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Client self rated adult attachment patterns and the therapeutic alliance: A systematic review

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ABSTRACT

Attachment theory has been proposed as a suitable framework within which to understand and explore the therapeutic alliance. This review systematically explores research that has examined the relationship between clients' self reported attachment patterns and the therapeutic alliance. Methodological characteristics and study findings are reviewed and discussed with the aim of concluding whether assessing clients' attachment patterns would be beneficial to therapy. In spite of inconsistencies with regards to the measurement and conceptualisation of attachment and the alliance, the evidence suggests that clients who rate themselves as having a more secure attachment pattern are likely to rate the alliance as stronger. The implications of this for therapeutic practice are discussed.

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1. Introduction

The therapeutic alliance refers to the interpersonal processes that occur in the relationship between a therapist and client. The importance of understanding the therapeutic alliance is illustrated through research that has found that a good quality alliance is related to a better therapeutic outcome (Horvath & Symonds, 1991). It has been suggested that attachment theory can provide a framework within which to explore the therapeutic alliance (Bowlby, 1988a). Although there has been considerable research on the relationship between client attachment patterns and the therapeutic alliance, at present there is a lack of synthesis of findings in this area. This paper therefore systematically reviews the empirical studies that have examined the relationship between clients' self reported attachment patterns and the therapeutic alliance. The intention is to evaluate whether assessing clients' attachment patterns would be beneficial to therapists and service providers. The concepts of therapeutic alliance and attachment will be discussed separately before exploring how they may fit together.

1.1. The therapeutic alliance

The concept of the therapeutic alliance was originally developed within the psychodynamic tradition (for a detailed description of its origins see Horvath & Luborsky, 1993). However, over time research has consistently indicated that the strength of the therapist–client relationship is an important variable in determining therapeutic success, independently of the type of therapy delivered (Martin, Garske, & Davis, 2000). Thus the concept has been adopted across therapeutic orientations and has emerged as an important common factor in the efficacy of the adult psychotherapeutic process (Norcross, 2002).

Differences in the way that researchers conceptualise and term the therapeutic alliance (e.g. working or helping alliance, therapeutic relationship) have led to the call for a clarification of the concepts underlying alliance in order to provide a cohesive definition (Elvins & Green, 2008). Bordin (1979) was the first to present a generic synthesis of alliance constructs and conceptualised it as a purposeful collaborative relationship which involves a blend of three features. These features are; (a) an agreement between the therapist and client on the goals of therapy, (b) an agreement of a task/s that can be done to achieve these goals, and (c) the development of bonds, that is the development of enough trust, respect, confidence and personal attachment between the therapist and the client to achieve the goals and take part in the tasks. This conceptualisation was consistent with the idea that the alliance is a common factor across therapeutic orientations and modalities. As a result, Bordin's conceptualisation began to dominate the literature and validated measurement scales were developed based on this theory. Two examples are the Working Alliance Inventory (WAI; Horvath & Greenberg, 1989) and the Family Therapy Alliance Scale (FTAS; Pinsof & Catherall, 1986). The WAI has become the most widely used measure in alliance research (Martin et al., 2000).

According to Bordin's (1979) theory, the process of building and repairing a strong alliance is the key mechanism underlying therapeutic change. In order for change to occur, therapists and clients need to monitor and repair any ruptures that may happen as a result of a disagreement or misunderstanding in relation to the above three components of the alliance (Safran & Muran, 2000). The alliance is viewed as dyadic and mutual with the therapist and client as active co-constructors, constantly negotiating and renegotiating the alliance in order for successful work to take place (Bordin, 1994). Research studies have focussed on identifying the factors that influence this relationship, in particular client pre-treatment individual differences (e.g. motivation, ability to form social relationships; Horvath, 1994). It is thought that by discovering these factors the efficacy of therapy will improve and clinicians and researchers will be able to understand how the alliance aids client change. This position forms the basis for the current review, which investigates the relationship between one factor, client attachment, and the therapeutic relationship. For the purposes of this review the term 'alliance' will be used to refer to the working relationship between client and therapist as conceptualised above.

1.2. Attachment

Attachment theory offers a framework within which clients' interpersonal characteristics and their capacity to form positive relationships can be viewed. Attachment conceptualises ways in which people express their need to belong and maintain proximity to another individual (the attachment figure) in times of need. Through early relationships in childhood with primary caregivers, people develop characteristic patterns of relating to others, which then become applicable to close relationships across the lifespan (Bowlby, 1988b; Mikulincer & Shaver, 2007).

Individual differences in attachment patterns occur depending upon the availability and responsiveness of these attachment figures. For example, if a child experiences their attachment figure as available, responsive in times of need and able to relieve their distress, they will internalise beliefs of the world as a safe place and others as caring and reliable. Consequently, they will feel secure enough to independently go and explore their environment. Bowlby (1988b) described this internalisation of beliefs about self and others in relationships in terms of internal working models. The models formed in childhood then become the prototype that adults use to navigate through experiences of social relationships (Fraley, 2002).

In the above example, the child develops a sense of attachment security and has a positive internal working model. However, if the attachment figure is experienced as cold, unresponsive and unavailable, the child will not develop a sense of attachment security and will form a negative working model of him or herself and others. In this case, individuals will have to develop alternative strategies to relieve distress rather than seeking proximity to the attachment figure. These alternative strategies are termed insecure attachment strategies and are further divided into different facets depending upon the behaviours an insecure individual adopts. For example, if in order to reduce their distress a person becomes totally self reliant and denies their attachment needs, they would be deemed as having a highly avoidant attachment pattern. Alternatively a person may become over-dependent and try to get an unresponsive attachment figure to provide more attention and support. In this case the individual would have a highly anxious attachment pattern (Mikulincer & Shaver, 2007).

1.3. Attachment and the therapeutic alliance

The attachment system in adulthood is believed to be activated in times of threat or distress, which may be particularly relevant to the times that many people seek therapeutic help. This has led researchers

to conceptualise the therapeutic relationship in terms of attachment. Bowlby (1988a) drew parallels between the role of the parent and the role of the therapist. Like a parent, the therapist is viewed as needing to provide a secure base for the client, which would then allow the client time, space and safety to explore and develop a greater understanding of themselves and the world.

The idea is that clients' project their internal working models onto the therapist and the therapist–client relationship, such that client attachment patterns affect how the two parties interact with each other and thus the formation and maintenance of their alliance (Bowlby, 1988a). Clients who have a secure attachment pattern are thought to be more able to become involved with self-exploration, engage in self-disclosure, develop a collaborative understanding with the therapist and be able to reflect on and appraise their past and current relationships (Mikulincer & Nachshon, 1991). These skills would help 'secure' clients form a good quality alliance and maintain it by repairing any ruptures that develop. Conversely, clients with an insecure attachment pattern may avoid interpersonal closeness with the therapist or worry about the therapist's investment in them. As a result this may impede or delay the formation of a good quality alliance.

