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The levels of self-criticism and forms of dependency: Their relation to attachment, the working alliance, and outcome

by

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Dedication

To my family for supporting me,

and to my husband, Clark, who is my solid rock.

Abstract

This study examined the relationships between attachment style and the levels of self-criticism (comparative and introjective) and forms of dependency (neediness and connectedness) and the working alliance and outcome variables over the course of psychotherapy. Sixty-five adult clients receiving therapy at a mental health clinic completed questionnaires after the first, fifth, and second to last sessions. Strong positive correlations were found between neediness and insecure attachment and negative correlations between neediness and secure attachment. Similar, yet weaker relationships were found between connectedness and attachment. Comparative self-criticism was positively associated with preoccupied and fearful attachment and negatively associated with secure attachment. Similar, yet weaker relationships were found between introjective self-criticism and attachment. Connectedness was associated with a strong working alliance across therapy and comparative self-criticism with a poor working alliance at session five. Although neediness was associated with poor outcome, preoccupied attachment was the best predictor of poor therapeutic outcome.

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Introduction

It has been suggested that human beings have an innate tendency towards self-realization (Horney, 1950). It is when obstacles impede this process that humans are held back from becoming fully developed, complete with the capacity to love others and the self. These obstacles are frequently longstanding personality characteristics, many of which have their origins in childhood and are solidified by multiple damaging experiences throughout the lifetime (Blatt, 2004; Bowlby, 1969). If these obstacles are related to ingrained personality characteristics, how can they be removed? How can an individual learn a new way to relate to the self and others?

Therapy is one tool that has been developed to help support personal growth and ameliorate concerns affecting psychological health. One component of therapy, the working alliance, which is the degree of connectedness and collaboration in the relationship between the clinician and client, is agreed to be a necessary condition of therapeutic change (Beck, 1995; Greenberg, 2002; Safran, Muran, Samstag, & Stevens, 2001). To develop a strong working alliance, it is believed that the client and therapist must have a shared understanding of the goals of therapy and an agreement on the types of tasks that will be required to achieve these goals (Bordin, 1979). To help account for why some clients develop stronger working alliances with their therapists than others, a collection of researchers have turned to the study of personality factors and their influence on the working alliance (Blatt, Zuroff, Bondi, Sanislow, & Pilkonis, 1998; Rector, Bagby, Segal, Joffe, & Levitt, 2000; Whelton, Paulson,

& Marusiak, 2007). It is possible that with an increased understanding of how personality factors affect the working alliance and outcome, therapists and theorists alike will have a greater understanding of the multiple factors which may influence therapeutic change.

There are a number of researchers who believe that the obstacles which impede the process towards self-realization lie within two significant variables of human personality: agency and communion (Zuroff, 1999). Agency refers to how one learns to relate to the self and communion refers to how one learns to relate to others. When an individual has difficulty learning how to relate to the self, the personality trait of self-criticism is believed to develop. Dependency is believed to develop when an individual has difficulty learning how to relate to others. In this way, self-criticism and dependency are personality traits which reflect the difficulties people have along either of these two lines of personality development, agency or communion. Dependency and self-criticism are theorized to be two dimensions underlying the entire field of psychopathology (Blatt & Shichman, 1983). From previous research, it is indicated that self-critical and dependent people are vulnerable to experiences of anxiety, depression, loss, and rejection, and this in turn affects their ability to develop strong, healthy adult relationships (Blatt et al., 1995; Blatt, 2004).

As self-criticism and dependency have such detrimental impacts on relations with the self and the other, most self-critical and dependent individuals would benefit from some kind of an intervention, such as psychotherapy. Despite having problems such as anxiety, depression, and other difficulties

which are typically treated by psychotherapy, several researchers have found that self-critical and dependent individuals do not show significant improvement over the course of therapy (Blatt & Maroudas, 1992; Marshall, Zuroff, McBride, & Bagby, 2008). Although it seems that these individuals would benefit from external aid, psychotherapy seems to be mostly ineffective.

The key to understanding why self-critical and dependent individuals continue to struggle personally and interpersonally despite having received therapy may be in rooted in understanding the nature of self-critical and dependent individuals themselves. It is essential to recognize that most self-critical and dependent individuals experience problems developing positive relationships with others. Paradoxically, in order to experience positive change through psychotherapy, these same individuals are required to enter into a deep relationship with their psychotherapist. In this way, self-critical and dependent individuals may have trouble with the very process which is at the heart of therapy, the working alliance, and this may affect their ability to improve in therapy. Some researchers have in fact shown that self-criticism and dependency are related to lower ratings of the working alliance (Alexander & Abeles, 1968; Whelton et al., 2007).

Although dependency and self-criticism have been studied rigorously by various researchers (Blatt, 2004; Irons, Gilbert, Baldwin, Baccus, & Palmer, 2006; Luyten et al., 2007; Murphy & Bates, 1997; Nietzel & Harris, 1990; Whiffen, Aubé, Thompson, & Campbell, 2000), they are no longer understood as unitary constructs, but rather as multidimensional constructs. Dependency is

believed to be comprised of neediness and connectedness, which are more and less maladaptive forms of dependency, respectively (Rude & Burnham, 1995). Self-criticism is believed to be comprised of comparative and introjective self-criticism, which are more and less maladaptive forms of self-criticism, respectively (Thompson & Zuroff, 2004). Although the dimensions of self-criticism and dependency have been related to the working alliance and therapeutic outcome, there are no published studies to date which examine how people with neediness, connectedness, comparative or internalized personality traits respond to therapy. Therefore, there is a need to understand the subtypes of self-criticism and dependency more fully so that adjustments can be made to make therapy more effective for these people.

In addition to understanding how the levels of self-criticism and forms of dependency relate to therapeutic outcome, it is helpful to relate these personality traits to the different types of internal working models classified in attachment theory in order to clarify which subtypes of self-criticism and dependency are related to healthy and unhealthy internal working models. Attachment theory as a field of study was born in 1969 when Bowlby began to examine the way in which humans make strong bonds with one another. Bowlby recognized that children learn to relate to others and the self through interactions with a primary caregiver, and that these early experiences with caregivers are internalized, meaning that these early experiences of the attachment relationship form a prototype for future relationships. These prototypes have been referred to as working models of attachments.

Through Bowlby's study, he found that there are positive ways to attach to others and also less adaptive ways to relate to others. The positive way of attaching to others is described as secure attachment and the less adaptive ways of relating to others are described as insecure attachments, which encompass preoccupied, dismissing, and fearful attachment styles (Bartholomew, 1990). These types of attachment all reflect positive or negative ways of relating to the self and the other. Attachment theory has now been expanded to encompass adult attachments with significant others. Similar patterns of attachment have been found in adults, and these attachment styles have been found to inform the way adults relate to the self and other (Bartholomew, 1990; Hazan & Shaver, 1987).

The present study will examine the co-relationships between the forms of dependency and levels of self-criticism and attachment, the working alliance, and therapeutic outcome. Comparing the subtypes of self-criticism and dependency to attachment provides a way of understanding how individuals with these personality traits relate to the self and other, which may further increase understanding of the difficulties these types of individuals have when in a psychotherapeutic context. The overarching goal of this study is to increase the understanding of which subtypes lead to the greatest difficulties developing a strong working alliance and little improvement in therapy. With an increased understanding of the subtypes of self-criticism and dependency, appropriate adjustments can be made to make therapy more effective for people with these personality traits.

One of the more general hypotheses of this study suggests that a secure attachment style will be associated with a strong working alliance and positive therapeutic outcome and that the opposite will be true for insecure attachment styles. Similarly, neediness and comparative self-criticism, the more maladaptive forms of dependency and self-criticism respectively, will be more closely linked to a poor working alliance and poor therapeutic outcome than the less maladaptive forms of these variables. Additionally, the more maladaptive forms of self-criticism and dependency are expected to be more closely associated with insecure attachment styles than the less maladaptive forms of self-criticism and dependency. Finally, neediness, comparative self-criticism, and fearful attachment, which are considered to be the most harmful forms of dependency, self-criticism, and attachment respectively, will be the best predictors of therapeutic outcome.

The literature review comprises three sections. The first section contains a discussion on the working alliance and its relation to outcome in psychotherapy. The next section reviews attachment literature including how it is understood to be related to the subtypes of self-criticism and dependency, the working alliance, and therapeutic outcome. The last section of the literature review is dedicated to the discussion of self-criticism and dependency, moving into a more specific discussion of the different forms of each and their understood relationship to the working alliance and therapeutic outcome. Following the literature review is a discussion of the methodology employed in this study and then the observed results. Finally, a discussion of these results is

presented including a discussion of the limitations of this study, the clinical implications of the findings, and suggested avenues of future exploration.

Literature Review

The Working Alliance

The working alliance, as a clinical construct, has its roots in psychoanalytic theory, beginning with the work of Freud in 1913 (Freud, 1953). Freud believed that the development of a link between the therapist and client was necessary for the client to project onto the therapist aspects of familiar people in order to undergo change.

Despite beginning as a clinical construct in 1913, empirical research on the role of the working alliance in therapy did not begin until much later. In 1961, Frank began studying *nonspecific factors* of therapy: factors that were not uniquely associated with a therapeutic intervention such as technique or tasks, but seemed to have an impact on therapeutic outcome. Although the working alliance was not specifically named in his research, Frank's work initiated a wave of research investigating nonspecific factors of therapy. At around the same time, Rogers (1951) was also investigating these nonspecific factors and their role in therapy. Specifically, Rogers believed that if three conditions were provided by the therapist (empathy, unconditional positive regard, and congruence), a therapeutic environment would be created that would be sufficient to bring about positive change in the client.

Although Roger's claim that providing these conditions is sufficient to create change is strongly debated (Blatt, 2004), Rogers' push for the empirical validation of his claims spurred considerable research on the therapeutic alliance (Horvath 1994), and today the alliance is generally accepted as an important and

indispensable factor of therapy by practitioners from many theoretical orientations (see Beck, 1995; Greenberg, 2002; Safran et al., 2001). In this section, after initially exploring some of the definitional components of the working alliance, the working alliance and its relationship to outcome will be discussed. Finally, some questions about the relationship between personality factors and the working alliance will be explored.

Defining the Working Alliance

According to Horvath and Bedi (2002), the alliance "refers to the quality and strength of the collaborative relationship between client and therapist in therapy . . . . The alliance is a conscious and purposeful aspect of the relation between therapist and client" (p. 41). Bordin (1979) adds to this definition of the working alliance, by viewing it as having three core features. The first is an agreement on the goals of therapy. Bordin claims that although the types of goals developed between client and therapist vary depending on the psychoanalytic perspective of the therapist, an agreement on the goals of therapy are an essential component of the working alliance. The second is agreement on the types of tasks the client engages in during therapy which are geared towards meeting these therapeutic goals. Bordin views the collaboration between client and therapist as requiring an agreed-upon contract which explicitly or implicitly includes agreement on the types of therapeutic tasks involved. The third core feature of the working alliance is a bond between the therapist and the client. Bonds too vary by psychoanalytic perspective of the

therapist, but a relationship based on trust and attachment are required to develop over the course of therapy.

Already in 1979, Bordin believed that the strength of the working alliance, rather than the type of the working alliance, was the major factor which brought about change in psychotherapy. In fact, Bordin's conviction was so great that he claimed the working alliance was "one of the keys, if not the key, to the change process" (Bordin, p. 253). Despite years of theoretical and empirical investigation into the construct of the working alliance beginning with Freud in 1913, popularized by Rogers (1951) and Frank (1961), and still continuing today, Horvath (2006) claims that there is still a "need to develop a clearer definition of the alliance" (p. 258). He states that questions of the nature of the alliance (what it is made of and whether it is based on transference or a real relationship) and how the alliance impacts outcome (whether it facilitates change or is responsible for change) have been debated from the beginning. Although there is a need to develop a clearer definition, the working alliance is widely accepted as an important therapeutic change factor. It has been referred to by some theorists as the "quintessential integrative variable" of therapy (Wolfe & Goldfried, 1988, p. 449).

The Relationship between the Working Alliance and Outcome

Bordin (1979) believed that the working alliance was embedded in all types of psychotherapy and that these working alliances were related to outcome. Much research on the relationship between the working alliance and outcome was spurred by Luborsky, Singer, and Luborsky (1975) who found that

different therapeutic approaches brought about similar therapeutic change. Their empirical conclusion was that all psychotherapeutic orientations were equally effective. This came as a great surprise to Luborsky et al. who concluded that if technique and therapeutic orientation did not account for therapeutic change, nonspecific factors, such as the therapeutic alliance, must largely be responsible. Horowitz (1974), after reviewing data from 42 patients treated by either psychoanalysis or psychoanalytically-oriented psychotherapy, like Luborsky et al. (1975), found that outcome did not vary depending on treatment type. Instead, he found that the strength of the alliance was related to outcome and postulated that it may in fact be the main factor of psychotherapeutic change. Through the work of both Luborsky et al. (1975), Horowitz (1974), and Bordin (1979), the concept of the working alliance as a pan-theoretical construct, a factor that plays an intricate role in all types of therapy, was born (Horvath, 2005).

There has been considerable research indicating that a strong working alliance is associated with positive outcome (Horvath & Symonds, 1991; Martin, Garske, & Davis, 2000; Orlinsky, Ronnestad, & Willutski, 2004; Rainer & Campbell, 2001; Zuroff, Blatt, Sotsky, Krupnick, Martin, Sanislow, et al., 2000). Tyrrell, Dozier, Teague, and Fallot (1999) found that better working alliances were associated with higher ratings of clients' overall functioning. In a study involving 53 clients undergoing 20 sessions of cognitive therapy, Muran, Gorman, Safran, Twining, Samstag, and Winston (1995) found that change in cognition and strength of the alliance were the best predictors of therapeutic

outcome. In 2002, Horvath and Bedi reported that the working alliance accounts for 12% of the outcome across all types of psychotherapy. The relationship between the working alliance and outcome is fairly clear and consistent.

Lambert and Barley (2001) summarized the existing psychotherapy outcome literature on the relationship between alliance and outcome. The outcome literature reviewed typically included the investigation of the influence of four groups of factors on the therapeutic outcome: extratherapeutic factors such as social support, expectancy effects such as the placebo effect, specific psychotherapeutic techniques, and factors common to all therapies such as the working alliance. What Lambert and Barley found was that extratherapeutic factors accounted for 40% of client improvement, and common factors, techniques, and expectancy accounted for 30%, 15%, and 15% of client improvement respectively. The large portion of change accounted for by extratherapeutic factors was unexpected, yet this research demonstrates that the working alliance is the most influential factor of change that the therapist has some degree of control over and that it makes a much greater impact than even technique or theoretical orientation.

In 2001, Horvath too undertook a meta-analytic investigation of the relation between the alliance and outcome. In this study, he combined the research from previous meta-analyses completed by Horvath and Symonds (1991) and Martin, Garske, and Davis (2000) with more recent research published from 1997 to 2000, and he found that the overall effect size

(calculated by taking an average of the correlations between alliance and outcome across studies) of the relationship between alliance and outcome was .21. Although seemingly small, Horvath (2001) claims that when compared to the total effect size of the treatment effect of therapy, which is .39, the alliance accounts for the vast majority of treatment effects. In a similar study conducted by Horvath (2005), it was reported that the relationship between the working alliance and outcome typically ranges from .22 to .29. In addition, he found that the client's assessments of the relationship are more predictive of outcome than either an observer's or the therapist's ratings and that an assessment of the alliance at the beginning of therapy is as good or better at predicting outcome than assessments at mid or end of therapy. Due to the relationship between the working alliance and outcome and also because of research indicating a relationship between a poor alliance and early drop-out (Horvath, 2001), the working alliance has been a construct of heavy study for over 30 years.

Despite the large body of working alliance literature, some unanswered questions persist. As previously indicated, there is a need to develop a clearer definition of the alliance. This clearer definition would consider the nature of the relationship, such as what it is made of and whether it is based on a real relationship or transference. It would also encompass how the working alliance influences outcome, such as whether it is a necessary component which facilitates change or whether it is partially responsible for therapeutic change.

In addition to developing a clearer definition of the working alliance, there is a need to examine the influence of other factors on the working alliance

and outcome. In a study by Puschner, Wolf, and Kraft (2008), 259 outpatients were assessed using measures of symptom distress and the working alliance over a two year time period while attending therapy and only moderate support was found for a relationship between the working alliance and a decrease in symptom distress. They found that clients who scored high on measures of distress reported weaker working alliances, but that the strength of the working alliance did not predict symptom distress in subsequent sessions. This study stands in contrast to the many studies indicating that the working alliance is the best predictor of treatment outcome. The authors concluded that although the working alliance is important in the sense that a good working alliance needs to be established between therapist and client, there are other factors, possibly therapist and client variables, that may "play a more important role for treatment success than further improvement of an already good helping alliance" (Puschner et al., 2008, p. 177).

The Working Alliance and Factors of Personality

Already in 1979, Bordin was postulating that differences in the strengths of working alliances were related to differences inherent to the therapist and that matching therapist and client on personality factors may play an important role in the development of strong working alliances. He stated specifically that "the strength of the working alliance is a function of the closeness of fit between the demands of the particular kind of working alliance and the personal characteristics of the patient and therapist." (Bordin, p. 253)

Despite theorists hypothesizing for many years that personality factors may affect the development of the working alliance, very little research has been dedicated to this end. This is surprising as many researchers investigating the working alliance and outcome partially summarize their articles by saying that client and therapist factors likely play an important role in the development of a working alliance (see Bordin, 1979; Horvath, 2005; Lambert & Barley, 2001; Puschner, Wolf, & Kraft, 2008). Despite this clear acknowledgement of a possible role, the literature on the influence of other factors on the working alliance and therapy is extremely modest in size (Horvath, 2001). It has been said that "researchers in the area of the working alliance lament the paucity of studies moving beyond these basic principles to answer more perplexing questions involving how initiation and enhancement of the therapeutic relationship might differ according to personality factors" (Whelton, Paulson, & Marusiak, 2007, p. 135). Following from these questions about the hypothesized role of personality factors in the development of the working alliance, the remainder of this literature review is dedicated to the discussion of several personality factors which may affect the development of the working alliance and in turn, affect therapeutic outcome.

Attachment

Bowlby (1969) developed attachment theory as a way to conceptualize the manner by which humans make strong bonds with others. Humans, like other socially organized mammals, tend to attach to a specific caregiver in infancy. From an evolutionary perspective, this reliance on a caregiver is

critical to survival: when danger is present, an infant maintains close proximity to the caregiver, and therefore increases probability of survival. This model of attachment has evolved to a more sophisticated level for human infants and includes not only needs for protection, but also needs for love and affection. Depending on the responsiveness of the caregiver to these needs, a healthy or an unhealthy attachment bond is formed (Bowlby).

According to Bowlby (1969), the key developmental task in childhood is to form this relationship with the primary caregiver. From infancy, Bowlby theorized that children internalize the early experiences with their caregivers, and over time, the early attachment relationship forms a prototype for future relationships. This prototype is called an *internal representation* or *working model* of attachment (Bowlby). These working models are thought to "influence behaviour by guiding the appraisal of social situations, as well as functioning to maintain a coherent world view and self-image by guiding the assimilation of new experiences" (Bartholomew, 1990, p. 152). Bowlby (1973) proposed two key features of working models of attachment. One is whether the attachment figure is believed to be the kind of person who responds to calls for help, which refers to an individual's *image of others,* and the other feature is whether the self is believed to be the kind of person the attachment figure is likely to respond to, which refers to an individual's *image of the self.* These two key features have been referred to as the working model of the self and the working model of others.

Ainsworth and the Strange Situation

Ainsworth, Blehar, Waters, and Wall (1978) extended Bowlby's conceptualization of attachment and proposed that the attachment system is at work continuously as it not only serves to ensure close proximity in the face of danger, but also provides a feeling of security which facilitates exploration in the absence of danger. According to Ainsworth and colleagues, *felt security* is the purpose of the attachment system and therefore the quality of attachment can be judged by the degree to which an infant relies on the caregiver as a source of security.

Based on laboratory observations of separations from and reunions with caregivers, using a procedure called the "Strange Situation," Ainsworth identified three patterns of infant attachment: avoidant, anxious-resistant, and secure. Infants with *secure* attachment welcomed the return of caregivers, sought proximity when distressed, and were easily comforted. Infants with an *anxious-resistant* attachment were ambivalent towards caregivers prior to the separation and were not able to be comforted when caregivers returned. Infants with *avoidant* attachment expressed little distress when separated from caregivers and avoided proximity upon return.

Ainsworth et al. (1978) found that the best predictor of attachment style was the caregiver's sensitivity to signals from the infant. Securely attached infants tended to have mothers who were warm and consistently responded to signals. Infants with ambivalent attachment tended to have mothers who were inconsistent in responses to signals and insensitive to needs. Infants with

avoidant attachment tended to have mothers who disliked physical contact and were hostile, rigid, and compulsive in caregiving. According to Siegel (1999) and Schore (2003) children seem to develop attachment styles corresponding to primary caregivers' emotional availability, perceptivity, and responsiveness to non-verbal signals.

Attachment Theory Expanding into Adulthood

Prior to 1987, the application of attachment theory was focused primarily upon infants despite Bowlby's (1980) emphasis that the attachment system spanned across the lifetime through its continual influence on the types of relationships an individual has with others. In 1987, one group of researchers developed a semi-structured interview, the Adult Attachment Interview (AAI), to measure adult representations of childhood attachment relationships (George, Kaplan, & Main, 1987). From this research, mothers were classified into three attachment groups which paralleled the attachment patterns of infants discovered by Ainsworth et al. (1978). In the AAI, respondents were questioned about their childhood relationship with their parents. George, Kaplan, and Main discovered that adults with a secure attachment were easily able to recall childhood experiences, had positive memories of parents, and valued close relationships. Adults with a preoccupied attachment described a relationship with parents that was close at times and at other times distant. Adults with a dismissing attachment described parents as cold and rejecting and also did not acknowledge the influence of their childhood experiences on current functioning.

At around the same time, another group of researchers, Hazan and Shaver (1987), hypothesized that Bowlby's theory provided a foundation for understanding the different feelings and behaviours of adults in romantic relationships. They developed a self-report measure that placed adults into three categories of attachment styles, which corresponded to the classic childhood attachment styles based on the study conducted by Ainsworth et al. (1978). They found that adults who fell into the avoidant and anxious-resistant categories reported more negative experiences of love, more negative beliefs about love, and shorter romantic relationships than adults who fell into the secure category. The discriminant validity of the three attachment styles as proposed by Hazan and Shaver (1987) was demonstrated by comparing them to the five personality traits proposed by Costa and McCrae in 1985 (Shaver & Brennan, 1992). The three attachment styles were related to the five personality traits (openness, conscientiousness, extraversion, agreeableness, and neuroticism) in predictable ways, but were not redundant with these traits. Participants with a secure attachment were more extraverted and less neurotic than insecurely attached participants. They were also more conscientious and more agreeable than avoidant participants. Participants with avoidant attachment were not as open to feelings. Participants with anxious-ambivalent attachment were not as open to differing values. Attachment styles were also found to be better predictors of relationship status than the Big Five personality traits at an eight month follow-up (Shaver & Brennan, 1992).

A Two-Dimensional Model of Attachment

In a seminal article, Bartholomew (1990) identified differences in the way avoidant individuals were classified by Main (1987) and Hazan and Shaver (1987). Main's method identified avoidant individuals as people who denied experiencing distress and did not acknowledge the need for closeness. Hazan and Shaver identified avoidant individuals as people who reported a fear of closeness and distress when close to others. From this observation, Bartholomew proposed that although three types of attachment styles were sufficient to classify childhood attachment, two categories of avoidant attachment, and therefore four styles in total, were required to encompass all types of adult attachment. In support of Bartholomew's hypothesized two categories of avoidant attachment, Bowlby's (1973) original formulations of attachment theory suggested that there are two forms of internal *working models* which guide individual attachment behaviours: an internal model of others and an internal model of the self, both of which can be either positive or negative. If Bowlby's two dimensions of attachment were considered when developing the theoretical categories of attachment styles, four attachment styles, as Bartholomew has proposed, would be the result.

Bartholomew's (1990) four attachment styles are as follows: secure, preoccupied, dismissing, and fearful. Her secure and preoccupied attachment styles closely match those proposed by previous researchers. Someone with a *secure attachment* has a positive model of the self and the other, a sense of being loveable and of worth and also expects others to be generally responsive

and accepting. People with secure attachment typically experience few interpersonal problems and have an internalized self-esteem. Sociodemographic variables, such as being female, white, middle-class, well educated, middle-aged, and married have all be found to relate to secure attachment (Mickelson, Kessler, and Shaver, 1997). A person with a *preoccupied attachment* has a negative model of the self and positive model of the other. These types of people have a sense of being unlovable while holding others in high-esteem. They possess an "insatiable desire to gain others' approval and a deep-seated feeling of unworthiness" (Bartholomew, 1990, p. 163). Although they are dependent on others approval, they often attempt to achieve approval through the use of a dominating interpersonal style (Bartholomew & Horowitz, 1991). They typically engage in much self-disclosure, are very emotionally expressive, cry frequently, often rely on others, and are often engaging in the role of caregiver. Interpersonal problems are related to an over-accommodating, intrusive, and needy interpersonal style (Horowitz, Rosenberg, & Bartholomew, 1993).

The newly proposed dismissing style, according to Bartholomew, is theoretically aligned with Main's conceptualization of dismissing attachment. A person with a dismissing attachment has a positive model of the self and negative model of the other. These types of people have a sense of being loveable and being of worth, but hold a negative stance towards others. Behaviourally, this results in avoidance of intimate relationships in order to protect against possible rejection and to maintain a positive self-image. A

person with a dismissing style is thought to develop a model of the self that is completely independent and adequate and therefore immune to negative feelings (Bartholomew, 1990). Their interpersonal problems have been related to excessively cold, distant, and competitive interpersonal styles (Horowitz, Rosenberg, & Bartholomew, 1993). Bartholomew (1990) speculated that dismissing individuals had parents who discouraged the expression of negative feelings.

In contrast to a dismissing style where a person has a positive model of the self, people with fearful attachment struggle with both close relationships and their self image, thus placing fearfully attached individuals in a more vulnerable position to depression and loneliness (Bartholomew, 1990). Fearfully attached individuals desire social approval and intimate relationships, but fear rejection to the point of avoiding social situations. These types of people have a sense of being unlovable and not worthy of love. Interpersonally, they tend to be introverted, inhibited, and non-assertive (Horowitz, Rosenberg, & Bartholomew, 1993). Bartholomew (1990) proposed that fearfully attached individuals may have had parents who were openly rejecting. According to Siegel (1999), this type of attachment seems to be most detrimental to development and seems to develop when a child is living in a paradoxical environment where the parent is a source of fear rather than comfort. Bartholomew's fearful attachment is theoretically similar to Hazan and Shaver's conceptualization of avoidant attachment. Over time, these attachment patterns

are thought to become so engrained that they operate automatically and without awareness (Bartholomew, 1990).

Interestingly, in a study conducted by Brennan, Shaver, and Tobey (1991), Hazan and Shaver's (1987) three-category attachment model was compared with Bartholomew's (1990) four-category attachment model. They found that the same two dimensions, model of the self and model of the other, were underlying both models. In addition, both models were related to each other as predicted.

In 1991, Bartholomew and Horowitz reproduced the organization of the four prototypes of attachment styles. Their finding was robust across family and friends' ratings and across different types of measures: semi-structured interviews and self-report rating scales. They found that measures of self-concept (measuring aspects of the model of the self) and sociability (measuring aspects of the model of others) were associated with the four attachment styles as expected. Bartholomew and Horowitz (1991) found the representation of the four prototypes of attachment style as follows: 47% for secure, 18% for dismissing, 14% for preoccupied, and 21% as fearful. The high percentage of respondents falling into the fearful group was not expected as the fearful group was initially conceptualized as a small group consisting primarily of children from exceptionally abusive homes and disturbing backgrounds. High numbers falling in the fearful category should be unusual in low-risk, non-clinical community samples (Brennan, Shaver, & Tobey, 1991). In addition, Bartholomew and Horowitz (1991) found an interaction between sex and

attachment style. Many more female participants fell into the preoccupied category than males and many more males fell into the dismissing category than females. In a different study conducted by Brennan, Shaver, and Tobey (1991) more males were classified as dismissing and more females as fearful.

It is important to note that most participants in the Bartholomew and Horowitz's (1991) study did not fit exclusively into any one category. Rather, they reported different tendencies across relationships and time. The four attachment styles are considered prototypes or ideals. Although no individual's experiences will perfectly match the characteristics of one prototype, all individuals are believed to best match one style over the others (Bartholomew, 1990).

There have been other studies that have suggested four attachment styles. Main and Solomon (1990), when conducting research with young infants, identified some babies with unresolved reactions to childhood abuse and placed these types of babies in a forth category they called D because the babies showed a disorganized, disoriented way of being. It has been found that adult children whose parents were alcoholics primarily fell into Bartholomew's fearful category (Brennan et al.). Crittenden (1988) also identified a forth category of attachment in her research which she termed A/C to represent a category for babies who displayed characteristics of both avoidant (A) and anxious-ambivalent (C) attachment. Crittenden (1988) found that children classified as A/C typically had parents who were abusive, depressed, or disturbed. Brennan, Shaver, and Tobey (1991) found that those classified as

fearful in Bartholomew's measure were classified as avoidant and anxious-ambivalent in Hazan and Shaver's measure, indicating that the fearful category is conceptually similar to the D category proposed by Main and Solomon (1990) and the A/C category proposed by Crittenden (1988). In this paper, Bartholomew's (1990) four categorical model of attachment is used as it matches more closely the two dimensional model of attachment as proposed by Bowlby (1973).

The Stability of Attachment Patterns into Adulthood

The stability of attachment patterns into adulthood continues to be studied. Although the stability of attachment styles has been demonstrated in some situations (see Waters, 1978; Ricks, 1985), it is acknowledged that attachment style is affected by life experience and when there is an association between childhood and adult attachment, it seems to be related to the continuity of the environment (Bartholomew, 1990). Neurobiological researchers, such as Siegel (1999) and Schore (2003), have suggested that attachment styles remain relatively stable across the lifetime. Through their line of work, they have discovered that early interpersonal experiences, the primary one of which is the experience of the primary caregiver, have a large impact on the structure and function of the brain and perhaps may be the most influential factor on the developing mind. Although the genetic make-up of the brain places limitations on structure and function, interpersonal experiences shape gene expression (Gilbert, 2005; Schore, 2003; Siegel, 1999). Siegel argues that if the brain is experience-deprived, neural pathways are not activated and cell death occurs

resulting in a permanent loss of the ability to form certain connections, and therefore, infants deprived of early interpersonal relationships may suffer permanent deficiencies in brain structure and function. In other words, those deprived of warm, loving interpersonal relationships at a critical time in childhood, may lack the capacity to form warm and loving interpersonal relationships with others as adults. It is known that important brain structures, such as the orbitofrontal cortex which is involved in the expression, processing, and regulation of affect, nonverbal communication, unconscious processes, and memory and cognitive functions, mature at 10 to 12 months (Schore, 2003), meaning that a child's internal working model and therefore his or her attachment style is somewhat solidified by this age.

Despite this, Siegel (1999) argues that although most influential and crucial during infancy and early childhood, the interpersonal experiences which influence the brain continue into late adulthood. Schore (2003) and Siegel (1999) suggest that later relationships which provide emotional availability, perceptivity, and responsiveness to non-verbal and verbal signals will encourage an individual to adopt a more adaptive attachment style. Life experiences, romance, parenting, psychotherapy, or other close, attuned interpersonal experiences in later life are all possible sources of learning different ways of relating to others (Siegel, 1999).

It is known that attachment styles relate to a number of adult functions such as emotional regulation, narrative ability, ways of relating socially, ability to access autobiographical memory, and ability to self-reflect (Schore, 2003;

Siegel, 1999). Attachment has also been related to relationship functioning (Brennan & Shaver, 1995), divorce (Hazan & Shaver, 1987), depression (Carnelley, Pietromonaco, & Jaffe, 1994), substance use (Brennan & Shaver, 1995), domestic violence (Dutton, Saunders, Starzomski, & Bartholomew, 1994), and childhood physical abuse and neglect (Mickelson, Kessler, and Shaver, 1997). Therefore, it is not surprising that research has found links between attachment styles and psychopathology (Schore, 2003). Although not necessarily indicative of mental disorders, insecure attachments seem to be risk factors for social and psychological dysfunction (Siegel, 1999). Schore (2003) theorizes that the failure of a positive early attachment and the subsequent inability to transition out of a negative affective state is a source of shame for insecurely attached individuals resulting in a disposition to shame. Schore claims that it is this shame that causes permanent difficulties with the regulation of self-esteem which underpins all developmental psychopathologies. This predisposition to psychopathology reflects the structural defects of the orbitofrontal cortex that are born from an unavailable, inconsistent, or abusive caregiver (Schore, 2003). There is research indicating that an under-developed orbitofrontal cortex is connected to mania, autism, drug additions, unipolar depression, borderline personality disorder, and psychopathic personality disorder (Schore, 2003). In contrast, adults with secure attachments seem to exhibit mental health and convey resilience even when faced with trauma (Siegel, 1999).

The Role of Attachment in Therapy

Despite the establishment of a large base of attachment literature, the study of attachment and its relationship to psychotherapy is in its infancy (Daniel, 2006) and is primarily conceptual and based on case studies (Davila & Levy, 2006). Bowlby (1988) believed that attachment theory was particularly relevant to psychotherapy. He proposed that the main goal of therapy should be the revision of internal working models which could be accomplished through the therapist adopting the contrasting attachment style to the client in order to change the client's beliefs of the self and other.

Although in its infancy, there have been some researchers who have studied the impact of attachment on the working alliance. Securely attached clients have been found to form stronger working alliances with therapists than insecurely attached clients (Kivlighan, Patton, & Foote, 1998; Mallinckrodt, Coble, & Gantt, 1995). Eames and Roth (2000) found that fearful attachment and the working alliance were negatively related, and secure attachment and the working alliance were positively related. In a study by Kanninen, Salo, and Punamäki (2000), for which the working alliance was measured at the beginning, middle, and end of therapy, no differences in scores were found on the first rating of working alliance, but subsequent measures showed differences. The pattern of working alliance ratings for the secure group was high-low-high and was similar for the preoccupied group, except that the fall and rise in ratings were more extreme. For individuals in the dismissing group, ratings were similar for the initial and middle sessions, but significantly lower at

termination (Kanninen et al., 2000). In another study, it was found than insecure attachment styles were significantly correlated with a low early alliance that became more positive towards the end of therapy (Saatsi, Hardy, & Cahill, 2007).

Tyrrell et al. (1999) studied how client and therapist attachment styles interacted with one another. They found that clients who were more avoidant had stronger working alliances and better outcomes with therapists who were more preoccupied with interpersonal relationships, and vice versa. They concluded that matching clients with therapists who were dissimilar to them on the avoidant-preoccupied dimension of attachment improved therapy outcome. This idea is similar to Bowlby's (1988) theory that a therapist's contrasting attachment style to the client is required in order to revise the client's internal working model of attachment. This would require the therapist and client to be matched on attachment style or for the therapist to adopt an attachment style dependent on the client's needs. Interestingly, it has been found that securely attached therapists are better able to adopt an attachment style other than their own and resist the temptation to interact with clients in a complementary way (Dozier, Cue, & Barnett, 1994).

The relationship between attachment and therapeutic outcome has been mostly ignored (Daniel, 2006; McBride, Atkinson, Quilty, & Bagby, 2006). In a study by Fonagy et al. (1995), it was found that preoccupied clients receiving treatment at an inpatient clinic benefited less than other clients. In a study conducted shortly after with 82 non-psychiatric patients, they found that

dismissing clients improved more than preoccupied and secure clients (Fonagy et al., 1996), which is surprising as secure clients were expected to improve most. In fact, in another study (Meyer, Pilkonis, Proietti, Heape, and Egan, 2001) it was found that secure attachment was most positively correlated with good therapeutic outcome. In contrast to Fonagy et al. (1995), Horowitz, Rosenberg, and Bartholomew (1993) found that clients with dismissing attachment had the poorest therapeutic outcome. Results from studies researching the relationships between outcome and attachment are clearly in conflict with one another. Additional research investigating the role of attachment in therapy is required in order to better understand the relationship between attachment style, the working alliance, and therapeutic outcome (Daniel, 2006).

Self-Criticism and Dependency

In 1974, informed by research and clinical experience, Blatt proposed that a distinction could be made between two types of depression: *anaclitic* depression which is the type of depression when an individual experiences extreme dependency needs in interpersonal relationships, and *introjective* depression which is the type of depression experienced when an individual continually fails to meet high personal standards and engages in perpetual self-criticism and guilt (Blatt, D'Afflitti, and Quinlan, 1976). According to Blatt (2004) these types of depression come from ruptures during one of two important stages of development. The first stage of development is discovering how to relate to others and the other is concerned with how to relate to the self.

Problems can occur along either of these developmental lines (Blatt, 2004). Blatt (2004) claims that if there is an early disruption of the attachment relationship between infant and caregiver and therefore a disruption during the critical period of learning how to relate to others, the individual is vulnerable to anaclitic depression, and if the self is criticized in a punitive and unrelenting way by caregivers there is a disruption in the development of relatedness to the self, and this leads to vulnerability to introjective depression (Blatt, 2004).

Anaclitic depression is considered to be a "simple" form of depression as it is focused on the beginning relationship with the caregiver and occurs at the earliest stage of development (Blatt, 2004). Predominant fears at this developmental stage are fears of being unloved and abandoned. Problems in this stage leads to a childlike dependency continuing into adulthood which is enacted by a person continually seeking to fill the need to feel love. People with anaclitic depression likely have difficulty expressing anger because of the fear of losing the other (Blatt, 2004).

Introjective depression, on the other hand, occurs at a later stage of development at which point the child has developed a sense of self. Introjective depression is related to harsh and critical caregivers who held high standards of behaviour and achievement. At this stage, the major defence is to identify with the caregiver, and in turn, assume responsibility for the unmet needs and blame the self (Blatt, 2004). A person with introjective depression internalizes the feelings of self-criticism, doubt, and guilt.

This initial differentiation between types of depression spawned the study of two personality traits which are believed to confer vulnerability to these two types of depression: self-criticism and dependency (Blatt, Quinlan, Chevron, McDonald, & Zuroff, 1982). Since the initial formulation of these constructs, both self-criticism and dependency have been studied thoroughly by various researchers from different theoretical orientations. One group of researchers who have contributed largely to the research of self-criticism and dependency are Blatt and colleagues (1976). Based on clinical literature and experience, Blatt, D'Afflitti, and Quinlan (1976) constructed the Depressive Experiences Questionnaire (DEQ) which consists of 66 statements that reflect the experiences of depressed individuals and is believed to measure dependency, self-criticism, and efficacy. Blatt et al. (1976) found that both the Zung Depression Scale and the Beck Depression Inventory were highly correlated with the self-critical personality trait and the dependency trait to a lesser degree, and that both traits were able to differentiate types of depression experienced by clinically depressed individuals. They hypothesized that the dependency trait was less correlated to depression than self-criticism because the dependency trait seemed to be measuring a "dimension of depression not usually emphasized in traditional measured of depression" (Blatt et al., 1976, p. 387). In fact, it was found that individuals who score high on the dependency construct tended to express their depression through somatic complaints (Blatt et al., 1976). Individuals experiencing the most severe forms of depression were found to

present with a combination of self-critical tendencies and dependency needs (Blatt et al., 1982).

Almost simultaneously, another group of researchers headed by Beck developed the Sociotropy-Dysfunctional Attitude Scale (SAS; Beck, Epstein, Harrison, & Emery, 1983) and the Dysfunctional Attitude Scale (DAS; Beck, Brown, Steer, & Weissman, 1991). Various researchers have identified two common dimensions among the DEQ, SAS, and DAS: one dimension relating to feeling critical of oneself and the other relating to being overly dependent on others because of cravings for attention and fears of abandonment (Blaney & Kutcher, 1991). The DEQ has been found to be the most psychometrically sound of the three measures (Blaney & Kutcher) and is the most widely used measure of self-criticism and dependency (Rector, Bagby, Segal, Joffe, & Levitt, 2000).

Using these measures, numerous researchers have found a strong association between depression and self-criticism and dependency. In a study comparing people with major depressive disorder (MDD) to university students, community adults, and people with other psychiatric disorders (including schizophrenia, generalized anxiety disorder, and substance abuse disorder), it was found that people with MDD had higher levels of dependency than any other group, and higher levels of self-criticism than university students and community adults (Luyten et al., 2007). It was also found that women had higher levels of dependency than men. In a meta-analytic study conducted to measure the relationships between depression and the two vulnerabilities to

depression, the mean effect size found between dependency and depression was .28 and between self-criticism and depression was .31 (Nietzel & Harris, 1990).

Perfectionism has been a personality trait that has been studied alongside self-criticism by numerous researchers (see Flett & Hewit, 2002; Dunkley, Zuroff, & Blankstein, 2003; Dunkley, Zuroff, & Blankstein, 2006). In a study by Gilbert, Durrant, & McEwan (2006) that compared self-criticism and perfectionism, no link between depression and perfectionism was found when self-criticism was entered into a multiple regression. This suggested that it may be the self-critical elements of perfectionism that are related to depression (Gilbert et al.). Similarly, in another study which used multiple measures of self-criticism and perfectionism, self-criticism was shown to be an independent predictor of depression (Powers, Zuroff, & Topciu, 2004).

There have been some relationships found between attachment styles and self-criticism and dependency, although the literature is scarce. Fearful and preoccupied attachments correlate with self-criticism (Irons et al., 2006; Murphy & Bates, 1997; Whiffen et al., 2000). Preoccupied attachment has also been related to dependency (Blatt & Zuroff, 1992; Whiffen et al., 2000). As there are inconsistencies in the definition of attachment, there are inconsistencies in the measures used by researchers and therefore the present literature does not represent a unified body of research which takes similar constructs and measures their relationship to other similar constructs. Some researchers continue to use Main's (1987) conceptualization of attachment styles and some use Hazan and Shaver's (1987) conceptualization instead of the integrated

conceptualization of Bartholomew (1990), therefore many research findings are not able to be easily compared. In this way, not only is the research on the relationship between attachment and these constructs sparse, it is inconsistent.

The Differentiation between Forms of Dependency

In 1995, Rude and Burnham published a study which reported the results of a factor analysis conducted on the dependency scales of both the DEQ and the SAS. This study was driven by two factors. One was the many research findings indicating that dependency was less related to symptomatic measures of depression (such as the BDI) than self-criticism, and the other was the movement within feminist psychology that questioned the emphasis of individuation, and in turn the de-emphasis on the value of intimacy and relatedness, in traditional psychology (which often led to the pathologizing of women). From this factor analysis, Rude and Burnham reported a two factor solution within the dependency scale of the DEQ and the SAS.

Rude and Burnham (1995) named the first factor *neediness* as it reflected what was traditionally thought of as dependency. They found neediness to be significantly correlated with the BDI. The second factor was named *connectedness* as it reflected "sensitivity to the effects of one's actions on others and valuing of interpersonal relationships" (Rude & Burnham, p. 327). They argued that the second factor, connectedness, was not a problematic form of dependency, but an adaptive form of dependency as it was not found to be significantly correlated with the BDI. Rude and Burnham found that the new dependency construct, neediness, was no longer related to sex, and also that

women had significantly higher scores on the connectedness subscale. What was originally believed to be a unitary construct was now understood to be more complex.

Shortly after, Blatt, Zohar, Quinlan, Zuroff, and Mongrain (1995) conducted a similar study of the dependency scale of the DEQ using different statistical procedures. They too found a two-factor solution, one they labelled dependence, and the other, relatedness. They found that the dependence factor measured feelings of helplessness and fears of loss, separation, and rejection, and that it had significantly greater correlations with depression measures than relatedness, which seemed to measure feelings of loss in response to relationship difficulties (Blatt et al., 1995). They, like Rude and Burnham (1995), suggested that relatedness was a more adaptive form of dependency. The presence of the connectedness factor within the dependency scale gave some explanation for the typically higher correlation between self-criticism and depression over dependency and depression (Zuroff, Mongrain, & Santor, 2004).

The generalizability of Rude and Burnham's (1995) results were tested by Zuroff, Moskowitz, and Côté (1999). They found similar results after applying the same strategies used by Rude and Burnham. They concluded that connectedness represented a more mature form of dependency as it reflected an appreciation for the feelings of others and a healthy concern with relationships (Zuroff et al., 1999). They found that neediness and connectedness were significantly but not highly correlated ($r = .36$, $p < .001$). In addition, when

measuring the relationships between depression and dependency, self-criticism, neediness, and connectedness, only self-criticism and neediness were found to significantly relate to depression.

The construct validity of the two dependency scales in the DEQ has been confirmed through comparisons of the scales with the NEO Personality Inventories. Neuroticism was found to be more strongly correlated with neediness, and extraversion, conscientiousness, and agreeableness were all more strongly correlated with connectedness and a small association was found between neuroticism and connectedness (Bacchiochi, Bagby, Cristi, & Watson, 2003; Dunkley, Blankstein, Zuroff, Lecce, & Hui, 2006). Dunkley et al. also found that neediness was related to more maladaptive interpersonal traits such as low assertiveness, low activity, and low pursuits for achievement, whereas connectedness was associated to traits such as being friendly, warm, open to feelings, and affectionate. They also found that individuals with prominent needy or connected ways of being were similar in some regards. For example, they both reported frequent feelings of inferiority, sensitivity to ridicule, and inability to cope with stress. Dunkley et al. suggested that the small similarities between connectedness and neediness could be explained by the shared variance with neuroticism.

As research on the relationship between connectedness and symptoms of depression gradually expanded (Blatt et al., 1995), the idea of connectedness as an adaptive construct began to be questioned. Rude and Burnham (1995), Blatt et al. (1995), and Dunkley et al. (2006) all found small but significant

correlations between connectedness and depression symptoms. This challenged the idea that connectedness as measured by the DEQ represented an adaptive form of dependency. It was therefore proposed that the connectedness construct measured a *less maladaptive* form of dependency than neediness (McBride, Zuroff, Bacchiochi, and Bagby, 2006; Whiffen et al., 2000).

Neediness and connectedness have been related to attachment styles. Neediness has been found to have a negative correlation with secure attachment (McBride et al., 2006). Connectedness has been found to have small and non-significant correlations with secure attachment which have been positive or negative depending on the population (McBride et al.). