenting problem was one of a potential breakdown in the attachment system and if we are to understand the

therapeutic relationship as an attachment relationship in itself then it makes sense that those who have difficulties before treatment could also experience difficulties in attaching to the therapist.

Whilst studies used a range of alliance measures, over half of the studies in this review chose measures that were well established, particularly the VTAS and WAI. Meta-analytic findings suggest that measures significantly overlap in terms of the construct they measure and have acceptable psychometric properties (Martin et al., 2000), which suggests no particular measure preference. Yet, other studies recommend the use of well-established scales, such as the WAI and VTAS (Alexander & Morrison Dore, 1999; Elvins & Green, 2008). Choosing a measure to assess the parent-therapist alliance in the context of child treatment is not straight forward as it can be a tricky decision about whether to choose a measure used predominantly in the adult or child field. Fortunately, many measures now have cross-validation, such as the WAI. It could be argued that repeated use of well-established measures allows for greater comparability and construct validity, however, there may also be a case for considering parent-specific forms that are developed from theoretical understandings of the role of the parent-therapist alliance in child treatment. One study combined these considerations and developed an alliance measure with a specific parent form based on existing measures and child process research (McLeod & Weisz, 2005). Further use and testing with this measure could prove promising.

An alternative approach was adapting measures by modifying the length of the measure or the language, for example, one study developed a parallel parent form of the TASC (Hawley & Weisz, 2005). Such adaptations could be problematic in

terms of comparability, variability, and introduces a question mark about what is being measured as ‘alliance’.

No one measure is recommended from this review, although using a more established measure such as the WAI, VTAS, or FTAS could be beneficial in terms of comparability. However, additional use and testing of newer measures that take a parental position into account such as the TPOCS, is encouraged. It may also be sensible to use different measures for individual and family treatment to account for subtle differences in treatment processes based on theoretical understandings of the alliance.

There is also a case within child and family treatment for gathering alliance and outcome data from multiple perspectives in order to reduce common rater variance and to understand more about how alliance develops, interacts, and relates to outcome. In their meta-analysis of child process studies, Shirk and Karver (2003) also recommend data collection from multiple perspectives. The use of multiple measures will need to be carefully considered in the context of the time and resources available. Observer measures may be best used in combination with self-report measures as whilst they allow for replication, they can also involve a complex inferential process and may miss the subjective experience of those directly involved in therapy that is less problematic when using self-report measures (Horvarth & Greenberg, 1994).

Future child treatment research should include quantitative assessment of the parent-therapist alliance, particularly across individual therapies where this is particularly lacking. Early measurement of the alliance may be useful for indicating treatment retention but there is no clear time preference when associating alliance with outcome. Earlier assessment may reduce the potential influence of improvement

but children and those presenting with more severe and complex problems may require more time to develop an alliance, which could indicate a preference for later alliance measurement. However, late alliance measurement would limit the ability to assess alliance-retention associations as clients may have already terminated treatment. Assessing alliance from multiple perspectives and by family role is encouraged in order to understand more about unique alliance-outcome contributions and interrelationships between individuals. The alliance measure used should have good psychometric properties and construct validity. Testing of new parent-considered measures, such as the TPOCS is encouraged. A greater understanding of the role of the parent-therapist alliance in child treatment may be further informed by a review of the substantial qualitative research in this area.

For clinicians, it may not be surprising that there is a complex relationship between the parent-therapist alliance and child outcomes. Parents may come to therapy with different motivations, goals and expectations than each other or their children and parental expectations have been shown to significantly impact on the success of treatment (Nock & Kazdin, 2001). This presents a challenge for the therapist in developing multiple alliances as well as managing multiple relationships and conflicts, particularly in conjoint therapies (Flicker et al, 2008). However, developing a strong parent-therapist alliance early in therapy may be beneficial for treatment retention, but this should not be at the expense of developing a good alliance with other family members, for example, there may be within-system factors that moderate the alliance-outcome relationship such as a sense of safety, and shared purpose. Developing a strong parent-therapist alliance also has at least the potential to positively influence child and family outcomes, however, the nature of this relationship may be dependent on child age. Alliances with adolescents can have an

equally powerful association with outcome as the parent-therapist alliance, if not more so. Clinicians should be alert to pre-treatment factors that could present a challenge for the development of the therapeutic alliance, particularly clients presenting with complex relational difficulties that may take longer to engage in treatment.



## References

- Achenbach, T. M., & Edelbrock, C. S. (1991a). *Manual for the Child Behavior Checklist/4–18 and 1991 profile*. Burlington: University of Vermont, Department of Psychiatry.
- Achenbach, T. M., & Edelbrock, C. S. (1991b). *Manual for the Youth Self-Report Form and 1991 profile*. Burlington: University of Vermont, Department of Psychiatry.
- Alexander, L.B., & Morrison Dore, M. (1999). Making the parents as partners principle a reality: The role of the alliance. *Journal of Child and Family Studies*, 8, 255-270.
- Armbruster, P., & Kazdin, A.E. (1994). Attrition in child psychotherapy. *Advances in Clinical and Child Psychology*, 16, 81-108.
- Armsden, G. C., & Greenberg, M. T. (1987). The inventory of parent and peer attachment: Individual differences and their relationship to psychological well-being in adolescence. *Journal of Youth and Adolescence*, 16, 427–454.
- Bickman, L., Lambert, E.W., Karver, M., & Andrade, A.R. (1998). Two low-cost measures of child and adolescent functioning for services research. *Evaluation and Program Planning*, 21, 263–275.
- Bordin, E. S. (1976). The generalizability of the psychoanalytic concept of the working alliance. *Psychotherapy: Theory, Research and Practice*, 16, 252–260.
- Bordin, E.S (1994). Theory and research on the therapeutic working alliance: new directions. In A.O. Horvarth., & L.S. Greenberg. (Ed.), *The working alliance: theory, research and practice*. (pp. 13 – 38). New York: John Wiley & Sons, Inc.

- Bowlby, J. (1988). *A secure base: Clinical applications of attachment theory*. London: Routledge.
- Buhrmester, D., & Furman, W. (1990). Perceptions of sibling relationships during middle childhood and adolescence. *Child Development, 61*, 1387–1398.
- Clarke, G., Hops, H., Lewinsohn, P.M., Andrews, J., Seeley, J.R., & Williams, J. (1992). Cognitive-behavioral group treatment of adolescent depression: Prediction of outcome. *Behavior Therapy, 23*, 341-354.
- Cooper, Z., & Fairburn, C.G. (1987). The Eating Disorder Examination: A semi-structured interview for the assessment of the specific psychopathology of eating disorders. *International Journal of Eating Disorders, 6*, 1–8.
- Dennis, M. L. (1999). *Global Appraisal of Individual Needs (GAIN): Administration guide for the GAIN and related measures (Version 1299)*. Bloomington, IL: Chestnut Health Systems.
- Diamond, G., & Liddle, H. A. (1996). Resolving a therapeutic impasse between parents and adolescents in multidimensional family therapy. *Journal of Consulting and Clinical Psychology, 64*, 481–488.
- Diamond, G. M., Liddle, H. A., Hogue, A., & Dakof, G. A. (1999). Alliance building interventions with adolescents in family therapy: a process study. *Psychotherapy, 36*, 355–368.
- DiGiuseppe, R., Linscott, J., & Jilton, R. (1996). The therapeutic alliance in adolescent psychotherapy. *Applied and Preventive Psychology, 5*, 85-100.
- Douchette, A., & Bickman, L. (2001). *Building a comprehensive integrated and practical child and adolescent mental health services measurement system*. Paper presented at the 14th Annual Research Conference, A system of care for children's mental health: Expanding the research base. Tampa: Florida.

- Elvins, R., & Green, J. (2008). The conceptualization and measurement of therapeutic alliance: An empirical review. *Clinical Psychology Review, 28*, 1167–1187.
- Escudero, V., Friedlander, M.L., Varelac, N., & Abascald, A. (2008). Observing the therapeutic alliance in family therapy: Associations with participants' perceptions and therapeutic outcomes. *Journal of Family Therapy, 30*, 194-214.
- Flicker, S.M., Turner, C.W., Waldron, H.B., Brody, J.L., & Ozechowski, T.J. (2008). Ethnic background, therapeutic alliance, and treatment retention in functional family therapy with adolescents who abuse substances. *Journal of Family Psychology, 22*, 167–170.
- Freud, S. (1913). On beginning the treatment. In J.Strachey (Ed.), *The standard edition of the complete psychological works of Sigmund Freud, Vol. 12* (pp 121-144). London: Hogarth Press.
- Friedlander, M. L., Horvath, A. O., Cabero, A., Escudero, V., Heatherington, L., & Martens, M. P. (2006). System for observing family therapy alliances: a tool for research and practice. *Journal of Counseling Psychology, 53*, 214–224.
- Furman, W., & Buhrmester, D. (1985). Children's perceptions of the personal relationships in their social networks. *Developmental Psychology, 21*, 1016-1024.
- Garland, A. F., Saltzman, M., & Aarons, G. (2000). Adolescents' satisfaction with mental health services: Development of a multi-dimensional scale. *Evaluation and Program Planning, 23*, 165–175.

- Gaston, L., & Marmar, C.R. (1994). The California Psychotherapy Alliance Scales. In A.O. Horvath and L. Greenberg (Eds.), *The working alliance: Theory, research and Practice* (pp. 85-109) Toronto: John Wiley and Sons.
- Gelso, C.J., & Carter, J.P. (1985). The relationship in counseling and psychotherapy: Components, consequences, and theoretical antecedents. *The Counseling Psychologist, 13*, 155-243.
- Gilbert, P., & Leahy, R.L. (2007). Introduction and overview: Basic issues in the therapeutic relationship. In P. Gilbert, & R.L. Leahy. (Eds.), *The therapeutic relationship in the cognitive behavioural psychotherapies* (pp. 3 – 24). London: Routledge.
- Glueckauf, R. L. (1993). Use and misuse of assessment in rehabilitation: Getting back to the basics. In R. L. Glueckauf, L. B. Sechrest, G. R. Bond, & E. McDonel (Eds.), *Improving assessment in rehabilitation and health* (pp. 135–155). Newbury Park, CA: Sage.
- Glueckauf, R.L., Liss, H.J., McQuillen, D.E., Webb, P.M., Dairaghi, J., & Carter, C.B. (2002). Therapeutic alliance in family therapy for adolescents with epilepsy: An exploratory study. *The American Journal of Family Therapy, 30*, 125–139.
- Glueckauf, R. L., Picha, D., & Webb, P. M. (1994). *The Family and Disability Assessment System Manual*. Unpublished manuscript, Indiana University–Purdue University at Indianapolis.
- Greenson, R.R. (1967). *The technique and practice of psychoanalysis (Vol. 1)*. New York: International University Press.
- Greenson, R.R. (1965). The working alliance and the transference neurosis. *Psychoanalytic Quarterly, 34* p. 155-181.

- Hartley, D. E., & Strupp, H. H. (1983). The therapeutic alliance: its relationship to outcome in brief psychotherapy. In J. Masling (Ed.), *Empirical studies of psychoanalytic theories, vol. 1.* (pp. 1–37) Hillsdale, NJ: Analytical Press.
- Harvey, S. (2008). An initial look at the outcomes for dynamic play therapy. *International Journal of Play Therapy, 17*, 86–101.
- Hawley, K.M., & Garland, A.F. (2008). Working alliance in adolescent outpatient therapy: Youth, parent and therapist reports and associations with therapy outcomes. *Child Youth Care Forum, 37*, 59–74.
- Hawley, K.M., & Weisz, J.R. (2005). Youth versus parent working alliance in usual clinical care: Distinctive associations with retention, satisfaction, and treatment outcome. *Journal of Clinical Child and Adolescent Psychology, 34*, 117–128.
- Hoge, R. D., Andrews, D. A., Faulkner, P., & Robinson, D. (1989). The Family Relationship Index: Validity data. *Journal of Clinical Psychology, 45*, 897–903.
- Hogue, A., Dauber, S., Stambaugh, L. F., Cecero, J. J., & Liddle, H. A. (2006). Early therapeutic alliance and treatment outcome in individual and family therapy for adolescent behavior problems. *Journal of Consulting and Clinical Psychology, 74*, 121–129.
- Holahan, C. J., & Moos, R. H. (1983). The quality of social support: Measures of family and work relationships. *British Journal of Clinical Psychology, 22*, 157–162.
- Horvath, A. O., & Bedi, R. P. (2002). The Alliance. In J. Norcross (Ed.), *Psychotherapy Relationships That Work: Therapist Contributions and*

- Responsiveness to Patients* (pp. 37-70). New York: Oxford University Press.
- Psychotherapy. Oxford, New York.
- Horvath, A. O., & Greenberg, L. S. (1989). Development and validation of the working alliance inventory. *Journal of Counseling Psychology, 36*, 223–233.
- Horvath, A., & Symonds, R.D. (1991). Relation between working alliance and outcome in psychotherapy: A meta-analysis. *Journal of Counselling Psychology, 38*, 39-149.
- Lambert, M. J., Hansen, N. B., Umphress, V., Lunnen, K., Okiishi, J., Burlingame, G. M., et al. (1996). *Administration and scoring manual for the OQ-45.2 (outcome questionnaire)* Stevenson, MD: American Professional Credentialing Services.
- Larsen, D.L., Attkisson, C.C., Hargreaves, W.A., & Nguyen, T. D. (1979). Assessment of client/patient satisfaction: Development of a general scale. *Evaluation and Program Planning, 2*, 197–207.
- Johnson, L.N., & Ketring, S.A. (2006). The therapy alliance: a moderator in therapy outcome for families dealing with child abuse and neglect. *Journal of Marital and Family Therapy, 32*, 345–354.
- Johnson, L. N., Ketring, S. A., & Abshire, C. (2003). The revised inventory of parent attachment: Measuring attachment in families. *Contemporary Family Therapy, 25*, 333–349.
- Johnson, L.N., Ketring, S.A, Rohacsa, J., & Brewera, A.L. (2006). Attachment and the therapeutic alliance in family therapy. *The American Journal of Family Therapy, 34*, 205–218.
- Johnson, L.N., Wright, D., & Ketring, S.A (2002). The therapeutic alliance in home-based family therapy: Is it predictive of outcome? *Journal of Marital and*

*Family Therapy*, 28, 93-102.

Juffer, F., Bakermans-Kranenburg, M.J., & Van IJzendoorn, M.H. (2008).

Introduction and outline of the VIPP and VIPP-R program. In F. Juffer, M.J. Bakermans-Kranenburg, & M.H. Van IJzendoorn (Eds.), *Promoting positive parenting: An attachment-based intervention*. Mahwah, NJ: Erlbaum.

Karver, M.S., Handelsman, B.H., Fields, S., & Bickman, L. (2006). Meta-analysis of therapeutic relationship variables in youth and family therapy: The evidence for different relationship variables in the child and adolescent treatment outcome literature. *Clinical Psychology Review*, 26, 50-65.

Kazdin, A. E., Siegel, T. C., & Bass, D. (1990). Drawing upon clinical practice to inform research on child and adolescent psychotherapy: A survey of practitioners. *Professional Psychology: Research and Practice*, 21, 189–198.

Kazdin, A. E., Marciano, P. L., & Whitley, M. (2005). The therapeutic alliance in cognitive-behavioral treatment of children referred for oppositional, aggressive, and antisocial behavior. *Journal of Consulting and Clinical Psychology*, 73, 726–730.

Kazdin, A. E., & Whitley, M., (2006). Child–therapist and parent–therapist alliance and therapeutic change in the treatment of children referred for oppositional, aggressive, and antisocial behavior. *Journal of Consulting and Clinical Psychology*, 74, 346–355.

Kazdin, A.E., Whitley, M., & Marciano, P.L. (2006). Child–therapist and parent–therapist alliance and therapeutic change in the treatment of children referred for oppositional, aggressive, and antisocial behaviour. *Journal of Child Psychology and Psychiatry*, 47, 436–445.

Kendall, P.C., & Ollendick, T.H. (2004). Special series current issues and ideas in

- anxiety disorders in children and adolescents. *Cognitive and Behavioral Practice, 11*, 65-74.
- Kovacs, M. (1992). *Children's Depression Inventory manual*. NorthTonawanda, NY: Multi-Health Systems.
- Liddle, H. A. (2002). *Multidimensional family therapy for adolescent cannabis users* (DHHS Publication No. SMA 02-3660). Rockville, MD: Substance Abuse & Mental Health Services Administration, Centre for Substance Abuse Treatment.
- Long, M. P., Glueckauf, R. L., & Rasmussen, J. L. (1998). Developing family counselling interventions for adults with episodic neurological disabilities: Presenting problems, persons involved, and problem severity. *Rehabilitation Psychology, 43*, 101-117.
- Luborsky, L. (1976). Helping alliances in psychotherapy. In Claghorn (Ed.), *Successful psychotherapy*, (pp. 92-116). New York: BrunnerMazel.
- Luborsky, L. (1984). *Principles of Psychodynamic Psychotherapy*. New York: Basic Books.
- Luborsky, L. (1994). Therapeutic alliances as predictors of psychotherapy outcomes: factors explaining the predicitive success. In A.O. Horvarth., & L.S. Greenberg. (Ed.), *The working alliance: theory, research and practice*. (pp. 38 - 51). New York: John Wiley & Sons, Inc.
- Luborsky, L., Crits-Christoph, P., Alexander, L., Margolis, M., & Cohen, M. (1983). Two helping alliance methods for predicting outcomes of psychotherapy: a counting signs vs. global ratings method. *Journal of Nervous and Mental Disease, 171*, 480-491.
- Luborsky, L., Barber, J., Siqueland, L., Johnson, S., Najavits, L., Franks, A. &



- Daley, D. (1996). The revised Helping Alliance Questionnaire (HAQ-II). *Journal of Psychotherapy Practice and Research, 5*, 260–271.
- Martin, D.J., Garske, J.P., & Davis, M.K. (2000). Relation of the therapeutic alliance with outcome and other variables: A meta-analytic review. *Journal of Consulting and Clinical Psychology, 68*, 438-450.
- McLeod, B. D., & Weisz, J. R. (2005). The therapy process observational coding system-alliance scale: measure characteristics and prediction of outcome in usual clinical practice. *Journal of Consulting and Clinical Psychology, 73*, 323–333.
- Morrissey-Kane, E., & Prinz, R.J. (1999). Engagement in Child and Adolescent Treatment: The Role of Parental Cognitions and Attributions *Clinical Child and Family Psychology Review, 2*, 183-198.
- Nock, M. K., & Kazdin, A. E. (2001). Parent expectancies for child therapy: Assessment and relation to participation in treatment. *Journal of Child and Family Studies, 10*, 155-180.
- Norcross, J.C. (2010). In B.L. Duncan, S.D. Miller, Wampold, B.E., & M.A. Hubble (Eds.), *The heart and soul of change: delivering what works in therapy* (2<sup>nd</sup> ed., pp 113-137). Washington, DC, US: American Psychological Association.
- Ollendick, T., & Russ, S. (1999). Psychotherapy with children and families: Historical traditions and current trends. In S. Russ & T. Ollendick (Eds.), *Handbook of psychotherapy with children and families* (pp. 3–13). New York: Kluwer Academic/Plenum Publishers.
- Pereira, T., Lock, J., & Oggins, J. (2006). Role of therapeutic alliance in family therapy for adolescent Anorexia Nervosa. *International Journal of Eating Disorders, 39*, 677–684.

- Pinsof, W. M. (1994). An integrative systems perspective on the therapeutic alliance: Theoretical, clinical, and research implications. In A. O. Horvath & L. S. Greenberg (Eds.), *The working alliance: Theory, research, and practice* (pp. 173–195). New York: John Wiley & Sons.
- Pinsof, W. M., & Catherall, D. R. (1986). The integrative psychotherapy alliance: family, couple and individual therapy scales. *Journal of Marital and Family Therapy, 12*, 132–151.
- Robbins, M.S., Liddle, H.A., Turner, C.W., Dakof, G.A., Alexander, J.F., & Kogan, S.M. (2006). Adolescent and parent therapeutic alliances as predictors of dropout in multidimensional family therapy. *Journal of Family Psychology, 20*, 108–116.
- Robbins, M.S., Mayorga, C.C., Mitrani, V.B., Szapocznik, J., Turner, C.W., & Alexander, J.F. (2008). Adolescent and parent alliances with therapists in brief statehick family therapy with drug-using Hispanic adolescents. *Journal of Marital and Family Therapy, 34*, 316–328.
- Robbins, M.S., Turner, C.W., & Alexander, J.F. (2003). Alliance and dropout in family therapy for adolescents with behavior problems: Individual and systemic effects. *Journal of Family Psychology, 17*, 534–544.
- Rogers, C. R. (1965). *Client-centered therapy: its current practice, implications, and theory*. Boston: Houghton Mifflin.
- Rosenberg, M. (1986). *Conceiving the self*. Malabar, FL: Krieger.
- Rosenberg, M. (1989). *Society and the adolescent self-image (revised edition)*. Middletown, CT: Wesleyan University Press.
- Sarason, I. G., Levine, H. M., Basham, R. B., & Sarason, B. R. (1983). Assessing

- social support: The Social Support Questionnaire. *Journal of Personality and Social Psychology*, *44*, 127–139.
- Shaffer, D., Fisher, P., Dulcan, M. K., & Davies, M. (1996). The NIMH Diagnostic Interview Schedule for Children Version 2.3 (DISC 2.3): Description, acceptability, prevalence rates, and performance in the MECA study. *Journal of the American Academy of Child and Adolescent Psychiatry*, *35*, 865–877.
- Shaffer, D., Gould, M. S., Brasic, J., Ambrosini, P., Fisher, P., Bird, H., & Aluwahlia, S. (1983). A Children's Global Assessment Scale (CGAS). *Archives of General Psychiatry*, *40*, 1228–1231.
- Safran, J.D., & Muran, J.C. (2000). Resolving therapeutic alliance ruptures: Diversity and integration. *Journal of Clinical Psychology*, *56*, 233–243.
- Shelef, K., Diamond, G.M., Diamond, G.S., & Liddle, H.A. (2005). Adolescent and parent alliance and treatment outcome in multidimensional family therapy. *Journal of Consulting and Clinical Psychology*, *73*, 689–698.
- Shirk, S.R., & Karver, M. (2003). Prediction of treatment outcome from relationship variables in child and adolescent therapy: A meta-analytic review. *Journal of Consulting and Clinical Psychology*, *71*, 452–464.
- Shirk, S.R., & Russell, R.L. (1996). *Change processes in child psychotherapy; revitalizing treatment and research* (pp. 153–155). New York: Guilford Press.
- Shirk, S.R., & Saiz, C.C. (1992). Clinical, empirical and developmental perspectives on the therapeutic relationship in child psychotherapy. *Development and Psychopathology*, *4*, 713–728.
- Sobell, L.C., & Sobell, M.B. (1996). *Timeline Follow-Back user's guide: A calendar method for assessing alcohol and drug use*. Toronto, Ontario, Canada: Addiction Research Foundation.

- Spielberger, C. (1973). *Manual for the State–Trait Anxiety Inventory for Children*. Palo Alto, CA: Consulting Psychologists Press.
- Stallard, P. (2002). Cognitive behavior therapy with children and young people: A selective review of key issues. *Behavioural and Cognitive Psychotherapy*, *30*, 297–309.
- Stiles, W. B., & Snow, J. S. (1984). Dimensions of psychotherapy session impact across sessions and across clients. *British Journal of Clinical Psychology*, *23*, 59–63.
- Stolk, M.N., Mesman, J., van Zeijl, J., Alink, L.R.A., Bakermans-Kranenburg, M.J., van IJzendoorn, M.H.F., & Koot, M. (2008). Early parenting intervention aimed at maternal sensitivity and discipline: A process evaluation. *Journal of Community Psychology*, *36*, 780–797.
- Straus, M. A. (1979). Measuring intrafamily conflict and violence: The Conflict Tactics (CT) Scales. *Journal of Marriage and the Family*, *41*, 75–88.
- Strupp, H., & Binder, J. (1984). *Psychotherapy in a new key, a guide to time-limited dynamic psychotherapy*. New York: Basic Books, Inc..
- Tichenor, V., & Hill, C. E. (1989). A comparison of six measures of working alliance. *Psychotherapy*, *26*, 195-199.
- Tolan, P.H., Hanish, L.D., McKay, M.M., & Dickey, M.H. (2002). Evaluating process in child and family interventions: Aggression prevention as an example. *Journal of Family Psychology*, *16*, 220–236.
- Tracey, T. J., & Kokotovic, A. M. (1989). Factor structure of the working alliance inventory. *Psychological Assessment*, *1*, 207–210.
- Wampold, B.E. (2010) The research evidence for common factors models: A historically situated perspective. In B.L. Duncan, S.D. Miller, Wampold,

B.E., & M.A. Hubble (Eds.), *The heart and soul of change: delivering what works in therapy* (2<sup>nd</sup> ed., pp. 49-83). Washington, DC, US: American Psychological Association.

## **PART TWO: Empirical Paper**

**Does therapist adherence and parent-therapist alliance predict successful outcome in a CBT guided self-help intervention for children diagnosed with anxiety disorders?**

## **Abstract**

**Aims:** Cognitive-behavioural therapy (CBT) delivered via parents is an effective treatment for childhood anxiety disorders that are severe and disabling.

Understanding more about the therapeutic process may offer a means to further optimise treatment. This study explored the association between therapist adherence and parent-therapist alliance and outcome in a guided manualised self-help CBT intervention for children diagnosed with anxiety disorders.

**Method:** Parents of 60 children (aged 7-12 years) received the intervention over eight sessions from a specialist anxiety clinic as part of a larger randomized controlled trial. Alliance and adherence were coded by independent raters from audio recordings of session two and session seven.

**Results:** At post-treatment 43% of children no longer met criteria for their primary diagnoses, 71% were rated as 'improved', and parents and children reported significant reductions in anxiety severity and impact. Alliance and adherence were rated high in both session two and seven and were highly correlated. A strong parent-therapist alliance at session seven predicted parent and child rated improvements. No other significant associations were found.

**Conclusion:** A stronger alliance later in therapy was associated with participant rated outcomes and was not confounded by pre-treatment demographics or symptom scores. Findings are discussed in relation to past research and methodological issues, such as the direction of causality and restricted variability in alliance scores. Clinical, training, and research implications and recommendations are made.

## **Introduction**

Anxiety disorders are one of the most common mental health disorders in young people (Cartwright-Hatton, McNicol, & Doubleday, 2006) and can significantly impair emotional, social and academic functioning (Pine, 1997). If left untreated, childhood anxiety presents a risk for adult mental health disorders and emotional well-being (Keller et al., 1992; Pine, 1997; Woodward & Fergusson, 2001). It is therefore important to develop effective and efficacious therapeutic interventions for this problem.

Cognitive-behavioural therapy (CBT) has been at the forefront of experimental research to demonstrate effective treatment for mental disorders generally (Gilbert & Leahy, 2007) and there are promising findings in the treatment of child anxiety. A Cochrane review of CBT for children diagnosed with anxiety disorders found approximately 50% of children experienced a remission of their primary diagnosis at post-treatment (James, Soler & Weatherall, 2006). Another review found a remission rate of 56% for CBT compared to 34% in wait list control groups for children and adolescents over 6 years of age (Cartwright-Hatton, Roberts, Chitsabean, Fothergill, & Harrington, 2004). Subsequent reviews have found comparable remission rates in contrast to wait list and alternative treatment controls (In Albon & Schneider, 2007; Ishikawa, Okajima, Matsuoka, & Sakano, 2007).

Traditionally children have been the direct recipients of CBT (Kovacs & Lohr, 1995), but there has been growing interest in the role of parents. Outcomes for parent inclusive treatment have been comparable to child-focused treatment. This was demonstrated in a meta-analysis of 24 CBT studies that found a recovery rate of 64% for child-focused treatment and 77% for family-focused treatment, or 54% and 65% respectively on the basis of intention to treat analyses (In Albon & Schneider, 2007).



Family-focused treatment may even facilitate more improvement as indicated by Creswell and Cartwright-Hatton (2007) who found that in five of seven randomized controlled trials of CBT for childhood anxiety, 15% to 45% more children recovered when receiving family-focused CBT as compared to child-focused CBT. Another study of group CBT found that when parents were involved in treatment children used more active coping strategies at post-treatment in addition to the reductions in anxious and depressive symptoms reported when children received treatment independently (Mendlowitz et al., 1999). Therefore, parent inclusive CBT has been found to be at least as effective as child-focused CBT, with some studies reporting additional gains.

Involving parents makes sense when considering the important part they play in the successful progression of their child's treatment. Parents play a critical role from the outset as children and adolescents rarely self-refer and often come to therapy at the pre-contemplative stage of change (DiGiuseppe, Linscott, & Jilton, 1996; Shirk & Karver, 2003). Therefore, parents often instigate treatment through help seeking, or agreeing to treatment, and ensuring session attendance. In a review of child and adolescent CBT research, Stallard (2002) identified three key roles for parents. Firstly, parents can act as facilitators in the transfer of therapy skills into everyday life. Secondly, parents can take on the role of co-therapist, for example, by monitoring progress and supporting the completion of therapy tasks. Thirdly, parents can be clients, for example, by learning new skills or by addressing potential barriers to treatment, which can include how parents understand their child's difficulties, their perceived ability to cope with these difficulties, and their understanding and expectations of therapy (Morrissey-Kane & Prinz, 1999; Nock & Kazdin, 2001). This is relevant in the area of child anxiety where parental anxiety can make it

difficult for parents to support their child's treatment, for example, due to anxiogenic parenting styles such as modelling anxious behaviour and restricting the child's autonomy to explore the environment (Cobham, Dadds, & Spence, 1998; Creswell, Willetts, Murray, Singhal, & Cooper, 2008).

The inclusion of parents may also be particularly relevant for younger children who rely more on their parents for support and instrumental aid than adolescents who generally rely more on their peers (Furman & Buhrmester, 1985; Buhrmester & Furman, 1990), for example, in a study of CBT versus CBT with family treatment for childhood anxiety, younger children (aged 7 - 10 years) did significantly better in combined CBT and family treatment, whereas it made no difference for older children (aged 11 - 14 years) (Barrett, Dadds, & Rapee, 1996).

There is mounting evidence to suggest that children may not need to be directly involved in treatment at all. A study delivering CBT to groups of parents of anxious children (aged 4 - 9 years) in which the children were not involved, found 55% of children no longer met criteria for their principal diagnosis at post-treatment and gains were maintained at six and twelve month follow up (Waters, Ford, Wharton, & Cobham, 2009). In a feasibility trial of the intervention used in this study (guided manualised self-help CBT delivered to parents of anxious children aged 7 - 12 years), 61% of children no longer met criteria for their primary anxiety disorder diagnosis at post-treatment, 76% were rated as 'much/ very much' improved and children and parents reported significant reductions in anxiety severity, impact and depression (Creswell et al., 2010).

Therefore, family-focused CBT can be as effective, if not more so, as treatment with the child alone, and because of the important roles that parents play in their child's treatment there are several potential benefits to their involvement. With

younger children treatment can be delivered effectively entirely through parents, without the direct involvement of the child. However, there remains up to 50% of children who do not recover from their primary diagnosis following treatment. This raises important questions about what makes treatment successful, what the mechanisms of change are, and how treatment can be improved so that more children are diagnosis free at the end of treatment.

When trying to answer questions such as these, research has looked to common and specific factors in treatment (Castonguay & Grosse, 2006). Common factors relate to across-model process variables such as the therapeutic alliance, and specific factors relate to model specific skills and techniques. In a review of the research with adult populations, Norcross (2002) identified that 30% of the variance in outcome was accounted for by common factors, primarily the therapeutic relationship. This was much greater than the contributions of therapeutic technique which accounted for 15% of outcome variance. A further 15% was attributed to expectancy effects, and 40% to extra-therapeutic change.

Of course, the interest in the therapeutic alliance is not recent. Studies have long looked to the therapeutic alliance to understand more about the process of therapy and its association to outcome. Bordin's (1976, 1994) concept of the therapeutic alliance is one of the most widely accepted and used. It proposes three components: 1) therapist and client agreement and collaboration on the tasks of therapy, 2) mutual agreement on the goals of therapy, and 3) a trusting, accepting bond. The importance of this relational construct in therapy has been supported by meta-analyses that have found a moderate and consistent relationship between therapeutic relationship and outcome across different types of treatment, length of treatment, problem type, person rating alliance and outcome, and measurement

points (early, middle, late in therapy) in the adult (Horvarth & Symonds, 1991; Martin, Garske, & Davis, 2000) and child literature (Shirk & Karver, 2003).

It could be argued that CBT has typically focused more on specific factors, namely the transfer of skills and techniques and that these have taken precedence in research trials (Gilbert & Leahy, 2007). Kendall (2000) comments that finding effective treatments may be a necessary first step to take before exploring common factors such as the therapeutic alliance. That is not to say that the alliance has been overlooked in CBT. Indeed, collaboration between the therapist and client has always been viewed as essential for the successful facilitation of therapy skills and techniques (Beck, Rush, Shaw, & Emery, 1979). Over the last 10 years increased attention has been paid to the therapeutic relationship in a bid to understand more about how technique and relationship interact, and how they impact on outcome (Gilbert & Leahy, 2007; Safran, 1998, Safran & Segal, 1990). However, in comparison to the adult literature, there is relatively little research within child-focused CBT, and virtually none for the parent-therapist alliance and outcome.

Although to date the parent-therapist alliance has not been examined within a CBT framework, research in relation to other therapeutic models (primarily family therapy) reveals that a good parent-therapist alliance can reduce the risk of early treatment termination (Robbins, Turner, & Alexander, 2003, Robbins et al, 2008; Flicker, Turner, Waldron, Brody, & Ozechowski, 2008; Kazdin, Whitley, & Marciano, 2006; Kazdin & Whitley, 2006), and predict successful child and/ or family outcomes for substance abuse (Hogue et al., 2006), externalizing behavior (Hawley & Garland, 2008; Hogue, Dauber, Stambaugh, Cecero, & Liddle, 2006), internalizing symptoms (McLeod & Weisz, 2005), symptom distress (Johnson, Wright, & Ketring, 2002; Johnson & Ketring, 2006), client rated improvement

(Friedlander et al 2006; Escudero, Friedlander, Valerac, & Abascald, 2008; Kazdin, Marciano, & Whitley, 2005; Kazdin et al., 2006), and positive parenting practices (Kazdin et al., 2006; Kazdin & Whitley, 2006; Stolk et al., 2008; Tolan, Hanish, McKay, & Dickey, 2002). These studies therefore lend support to understanding more about the parent-therapist relationship in CBT for child anxiety which remains under researched.

There has also been interest in understanding more about the contribution of model specific factors to outcomes in child treatment, particularly in the drive to establish evidence-based effective and efficacious treatments (Fabiano & Pelham, 2002). It could be argued that one of the strengths of CBT has been its focus on theory-driven skills and techniques and there is an implicit belief that model adherence is important, for example, child anxiety research often reports good model adherence although this is not always explicitly associated with outcome (Cobham et al., 1998; Creed & Kendall, 2005; Kendall et al., 1997). Those studies that have explored the adherence-outcome relationship have reported mixed results. A meta-analysis of 36 adult treatment studies found that overall neither adherence nor therapist competence were associated with outcomes, with an effect size close to zero, but studies were heterogenous with some finding a significant association (Webb, DeRubeis, & Barber, 2010). Similarly, Liber et al. (2010) found no evidence for a significant relationship between adherence and outcome in individual and group CBT for children with anxiety disorders. However, Feeley, DeRubeis, and Gelfand (1999) found theory-specific techniques delivered early in treatment predicted a positive change in depressive symptoms in their sample of 25 adults who had received 12 sessions of cognitive therapy for depression.

Despite these mixed results, there are recognised benefits to manualised treatments as they enable comparability across studies, replication, treatment integrity, technical competence, and a systematic way of training and supervising therapists (Fabiano & Pelham, 2002; Lambert & Ogles, 2004). However, other practitioners have argued that manuals restrict clinical flexibility, creativity and responsiveness, and may even damage the therapeutic relationship and negatively impact on outcomes, as summarised and discussed by Addis, Wade, and Hatgis (1999). This is not unfounded given the findings of meta-analyses of adult treatment studies reporting an effect size of around zero for associations between specific treatments and outcome (Wampold et al., 1997). Other reviews have also found limited model-outcome effects (Ahn & Wampold, 2001; Brown, Dreis, & Nace, 1999; Shadish, Matt, Navarro, & Phillips, 2000).

However, this perhaps places alliance and adherence in a falsely dichotomous position (Butler & Strupp, 1986). In fact, adherence is not necessarily distinct from the therapeutic relationship and Wilson (1997) emphasises the need for clinicians to be flexible and responsive when working within a protocol driven treatment. A good relationship offers a safe and supportive context in which therapeutic techniques can be facilitated. Equally, the inclusion of the task and goal dimension in Bordin's definition of alliance captures the contribution of technique in addition to a strong and supportive bond. Therefore, alliance and adherence overlap and can be complementary, although this interaction is often not explored with studies often focusing on the independent effects of alliance or adherence. An improved understanding of common and specific factors in therapy, and how they interact, will provide a means to enhance outcomes through theoretical, research and clinical developments.

In summary, CBT delivered via parents has been shown to be effective for younger children who are diagnosed with anxiety disorders. What is less well understood is what accounts for the variance in treatment outcome. A good therapeutic alliance has consistently been shown to predict successful outcomes in child and adult treatment, yet much less is known about the parent-therapist alliance-outcome association, particularly in CBT for child anxiety. In contrast, there has been mixed findings in relation to treatment adherence and outcomes with some debate about whether adhering to a manualised treatment stifles the therapeutic alliance and negatively impacts on outcomes. However, to date there are no published studies that have explored the association of alliance and adherence to outcomes in CBT for child anxiety when treatment is delivered via parents, or the interaction between alliance and adherence.

This study aimed to address this gap in the literature and asked the central question; does a good parent-therapist alliance and/or therapist adherence to an effective guided self-help CBT treatment predict successful child outcomes? Successful outcomes were considered to be the child no longer meeting criteria for his or her primary anxiety disorder diagnosis at post-treatment, clinician rated improvement, and reductions in child and parent rated anxiety severity and impact. The findings are intended to add to the therapy process literature, particularly in the area of childhood anxiety disorders, and inform clinical practice with a view to improving treatment effectiveness.

### **Hypotheses**

1. The main hypothesis of this study was that the therapeutic alliance would predict child treatment outcomes after controlling for pre-treatment therapist, parent and child characteristics and pre-treatment symptom severity.

Specifically, higher ratings of therapeutic alliance would be associated with a) more children free of their primary anxiety disorder diagnosis at post treatment, b) clinician rated improvement, and c) reductions in child anxiety severity and impact.

2. This study also explored the association between therapist adherence to the treatment manual and outcomes (more children free of their primary anxiety disorder diagnosis at post treatment, clinician rated improvement, and reductions in child anxiety severity and impact), and a possible interaction between alliance and adherence.

## **Method**

### **Participants**

#### **Inclusion criteria**

Families were included if their child was 7 to 12 years of age and had a current primary anxiety disorder diagnosis of DSM-IV generalized anxiety disorder, social phobia, separation anxiety disorder, or panic disorder/agoraphobia or specific phobia, and parents agreed to attend treatment. Maternal anxiety is a strong predictor of poorer treatment outcome (Cobham et al., 1998; Creswell et al., 2008; Creswell et al., 2010), therefore only those who did not meet diagnostic criteria were included.

Participants were excluded if the child had a significant physical or intellectual impairment (including autistic spectrum disorders), or had a current prescription of psychotropic medication (or, if psychotropic medication was prescribed, it must have been at a stable dose for at least one month with agreement to maintain that dose throughout the study). Mothers were excluded if they had a current anxiety disorder diagnosis, significant intellectual impairment, severe co-morbid disorder such as major depressive disorder, psychosis, substance/alcohol



dependence, or were prescribed psychotropic medication (or, if psychotropic medication was prescribed, it must have been at a stable dose for at least one month with agreement to maintain that dose throughout the study).

### **Participant demographics**

Participants were 60 parents of children with a current anxiety disorder diagnosis (32 boys, 28 girls) who had been recruited into a randomized controlled trial (RCT) at a specialist child anxiety clinic and had been randomized into the eight session guided manualised self-help CBT treatment condition. Only treatment completers were included.

Children ranged in age from 7-12 years ( $M = 9.4$ ,  $SD = 1.67$ ); 49 (84%) of the children were White British, 2 (3%) were White and Asian, 2 (3%) were Pakistani, and 1 (2%) child was in each of the following ethnic groups: White Irish, White and Black Caribbean, Indian, and other Black and Mixed backgrounds. Principal pre-treatment Axis I diagnoses were specific phobias ( $n = 15$ , 25%), social phobia ( $n = 14$ , 23%), generalized anxiety disorder ( $n = 13$ , 22%), separation anxiety disorder ( $n = 12$ , 20%), panic disorder ( $n = 2$ , 3%), agoraphobia ( $n = 2$ , 3%), and anxiety disorder not otherwise specified ( $n = 1$ , 2%). Rates of co-morbidity were high with 45 (75%) children meeting criteria for at least one other diagnosis (see Table 1a).

Thirty-one (52%) parents were married, 11 (18%) were remarried, 10 (17%) were divorced or separated, 3 (5%) lived with a partner, 2 (3%) were single, and 1 (2%) was widowed. All parents had at least completed school education and 47 (83%) mothers and 38 (81%) fathers had completed further education. Forty-six (85%) mothers were in full or part-time employment, 8 (14%) were unemployed, and 1 (2%) was retired. All fathers who returned data were in full or part time employment (see Table 1b).

Three male therapists and 16 female therapists aged 25 to 58 years delivered the intervention; 5 (26%) were masters/ doctoral students, 4 (21%) were graduate psychologists, 4 (21%) were CBT diploma students, 3 (16%) were clinical psychologists, 2 (11%) were trainee clinical psychologists, and 1 (1%) was a psychiatrist. Seven participants were seen by male therapists, and 43 by female therapists (see Table 1c).

### **Power calculation**

Tabachnick and Fidell (2006a) provide a rule of thumb for a medium effect size  $f_2 = .15$  (Cohen, 1988) relationship between the independent and dependent variables, with  $\alpha = .05$  and power=.80. For multiple regression this is  $N \geq 50 + 8m$  ( $m$  is the number of independent variables). Therefore, for two predictor variables a sample size of 64 was required.

### **Ethics**

Ethical approval for this study was obtained from the Local Research Ethics Committee (07/H0505/157) and the University Department Research Ethics Committee (within which the clinic was based) (07/49) as part of the larger RCT ethics application. Participants were fully informed of privacy and confidentiality and their right to withdraw from the study at any time. Formal written consent was obtained from all participants.

Table 1a. Participant demographics: children

Demographic	n (%)
<b><i>Gender</i></b>	
Male	32 (53%)
Female	28 (47%)
<b><i>Ethnicity</i></b>	
White British	49 (84%)
White and Asian	2 (3%)
Pakistani	2 (3%)
White Irish	1 (2%)
White and Black Caribbean	1 (2%)
Indian	1 (2%)
Other Black background	1 (2%)
Other Mixed background	1 (2%)
<b><i>ADIS Diagnosis</i></b>	
Specific Phobia	15 (25%)
Social Phobia	14 (23%)
Generalised Anxiety Disorder	13 (22%)
Separation Anxiety	12 (20%)
Panic Disorder	2 (3%)
Agoraphobia	2 (3%)
ADNOS	1 (2%)

*Note:* ADNOS – Anxiety Disorder Not Otherwise Specified

Table 1b. Participant demographics: parents

Demographic	n (%)
<b><i>Marital Status</i></b>	
Married	31 (52%)
Remarried	11 (18%)
Divorced/ Separated	10 (17%)
Living with partner	3 (5%)
Single	2 (3%)
Widowed	1 (2%)
<b><i>Educational background</i></b>	
<i>School education</i>	
Mothers	10 (17%)
Fathers	11 (19%)
<i>Further education</i>	
Mothers	47 (83%)
Fathers	38 (81)
<b><i>Occupational Status</i></b>	
<i>Full or part time employment</i>	
Mothers	46 (85%)
Fathers	50 (86%)
<i>Unemployed</i>	
Mothers	8 (14%)
Fathers	0
<i>Retired</i>	
Mothers	1 (2%)
Fathers	0

Table 1c. Participant demographics: therapists

Demographic	n (%)
<b><i>Gender</i></b>	
Male	3 (16%)
Female	16 (84%)
<b><i>Occupation</i></b>	
Masters/ Doctoral Student	5 (26%)
Graduate Psychologist	4 (21%)
CBT Diploma Student	4 (21%)
Clinical Psychologist	3 (16%)
Trainee Clinical Psychologist	2 (11%)
Psychiatrist	1 (1%)

### **Procedure**

Anxiety diagnoses, severity, and impact were assessed at pre-treatment and five weeks post-treatment by research staff blind to treatment allocation. Alliance and adherence measures were completed for one early session (session two) and one late session (session seven) after participants had completed treatment. Process ratings were completed by two raters; a third year psychology doctoral student and an assistant psychologist. Both raters were blind to pre and post assessment results and were not familiar with the therapists delivering the treatment. Raters trained in using the alliance and adherence measures until they achieved a high level of inter-rater reliability (until the mean intra-class coefficient reached .80; Shrout & Fleiss, 1979). Once reliability was reached, raters independently scored alliance and adherence for each session and consulted every fifth session to prevent rater drift.

## **Intervention**

Parents received four face-to-face and four telephone sessions over eight weeks. Sessions one, two, four and seven were face-to-face sessions (4 x 1 hour), and sessions three, five, six and eight were telephone sessions (4 x 15 minutes). Face-to-face sessions were conducted in the clinic or in participant's homes. The intervention followed a guided manualised self-help CBT approach based on the book 'Overcoming your child's fears and worries' (Creswell & Willetts, 2007). Content included; psychoeducation about anxiety, identifying and challenging thoughts, behavioural experiments, addressing parental responses and behaviour (e.g. modelling, praise, and rewards), graded exposure using a step plan, addressing unhelpful thoughts, problem solving, and relapse prevention/ keeping it going. Every family was given a copy of the book and each session was mapped closely onto the book chapters. Sessions included various activities such as discussions, completing handouts, and role plays. Parents completed homework tasks in between sessions independently and with their child. The role of the therapist was to support and encourage parents with the self-help treatment, rehearse skills, and to problem solve any difficulties that arose. Therapists were trained by clinical psychologists who were experienced in using the approach and received regular supervision throughout treatment delivery.

## **Measures**

### ***Outcome measure.***

*The Anxiety Disorders Interview Schedule for Children/Parents (ADIS-C/P;* Silverman & Albano, 1997) is a widely used semi-structured interview covering multiple diagnostic domains: separation anxiety disorder, social phobia, generalized anxiety disorder, specific phobias, panic, agoraphobia, obsessive-compulsive

disorder, depression, dysthymia, attention deficit hyperactivity disorder, oppositional disorder, and conduct disorder. Severity is scored on an 8-point scale ranging from 0 (no interference in daily life) to 8 (extreme interference in daily life) by trained assessors. Presence of symptoms and severity scores of 4 to 8 indicate the presence of a disorder. The diagnosis with the highest severity score pre-treatment was classed as the primary diagnosis. Children's diagnoses were assessed pre and post-treatment by graduate psychologists trained to administer the measure. For each assessor the first 20 interviews were discussed with a consensus team led by an experienced diagnostician (clinical psychologist) and both the assessor and the team independently allocated diagnoses and severity ratings. Training continued until inter-rater reliability reached .85. Once reliability was achieved every sixth independent assessment was discussed with the consensus team to prevent rater drift. Inter-rater reliability was checked throughout. Agreement between raters in this study was excellent ( $\kappa = .98$ , ICC = .99).

*Clinical Global Impression-Improvement (CGI-I; Guy, 1976)* was allocated by the graduate psychologist or research assistant conducting the ADIS-C/P interview based on pre-post shifts in diagnosis and severity. A 7-point scale was used, from 1 (very much improved), to 7 (very much worse). The CGI was previously used in a large multisite randomised controlled treatment trial of 488 children and adolescents with anxiety disorders (Walkup et al., 2008), and in a feasibility study of the intervention used in this study in which inter-rater reliability was excellent (ICC = .96) (Creswell et al., 2010).

*The Spence Children's Anxiety Scale- child/parent report (SCAS-C/P; Spence, 1998)* is a 38 item child and parent self-report questionnaire that assesses severity of anxiety symptoms within six DSM-IV diagnostic domains. Items are

rated on a 4-point frequency scale from 0 (never) to 3 (always). The child version also includes 6 positive filler items to check for positive rater bias. It has been shown to have high internal consistency with Cronbach's  $\alpha = .92$ , and acceptable test-retest reliability of .6 (Spence, 1998; Spence, Barrett, & Turner, 2003). Nauta et al. (2003) report good reliability and validity of the scales and good correlations between the child and parent form. Cronbach's  $\alpha$  in this study was generally acceptable at .7 and above. However, this was poor for post-treatment child report  $\alpha = .57$ .

*The Child Anxiety Impact Scale* (CAIS; Langley, Bergman, McCracken, & Piacentini, 2004) is a 27-item questionnaire consisting of three subscales: home/family, school and social, designed to measure the impact of anxiety in each of these domains over the course of the previous month. Items are scored on a 4-point scale from 0 (not at all) to 3 (very much). Children and parents rated anxiety impact at pre and post treatment. The authors report good internal consistency (Cronbach's  $\alpha = .73$  to  $.87$ ), and construct validity for the parent form. Psychometric properties of the child form have not yet been published. In this study internal consistency for parent and child forms was poor ranging from  $\alpha = .32$  to  $\alpha = .48$ .

### ***Process measures***

Audio recordings of session two were rated for each participant who completed treatment ( $n = 60$ ). A subsample of recordings was coded at session seven ( $n = 35$ ). Sessions were coded in their entirety for alliance and adherence. In order to achieve acceptable inter-rater reliability, additional study specific scoring guidelines were developed.

The *Working Alliance Inventory - Observer form* (WAI; Horvarth & Greenberg, 1989; WAI-O; Tichenor & Hill, 1989) was used to assess parent-therapist



alliance. The WAI measures Bordin's three pantheoretical subscales of alliance: bonds, goals, and tasks. There are 36 items rated on a 7-point scale from 1 (Never) to 7 (Always). The WAI is one of the most widely used and accepted measures of alliance and rates highly in comparison to other alliance measures in terms of conceptual basis, construct validity, criterion and convergent validity, discriminant validity, and predictive validity (Elvins & Green, 2008). In this study, inter-rater reliability was calculated using intra-class correlation coefficients (ICC; Shrout & Fleiss, 1979). Inter-rater reliability was 'excellent' across as compared to guidelines by Cicchetti, (1994). Cronbach's alpha at session two was  $\alpha = .86$ , and at session seven  $\alpha = 0.78$ . Internal consistency was acceptable at session two ( $\alpha = .95$ ), and session seven ( $\alpha = .83$ ).

*Treatment adherence* was measured using a scale developed specifically for the treatment manual (Creswell et al., 2010). Seven general items were scored for each session (setting the agenda, inviting items for agenda, reviewing homework, addressing parental concerns, setting homework, following agenda, and inviting further queries) on a 4-point scale from 0 (information/ task not covered or wholly inaccurate) to 4 (level of detail provided as in manual and entirely accurate). The manual was then divided into subsections within each session, and adherence to each subsection scored on the same 4-point scale. In this study, inter-rater reliability was excellent for adherence at session two  $\alpha = 0.88$ , and at session seven  $\alpha = 0.89$ . Internal consistency was acceptable for adherence at session two ( $\alpha = .87$ ), and session seven ( $\alpha = .71$ ).

### **Analytic procedure**

Data analyses were conducted in SPSS version 14 using a stepped approach. First, process and outcome data was tested for normality; skew, kurtosis and outliers. Second, descriptive analyses were conducted for treatment outcome, alliance and adherence. Third, bivariate analyses were conducted with pre-treatment child, parent and therapist demographic variables and outcomes to identify possible covariates to account for in the regression analyses. Fourth, study hypotheses were tested using the following approaches; a) bivariate analyses were conducted to examine the association between process variables (alliance and adherence) and outcome variables to identify any statistically significant associations, b) process variables that were associated with outcome were entered in a regression to identify to what extent process factors predicted outcome when controlling for pre-treatment scores.

## **Results**

### **Preliminary Analyses**

#### **Tests for normality**

All process and outcome data were checked for normality; outliers, skew and kurtosis. The distribution of alliance scores for session two had a positive skew of -1.93 ( $SE = 0.31$ ), kurtosis of 3.89 ( $SE = 0.61$ ) and two outliers were identified ( $z > 3$ ). To address this, a log transformation was applied as recommended by Tabachnick and Fidell (2006b) and both outliers removed. A further four outliers were removed from the SCAS and CAIS data. All other process and outcome variables were normally distributed.

## **Descriptive analyses of treatment outcome**

### ***Clinician diagnostic assessment***

Post-treatment diagnostic data was missing for six children because they did not complete post-treatment diagnostic assessment. At post-treatment, 26 children (43%) no longer met criteria for their primary anxiety diagnosis, and 28 children (52%) continued to meet diagnostic criteria. Of the 28 children with a remaining diagnosis, there was a reduction in symptom severity  $t(27) = 2.44, p = 0.02$ . Of the 45 children for whom assessors rated post-treatment global improvement, 32 (71%) were rated as ‘much improved’ or ‘very much improved’, 5 (11%) were rated ‘minimally improved’, 6 (13%) were considered to have stayed the same, and 2 (4%) children were rated ‘minimally worse’ or ‘much worse’ (see Table 2).

### ***Parent and child self-report data for anxiety severity and impact.***

Due to the high correlation between self-report SCAS data from mothers and fathers (pre-treatment:  $r = .73$ , post-treatment:  $r = .67$ , both  $p < .01$ ), an average parent score was used for analyses. When only one parent returned data, their score was used. CAIS data was only collected from mothers. Not all parents and children returned the self-report questionnaires and therefore some data was missing for analysis.

Overall, parents and children reported a significant reduction in child anxiety severity at post-treatment on the SCAS; parents  $t(48) = 3.79, p = .01$ ; children  $t(46) = 5.41, p = .01$ . Mothers and children also reported a significant reduction in the impact of anxiety as measured by the CAIS; mothers  $t(45) = 2.54, p = .02$ , children  $t(42) = 2.19, p = .03$  (see Table 3).

Table 2. Post-treatment results for diagnostic severity and clinician rated improvement

Outcome Measure	Pre-treatment n (%)	Post-treatment n (%)
<b>Diagnostic severity:</b>		
No diagnosis	1 (2%)	24 (44%)
Mild	0	2 (4%)
Moderate	28 (47%)	23 (43%)
Severe	31 (52%)	5 (9%)
<b>CGI-I</b>		
Very much improved		14 (31%)
Much improved		18 (40%)
Minimally improved		5 (11%)
No change		6 (13%)
Minimally worse		1 (2%)
Much worse		2 (2%)

*Note:* CGI-I = Clinical Global Impression - Improvement

Table 3. Results for self-reported outcomes

Outcome Measure	Pre-treatment Mean (SD)	Post-treatment Mean (SD)	t	df	p
<b>SCAS:</b>					
Parent rating	28.72 (12.56)	21.83 (9.31)	3.79	48	.01**
Child rating	32.04 (13.17)	26.74 (14.62)	5.41	46	.01**
<b>CAIS:</b>					
Mother rating	12.57 (12.27)	7.20 (6.71)	2.54	45	.02*
Child rating	13.73 (11.14)	8.98 (8.03)	2.19	42	.03*

*Note:* SCAS = Spence Children’s Anxiety Scale, CAIS = Child Anxiety Impact Scale

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

### **Descriptive analyses of alliance and adherence.**

The means and standard deviations for parent-therapist alliance and therapist treatment adherence are reported in Table 4. Actual adherence scores are provided but further analyses used a proportionate score because the totals for session two and session seven were different due to more manualised subsections in session two (ten subsections compared to six).

Table 4. Descriptive data for alliance and adherence

Process Measure	Early ( <i>n</i> = 60)	Late ( <i>n</i> = 35)
	Mean (SD, range)	Mean (SD, range)
<b>WAI</b> <sup>a</sup>		
Total	217.91 (24.99, 130 – 245.5)	223.40 (14.90, 56.5 – 188)
Bond	71.39 (11.04, 34 – 83.5)	76.81 (5.21, 58 – 84)
Goal	71.65 (11.16, 28 – 82.5)	72.59 (7.22, 49 – 82.5)
Task	71.38 (13.19, 23.5 – 84)	74.00 (6.79, 56 – 82)
<b>Adherence</b> <sup>b</sup>		
Actual	46.32 (9.61, 21 – 63.5)	35.03 (7.59, 18 – 49)
Proportional	71.26 (14.78, 32.31 – 97.69)	66.09 (14.32, 33.96 – 92.45)

*Note:* WAI = Working Alliance Inventory

<sup>a</sup> Potential range of total WAI score = 36 to 252. Potential range of WAI subscales = 12 to 84. Higher scores indicate better alliance.

<sup>b</sup> Adherence was scored as a proportion of the total score as actual scores were different for early (0 - 61) and late sessions (0 - 45). Higher scores indicated more adherence to the manual.

In order to ascertain whether to use early and late process scores for further process-outcome analyses, temporal consistency in ratings was assessed. For those participants for whom early and late alliance were coded (*n* = 35), early alliance was moderately correlated with late alliance ( $r(34) = .36, p = .04$ ), meaning those parents with a better alliance with the therapist at session two also had a better alliance at session seven. There was a small increase in the mean alliance score from early to

late treatment sessions but this was not significant,  $t(33) = .63, p = .53$ . In contrast, the difference in adherence scores from early to late in therapy was significant,  $t(34) = 4.35, p = .01$ , ( $r(35) = .46, p = .01$ ) indicating that therapists adhered less to the manual in session seven than session two. Given these trends, process-outcome analyses were conducted on early and late process variables separately rather than using an averaged score.

### **Identification of pre-treatment covariates**

Bivariate analyses were conducted with pre-treatment child (age, gender), therapist (occupational status), and parent (marital status, educational background, occupational status) variables (see Table 1) and outcomes in order to identify whether any needed to be controlled for in further analyses as covariates. No significant associations were found, therefore, none of these factors were entered as covariates in following analyses.

### **Hypothesis Testing: Does Alliance and/or Adherence Predict Successful**

#### **Outcome?**

##### **Diagnostic change**

A series of t-tests were run to examine associations between process variables and post-treatment diagnostic category, none of which reached significance (see Table 5), therefore, further regression analyses were not conducted. These findings suggested that hypothesis 1a; that a good parent-therapist alliance would predict diagnostic change (more children free of their primary anxiety disorder diagnosis at post treatment), was not supported.

Table 5. Process-outcome t-tests for post-treatment diagnosis

	No Diagnosis (Mean, SD)	Diagnosis (Mean, SD)	t	df	p
<b>Adherence</b>					
Session 2	26 (70.12, 14.74)	28 (75.93, 13.04)	1.54	52	.13
Session 7	13 (64.43, 18.82)	20 (67.69, 11.09)	.82	31	.42
<b>WAI-O</b>					
Total Session 2	25 (2.80, 1.43)	28 (2.64, 1.43)	.45	51	.66
Total Session 7	12 (2.99, .76)	20 (2.55, 1.07)	1.22	30	.23

Note: WAI-O = Working Alliance Inventory – Observer form

### Clinician rated change

Clinician rated improvement on the CGI-I was associated a stronger parent-therapist alliance at session seven ( $r(26) = -.54$ ). The CGI-I was not significantly associated with early alliance ( $r(44) = .14$ ), early adherence ( $r(45) = .14$ ), or late adherence ( $r(27) = .27$ ). These findings suggested that hypothesis 1b; that a good parent-therapist alliance would predict clinician rated improvement was partially supported.

The CGI-I was then categorised into a dichotomous variable as informed by previous studies using the measure (Creswell et al., 2010; Walkup et al., 2008). Cases were categorised into ‘improved’ if they were rated as minimally, much, or very much improved ( $n = 36$ ), or ‘not improved’ ( $n = 9$ ) if they were rated as no change, minimally worse, or much worse. A second series of t-tests were run to



examine associations between improvement category and early and late alliance and adherence. Clinician rated improvement was associated with session seven adherence and this just reached significance  $t(25) = 2.03, p = .05$  (see Table 6). The mean scores for therapist adherence indicated that therapists adhered less to the manual in the ‘improved’ group compared to the ‘not improved’ group. However, this result must be interpreted with caution due to the unequal group sizes in the ‘improved’ group compared to the ‘not improved’ group.

Table 6. Process-outcome t-tests for clinician rated improvement

	Improved n (Mean, SD)	Not Improved n (Mean, SD)	t	df	p
<b>Adherence</b>					
Session 2	36 (77.61, 13.86)	9 (78.97, 11.43)	1.27	43	.21
Session 7	22 (63.64, 14.93)	5 (77.92, 9.52)	2.03	25	.05*
<b>WAI-O</b>					
Total Session 2	35 (2.73, 1.14)	9 (2.65, 1.99)	.16	42	.87
Total Session 7	21 (3.03, .68)	5 (1.46, 1.50)	2.30	4.40	.08

Note: WAI-O = Working Alliance Inventory – Observer form

\* $p < .05$

### **Parent and child reported change**

Next, associations between process variables and parent and child reported outcomes were examined (see Table 7). Alliance at session two was not significantly associated with any continuous outcome measure. Likewise, adherence at neither session two nor session seven was significantly associated with any outcome measure. However, significant associations were found for session seven alliance and several outcome measures, specifically; session seven mean alliance was associated with parent rated anxiety severity ( $r(27) = -.65, p < .01$ ), child rated anxiety impact ( $r(30) = -.43, p < .05$ ) and parent rated anxiety impact ( $r(27) = -.52, p < .01$ ).

Regression analyses were run to identify the predictive strength of the observed parent-therapist alliance at session seven for child outcomes when controlling for pre-treatment scores. In each of the three regressions, the relevant pre-treatment score was entered as a covariate in the first block, followed by WAI-O mean score for session seven in the second block. Observed alliance at session seven predicted parent rated post-treatment anxiety severity, explaining an additional 16.2% of the variance when controlling for pre-treatment severity. Observed alliance also predicted mother and child rated post-treatment anxiety impact, explaining 28.8% and 12.5% of the variance respectively when controlling for pre-treatment impact ratings (see Tables 8a, 8b, 8c). Therefore, hypothesis 1c that a good parent-therapist alliance would predict reductions in child anxiety severity and/or impact was partially supported.

Table 7. Process-outcome correlations for continuous outcomes

Outcome Measure	WAI Mean Session 2	WAI Mean Session 7	Adherence Session 2	Adherence Session 7
ADIS-C/P	-.07	-.20	.18	.15
CSR	.07	-.54**	.14	.27
CGI-I				
SCAS	.02	-.30	-.02	.09
Child rating	.04	-.65**	-.08	.32
Parent rating				
CAIS	-.15	-.43*	.01	.03
Child rating	.03	-.52**	-.17	.18
Parent rating				

*Note:* ADIS-C/P CSR = Anxiety Disorder Interview Schedule- Child/Parent Clinical Severity Rating, CGI = Clinical Global Impression- Improvement, SCAS = Spence Child Anxiety Scale, CAIS = Child Anxiety Impact Scale.

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

Table 8a. Regression analyses for prediction of SCAS-P by alliance at session 7

	R <sup>2</sup>	F	β	t	p	ΔR <sup>2</sup>	ΔF(p)
<b>Model 1</b>	.49	24.37	.70	4.94	.01**		
Pre-treatment Parent SCAS							
<b>Model 2</b>	.66	22.88			.01**	.16	.01**
Pre-treatment Parent SCAS			.53	4.01	.01**		
WAI Mean			-.44	3.37	.01**		

Note: Model 1  $df = (1, 25)$ , Model 2  $df = (1, 24)$

SCAS- P = Spence Children's Anxiety Scale – Parent form

\*\*  $p < .01$

Table 8b. Regression analyses for prediction of CAIS-P by alliance at Session 7

	R <sup>2</sup>	F	β	t	p	ΔR <sup>2</sup>	ΔF(p)
<b>Model 1</b>	.01	0.13	.08	.36	.72		
Pre-treatment Mother CAIS							
<b>Model 2</b>	.29	4.56			.02*	.29	.01**
Pre-treatment Mother CAIS			-.06	.33	.74		
WAI Mean			-.55	2.99	.01**		

Note: Model 1  $df = (1, 23)$ , Model 2  $df = (1, 22)$

CAIS-P = Child Anxiety Impact Scale – Parent form

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

Table 8c. Regression analyses for prediction of CAIS-C by alliance at session 7

	R <sup>2</sup>	F	β	t	p	ΔR <sup>2</sup>	ΔF(p)
<b>Model 1</b>	.17	5.18	.41	2.28	.03*		
Pre-treatment Child CAIS							
<b>Model 2</b>	.29	5.12			.01*	.13	.05*
Pre-treatment Child CAIS			.34	1.99	.06		
WAI Mean			-.36	2.10	.05*		

Note: Model 1  $df = (1, 26)$ , Model 2  $df = (1, 25)$

CAIS-P = Child Anxiety Impact Scale – Child form

\*  $p < .05$

### **Alliance-adherence relationship**

Early alliance was positively correlated with early adherence ( $r(58) = .59, p = .01$ ), meaning that therapists who adhered more to the manual at session two were also rated as having a better parent-therapist alliance. The same pattern was found for late alliance and adherence ( $r(34) = .52, p = .01$ ), although as noted above, there had been a small increase in alliance scores and a significant decrease in adherence scores from session two to session seven.

### **Discussion**

This study aimed to investigate the relationship between the parent-therapist alliance and therapist adherence to child outcomes for a guided self-help CBT intervention for anxious children. Findings indicated that following this brief intervention, just under half of the sample (43.3%) were diagnosis free at post-treatment, which was slightly lower than the 61% found in the feasibility study using this approach with 41 anxious children (Creswell et al., 2010), and slightly lower than previous studies with similar populations that report around 50-65% free of their primary diagnosis at post-treatment (Cartwright-Hatton et al., 2004; In-Albon & Schneider, 2007; James et al., 2005). However, clinicians rated 71% of children as ‘much/very much improved’ and this was comparable with 76% in the feasibility study (Creswell et al., 2010), and greater than the 59.7% of children rated improved in a large randomized controlled trial of 488 children aged 7 to 17 years who received 14 sessions of CBT for anxiety. Parents and children also reported significant post-treatment improvements in anxiety severity and impact. Therefore, clinicians, parents and children perceived significant improvements at post-treatment even though diagnostically over half of the children in this sample continued to meet criteria for their primary anxiety diagnosis. This was promising as perceived

improvements may encourage parents to persist with the intervention and this may facilitate further gains beyond session completion. Indeed, in the feasibility study over 80% of therapists and parents reported a high satisfaction with the treatment and said they would continue to use the techniques beyond treatment completion (Creswell et al., 2010). This would be an interesting hypothesis to test at the six-month follow up assessment.

There were mixed findings in relation to the relationship between alliance and outcome, which partially supported hypotheses. Neither early nor late alliance predicted diagnostic status at post-treatment. However, a better parent-therapist alliance later in therapy was associated with improvement as rated by the assessor or clinician completing the post-treatment ADIS-C/P assessment. This is of interest because whilst alliance did not predict categorical diagnostic change, there was an improvement from pre to post treatment. This may be related to the finding that for those children who still met criteria for their primary diagnosis at post-treatment, there was a significant reduction in severity. A better parent-therapist alliance later in therapy also predicted a better outcome as rated by children or their parents, specifically a reduction in anxiety severity and impact. The alliance findings were partially comparable to a study by McLeod and Weisz (2005) who found a better observed mean parent-therapist alliance (averaged across four therapy time points) predicted reductions in child and parent rated anxious and depressive symptoms at post-treatment.

This raised a question about why only later in therapy did alliance predict outcomes, and particularly the direction of causality. It may have been that improvements impacted on alliance ratings. However, as in previous meta-analyses, alliance ratings were relatively consistent over time (Horvarth & Symonds, 1991;

Martin et al., 2000) with only modestly higher ratings in session seven and this difference did not reach significance. Also findings were perhaps more robust as alliance was rated observationally, therefore avoiding issues of common rater variance.

An alternative explanation for the limited number of significant associations between alliance and outcome may be related to the restricted variability in the alliance measure as ratings were high for both early and late sessions. High ratings in this study could have been related to the type of intervention the parent's received. Parents may have had a particularly positive attitude and approach towards treatment because they were receiving guidance in how to help their child, rather than directly addressing their own psychopathology. Ceiling effects in therapy process measures are a common problem in child research when children rate the alliance (Kendall, 1994), and observed alliance has been recommended (Shirk & Karver, 2003). Consequently in the current study observer ratings of alliance were made by independent raters trained to a high level of reliability. Observer rated alliance can be advantageous to reduce the effects of common rater variance but can miss the subtle subjective aspects of the relationship that are captured when alliance is rated by clients and therapists. Audio recordings also miss important nonverbal relational information that can be accessed from video recordings. The WAI-O was used in this study due to its robust psychometric properties, strong theoretical basis, and wide use across adult and child research (Elvins & Green, 2008; Alexander & Morrison Dore, 1999). However, practical use of the measure in this context was sometimes problematic and may partially explain the elevated scores, for example, delivering a manualised intervention did not allow for much flexibility and so scoring tended to

be consistently high on items related to goal and task adherence unless parents explicitly disagreed with session contents.

If ceiling effects of the alliance measure were to partially explain the limited associations between alliance and outcome, then it could be reasonable to expect that this would have been a problem across early and late alliance but this was not the case. However, there was a significant drop in adherence scores later in therapy and this was of interest because the late alliance-outcome associations could have been somewhat explained by the high alliance score in combination with the lower adherence score. When therapists adhered less to the manual, there could have been more space for the relationship to develop or be expressed in a manner that could be observed. Wilson (1997) notes the challenge of maintaining a consistent focus on manualised treatment at the same time as being responsive to the client's changing needs, and critics of manualised treatments have argued that strict adherence to a protocol driven treatment may impede the therapeutic alliance and negatively impact on outcomes (Addis et al., 1999). However, in this study, alliance and adherence were highly correlated at both time points. Therefore, an increase in the adherence was not associated with a decrease in alliance.

Whilst therapists adhered less to the manual later in therapy, adherence remained high with therapists adhering to 66% of the manual in session seven compared to 71% in session two. One plausible explanation for the drop in adherence later in therapy could be that manualising treatment makes the assumption that clients will progress at similar rates and therefore the same material can be followed in the same sequence and at the same time. However, the nature of clinical practice is that often this is not the case and therapists must be flexible and responsive to the needs of the client (Kendall & Chu, 2000). Even so, alliance and adherence were



positively correlated at both time points, and this was unsurprising given the overlap in alliance and adherence constructs, for example, setting an agenda collaboratively with the parent was both adhering to the treatment manual and agreeing on the goals of therapy which was a dimension of alliance. However, adherence did not predict diagnostic change or parent, or child rated outcomes. There was a modest association between clinician rated improvement and adherence at session seven but it is likely that this result was influenced by the comparison between two unequal groups, as four times as many participants were classified as ‘improved’ compared to ‘not improved’.

The non-significant findings for adherence were consistent with adherence-outcome meta-analyses in adult treatment studies which have found effect sizes close to zero (Wampold et al., 1997; Webb et al., 2010), and a similar child anxiety treatment study that found no significant association between adherence and outcomes for child focused treatment for child anxiety (Liber et al., 2010). Of interest, Webb et al. (2010) found that in some studies the alliance moderated the adherence effect, so a better alliance reduced the effect size of adherence. These findings suggest that whilst the constructs of alliance and adherence overlap, alliance captures something unique in relation to outcome.

### **Limitations**

There are several limitations to this study that should be borne in mind when interpreting findings. Firstly, as mentioned above, overall alliance ratings were positively skewed and had limited variability, which presented a challenge for finding significant process-outcome findings. This may have been related to the context of the treatment in a specialist anxiety clinic, specifically for a research trial, and in which clinicians were trained and supervised by treatment developers. It is

likely that application of the treatment in community outpatient settings would result in greater variability.

Secondly, families in this sample were mainly White British, parents were non-anxious (a common indicator of poorer treatment outcome; Cobham et al., 1998; Creswell et al., 2008), and over 80% of parents were in full or part-time employment and had completed further education. Therefore, they might have had a different understanding and approach to treatment than might be seen in a more diverse community sample. Generalisability may therefore be limited to this context and population.

Thirdly, only a subsample of participants were rated for alliance at session seven and therefore, it cannot be known if the same associations would have been found if the sample was coded in its entirety.

Fourth, this study only included families who completed treatment. It may be that parents remaining in treatment were more motivated and willing to cooperate with the process and therefore developed a better alliance with the therapist. Research in other child treatment contexts found that dropping out of treatment was associated with lower parent-therapist alliances (Kazdin et al., 2005; Kazdin et al., 2006; Kazdin & Whitley, 2006; Robbins et al., 2008; Shelef et al., 2005). Further research looking at alliance-retention associations could provide further information in this regard.

Fifth, this study found that a strong parent-therapist alliance later in therapy was associated with client rated outcomes for anxious children. However, this relationship may not be causal and there remains a question about how a good alliance develops and how it then relates to outcome. This will need to be further disentangled in future research.

## **Clinical Implications**

For clinicians, these findings suggest that using a guided manualised self-help CBT intervention with parents of anxious children is potentially effective in reducing anxiety severity at post-treatment and children and parents perceived anxiety severity and impact. The intervention offers a time and cost efficient way to deliver a front line psychological treatment in primary care, in contexts in which it may be difficult to meet with the child, and for parents who are motivated and able to meet the demands of a guided self-help program. Results of the larger RCT will further inform these findings.

Results also suggested that there could be value in attending to alliance across the course of therapy with parents. The therapeutic alliance naturally ebbs and flows across the course of therapy, in cycles of rupture and repair (Shafran & Murran, 2000). Being mindful of this process and to repair ruptures even later in therapy may contribute to the effectiveness of treatment.

In this study, adherence to the treatment manual was not significantly associated with outcomes, however therapists generally maintained good model adherence and it cannot be known what the effect of a low adherence might have been. Additionally, primary care mental health workers have previously reported high satisfaction with the program and would continue to use it in their practice (Creswell et al., 2010). Similarly, in the same study, over 80% of parents reported high satisfaction with the intervention, thought the level of support was ‘just right’, and said they would continue to use it beyond session completion. The qualifications of the therapist had no statistical impact on process measures or outcome measures, suggesting a wide usability of the treatment manual with appropriate training, support and supervision. This is in line with significant research indicating little

impact of clinician experience on the effectiveness of treatment (Christensen & Jacobson, 1994; Smith, Glass and Miller, 1980; Wilson, 1997).

The process of measuring alliance and adherence highlighted the overlap between the two constructs and therefore, there may be something important about maintaining a balance between delivering an effective evidence-based treatment whilst still adapting flexibly to the needs of the client, for example, having a large agenda may restrict clinical flexibility and space within the session in which the relationship may have space to grow.

### **Training Implications**

One of the questions driving this study was how to improve psychological interventions to positively impact on outcomes. If stronger positive alliances do predict better treatment outcomes then can and should therapist's capacity to form alliances be selected for by applied psychology training programs? In fact, the capacity to form therapeutic alliances is already part of clinical psychology selection and recruitment and these criteria could be at least partly supported by the evidence base. A review of 25 empirical studies and related literature that identified a number of positive associations between therapist attributes and alliance, such as; being trustworthy, affirming, flexible, interested, alert, honest, open, warm, friendly, relaxed, confident, experienced, competent, and respectful (Ackerman & Hilsenroth, 2003). The authors hypothesise that these qualities increase the client's confidence and trust in the therapist (that he or she will be helpful and understanding), which creates a facilitative climate for treatment to take place and in turn, increases opportunities for change (through clients expectations and beliefs that the therapy will be helpful). In another study, Eversmann, Schottke, Wiedl, & Rogner (2011) found a cohort of 20 trainees scoring lower on interpersonal capability upon entry to

training showed lower than average treatment success and had completed fewer treatments by the end of training five years later. Studies such as these may suggest that screening for personal qualities upon entry to training may optimise the conditions for alliance in treatment. However, methodological limitations and the wide range of outcomes limit conclusions and generalizability of findings.

A second consideration is therefore the potential to train psychotherapists in alliance building techniques as this may balance the need to focus on personal quality selection at point of entry into training. Whilst amount of training and experience has commonly not been associated with better alliances (REFS), there is evidence to suggest that certain therapist behaviours and techniques may be. In their review, Ackerman and Hilsenroth (2003) also summarise therapist techniques that have been associated with better alliances to include; exhibiting a sense of understanding, greater session depth, exploration, reflection, taking a supportive and active stance, accurate interpretations, affirming, noting success, attending to the client's experience, and facilitating expression of affect. Studies directly aiming to train the alliance have also shown promising outcomes, for example, when comparing an alliance focused assessment protocol to usual information gathering (for a review see, Hilsenroth & Cromer, 2007), training psychotherapists in a manualised alliance-fostering therapy (Crits-Christoph et al., 2006), and when adding alliance rupture-repair training to evidence based treatments for depression (Constantino et al., 2008), and Generalised Anxiety Disorder (Newman, Castonguay, Berkovec, Fisher & Nordberg, 2008). However, positive outcomes are not always the case; for example, psychotherapists who received a 3-hour alliance training workshop demonstrated no significant differences between the trained group and a non-trained group in terms of

alliance quality, client engagement and use of alliance strategies (Smith-Hansen, Constantino, Piselli & Remen, 2011).

Therefore, there is some evidence to suggest the potential to train clinicians in alliance development and maintenance, and in considering personal qualities upon selection for applied training courses. However, what exactly is selected for and trained is still a somewhat open question; for example, do the same behaviours impact in similar ways across a range of treatments and client groups? Despite questions still remaining, the evidence suggests that a focus on alliance building within applied psychology training courses is a valuable endeavour.

### **Research Implications**

A number of recommendations have emerged from the process and findings of this study to inform future research. Generally, more research is needed into the role of the parent-therapist alliance in CBT. As also recommended elsewhere, it would be beneficial to measure therapy process as standard in treatment outcome studies in order to understand more about what makes treatment effective and efficacious (Green, 2006; Kazdin & Nock, 2003).

As noted above, observing alliance has a number of benefits; however, gathering alliance data from multiple perspectives will provide more detailed subjective information about the process of treatment and its association to outcome. If possible, observer ratings should be made using video recordings of sessions to capture non-verbal treatment process data.

Deciding on an appropriate alliance measure was also challenging yet an important consideration. There was a difficult pay off between using a well-established measure for comparability, or choosing a measure more specifically designed for the context in which it was used. The WAI-O was selected in this study

but it cannot be known if results would have been significantly different using an alternative measure. There are other measures available that could be considered in future research, for example, the Therapy Process Observational Coding System (TPOCS; McLeod & Weisz, 2005) has been recently developed in the context of measuring child and parent alliances. When selecting an alliance measure researchers should consider the psychometric properties of the measure, but particularly its construct validity and study-specific usability. Piloting process measures is strongly recommended in order to address coding difficulties early in the research and to assist with choosing the most appropriate process measure.

There is value in continuing to measure adherence alongside alliance in future process research, particularly on a session by session basis. It is possible that certain therapy techniques have a greater relationship with outcome than others. There is also a need for more to be understood about the interaction between alliance, adherence and their association to outcome (Webb et al., 2010).

This study did not explore how treatment skills and techniques were transferred into the home environment and translated into work between the parent and child presenting with anxiety. Kelly, Bickman, and Norcross (2010) have commented that the parent-therapist alliance ‘facilitates engagement by providing a stable, supportive context in which treatment can take place’ (Kelly, Bickman, & Norcross, 2010). However, there are likely to be many other factors that impact on the continuation of therapy tasks outside of the clinic, for example, studies of the parent-therapist alliance in different child treatment contexts have found that pre-treatment relationships (quality of the parent-child attachment, and social support) impacted on alliance-outcome associations (Johnson et al., 2006) and predicted the development of a good alliance with the therapist (Friedlander, Lambert & de la Pena,

2008; Kazdin & Whitley, 2006). There is also growing evidence to suggest a relationship between parental beliefs and expectations and treatment outcomes (Bogels, & Brechman-Toussaint, 2006). Future studies of indirect treatment may benefit from measuring this dimension of treatment as it may explain some of the variability in outcome.

## **Conclusion**

This study was the first to assess the association between process and outcome in guided manualised self-help CBT for anxious children in which treatment was delivered solely to parents. A strong parent-therapist alliance later in therapy predicted clinician rated improvement and reductions in child anxiety severity and impact as rated by parents and children and this was not confounded by pre-treatment demographics or symptom scores. Neither early alliance, nor early or late therapist adherence to the manual predicted outcomes. However, observer ratings of the parent-therapist alliance and therapist adherence were high across treatment and alliance was correlated with adherence suggesting an overlap in these process constructs. Findings highlighted the need for clinicians to attend to alliance across treatment, and the need to attend to alliance even when delivering a highly structured protocol driven treatment. More research is needed to understand the relationship between process and outcomes and to identify other factors that might further explain variability in outcome. Future process research in a similar context could benefit from gathering alliance from multiple perspectives and measuring the factors influencing the translation of therapy skills outside of sessions when treatment is delivered indirectly.



## References

- Ackerman, S.J., & Hilsenroth, M.J. (2003).  
A review of therapist characteristics and techniques positively impacting the therapeutic alliance. *Clinical Psychology Review, 22*, 1-33.
- Addis, M.E., Wade, W.A., & Hatgis, C. (1999). Barriers to dissemination of evidence-based practices: addressing practitioners concerns about manual-based psychotherapies *Clinical Psychology: Science and Practice, 6*, 430-441.
- Ahn, H., & Wampold, B.E. (2001). Where oh where are the specific ingredients? A meta-analysis of component studies in counselling and psychotherapy. *Journal of Counseling Psychology, 48*, 251-257.
- Alexander, L.B., & Morrison Dore, M. (1999). Making the parents as partners principle a reality: The role of the alliance. *Journal of Child and Family Studies, 8*, 255-270.
- Barrett, P.M., Dadds, M.R., & Rapee, R.M. (1996). Family treatment of childhood anxiety: A controlled trial. *Journal of Consulting and Clinical Psychology, 64*, 333-342.
- Beck, A.T., Rush, A.J., Shaw, B.F., & Emery, G. (1979). *Cognitive therapy of depression*. New York: The Guildford Press.
- Bogels, S.M., & Brechman-Toussaint, M.L. (2006). Family issues in child anxiety: Attachment, family functioning, parental rearing and beliefs. *Clinical Psychology Review, 26*, 834-856.
- Bordin, E. S. (1976). The generalizability of the psychoanalytic concept of the working alliance. *Psychotherapy: Theory, Research and Practice, 16*, 252–260.

- Bordin, E.S (1994) Theory and research on the therapeutic working alliance: new directions. In A.O. Horvarth., & L.S. Greenberg. (Ed.), *The working alliance: theory, research and practice* (pp. 13 – 38). New York: John Wiley & Sons, Inc.
- Brown, J., Dreis, S., & Nace, D.K. (1999). What really makes a difference in psychotherapy outcome? Why does managed care want to know? In M.A. Hubble, B.L. Duncan., & S.D. Miller, (Eds.), *The heart and soul of change: What works in therapy* (pp. 389-406). Washington, DC, US: American Psychological Association.
- Buhrmester, D., & Furman,W (1990). Perceptions of sibling relationships during middle childhood and adolescence. *Child Development*, *61*, 1387–1398.
- Butler, S.F., & Strupp, H.H. (1986). Specific and nonspecific factors in psychotherapy: A problematic paradigm for psychotherapy research. *Psychotherapy: Theory, Research, Practice, Training*, *23*, 30-40.
- Cartwright-Hatton, S., McNicol, K., & Doubleday, E. (2006). Anxiety in a neglected population: prevalence of anxiety disorders in pre-adolescent children. *Clinical Psychology Review*, *26*, 817–833.
- Cartwright-Hatton, S., Roberts, C., Chitsabean, P., Fothergill, C., & Harrington, R. (2004). Systematic review of the efficacy of cognitive-behaviour therapies for childhood and adolescent anxiety disorders. *British Journal of Clinical Psychology*, *43*, 421-436.
- Castonguay, L.G., & Grosse, M. (2005) Change in psychotherapy: A plea for no more “nonspecific” and false dichotomies. *Clinical Psychology: Science and Practice*, *12*, 198-201.

- Christensen, A., & Jacobson, N.S. (1994). Who (or what) can do psychotherapy: the status and challenge of non-professional therapies. *Psychological Science*, 5, 8-14.
- Cicchetti, D.V. (1994). Guidelines, criteria, and rules of thumb for evaluating normed and standardized assessment instruments in psychology. *Psychological Assessment*, 6, 284–290.
- Cobham, V.E., Dadds, M.R., & Spence, S.H. (1998). The role of parental anxiety in the treatment of childhood anxiety. *Journal of Consulting and Clinical Psychology*, 66, 893-905.
- Constantino, M. J., Marnell, M. E., Haile, A. J., Kanther-Sista, S. N., Wolman, K., Zappert, L., & Arnow, B. A. (2008). Integrative cognitive therapy for depression: A randomized pilot comparison [Special issue]. *Psychotherapy: Theory, Research, Practice, Training*, 45, 122–134.
- Creswell, C., & Cartwright-Hatton, S. (2007). Family treatment of child anxiety: outcomes, limitations and future directions. *Clinical Child and Family Psychology*, 10, 232-252.
- Creswell, C., Hentges, F., Parkinson, M., Sheffield, P., Willetts, L., & Cooper, P. (2010). Feasibility of a guided cognitive behaviour therapy (CBT) self-help for childhood anxiety disorders in primary care. *Mental Health in Family Medicine*, 7, 49-57.
- Creswell, C., & Willetts, L. (2007). *Overcoming your child's fears and worries: a self-help guide using cognitive behavioural techniques*. London: Constable & Robinson.
- Creswell, C., Willetts, L., Murray, L., Singhal, M., & Cooper, P. (2008). Treatment of child anxiety: An exploratory study of the role of maternal anxiety and

- behaviours in treatment outcome. *Clinical Psychology and Psychotherapy*, 15, 38–44.
- Creed, T.A., & Kendall, P.C. (2005). Therapist alliance-building behavior within a cognitive-behavioral treatment for anxiety in youth. *Journal of Consulting and Clinical Psychology*, 73, 498–505.
- Crits-Christoph, P., Connolly Gibbons, M., Crits-Christoph, K., Narducci, J., Schamberger, M., & Gallop, R. (2006). Can therapists be trained to improve their alliances? A preliminary study of alliance-fostering psychotherapy. *Psychotherapy Research*, 16, 268–281.
- DiGiuseppe, R., Linscott, J., & Jilton, R. (1996). The therapeutic alliance in adolescent psychotherapy. *Applied and Preventive Psychology*, 5, 85-100.
- Elvins, R., & Green, J. (2008). The conceptualization and measurement of therapeutic alliance: An empirical review. *Clinical Psychology Review*, 28, 1167–1187.
- Escudero, V., Friedlander, M.L., Varelac, N., & Abascald, A. (2008). Observing the therapeutic alliance in family therapy: Associations with participants' perceptions and therapeutic outcomes. *Journal of Family Therapy*, 30, 194–214.
- Eversmann, J., Schottke, H., Wiedl, K.H., & Rogner, J. (2011). The observational rating scale Therapy-Related Interpersonal Behaviors (TRIB) in the selection of trainee psychotherapists. *Zeitschrift für klinische psychologie und psychotherapie*, 40, 11-21.
- Fabiano, G.A., & Pelham, W.E., (2002). Evidence-based treatment for mental disorders in children and adolescents. *Current Psychiatry Reports*, 4, 93-100.

- Feeley, M., DeRubeis, R. J., & Gelfand, L. A. (1999). The temporal relation of adherence and alliance to symptom change in cognitive therapy for depression. *Journal of Consulting and Clinical Psychology, 67*, 578–582.
- Flicker, S.M., Turner, C.W., Waldron, H.B., Brody, J.L., & Ozechowski, T.J. (2008). Ethnic background, therapeutic alliance, and treatment retention in functional family therapy with adolescents who abuse substances. *Journal of Family Psychology, 22*, 167–170.
- Friedlander, M. L., Horvath, A. O., Cabero, A., Escudero, V., Heatherington, L., & Martens, M. P. (2006). System for observing family therapy alliances: a tool for research and practice. *Journal of Counseling Psychology, 53*(2), 214–224.
- Friedlander, M.L., Lambert, J.E., & de la Pena, C.M. (2008). A step toward disentangling the alliance/improvement cycle in family therapy. *Journal of Counseling Psychology, 55*, 118–124.
- Furman, W., & Buhrmester, D. (1985). Children's perceptions of the personal relationships in their social networks. *Developmental Psychology, 21*, 1016–1024.
- Gilbert, P., & Leahy, R.L. (2007). Introduction and overview: Basic issues in the therapeutic relationship. In P. Gilbert, & R.L. Leahy. (Eds.), *The therapeutic relationship in the cognitive behavioural psychotherapies* (pp. 3 – 24). London: Routledge.
- Green, J. (2006) Annotation: The therapeutic alliance – a significant but neglected variable in child mental health treatment studies. *Journal of Child Psychology and Psychiatry, 47*, 425–435.
- Guy, W. (1976). The clinical global impression scale. In *The ECDEU Assessment Manual for Psychopharmacology – revised* (DHEW Publ. No. ADM 76–338)

(pp. 218 – 222) Rockville, MD: US Department of Health, Education, Welfare and Public Health Services.

Hawley, K.M., & Garland, A.F. (2008). Working alliance in adolescent outpatient therapy: Youth, parent and therapist reports and associations with therapy outcomes. *Child Youth Care Forum, 37*, 59–74.

Hilsenroth, M.J., & Cromer, T.D. (2007). Clinician interventions related to alliance during the initial interview and psychological assessment. *Psychotherapy: Theory, research, practice, and training, 44*, 205-218

Hogue, A., Dauber, S., Stambaugh, L. F., Cecero, J. J., & Liddle, H. A. (2006). Early therapeutic alliance and treatment outcome in individual and family therapy for adolescent behavior problems. *Journal of Consulting and Clinical Psychology, 74*, 121–129.

Horvath, A. O., & Greenberg, L. S. (1989). Development and validation of the working alliance inventory. *Journal of Counseling Psychology, 36*, 223–233.

Horvath, A., & Symonds, R.D. (1991). Relation between working alliance and outcome in psychotherapy: A meta-analysis. *Journal of Counselling Psychology, 38*, 39-149.

In-Albon, T., & Schneider, S. (2007). Psychotherapy of childhood anxiety disorders: A meta-analysis. *Psychotherapy and psychosomatics, 76*, 15–24.

Ishikawa, S., Okajima, I., Matsuoka, H., & Sakano, Y. (2007). Cognitive behavioural therapy for anxiety disorders in children and adolescents: A meta-analysis. *Child and Adolescent Mental Health, 12*, 164–172.

James, A., Soler, A., & Wetherall, R. (2006). Cognitive behavioural therapy for anxiety disorders in children and adolescents. *The Cochrane Library, 1*, 1-25.

- Johnson, L.N., & Ketring, S.A., (2006). The therapy alliance: A moderator in therapy outcome for families dealing with child abuse and neglect. *Journal of Marital and Family Therapy*, 32, 345–354.
- Johnson, L.N., Ketring, S.A., Rohacs, J., & Brewera, A.L. (2006). Attachment and the therapeutic alliance in family therapy. *The American Journal of Family Therapy*, 34, 205–218.
- Johnson, L.N., Wright, D., & Ketring, S.A. (2002). The therapeutic alliance in home-based family therapy: Is it predictive of outcome? *Journal of Marital and Family Therapy*, 28, 93-102.
- Kazdin, A. E., Marciano, P. L., & Whitley, M. (2005). The therapeutic alliance in cognitive-behavioral treatment of children referred for oppositional, aggressive, and antisocial behavior. *Journal of Consulting and Clinical Psychology*, 73, 726–730.
- Kazdin, A.E., & Nock, M.K. (2003). Delineating mechanisms of change in child and adolescent therapy: Methodological issues and research recommendations. *Journal of Child Psychology and Psychiatry*, 44, 1116 -1129.
- Kazdin, A. E., & Whitley, M., (2006). Child–therapist and parent–therapist alliance and therapeutic change in the treatment of children referred for oppositional, aggressive, and antisocial behavior. *Journal of Consulting and Clinical Psychology*, 74, 346–355.
- Kazdin, A.E., Whitley, M., & Marciano, P.L. (2006) Child–therapist and parent–therapist alliance and therapeutic change in the treatment of children referred for oppositional, aggressive, and antisocial behaviour. *Journal of Child Psychology and Psychiatry*, 47, 436–445.

- Keller, M.B., Lavori, P.W., Wunder, J., Beardslee, W.R., Schwartz, C.E., & Roth, J. (1992). Chronic course of anxiety disorders in children and adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry, 31*, 595-599.
- Kelly, S.D., Bickman, L., & Norcross, E. (2010) In B.L. Duncan, S.D. Miller, Wampold, B.E., & M.A. Hubble (Eds.), *The heart and soul of change: delivering what works in therapy* (2<sup>nd</sup> ed., pp 325-348). Washington, DC, US: American Psychological Association.
- Kendall, P.C. (1994). Treating anxiety disorders in children: Results of a randomized clinical trial. *Journal of Consulting and Clinical Psychology, 62*, 100-110.
- Kendall, P. C. (2000). *Cognitive–behavioral therapy for anxious children: Therapist manual* (2nd ed.). Ardmore, PA: Workbook Publishing.
- Kendall, P.C., & Chu, B.C. (2000). Retrospective self-reports of therapist flexibility in manual-based treatment for youths with anxiety disorders. *Journal of Clinical Child and Adolescent Psychology, 29*, 209-220.
- Kendall, P. C., Flannery-Schroeder, E., Panichelli-Mindell, S. M., Southam-Gerow, M., Henin, A., & Warman, M. (1997). Therapy for youths with anxiety disorders: A second randomized clinical trial. *Journal of Consulting and Clinical Psychology, 65*, 366–380.
- Kovacs, M., & Lohr, W.D. (1995). Research on psychotherapy with children and adolescents: An overview of evolving trends and current issues. *Journal of Abnormal Child Psychology, 23*, 11-30.
- Lambert, M. J., & Ogles, B. M. (2004). The efficacy and effectiveness of psychotherapy. In M. J. Lambert (Ed.), *Bergin and Garfield's handbook of*



*psychotherapy and behavior change* (5<sup>th</sup> ed., pp. 139-193). New York: Wiley.

Langley, A.K., Bergman, L., McCracken, J., & Piacentini, J.C. (2004). Impairment in childhood anxiety disorders: preliminary examination of the Child Anxiety Impact Scale. *Journal of Child and Adolescent Psychopharmacology*, *14*, 105–114.

Liber, J.M., McLeod, B.D., Van Widenfelt, B.M., Goedhart, A.W., van der Leeden, A.J.M., Utens, E.M.W.J., & Treffers, P.D.A. (2010). Examining the relation between the therapeutic alliance, treatment adherence, and outcome of cognitive behavioral therapy for children with anxiety disorders. *Behavior Therapy*, *41*, 172-186.

Martin, D.J., Garske, J.P., & Davis, M.K. (2000). Relation of the therapeutic alliance with outcome and other variables: A meta-analytic review. *Journal of Consulting and Clinical Psychology*, *68*, 438-450.

McLeod, B. D., & Weisz, J. R. (2005). The therapy process observational coding system-alliance scale: measure characteristics and prediction of outcome in usual clinical practice. *Journal of Consulting and Clinical Psychology*, *73*, 323–333.

Mendlowitz, S.L., Manassis, K., Bradley, S., Scapillato, D., Miezitis, S., & Shaw, B.F. (1999). Cognitive-behavioral group treatments in childhood anxiety disorders: The role of parental involvement. *The Journal of the American Academy of Child and Adolescent Psychiatry*, *38*, 1223–1229.

Morrissey-Kane, E., & Prinz, R.J. (1999) Engagement in Child and Adolescent Treatment: The Role of Parental Cognitions and Attributions. *Clinical Child and Family Psychology Review*, *2*, 183-198.

- Nauta, M.H., Scholing, A., Rapee, R.M., Abbott, M., Spence, S.H., & Waters, A. (2003). A parent-report measure of children's anxiety: psychometric properties and comparison with child-report in a clinic and normal sample. *Behaviour Research and Therapy, 42*, 813–39.
- Newman, M.G., Castonguay, L.G., Borkovec, T.D., Fisher, A. J., & Nordberg, S.S. (2008). An open trial of integrative therapy for generalized anxiety disorder [Special issue]. *Psychotherapy: Theory, Research, Practice, Training, 45*, 135–147.
- Nock, M.K., & Kazdin, A.E. (2001). Parent expectancies for child therapy: Assessment and relation to participation in treatment. *Journal of Child and Family Studies, 10*, 155–180.
- Norcross, J. C. (2002). Empirically supported therapy relationship. In J. C. Norcross (Ed.), *Psychotherapy relationships that work: Therapist contributions and responsiveness of patients* (pp. 3–16). New York: Oxford University Press.
- Pine, D.S. (1997). Childhood anxiety disorders. *Current Open Paediatrics, 9*, 329–339.
- Robbins, M.S., Mayorga, C.C., Mitrani, V.B., Szapocznik, J., Turner, C.W., & Alexander, J.F. (2008). Adolescent and parent alliances with therapists in brief statehich family therapy with drug-using Hispanic adolescents. *Journal of Marital and Family Therapy, 34*, 316–328.
- Robbins, M.S., Turner, C.W., & Alexander, J.F. (2003). Alliance and dropout in family therapy for adolescents with behavior problems: Individual and systemic effects. *Journal of Family Psychology, 17*, 534–544.
- Safran, J.D., & Muran, J.C. (2000). Resolving therapeutic alliance ruptures: Diversity and integration. *Journal of Clinical Psychology, 56*, 233–243.

- Safran, J.D., & Segal, Z.V. (1990). *In person process in cognitive therapy*. New York: Basic Books.
- Shadish, W.R., Navarro, A.M., Matt, G.E., & Phillips, G. (2000). The effects of psychological therapies under clinically representative conditions: *A meta-analysis*. *Psychological Bulletin*, *126*, 512-529.
- Shelef, K., Diamond, G.M., Diamond, G.S., & Liddle, H.A. (2005). Adolescent and parent alliance and treatment outcome in multidimensional family therapy. *Journal of Consulting and Clinical Psychology*, *73*, 689–698.
- Shirk, S.R., & Karver, M. (2003). Prediction of treatment outcome from relationship variables in child and adolescent therapy: A meta-analytic review. *Journal of Consulting and Clinical Psychology*, *71*, 452–464.
- Shrout, P. E., & Fleiss, J. L. (1979). Intraclass correlations: Uses in assessing rater reliability. *Psychological Bulletin*, *86*, 420–428.
- Silverman, W., & Albano, A. (1997). *The Anxiety Disorders Interview Schedule for DSM-IV, Child and Parent Versions*. San Antonio, TX: Psychological Corporation.
- Smith, M.L., Glass, G., & Miller, T. (1980). *The benefits of psychotherapy*. Baltimore, MD: John Hopkins University Press.
- Smith-Hansen, L., Constantino, M.J., Piselli, A. & Remen, A.L. (2011). Preliminary results of a video-assisted psychotherapist workshop in alliance strategies. *Psychotherapy*, *48*, 148-162.
- Spence, S.H. (1998). A measure of anxiety symptoms among children. *Behaviour Research and Therapy*, *36*, 545-566.

- Spence, S.H., Barrett, P.M., & Turner, C.M. (2003). Psychometric properties of the Spence Children's Anxiety Scale with young adolescents. *Journal of Anxiety Disorders, 17*, 605-625.
- Stallard, P. (2002). Cognitive behavior therapy with children and young people: A selective review of key issues. *Behavioural and Cognitive Psychotherapy, 30*, 297–309.
- Stolk, M.N., Mesman, J., van Zeijl, J., Alink, L.R.A., Bakermans-Kranenburg, M.J., van IJzendoorn, M.H.F., & Koot, M. (2008). Early parenting intervention aimed at maternal sensitivity and discipline: A process evaluation. *Journal of Community Psychology, 36*, 780–797.
- Tabachnick, B.G., & Fidell, L.S. (1996a). *Using Multivariate Statistics* (3<sup>rd</sup> ed, pp. 132) New York: HarperCollins Publishers.
- Tabachnick, B.G., & Fidell, L.S. (1996b). *Using Multivariate Statistics* (3<sup>rd</sup> ed, pp. 83) New York: HarperCollins Publishers.
- Tichenor, V., & Hill, C. E. (1989). A comparison of six measures of working alliance. *Psychotherapy, 26*, 195-199
- Tolan, P.H., Hanish, L.D., McKay, M.M., & Dickey, M.H. (2002). Evaluating process in child and family interventions: Aggression prevention as an example. *Journal of Family Psychology, 16*, 220–236.
- Walkup, J.T., Albano, A.M., Piacentini, J., Birmaher, B., Compton, S.N., Sherrill, J.T., Ginsburg, G.S., Rynn, M.A., McCracken, J., Waslick, B., Iyengar, S., March, S.H., & Kendall, P.C. (2008). Cognitive behavioral therapy, Sertraline, or a combination in childhood anxiety. *New England Journal of Medicine, 359*, 2753–2766.

- Wampold, B.E., Mondin, G.W., Moody, M., Stich, F., Benson, K., & Ahn, H. (1997). A meta-analysis of outcome studies comparing bona fide psychotherapies: Empirically, "all must have prizes." *Psychological Bulletin*, *122*, 203-215.
- Waters, A.M., Ford, L.A., Wharton, T.A., Cobham, V.E. (2009) Cognitive-behavioural therapy for young children with anxiety disorders: Comparison of a child and parent condition versus a parent only condition. *Behaviour Research and Therapy*, *47*, 654–662.
- Webb, C.A., DeRubeis, R.J., Barber, J.P. (2010). Therapist adherence/competence and treatment outcome: A meta-analytic review. *Journal of Consulting and Clinical Psychology*, *78*, 200-211.
- Wilson, G.T. (1997). Treatment manuals in clinical practice. *Behavior, Research, and Therapy*, *35*, 205-210.
- Woodward, L.J., & Fergusson, D.M. (2001). Life course outcomes of young people with anxiety disorders in adolescence. *Journal of the American Academy of Child and Adolescent Psychiatry*, *40*, 1086-1093.

## **PART THREE: Critical Appraisal**

## **Introduction**

This critical appraisal firstly provides a context for the development of this study and a reflection on what attracted me to conducting the research. It then considers alliance and adherence theory and measurement, the challenges that arose, and how these were resolved. Finally, it discusses the role of the parent-child attachment when child treatment is delivered indirectly.

### **Background context**

I was initially drawn to the area of anxiety disorders following a positive clinical experience in my first year of doctoral training in a specialist adult outpatient anxiety disorders clinic delivering time-limited evidence-based cognitive-behavioural therapy (CBT). Through training, background reading and clinical practice I developed an interest in the development, maintenance and ultimately successful treatment of these profoundly disabling disorders. I also became interested in how to adapt successful adult treatments for children, taking into consideration the developmental stage of the child (see for example, Grave & Blissett, 2004). The large study underway at the Berkshire Child Anxiety Clinic was of interest as they were delivering treatment via parents and I was curious about how therapists worked in an adult way whilst delivering a child-friendly treatment.

I was also interested in the relational aspects of therapy: why therapy was less successful for some clients, and particularly what psychodynamic theories had to say about therapeutic processes that could inform and compliment cognitive-behavioural treatment. Indeed, the concept of the therapeutic alliance was rooted in psychodynamic theory, particularly Freud's (1913) understanding that treatment takes place through the attachment and transference relationship between client and therapist.

Therefore, this research was an opportunity to further investigate what makes treatment successful, to what extent common and specific factors impact on outcomes, and how this relates to clinical practice in general and in the context of child treatment.

### **Defining the therapeutic alliance**

In order to study and measure the therapeutic relationship one must start by making a decision about how to define the construct. This was important from the outset when deciding on search terms for the literature review and had implications for what results would be returned. There were multiple ways in which the therapeutic relationship has been labelled, for example; ‘therapeutic alliance’, ‘working alliance’, ‘therapeutic relationship’, ‘collaboration’, ‘partnership’, and ‘transference’. There were also subtle differences with how each construct was defined. This was highlighted in a review of the adult literature by the American Psychological Association Division 29 taskforce who identified several evidence-based effective constructs that constitute the therapeutic relationship, including: therapeutic alliance, goal consensus, collaboration, group cohesion, and empathy (Norcross, 2002). This presented an early dilemma when selecting search terms and later when selecting an alliance measure for the empirical paper. In order for the review to be manageable and consistent I needed to be selective.

Further reading indicated that Bordin’s (1976, 1994) definition of the alliance was the most widely used and accepted. It had wide applicability due to its pantheoretical stance and had been extensively applied across adult and child research. It also underpinned and informed many well established alliance measurement scales and captured elements of technique (agreement on tasks and goals) as well as the therapeutic relationship (collaboration and a safe, supportive



bond between therapist and client). This seemed to fit well with the empirical paper's focus on adherence and alliance.

However, through the process of conducting the literature review there appeared to be differences in how the alliance construct was applied in different treatment contexts and with different populations. This was particularly highlighted in family therapy process research that emphasised the subtleties of within-system alliances, and subsystem alliances. In the context of family therapy, Bordin's theory had been adapted to include an understanding of families and systems as hierarchically organised and mutually influential (Pinsoff, 1994; Pinsoff & Catherall, 1986). Additionally, the therapist's stance in relation to the family is different depending on the school from which the therapist is practicing; for example, the detached observer therapist's stance usually related to early Milan schools of family therapy compared to post-Milan schools that position the therapist as part of the system. This is of course not unique to family therapy as different psychological theories also have different ideas about the therapist's position in relation to the client.

Systemic positions and definitions of the alliance were of interest when considering the alliance in the context of child treatment because, even when treatment is primarily individually focused, children are usually attached and dependent on a family system, particularly younger children. This broadened my understanding of the alliance construct and was useful to hold in mind when thinking around the empirical paper.

## **Measuring Alliance**

### **Choosing a measure**

Choosing an alliance measurement scale for the empirical paper took some time and deliberation. There was a need to choose an observational measure because participants had already completed treatment and therefore self-report was not an option. The measure also needed to have a solid theoretical grounding and good psychometric properties. There was also a draw towards a reasonably well established measure so that there was the potential to compare the results across other studies. However, when measuring the parent-therapist alliance (adult clients within the context of child research) it was a difficult decision about whether to use a measure developed and used in child research or adult research. Parents seemed a bit stuck in the middle with no one measure fitting neatly.

Two options emerged from reading around the process literature, consulting with my supervisors, and reading reviews of alliance measures (Elvins & Green, 2008; Martin, Garske, & Davis, 2000). One option was the Therapy Process Observational Coding System — Alliance scale (TPOCS-A; McLeod & Weisz, 2005) and the second was the Working Alliance Inventory – Observer form (WAI-O; Tichenor & Hill, 1989). The advantages of using the TPOCS-A were that it had been developed and tested as an observer measure with parents of children with internalising disorders and was therefore a good match for this study. It also had good construct validity as it had been developed from an amalgamation of established child focused measures and child process research, and included two subscales that were aligned with two dimensions of Bordin's (1976, 1994) three-dimensional definition of the alliance, namely; client-therapist agreement on the tasks of therapy, and the development of a safe and supportive bond. However, it was

relatively brief (although this was potentially an advantage in terms of time efficiency and ease of rater training) and had not been used in many studies beyond its initial development and testing in a small study of 22 participants.

In comparison, the WAI was directly based on Bordin's theory and had been extensively used across treatment contexts and populations. The wider application of the WAI presented an opportunity to compare across studies and it had been adapted and used in some child and adolescent studies to measure the parent-therapist alliance (for example, Glueckauf et al., 2002; Hawley & Garland, 2008; Kazdin, Marciano, & Whitley, 2005; Pereira, Lock, & Oggins, 2006). It had also been recommended in a review of parent inclusion in child treatment (Alexander & Morrison Dore, 1999). There was also a potential advantage in using a longer scale (36 items on the WAI compared to 9 on the TPOCS) to pick up a wider range of alliance indicators.

In order to resolve the dilemma of which measure to use both forms were piloted on a few sessions. From this small pilot and discussions with my supervisor, the WAI-O seemed a better fit for the sessions. However, the difference was small and it is not possible to say whether the use of the TPOCS might have led to different results.

### **Challenges of alliance coding**

Once the measure had been chosen, it was important to establish an acceptable level of coding reliability. An assistant psychologist had volunteered to assist with coding and this was helpful to establish reliability. However, challenges arose at a measure-specific, study-specific and individual rater level, which were discussed at length.

At a measure-specific level, some items required the rater to infer the thoughts and feelings of the client or therapist and these items were particularly difficult to code, for example, 'the client feels that the therapist is not totally honest about his/her feelings toward him/her'. This item was challenging because the nature of the intervention was rather like teaching and these kinds of affective questions seemed less applicable in this context compared to traditional individual therapy in which the therapist works directly with the client.

At a study-specific level, the research context made some items difficult to score. Items such as 'the client fears that if he/she says or does the wrong things, the therapist will stop working with him/her' seemed less applicable because the parent may have felt that the therapist was invested in the parent finishing treatment for the benefit of the research and therefore less likely to terminate treatment early. The nature of the treatment as a guided self-help intervention also meant that items referring to agreement on the tasks and goals of therapy were often rated high. This may have been because the nature of the treatment was specialised and specific in relation to child anxiety, the tasks were largely pre-determined by the structured manual (thus requiring little negotiation where disagreements may have arisen), and parents very rarely disagreed or raised complaints with the goals and tasks of therapy. These high ratings would then have contributed to the positively skewed alliance data.

Rating items from audio recordings was also somewhat restrictive because ratings were dependent on the therapist and/or client making explicit statements, for example; it was hard to know if the parent was in agreement with the therapist unless he or she explicitly agreed or disagreed. This was a common frustration because it

was impossible to know what the therapist and parent may have been communicating non verbally, such as nodding to agree or looking confused.

At an individual rater level, a common challenge was sticking to what was said and not inferring or assuming what the client or therapist's 'real' feelings, thoughts, and intentions were. This was particularly challenging when items required an inference to be made, as noted above. Another challenge was not allowing coding to be influenced by one significant comment in therapy or personal liking for the therapist. It is understandable that different raters will initially code differently and use different rationales for coding as individuals come to coding with different clinical experiences, backgrounds, values and beliefs that unavoidably come to bear on the research. This is acknowledged frequently in qualitative research but is less recognised and discussed in relation to quantitative research. It was useful to be mindful of these individual influences whilst remaining focused on what was explicitly said in sessions.

To address the challenges outlined above and to reach an acceptable level of inter-rater reliability, detailed study-specific guidelines were developed to assist with coding. This was a collaborative and evolving process. Inter-rater training was ongoing and at least every fifth session was double coded. It was also helpful to consult on sessions that were particularly problematic to score. The risk of rater drift would have increased without regular training and consultation because most discussions led to adjustments in coding. Coding dilemmas were frequent throughout and it was often difficult to reach an absolute consensus, particularly to agree on the exact point on the 7-point Likert scale.

## **Implications**

Through the alliance measurement process it became clear that even studies using the same alliance measure are likely to have subtly different ways in which the measure is understood and applied. This might partially explain why so many studies in the literature review used modified versions of established scales. Measuring subjective, interpersonal and intrapersonal processes in therapy is challenging and quantitative measures may impose a somewhat artificial structure on a complex and sometimes messy process. It is hard to say whether the study-specific guidelines developed in this study affected the construct validity of the measure. Incidentally, the TPOCS-A had considerably more guidance included with the measure that might have reduced the need to develop additional guidelines.

Future studies would benefit from careful selection and piloting of alliance measures to assess the applicability and usability of the measure for the study context. Wherever possible video recordings of sessions should be used to rate the alliance observationally as this would allow access to detailed, subtle and informative non-verbal information. Gathering alliance data from multiple-perspectives would also enable a wider understanding of the alliance process and address some of the challenges found with observer measurement such as the problem of inferring what the client is thinking and feeling.

## **Measuring adherence**

### **The adherence debate**

The second process measure used in the empirical paper was adherence to the guided manualised self-help CBT program. Adherence to a manualised treatment has raised some debate in the psychological literature, and more recently in relation to the application of these in the Government initiative Improving Access to

Psychological Therapies (see Veale, 2008 for a summary). There have been concerns that adhering closely to a highly structured protocol-driven intervention reduces clinical flexibility and impedes the therapeutic relationship, even restricting a successful outcome. However, most clinicians recognize that it is important for clients to be offered effective treatments based on the best current evidence and best practice guidelines. Clinicians also operate within an economic and national health service context that requires the delivery of cost-effective treatments. Therefore, in order to deliver effective evidence-based treatments, there is a certain need to adhere to the treatment in order to be providing appropriate care. This certainly does not mean that clinicians neglect to engage or collaborate with their clients, nor does it prevent them from developing highly individualized formulations and collaborative goals (Fabiano & Pelham, 2002). Understanding more about how alliance and adherence interacted offered a way to develop a fuller understanding of therapy processes in relation to successful outcomes, and was recommended in a review of process research (Webb, DeRubeis, & Barber, 2010).

### **Challenges of adherence coding**

Coding adherence in this study was actually more challenging than anticipated. The measure itself contained two sections, the first section contained general items that were applicable to every session, and the second section was session specific. Most items were scored on a zero (item not covered at all) to four (item covered in complete detail and depth) scale. However, some items did not map well onto this coding scheme, for example, ‘invite parental items for the agenda’ would have been better marked as yes/ no. Some items also covered more subsections of the manual than others, for example, one item covered a very brief subsection with three lines of text, whereas another covered three detailed

subsections. Therefore, in some places the marks were unequally weighted so it was much easier to score four marks for the first example in comparison to the second.

Similar to the alliance measure, it was sometimes hard to know what was actually happening in session unless it was explicitly talked about, for example, sometimes it was hard to know if the therapist was working on the appropriate worksheet or showing the parent the relevant section in the supporting self-help book. Another challenge was identifying which subsections were being covered when because occasionally therapists mixed subsections together or went back and forth between them.

These challenges were resolved in the same way as the alliance coding challenges, by creating study-specific guidelines, holding regular meetings and double coding. Future research could benefit from using this approach as well as piloting the measure and ensuring equal distribution of ratings across manual subsections.

### **Alliance-adherence interactions**

As noted above, there is sometimes a suggestion that alliance and adherence are dichotomous and separate. However, this is perhaps a false dichotomy (Butler & Strupp, 1986) and whilst the empirical paper did not find a statistically significant interaction between alliance and adherence, their overlap could be clearly seen from an observational point of view.

This interaction can be illustrated using an example from session two during the role play exercise in which parents practiced using Socratic questioning ('thinking like a judge in court'). The role play often dominated the session at the expense of later items on the agenda, which consequently had to be rushed. This particularly occurred when the parent struggled with the role play and needed extra



time to work on this with the therapist. It was at times such as this that the alliance-adherence interaction became apparent, for example, rushing through later items on the agenda lost marks on adherence, but the therapist being sensitive to the parent's struggles and taking extra time to explain and practice Socratic questioning scored more highly on the alliance. This also impacted on coding the WAI item; 'there is a sense that the time spent in therapy is not spent efficiently' because session two often overran for up to one and a half hours if the therapist spent a lot of time on the role play and also covered the later items in adequate depth, thus scoring highly on the adherence measure, but lower on the alliance measure as this might not have been perceived as 'efficient' in the context of the therapeutic hour. These examples also highlight the need for therapists to be flexible and responsive to clients even within a highly structured treatment, as well as further highlighting the complexity of process coding.

### **Indirect treatment and attachment**

Multiple studies have demonstrated that a strong client-therapist alliance predicts successful treatment outcome across treatment contexts, populations, and measurement rater and time points, as illustrated in meta-analyses (e.g. Horvarth & Symonds, 1991; Martin, Garske, & Davis, 2000; Shirk & Karver, 2003). However, when treatment is delivered indirectly it raises the question; who is the therapist and who is the client? In this study it could be argued that the parents were the therapists and the children were the clients and therefore could the parent-child alliance explain some of the variance in outcome? Was this an important gap in the research?

In order for the treatment to be successful it required the parent to attend sessions, read the supporting book, and make changes to his or her parenting practices, for example, in the use of Socratic questioning, dropping reassurance, and

increasing rewards and praise for 'have a go behaviour'. However, parents also needed to also apply the skills and techniques with their child, for example, when developing the step-by-step plan of feared situations and testing out fears. These are demanding tasks for both parent and child.

We know from evolutionary theory that humans respond to feared stimuli with flight-fight-freeze responses and therefore it follows that for the child to approach rather than avoid/escape fearful situations he or she would need to trust that the parent will be there to support them and to comfort and protect them should something go wrong. This is aligned with attachment theory that understands children's ability to freely explore their world as positively influenced by a safe, secure and trusting base provided through a secure attachment with the parent (Bowlby, 1988). Therefore, the quality of the parent-child attachment is an important consideration when embarking upon fearful tasks in therapy, and has been linked to child anxiety (Bogels, & Brechman-Toussaint, 2006).

Of course, attachment is not the only factor to potentially influence the therapeutic process and treatment outcomes. When taking a developmental perspective, a multitude of complex interacting factors can impact on psychopathology, the process and success of treatment, and the ability to develop a strong therapeutic alliance. More specifically, a review of parenting and child anxiety identified an increased risk of childhood anxiety when parent(s) behave in a way that limits the child's autonomy, and greater parental anxiety has been linked to poorer treatment outcomes (Wood, McLeod, Sigman, Hwang, & Chu, 2003). There is also growing evidence to suggest a relationship between parental beliefs and expectations and treatment outcomes (Bogels & Brechman-Toussaint, 2006). Therefore, these

more specific factors may have implications for parent(s) ability to make use of and apply a guided self-help approach.

Future studies of indirect child treatment may benefit from including measures to further explore these ideas and other researchers have also suggested that measuring attachment could be a useful and informative next step in process research (Elvins & Green, 2008; Green, 2006).

## **Conclusion**

Going back to the initial questions about common factors that influence successful outcomes, the central message seems to be that attending to the therapeutic alliance in psychological treatment is important and has the potential to facilitate a good outcome, across different treatments, contexts and client groups. A number of researchers have offered advice on how to optimise the therapeutic alliance, such as expressing empathy, using motivational interviewing techniques with resistant clients, genuineness, positive regard, asking for regular feedback, and privileging the client's experience (DiGiuseppe, Linscott, & Jilton, 1996; Norcross, 2010). However, researching therapy processes, especially in non-individual therapy, is complex and challenging as multiple perspectives, theories and definitions exist. Yet this is an exciting and ever developing area of research in which much more is still to be understood.

## References

- Alexander, L.B., & Morrison Dore, M. (1999). Making the parents as partners principle a reality: The role of the alliance. *Journal of Child and Family Studies, 8*, 255-270.
- Bogels, S.M., & Brechman-Toussaint, M.L. (2006). Family issues in child anxiety: Attachment, family functioning, parental rearing and beliefs. *Clinical Psychology Review, 26*, 834-856.
- Bordin, E. S. (1976). The generalizability of the psychoanalytic concept of the working alliance. *Psychotherapy: Theory, Research and Practice, 16*, 252–260.
- Bordin, E.S (1994) Theory and research on the therapeutic working alliance: new directions. In A.O. Horvarth., & L.S. Greenberg. (Ed.), *The working alliance: theory, research and practice* (pp. 13 – 38). New York: John Wiley & Sons, Inc.
- Bowlby, J. (1988). *A secure base: Clinical applications of attachment theory*. London: Routledge.
- Butler, S.F., & Strupp, H.H. (1986). Specific and nonspecific factors in psychotherapy: A problematic paradigm for psychotherapy research. *Psychotherapy: Theory, Research, Practice, Training, 23*, 30-40.
- DiGiuseppe, R., Linscott, J., & Jilton, R. (1996).The therapeutic alliance in adolescent psychotherapy. *Applied and Preventive Psychology, 5*, 85-100.
- Elvins, R., & Green, J. (2008). The conceptualization and measurement of therapeutic alliance: An empirical review. *Clinical Psychology Review, 28*, 1167–1187.

- Fabiano, G.A., & Pelham, W.E., (2002). Evidence-based treatment for mental disorders in children and adolescents. *Current Psychiatry Reports*, 4, 93-100.
- Freud, S. (1913). On beginning the treatment. In J.Strachey (Ed.), *The standard edition of the complete psychological works of Sigmund Freud, Vol. 12* (pp 121-144). London: Hogarth Press.
- Glueckauf, R.L., Liss, H.J., McQuillen, D.E., Webb, P.M., Dairaghi, J., & Carter, C.B. (2002). Therapeutic alliance in family therapy for adolescents with epilepsy: An exploratory study. *The American Journal of Family Therapy*, 30, 125–139.
- Grave, J., & Blissett, J. (2004). Is cognitive behavior therapy developmentally appropriate for young children? A critical review of the evidence. *Clinical Psychology Review*, 24, 399–420.
- Green, J. (2006) Annotation: The therapeutic alliance – a significant but neglected variable in child mental health treatment studies. *Journal of Child Psychology and Psychiatry*, 47, 425-435.
- Horvarth, A., & Symonds, R.D. (1991). Relation between working alliance and outcome in psychotherapy: A meta-analysis. *Journal of Counselling Psychology*, 38, 39-149.
- Karver, M. S., Handelsman, J. B., Fields, S., & Bickman, L. (2005). A theoretical model of common process factors in youth and family therapy. *Mental Health Services Research*, 7, 35–51.
- Kazdin, A. E., Marciano, P. L., & Whitley, M. (2005). The therapeutic alliance in cognitive-behavioral treatment of children referred for oppositional, aggressive, and antisocial behavior. *Journal of Consulting and Clinical Psychology*, 73, 726–730.

- Martin, D.J., Garske, J.P., & Davis, M.K. (2000). Relation of the therapeutic alliance with outcome and other variables: A meta-analytic review. *Journal of Consulting and Clinical Psychology, 68*, 438-450.
- McLeod, B.D., & Weisz, J.R. (2005). The therapy process observational coding system-alliance scale: measure characteristics and prediction of outcome in usual clinical practice. *Journal of Consulting and Clinical Psychology, 73*, 323–333.
- Norcross, J. C. (2002). Empirically supported therapy relationship. In J. C. Norcross (Ed.), *Psychotherapy relationships that work: Therapist contributions and responsiveness of patients* (pp. 3–16). New York: Oxford University Press.
- Norcross, J.C. (2010). In B.L. Duncan, S.D. Miller, Wampold, B.E., & M.A. Hubble (Eds.), *The heart and soul of change: delivering what works in therapy* (2<sup>nd</sup> ed., pp 113-137). Washington, DC, US: American Psychological Association.
- Pereira, T., Lock, J., & Oggins, J. (2006). Role of therapeutic alliance in family therapy for adolescent Anorexia Nervosa. *International Journal of Eating Disorders, 39*, 677–684.
- Pinsof, W. M. (1994). An integrative systems perspective on the therapeutic alliance: Theoretical, clinical, and research implications. In A. O. Horvath & L. S. Greenberg (Eds.), *The working alliance: Theory, research, and practice* (pp.173–195). New York: John Wiley & Sons.
- Pinsof, W. M., & Catherall, D. R. (1986). The integrative psychotherapy alliance: family, couple and individual therapy scales. *Journal of Marital and Family Therapy, 12*, 132–151.
- Shirk, S.R., & Karver, M. (2003). Prediction of treatment outcome from relationship

variables in child and adolescent therapy: A meta-analytic review. *Journal of Consulting and Clinical Psychology*, 71, 452–464.

Tichenor, V., & Hill, C. (1989). A comparison of six measures of working alliance. *Psychotherapy*, 26, 195–199.

Veale, D (2008) Psychotherapy in dissent. *Therapy Today*, February.

Webb, C.A., DeRubeis, R.J., Barber, J.P. (2010). Therapist adherence/competence and treatment outcome: A meta-analytic review. *Journal of Consulting and Clinical Psychology*, 78, 200-211.

Wood, J.J., McLeod, B.D., Sigman, M., Hwang, W., & Chu, B.C. (2003). Parenting and childhood anxiety: Theory, empirical findings, and future directions. *Journal of Child Psychology and Psychiatry*, 44, 134-151.