In keeping with an attachment view of therapy, is the idea that therapeutic change occurs as insecure clients, contrary to their previous experience, experience a containing and responsive relationship with their therapist (Bowlby, 1988a). If this experience deviates significantly from the individuals' early prototype model, their core attachment pattern may be modified (Daniel, 2006). Consistent with this idea, studies have reported that decreases in symptom severity over the course of psychotherapy are associated with increases in self reported secure attachment (Travis, Bliwise, Binder, & Horne-Moyer, 2001).

In addition, authors argue that therapists need to understand and utilise attachment theory to ensure good therapeutic practice and improve outcome (e.g. Slade, 1999). In fact, Liotti (2007) argues that any rupture in the alliance can be traced back to the client's attachment system. Along these lines, Harris (2004) outlined the impact of particular attachment patterns on the development of the alliance and suggested ways in which therapists could respond in order to "reduce the destructive impact of the patient's insecure attachment style on the alliance" (Harris, 2004, p. 150). Hence if therapists are aware of their client's attachment pattern they can be attentive to potential alliance problems. Moreover, as a poor alliance has been linked to increased rate of drop out from therapy and less successful therapeutic outcomes, Shorey and Snyder (2006) advocated for the assessment of clients' attachment as standard in clinical assessment batteries.

1.4. Assessing clients' attachment patterns

Shorey and Snyder's (2006) idea of pre-therapy assessment of clients' attachment patterns is complicated by the longstanding debate over the best method for measuring adult attachment (for a summary see Shaver & Mikulincer, 2002). Nonetheless, several measures have dominated research studies on attachment. These measures include narrative accounts, clinical interviews and self report questionnaires. However, not all these methods are suited for the therapeutic setting.

Narrative measures require a great deal of resources to analyse qualitatively and suffer from issues of inter-rater reliability. The use of clinical interviews to assess attachment relies upon the clinical judgement of the therapist and it has been demonstrated that this method is not reliable (Hughes, Hardy, & Kendrick, 2000). Self report measures are more practical but are based on the underlying assumption that adult attachment is best assessed through an individual's conscious reports of their emotional experiences and behaviours in close relationships in adulthood. As attachment is often considered to be an unconscious, automatic process, the validity of self report instruments has been questioned (Crowell, Fraley, & Shaver, 1999). In spite of this, self reports are the most frequently used methods of assessing individual differences in attachment security. They are relatively quick to complete, may be administered alongside other pre-therapy measures and can be hand scored relatively quickly. Therefore, the only measures that are likely to be suitable for use in the therapeutic setting are self report measures (Shorey & Snyder, 2006).

Yet the task of selecting which self report attachment instrument to use is complicated by the number of measures available and the different ways in which they conceptualise, measure and report attachment (Crowell et al., 1999). A detailed review of each measure is beyond the scope of this paper (interested readers are guided to Mikulincer & Shaver, 2007). However, two issues related to self report attachment measures are important to consider when evaluating research studies: whether attachment is (a) best measured categorically or continuously; and (b) best viewed as generic (existing in the same way across many relationships) or relationship specific.

Historically, categorical self report measures were developed which classified individuals into a certain type of attachment style (e.g. secure, avoidant, anxious/ambivalent; Hazan & Shaver, 1987). These measures were criticised as they were based on the assumption that variations among individuals within a category did not exist, despite individual differences being observed in clinical practice (Mikulincer & Shaver, 2007). Hence, measures using continuous rating scales were developed. These multi-item continuous scales differ with regards to the number of factors they measure.

The Experiences in Close Relationships Scale (ECRS; Brennan, Clark, & Shaver, 1998) and the Adult Attachment Inventory (AAI; Simpson, Rholes, & Nelligan, 1992) measure two insecure factors, anxiety and avoidance. According to this model, lower scores on both these factors indicate a more secure attachment pattern. The Adult Attachment Scale (AAS; Collins & Read, 1990) measures three factors; comfort with closeness, comfort with depending on others and anxious concern about being abandoned or unloved. Bartholomew has developed measures to assess attachment patterns within a four factor model. Hence both measures linked to her theoretical perspective, the Relationship Questionnaire (RQ; Bartholomew & Horowitz, 1991) and the Relationship Styles Questionnaire (RSQ; Griffin & Bartholomew, 1994), provide scores on four factors; secure, fearful, preoccupied and dismissive. Finally, the Attachment Styles Questionnaire (ASQ; Feeney, Noller, & Hanrahan, 1994) provides an even more finely grained analysis and measures five factors; lack of confidence, discomfort with closeness, need for approval, preoccupation with relationships and viewing relationships as secondary. Thus, researchers have designed different self report measures to fit with their hypotheses on how adult attachment is structured.

The most recent findings indicate that adult self reported attachment is best assessed by two continuous dimensions; avoidance and anxiety (Brennan et al., 1998; Fraley & Waller, 1998). Both dimensions are concerned with the ways in which individuals' behave in relationships and a score on these two dimensions indicates individuals' level of security in attachment. 'Attachment avoidance' concerns the degree to which an individual experiences discomfort with being close to and depending upon others. 'Attachment anxiety' relates to the extent to which an individual fears others will reject and abandon them in times of need. An individual who is securely attached will score low on both of these dimensions.

The factors mentioned above, relating to the different measures of adult attachment, can be organised along the lines of these two dimensions (Brennan et al., 1998). For example, the factors of dismissive, fearful, discomfort/comfort with closeness and relationships as secondary all relate to attachment avoidance. Each of these factors gives information on how individuals, who perceive becoming attached to others as dangerous or disallowed, avoid attachment

relationships. In relation to therapy, clients who are high in attachment avoidance may dismiss the need to form a relationship with the therapist (high dismissive). They may worry and fear getting close to the therapist (high fearful), they may experience discomfort with getting close to the therapist (high discomfort with closeness or low comfort with closeness) and they may put less importance on forming a relationship with the therapist (high relationships as secondary). These strategies may serve to deny any attachment needs and lead to clients becoming totally self-reliant in therapy (Mikulincer & Shaver, 2007).

The factors preoccupied (RSQ), preoccupied with relationships, need for approval (ASQ) and anxious (AAS) all relate to attachment anxiety. These factors provide information on how individuals, who perceive attachment figures to be unreliable, unresponsive or unavailable, gain attention and support in order to maintain proximity to other people and get their needs met (Mikulincer & Shaver, 2007). In relation to therapy, anxiously attached clients may worry about the availability of the therapist and as a result display anxious strategies in the alliance. They may become over-dependent on the therapist, desire to be emotionally and physically close to them, become preoccupied with making a relationship with them (high preoccupied), and make excessive demands for attention and care (high need for approval). As a result of these relationship patterns attachment theory predicts that those clients scoring highly on the anxious and avoidant attachment scales will have difficultly forming and maintaining a good quality therapeutic alliance and consequently alliance ratings will be lower.

Self report measures were originally designed to ask participants to rate their attachment pattern in relation to their attachment to romantic partners (e.g. Hazan & Shaver, 1987; Simpson et al., 1992). However research has indicated that attachment patterns are relevant in many forms of relationships, not specifically romantic or parental relationships. As such attachment can be measured at a fairly abstract level, such as by asking about global close relationships. For example, Klohnen, Weller, Luo, and Choe (2005) suggested that an adult's attachment in specific relationships (e.g. to best friends and romantic partners) is reflective of their general attachment pattern. In addition, Overall, Fletcher, and Friesen (2003) examined three specific relationships (family, friendship and romantic) and found a hierarchical arrangement of specific and global attachment working models. Thus the overall global attachment working model is the super ordinate concept and nested within that are relationship domain representations (i.e. romantic) and then specific relationship models (i.e. current partner). Therefore, in relation to this review, although these representations may be related conceptually, it is important to be mindful that a measure asking clients to rate their attachment in general adult relationships may not find results exactly equivalent to a measure asking clients to rate their relationship with their therapist.

To summarise, the literature indicates that the attachment patterns that clients bring to the therapy relationship can influence the formation and development of their working alliance (Bowlby, 1988a). More specifically, clients with insecure attachment patterns may struggle to form good quality therapeutic alliances and be less able to maintain this alliance by repairing any ruptures that may develop (Mikulincer & Nachshon, 1991). As good quality therapeutic alliances are related to better therapeutic outcome (Horvath & Symonds, 1991), it is possible that clients' insecure attachment may contribute to poorer therapeutic outcomes. Consequently researchers have suggested that client attachment should be assessed in order for therapists to be aware of its potential influences on the alliance throughout therapy (Shorey & Snyder, 2006).

1.5. Aims of this review

Much of the research conducted on the link between attachment and therapy has focussed on the effect of client attachment patterns on several therapeutic processes, such as in-treatment behaviours, transference and treatment outcomes. However, the therapeutic alliance is seen as one of the most important components of therapeutic change. At present, there is an unhelpful lack of synthesis in relation to the literature on attachment and the quality of the alliance. Moreover, the literature on attachment has moved on from some of the original conceptualisations. Studies now indicate that self reported attachment is composed of two overall dimensions, avoidance and anxiety, which provide information on an adult's level of attachment security. Each of these dimensions may be differentially related to the quality of the alliance. Therefore the goal of the current review is to examine the nature of, and characterise the relationship between, these aspects of client self reported attachment patterns and the therapeutic alliance.

2. Method

2.1. Search strategy

A literature search was conducted using the online databases PsycInfo, PsycArticles and CINAHL as they are representative of the literature published in this area. A search was conducted using the subject terms *attachment* AND *psychotherapeutic processes OR therapeutic processes OR therapeutic alliance OR working alliance OR helping alliance OR therapeutic relationship OR professional–patient relations*. The results were then narrowed by publication type (peer reviewed journal only) and the age of the population (adults 18 years and older). This initial search yielded 105 papers which were published between 1984 and October, 2008. A second search of abstracts within the database, using identical terms and parameters to the above search, but entering the terms as free text, revealed 115 studies. Forty one studies were duplicates. Hence, 179 titles and abstracts were reviewed using the inclusion criteria.

2.2. Inclusion criteria

To be included in this review articles had to conform to the following criteria:(a) the article was published in English, (b) the sample consisted of clients who had received, or were due to receive, a form of psychological therapy, (c) a measure of client self rated adult attachment was used, (d) a measure of the therapeutic alliance was used, and (e) the study investigated a quantifiable relationship between the variables of adult attachment and the therapeutic alliance.

3. Search results

3.1. Selection of studies

Out of the 179 studies retrieved, a total of 18 met the inclusion criteria. The descriptive and methodological characteristics of the studies will be discussed before considering the studies' findings.

3.2. Descriptive characteristics of studies

Table 1 provides a summary of the main descriptive characteristics of the studies.

The majority of the studies were conducted within the US ($n = 11$). Ten studies were naturalistic in design, such that participants were recruited before their first therapy session and then received treatment as usual. This allowed the researchers to give each participant the measures at the same set time in therapy. Six studies were survey studies recruiting clients already in therapy and consequently not all participants completed the questionnaires at the same time point in their therapy. Two studies (Bruck et al., 2006; Tasca et al., 2007) were randomised trials, in which participants were

randomly assigned to one of two groups (psychodynamic or cognitive behavioural therapy). Although at analysis Bruck et al. (2006) combined data across groups.

Whilst fifteen studies were concerned with assessing the therapeutic alliance in one-to-one therapy, two studies delivered group therapy and one study delivered family therapy. In those studies that reported the length of therapy ($n = 12$) the number of sessions ranged from seven (Sauer et al., 2003) to 30 (Bruck et al., 2006). Therapy was carried out from a variety of orientations (i.e. psychoanalysis/dynamic based therapy, common factors/eclectic counselling approach, eco-systemic family therapy). Six studies did not specify a particular therapeutic orientation. Most of the studies reported therapy that was being delivered within university counselling centres. Two studies reported therapy that was delivered within a residential inpatient setting. In relation to therapists' experience, eight studies comprised of therapists who were still in training (i.e. doctoral/masters students).

Four studies used a student population; one study used undergraduate students and three studies used students who were enrolled on a counselling/psychology course. Two studies were concerned with therapy for clients with a clinical diagnosis of depression, two studies used clients with eating disorders, one study used clients who were receiving treatment for drug misuse and one study reported using participants with diagnoses of mood/anxiety disorders and personality disorders.

Of those studies that reported the gender of participants in their final sample ($n = 16$) all but one study (Meier et al., 2005) used predominately female participants and three studies analysed data from a female population only. Most studies reported including clients from a range of relationship statuses (i.e. single, married, and divorced) and a range of ethnic backgrounds.

Of particular note is the level of attrition in some studies. The number of participants recruited in each study ranged from 18 to 187. However, out of the total 1552 participants recruited across studies, data from only 1118 participants was analysed. In those studies that used naturalistic designs attrition was higher due to clients dropping out of therapy before all the measures could be completed.

3.3. Measurement of the therapeutic alliance

All the studies used a measure of the therapeutic alliance where higher scores indicated a stronger alliance. The majority of studies used the client ratings of the alliance. However, five studies used both clients' and therapists' ratings. Fourteen studies used the WAI. The WAI has good validity and inter-rater and test–retest reliability (Martin et al., 2000). However, direct comparisons between these studies are hindered by the variations in the ways in which researchers scored and reported the measures. For example, within the 14 studies using the WAI, seven reported a total item score, three reported the total score and subscale scores, two reported an overall mean, one reported only the subscale scores, and one reported only the bond subscale. These differences make interpretation difficult concerning which aspects of the alliance are important when assessed in relation to client attachment. Other alliance measures used include the Session Impacts Scale (SIS; Elliott & Wexler, 1994) and the California Psychotherapy Alliance Scale (CALPAS; Gaston & Marmar, 1994).

3.4. Measurement of attachment

Many studies included in this review have distinguished between adult global/general adult attachment patterns and specific client attachment to the therapist. Four studies measured both clients' global and specific attachment patterns.

3.4.1. Global attachment measures

The most popular measure of global attachment is the AAS, used in five studies, although an adapted version is used in one study. Other questionnaires used were the ECRS ($n = 4$), RSQ ($n = 3$), RQ ($n = 3$), ASQ and the AAI. One study assessed the parent–adolescent attachment relationship (Johnson et al., 2006), specifically ratings of mothers' and fathers' trust and communication using the Revised Inventory of Parent and Peer Attachment (Johnson, Ketring, & Abshire, 2003).

In keeping with recommendations made in the attachment literature (Fraley & Waller, 1998), it appears that all the studies analysed participants scores on continuous dimensions of attachment. As mentioned previously, each scale produces different factors and it appears that even within the studies that use the same measure the factors are termed or scored differently. For example within the five studies that use the AAS, four term the factors 'close, depend and anxiety', as the authors of the scale originally intended, and one adapts the measure (AAS-R) to term them 'security, avoidance and anxiety/ambivalence', akin to Hazan and Shaver's (1987) factors. Furthermore, many authors adapt the scoring of the measures to compute one or two dimensions from measures that were originally designed to assess more (Goldman & Anderson, 2007; Meier et al., 2005; Tasca et al., 2007).

3.4.2. Specific attachment measures

Five studies assessed client attachment to the therapist. Four studies used the Client Attachment to Therapist Scale (CATS; Mallinckrodt, Gantt, & Coble, 1995) to measure clients' perceptions of their attachment relationship with their therapist, rated on three subscales; secure, preoccupied-merger and avoidant-fearful. Within these studies there are differences in both the times at which the measure was given (e.g. after each session, after the first session or not at any set time point), and the ways in which it was analysed (e.g. using subscale scores or a composite avoidant–fearful/secure subscale score). One study (Parish & Eagle, 2003) used the Components of Attachment Questionnaire (CAQ; Parish, 2000) which was designed to assess which aspects of attachment are prominent in a particular relationship. Parish and Eagle (2003) asked clients to complete two forms of the CAQ, one in relation to their relationship to their therapist and one in relation to their relationship with a primary attachment figure. This assessed whether attachment was prominent in the therapeutic relationship and measured the intensity of overall attachment within that relationship.

3.5. Summary of methodological characteristics

In summary, there are various measures of alliance and attachment used within the studies included in this review. Even amongst those studies that have used similar alliance or attachment measures, differences occur in the way in which researchers have delivered, scored and analysed the measure. These methodological issues restrict any direct comparisons that can be made between the study findings.

4. Study findings

The statistical findings from each study will now be explored. The relationship between clients' global attachment and the alliance will be discussed first, followed by a discussion on the relationship between clients' specific attachment to the therapist and the alliance. Within each section the direction and strength of any relationship will be discussed.

4.1. Relationship between clients' global attachment patterns and the alliance

Sixteen studies provide data from correlation or regression analyses examining the relationship between clients' global attachment patterns and the therapeutic alliance; twelve of these studies report significant findings. Table 2 summarises the significant findings by global attachment dimension. The correlation and regression coefficients can provide a measure of the effect sizes, which are scale

Table 1
Descriptions of the 18 studies.

Study number & reference	Country	Sample population & setting	Therapy	Attachment measure	Alliance measure	Level of analysis
1. Lindgren, Barber, and Sandahl (2008)	Sweden	Outpatients suffering burn out depression	Group manualised psychodynamic therapy total of 18×90 minute sessions	RSQ (omitted secure subscale)	CALPAS-G client rated (computed total score & mean score over sessions 3, 5, & one other session & development over sessions 3–5)	Individual level ($N=18$)
2. Romano, Fitzpatrick, and Janzen (2008)	Canada	Volunteer students on a counselling course	One to one common factors counselling on average 14 sessions	ECRS pre-therapy CATS after each session	WAI client rated (computed mean over session 5–9 on total, bond, goal & task)	Individual level ($N=59$)
3. Tereno, Soares, Martins, Celani, and Sampaio (2008)	Portugal	Inpatient females with eating disorders & their parents	–	AAS-R	WAI (only bond subscale used)	Group level (anorexic $N=30$, bulimic $N=27$)
4. Janzen, Fitzpatrick, and Drapeau (2008)	US	Undergraduate students on counselling course at university counselling centre	One to one common factors counselling total of 12–15 sessions	ECRS-pre-therapy CATS-after session 1–4 (computed composite avoidant–fearful/secure subscale)	SIS client rated (analysed scores from sessions before, during and after client identified a relationship building incident)	Individual level ($N=30$)
5. Goldman and Anderson (2007)	US	University students at a university counselling centre	One to one mostly eclectic therapy, 2× CBT, 3× unspecified	AAS revised-pre-therapy (computed single security dimension)	WAI client rated (used total score from sessions 1–3)	Individual level ($N=30$)
6. Tasca, Balfour, Ritchie, and Bissada (2007)	US	Females suffering with binge eating disorder at hospital eating disorders clinic	Group manualised PIP and CBT total of 17 sessions	ASQ pre-therapy (used item means from four scales only: preoccupied, discomfort with closeness, need for approval and relationships as secondary)	CALPAS-G client rated (used total item mean score & growth over sessions 1–16)	Group level (GPIP $n=33$, GCBT $n=32$)
7. Fuertes et al. (2007)	US	On going therapy dyads	One to one therapy various orientations median of 16 sessions	ECRS therapist rated only CATS	WAI -12 Client & therapist rated (used total score from ratings after sessions 1–3)	Individual & dyad level ($N=59$)
8. Johnson, Ketring, Rohacs, and Brewer (2006)	US	Families in ongoing therapy taking place at the family home	Eco-systemic family therapy in most cases 2 sessions a week for 6–8 weeks	Inventory of Parent and Peer Attachment–adolescent rated The Revised Inventory of Parent Attachment–parent rated	Family therapy alliance scale (used task, bond, goal subscales rated at the end of therapy)	Individual level (mothers $n=26$, fathers $n=14$ and adolescents $n=21$)
9. Bruck, Winston, Aderholt, and Muran (2006)	US	Outpatients with a mixture of mood & anxiety disorders and personality disorders	One to one manualised short-term dynamic therapy & CBT total of 30 sessions	RSQ pre-therapy	WAI-12 therapist & client rated (used overall mean score from sessions 1–6)	Individual level ($N=26$)
10. Meier, Donmall, Barrowclough, McElduff, and Heller (2005)	UK	Residential inpatients in rehabilitation suffering with drug misuse	One to one in a therapeutic community 4–8 h a day of 1–1 and group therapy for first 3 weeks	RQ modified pre-therapy (used attachment security index score only)	WAI-12 therapist & client rated (used total scores from first 3 weeks)	Individual level ($N=187$)
11. Mallinckrodt, Porter, and Kivlighan (2005)	Columbia	Clients in therapy at a university counselling centre	One to one had received 4–8 sessions at time of data collection	ECRS CATS	WAI client rated (used total, bond, task and goal rated after one session in mid therapy)	Individual level ($N=38$ for study 1, also reanalysed data for study 2, $N=44$)
12. Reis and Grenyer (2004)	Australia	Outpatients with major depression at university counselling centre	One to one supportive expressive dynamic psychotherapy total of 16 sessions	RQ-pre-therapy	WAI client rated (summed and averaged all items as rated at end of session 3)	Individual level ($N=58$)
13. Sauer, Lopez, and Gormley (2003)	US	University and community counselling centres	One to one, 4× dynamic, 5× CBT, 5× eclectic, 3× systemic therapy at least 7 sessions	AAI-after the first session	WAI client and therapist rated (used total score after sessions 1,4 and 7)	Individual level ($N=17$)
14. Parish and Eagle (2003)	US	Doctoral students in therapy and other outpatients at university counselling centre	One to one psychodynamic/analysis >6 months	Components of Attachment Questionnaire RQ	WAI-12 client rated (used total score only)	Individual level ($N=105$)
15. Eames and Roth (2000)	UK	Outpatient clinics	One to one 24× CBT, 3× dynamic, 1× CAT, 1× eclectic	RSQ after first session	WAI-12 therapist and client rated (used total, task, bond and goal rated after sessions 2–5)	Individual level (client $N=30$, therapist $N=28$)
16. Kivlighan, Patton, and Foote (1998)	US	Counsellor-client dyads at university counselling centre	One to one	AAS pre-therapy	WAI-client rated (used total score after session 3)	Individual & dyad level ($N=40$)

(continued on next page)

Table 1 (*continued*)

Study number & reference	Country	Sample population & setting	Therapy	Attachment measure	Alliance measure	Level of analysis
17. Satterfield and Lyddon (1995)	US	Outpatients at university counselling centre	One to one	AAS pre-therapy	WAI-client rated (used total score after session 3)	Individual level ($N=60$)
18. Mallinckrodt, Coble, and Gantt (1995)	US	Mostly outpatients from university/ college counselling centres, a hospital clinic & a training clinic	One to one	AAS not given at one set time point	WAI- client rated (used total, task, bond and goal at various time points)	Individual level ($N=76$)

Note. – = not enough information provided, PIP = Psychodynamic Interpersonal psychotherapy, CBT = Cognitive Behavioural Therapy, CAT = Cognitive Analytic Therapy, AAS = Adult Attachment Scale, ECRS = Experiences in Close Relationships Scale, RQ = Relationship Questionnaire, RSQ = Relationship Styles Questionnaire, CATS = Client Attachment to Therapist Scale, ASQ = Attachment Styles Questionnaire, WAI = Working Alliance Inventory, WAI-12 = Working Alliance Inventory Short Form, SIS = Session Impact Scale, CALPAS-G = Californian Psychotherapy Alliance Scale Group version.

independent quantifiers of the strength of the relationship between two particular variables (Rosenthal & DiMatteo, 2001).

In order to summarise this body of information, the sample size as well as the direction and size of each significant effect is shown in Table 3. Each attachment dimension is arranged under the super ordinate categories of attachment security, where higher scores on these dimensions indicate more secure attachment, and attachment insecurity (avoidance and anxiety), where higher scores indicate insecure attachment. For ease of explanation the study findings will be discussed in relation to these two categories.

4.1.1. Attachment security

The theoretical literature indicates that clients who are securely attached will be able to form a good quality therapeutic alliance and maintain this alliance by repairing any ruptures that may develop (Bowlby, 1988a). Hence, a positive relationship is predicted between clients' ratings on the secure attachment dimensions and alliance ratings. In keeping with this theory, Table 3 illustrates a fairly consistent picture of positive relationships of medium strength.

Clients' attachment security was assessed by higher scores on the secure (RSQ), the depend (ability to rely on or trust others) and the close (comfort with intimacy) dimensions (AAS). Five studies reported that when measured as a single dimension, or when computed from a combination of other dimensions (Goldman & Anderson, 2007), secure client attachment was significantly positively related to the alliance ($p<.05$, medium effect size). This relationship was found in different client groups, for example outpatient clients and student clients from both undergraduate and postgraduate populations. It does not seem to be important whether the relationship was measured early on in the therapeutic process or later, as significant relationships were observed

Table 2
A summary of significant findings between total alliance ratings and global attachment dimensions.

Client attachment dimension	Alliance rating	Session number[a]	Study number	*N*	Correlation/effect size (*r*)	Regression coefficient (β unless otherwise stated)	Corrected effect size[b]
Security	Client total	1	5	30	.39*	$R^2=0.15$*	
Secure	Client total	–	10[c]	187	–	3.23**	
		3	12	58	.24	0.31*	
		–	14	105	.25*	–	
	Therapist total	5	15	24	.42*	.32	
		–	10	187	–	2.18*	
Depend	Client total	3	16	40	.38*	−.30	
		3	17	60	.31**	–	
Close	Client total	3	16	40	.35*	.43**	
		–	18	76	.22[d]	.30*	
Dismissive	Client total	–	14	105	−.22*	–	
		3	12	58	−.27*	−.33*	
		3	1	18	−.47*	–	.45
		3, 4, 5	15	<25	<.33	<.65*	
		3–5[e]	1	18	.62**	–	.59
	Therapist total	3, 4	15	26	<.29	<.68**	
Fearful	Client total	–	14	105	−.20*	–	
		5	15	20	−.52*	−.57**	
Preoccupied	Client total	1–6	9	26	−.33*	–	
		5	15	20	−.17	.62*	
	Therapist total	3, 4	15	26	<−.10	<.60*	
Anxiety	Client total	–	11	38	−.33*	–	
		–	18	76	−.32**	−.37**	
Need for approval	GPIP client total	1–16	6[c]	33	–	.04***	.65
Relationships as secondary	GPIP client total	1–16	6	33	–	−.02*	.35

Note. – denotes authors did not report this information, < denotes that there was more than one correlation and regression statistic reported over different sessions but all statistics were less than the number reported.

[a] Study numbers refer to those presented in Table 1.

[b] Corrected effect sizes were calculated if $N<20$ (using Hedges' formula $r=1-3/4\,N-9$) or if *r* was not reported and the authors reported enough statistics to compute *r* from $r=\sqrt{t^2/t^2+df}$ (Rosenthal & DiMatteo, 2001).

[c] Study 10 and Study 6 analyses differed from other studies, authors performed hierarchical linear modelling and consequently size of study 10 and study 6 regression coefficients are not comparable with other studies.

[d] Authors use significance level of $p<.01$ only.

[e] Early growth in the alliance was calculated as individual slopes between sessions 3 and 5.

Table 3
The direction and size of significant findings by global attachment dimensions.

		Global attachment security						Global attachment insecurity–avoidance										Global attachment insecurity–anxiety					
		Secure/ security		Depend		Close		Avoidance		Dismissive		Fearful		Relationships as secondary		Discomfort with closeness		Anxiety		Preoccupied		Need for approval	
Study number	*N*	+/−	ES	+/−	ES	+/−	ES	+/−	ES	+/−	ES	+/−	ES	+/−	ES	+/−	ES	+/−	ES	+/−	ES	+/−	ES
1	18									−/+[a]	m/l	*ns*								*ns*			
2	59							*ns*										*ns*					
3	27	*ns*						*ns*										*ns*					
4	30							*ns*										*ns*					
5	30	+	m																				
6	<33													−	m	*ns*				*ns*		+[b]	l
9	26	*ns*								*ns*		*ns*								−	m		
10	187	+	[c]																				
11	38							*ns*										−	m				
12	58	+	m							−	m	*ns*								*ns*			
13	17							*ns*										*ns*					
14	105	+	m							−	m	−	m							*ns*			
15	<26	+	m							+	m	−	l							+	s		
16	40			+	m	+	m											*ns*					
17	60			+	m	*ns*												*ns*					
18	76			*ns*		+	m											−	m				

Note. Study 7 is omitted as assessed clients' specific attachment only, study 8 is omitted as assessed clients' parental attachment only.
N = sample size. < denotes several analyses carried out on different numbers of participants, either due to analyses between groups or over different sessions, but sample size no larger than number quoted. ES = effect size, + indicates positive correlation, − indicates negative correlation, *ns* indicates not significant, s, m, l denote small, medium and large effect sizes in accordance with Cohen (1992); small $r = .10$, medium $r = .30$, large $r = .50$.
* $p < .05$, ** $p < .01$, *** $p < .001$.

[a] Authors report significant negative correlation with total alliance at session 3 and significant positive correlation with early growth in the alliance over sessions 3 to 5.
[b] Authors report significant positive correlation with growth in the alliance over sessions 1 to 16.
[c] Unable to calculate effect size from study 10 given analysis was not comparable to other studies.

from session one (Goldman & Anderson, 2007) through to six months after starting therapy (Parish & Eagle, 2003). Nor was it important whether therapists or clients rated the alliance because significant relationships were found in both sets of ratings. Furthermore, attachment security significantly predicted client rated alliance when entered alone into regression analyses (Goldman & Anderson, 2007) and when entered alongside other dimensions, such as fearful, preoccupied and dismissing (Reis & Grenyer, 2004). The one study that failed to find secure as a significant predictor suffered from low power.

In keeping with the attachment premise, statistically significant positive correlations were also found between clients' ratings on the close (Kivlighan et al., 1998) and depend subscale of the AAS and their ratings of the total alliance after session three (Kivlighan et al., 1998; Satterfield & Lyddon, 1995). Although when all the AAS attachment dimensions (anxiety and close) were hierarchically regressed onto the alliance, close but not depend emerged as a significant independent predictor (Kivlighan et al., 1998; Mallinckrodt, Coble et al., 1995). This may be due to the two subscales being highly correlated (Mallinckrodt, Coble et al., 1995; Mallinckrodt, Gantt et al., 1995; Satterfield & Lyddon, 1995). When added together into the model, close may incorporate some of the variance depend was accounting for when analysed independently.

In summary, consistent with the premise of attachment theory, there is evidence to suggest that clients' attachment security correlates with, and is a significant predictor of, a positive therapeutic alliance. Analyses have consistently produced a medium effect size. Thus the more secure the client is in relation to their attachment pattern, the greater their and their therapist's ratings of the alliance.

4.1.2. Attachment insecurity

Consistent with the attachment literature, this review arranged each of the subscales used that assessed attachment insecurity within the dimensions of avoidance and anxiety (Brennan et al., 1998). Attachment avoidance included the subscales avoidance, dismissive, fearful, relationships as secondary and discomfort with closeness. Attachment anxiety included the subscales anxiety, preoccupied and need for approval. Higher scores on these subscales indicate clients are insecure in their attachments to significant others. As previously mentioned these factors provide information on what strategies individuals adopt in close relationships.

In relation to the therapeutic alliance, attachment theory would predict a negative relationship such that clients with insecure attachment patterns would rate the therapeutic alliance lower. This would be a consequence of clients avoiding an attachment relationship in therapy or being anxious in their relationship with the therapist. Table 3 illustrates that across attachment insecurity the findings are mixed.

4.1.2.1. Attachment avoidance. In relation to attachment avoidance, when assessed as a single dimension, avoidance was not significantly related to, or predictive of, ratings of the alliance. The findings of the relationship between clients' ratings on the dismissive attachment subscale and alliance ratings suggest that when the alliance was measured at a single time point in therapy, dismissive attachment was negatively related to the alliance (Table 3). Although two studies reported a significant positive relationship, both of these studies are underpowered. Moreover, one reported the finding in relation to the overall growth in the alliance and not in relation to a single time point (Lindgren et al., 2008); and the other pertained to a group therapy situation which involves a complex interaction between therapist and clients. Thus the findings of negative relationships between dismissive attachment and alliance are likely to be more representative and applicable when describing the one-to-one therapeutic relationship.

All of the studies that reported a significant negative relationship between dismissive attachment and the alliance delivered psychodynamic therapy. It may be that those high in dismissive attachment rate the alliance particularly poor at the start of psychodynamic therapy as part of this therapy involves the therapist making a direct link to, and explicitly focussing on, the therapist–client relationship. This would be at odds with the dismissive client's denial of the need for close relationships (Bartholomew, 1990). Clients high in dismissive attachment may not see a need to, or be motivated to, focus on developing an alliance with the therapist, and hence rate the alliance as lower.

It is hard to draw a conclusion on the impact of fearful attachment on the alliance. Two studies found a significant negative relationship (Eames & Roth, 2000; Parish & Eagle, 2003). Whilst in psychology the weight of evidence tends to rest with statistically significant findings, it should be noted that three other studies failed to find a significant relationship, although one of these did involve group therapy. Furthermore, whilst Eames and Roth reported a large effect size it is likely that this is an overestimation of the size of the effect given Parish and Eagle report a medium effect size using a much larger sample size ($N = 105$ in comparison to $N = 20$).

Tasca et al. (2007) measured two further subscales relating to attachment avoidance, relationships as secondary and discomfort with closeness. Significant findings indicated clients who view relationships as not important rated the group alliance in psychodynamic therapy significantly lower. However, given that this study was the only study to use these dimensions and group rather than one-to-one therapy, it is difficult to generalise from these findings to other therapeutic settings.

In summary, comparison of the studies revealed a mixed picture of the findings for the impact of attachment avoidance on the therapeutic alliance. Only when avoidance was measured using the subscale dismissive did clients rate the alliance as significantly lower. Overall the dimension of avoidance was not related to the alliance.

4.1.2.2. Attachment anxiety. Attachment anxiety was assessed through the subscales anxiety, preoccupied and need for approval. The majority of the studies that assessed attachment anxiety did not report statistically significant findings. Of the studies that reported a significant finding, a significant negative relationship was found when assessing anxiety on the anxious subscale of the ECRS and AAS (Mallinckrodt, Coble et al., 1995; Mallinckrodt, Gantt et al., 1995; Mallinckrodt et al., 2005) and when assessing preoccupied attachment on the RSQ (Bruck et al., 2006). Comparisons between the studies revealed that the studies that did not find a significant relationship assessed attachment patterns prior to therapy. Mallinckrodt et al. (2005) and Mallinckrodt, Coble et al. (1995), Mallinckrodt, Gantt et al. (1995) conducted survey studies and hence assessed client attachment once therapy had started. Given clients' attachment patterns may change during therapy (Daniel, 2006) these results highlight that client rated attachment anxiety may be subject to change and thus its impact on the alliance may become more apparent as therapy progresses.

Significant positive relationships were reported between the alliance and preoccupied attachment (Eames & Roth, 2000) and need for approval (Tasca et al., 2007). Further investigation reveals that the positive relationships between need for approval and the alliance relates to the linear growth in the alliance and not the alliance at a single time point. This result indicates clients with high anxious attachment perceived the group therapy alliance to increase as sessions progressed. As mentioned above, however, this study stands in isolation as it was the only study to use this measure of attachment and to compare data by therapy type.

When entered into regression analyses alongside other attachment dimensions, preoccupied uniquely predicted client and therapist rated alliance in a positive direction (Eames & Roth, 2000). Caution is needed when interpreting this result given the discrepancy between the correlation and regression findings. This result may have been due to a suppressor effect related to high co-linearity between the subscales preoccupied and dismissive.

In summary, the majority of the studies that assessed the relationship between anxious attachment and the alliance failed to report a statistically significant relationship. Specifically when client anxious attachment was measured prior to therapy it did not have a significant influence on the alliance. It appears that whilst there is compelling evidence for the relationship between measurement of attachment security and the alliance, the evidence for a significant relationship between attachment insecurity is mixed.

4.1.3. Other attachment dimensions

In the family therapy study Johnson et al. (2006) found that only mothers' ratings of attachment and the alliance was significantly related. Mothers' ratings on the communication (extent and quality of communication in their relationship with their eldest child) and trust (mutual understanding and respect) subscales showed a statistically significant positive correlation with their alliance ratings on the FTAS as rated at the end of therapy. However, this study is the only study to assess attachment in this way, making it difficult to generalise from the findings.

4.2. Relationship between clients' specific attachment patterns to the therapist and the alliance

Table 4 provides a summary of the strength and direction of the significant findings between clients' attachment to the therapist and alliance ratings.

The findings appear to be consistent. A significant positive relationship was found between client secure attachment to the therapist and the alliance, irrespective of whether the alliance was measured using the WAI or SIS. A significant negative relationship was found between clients' ratings on the CATS avoidant–fearful scale and their total WAI ratings. However, clients' ratings on the preoccupied/merger subscale of the CATS do not appear to be significantly correlated with alliance ratings as only one study reports a statistically significant finding (Romano et al., 2008).

Using the CAQ to assess and compare clients' ratings of attachment to the therapist and their ratings of attachment to a primary attachment figure, Parish and Eagle (2003) found that clients' overall attachment to the therapist, and not their attachment to the primary attachment figure highly correlated with their working alliance ratings. In a multiple regression analysis both the secure base subscale ($\beta = .43$, $p < .001$) and the availability subscale ($\beta = .42$, $p < .001$) uniquely predicted the working alliance.

5. Discussion

This review provides a synthesis of the research that examines the relationship between client attachment and the therapeutic alliance. Findings indicate that the research has examined two types of client attachment, clients' global attachment patterns and clients' specific attachment pattern to the therapist.

In relation to clients' global attachment patterns there is evidence to suggest that the more secure clients are in their attachment relationships the better the quality of the alliance they form with their therapist. The research into the relationship between client attachment insecurity and the alliance is less certain. The majority of the evidence indicates that clients' attachment avoidance and anxiety are not significantly related to alliance ratings (Table 3), although there is evidence to suggest that having a dismissive avoidant attachment pattern reduces the strength of the alliance.

In relation to clients' specific attachment to their therapist, the findings indicate that clients who rate themselves as securely attached to their therapist experience better quality alliances. Conversely, those clients who rate themselves as displaying an avoidant–fearful pattern of attachment with their therapist will experience less positive working alliances (Table 4).

Comparisons between the strength of the findings across these two types of attachment (global and specific) reveal that client attachment to the therapist has a stronger impact on the quality of the working alliance than client global attachment. Two out of the three studies that found significant correlations between the CATS and alliance rating failed to find a significant correlation between the ECRS and the alliance ratings. Effect sizes were greater for specific attachment than for global attachment and alliance (see Table 3). This is consistent with Klohnen et al.'s (2005) findings that correlations between relationship-specific attachment and relationship outcome were much stronger than correlations for general attachment models.

Measuring clients' specific attachment may therefore be more appropriate in relation to the quality of the alliance than measuring clients' global attachment. However, this finding may be influenced by the shared variance between the measures that assess client specific attachment and the alliance. Mallinckrodt et al. (2005) noted that the CATS secure subscale shared about half its variance with WAI total scores. They suggested that whereas clients may perceive high quality alliance and secure attachment to the therapist as similar, poor working alliance and insecure attachment to therapist may be different.

5.1. Limitations of present research

Methodological limitations of the studies made synthesising the findings of this systematic review difficult. Many studies suffered from high attrition rates and small sample sizes. Given a poor alliance has been linked to an increased rate of drop out from therapy (Shorey & Snyder, 2006), using data only from clients who had stayed in therapy may introduce a bias in results towards a better quality alliance. This reduces the ability to generalise from the findings and future research would benefit from exploring whether the relationship between attachment and the alliance differs depending upon whether clients complete therapy or not.

This review highlighted issues concerning the conceptualisation and measurement of adult attachment and the therapeutic alliance. Unfortunately although the various measures of adult attachment may be addressing a similar concept, direct comparisons between studies were hindered due to the lack of consensus on which factors best measure attachment. Relatively few studies conceptualised attachment in the two dimensions which has been proposed as the most robust way of measuring adult attachment (Brennan et al., 1998). This review suggests there is a need for a common method of assessing adult attachment with clear communication about the constructs assessed in order for comparisons to be made across the literature.

Whilst the therapeutic alliance literature appears to have moved somewhat further than the attachment literature and reached more of a consensus on how to measure the alliance (the majority of studies

Table 4
The direction and size of significant findings by specific attachment to therapist dimensions.

		CATS dimension					
		Secure/security		Avoidant–Fearful		Preoccupied–Merger	
Study number	*N*	+/−	ES	+/−	ES	+/−	ES
2	59	+	l	−	l	−	m
4	30	+	l			*ns*	
7	59	*ns*		−	l	*ns*	
11	38	+	l	−	l	*ns*	

Note. CATS = Client Attachment to Therapist Scale, *N* = sample size, ES = effect size, + indicates positive correlation, − indicates negative correlation, *ns* indicates not significant, s, m, l denote small, medium and large effect sizes in accordance with Cohen (1992); small $r = .10$, medium $r = .30$, large $r = .50$.

utilised the WAI), differences occurred in the ways in which the measure was scored and analysed. This made a coherent overall picture hard to obtain. That being said, in all the studies included in this review, the alliance was assessed in relation to the strength of the alliance, that is higher scores indicated stronger alliances. Bordin (1994) emphasised that, from a theoretical point of view, defining the alliance simply by its strength will have limitations. He acknowledged that skilled therapists will be able to reduce the variance in the strength of the alliance that may occur due to clients' insecure attachment patterns, such that even in the most limiting cases, therapists will achieve a good level of alliance by the third session. Certainly the majority of studies reviewed reported high mean levels of alliance rating, indicating participants rated the alliance towards the positive end of the scales. Hence assessing the strength of the alliance on the basis of clients' capacity to form relationships may be negated by the factor of therapists' skills in alliance development. From this perspective the current studies that assessed alliance only at the end of the third session may fail to capture the whole effect of clients' attachment patterns on the alliance and may more reflect the therapists' skills in achieving a good alliance. Future studies are required that examine the mediating effect of therapist skills on the relationship between attachment and the alliance.

It is of some interest that only two of the studies, included in this review, measured client rated alliance in group therapy (Lindgren et al., 2008; Tasca et al., 2007) while one used family therapy. It is clear that the interactions between attachment patterns and alliance are likely to be more complex in a situation where the therapist is not in a one to one relationship with the client, and even more so with the dynamics of family therapy. This review suggests that this is an under researched area, but one that is certainly worthy of further research, since, as mentioned earlier, it may not be appropriate to generalise findings from one setting to another.

5.2. Clinical implications

The clinical and research literature indicates that a good quality therapeutic alliance is related to more positive therapeutic outcomes, independent of the type of therapy delivered (Martin et al., 2000). It is thought that the attachment patterns clients bring to therapy effect the alliance, such that clients who have a secure attachment pattern will be more able to become involved and engage in a positive alliance (Mikulincer & Nachshon, 1991). Along these lines, it has been recommended that an attachment measure is included in clinical assessment batteries (Shorey & Snyder, 2006). This was suggested as a way to allow therapists to be attentive to potential problems that may occur in the development of the alliance as a result of insecure attachment patterns.

The findings of this systematic review show that there is strong evidence to link a client's pre-therapy secure attachment to a good quality alliance that is formed within therapy. Clients who rated themselves higher on dimensions such as secure on the RSQ (Griffin & Bartholomew, 1994) or depend and close on the AAS (Collins & Read, 1990), formed better quality alliances with their therapist. This review also indicates that clients who rate themselves as lower on these dimensions will form weaker alliances in therapy. In addition, this review shows that there is no consistent evidence to suggest that the concept of attachment insecurity, when assessed by clients' ratings on dimensions of attachment anxiety and avoidance, is linked to the therapeutic alliance. Therefore, therapists could only make evidence based hypotheses as to whether clients will form positive alliances or not by assessing clients' attachment pre-therapy via one of the secure scales. These scales would not give an indication of the kinds of potential problems or ruptures that may occur in the alliance due to clients' attachment patterns. For example, knowing a client has an avoidant attachment pattern would give the therapist clues that they may reject the importance of the therapy relationship and may even withdraw from therapy when ruptures occur (Harris, 2004). Using a secure scale would not provide this information; it would only inform that a client was insecure or secure. This may make using the secure scale in isolation unnecessary.

No research to date has been conducted into whether knowing clients' attachment pattern may aid or benefit therapists' work or the therapeutic process, or improve client outcome. For example, this information might best be used to adjust therapists' interpersonal style to facilitate the formation of more viable working alliances with their clients. Or it might equally be the case that knowing such information would hinder the therapeutic work as the therapist may equate ruptures in the alliance to clients' attachment patterns and neglect to work through these thoroughly, potentially reducing the opportunities for therapeutic change.

The review findings indicate that clients' specific attachment to the therapist, assessed as therapy progresses, relates more strongly to the alliance and will give more of an indication of how the alliance is developing. However, if therapists are going to conduct these kinds of assessments, it would be more beneficial to use an alliance measure itself, given the shared variance between the specific attachment measures and therapeutic alliance measures. Janzen et al. (2008) offered the hypothesis that the relationship between general attachment and alliance may be mediated by client specific attachment to therapist. Larger scale studies are needed to test this hypothesis.

One important factor neglected here is the contributions of therapists' attachment patterns to the therapeutic alliance. Given the alliance is a collaborative relationship with client and therapist as co-constructors, the attachment patterns therapists bring to the relationship will also have an impact. Past research has shown that therapists' self reported attachment patterns were significantly associated with their perceived quality of overall therapeutic alliances with clients (Black, Hardy, Turpin, & Parry, 2005). Whilst three studies in this review analysed therapist contributions to the alliance as well as clients, the literature would benefit from further dyadic studies in order to help understand the ways in which the alliance is co-constructed and how client-therapist attachment patterns interact to impact on the alliance.

To conclude, this review indicates that a pre-therapy measure of attachment security would provide an indication of the strength of the alliance the client may co-create. However, at present more research is required to inform clients, therapists and service providers on how knowledge of this information will affect the therapist, the therapeutic process and client outcome. In addition, the alliance is likely to be affected by therapist attachment as well as client attachment. Thus solely focussing on the impact of client attachment on the alliance may yield inaccurate results.

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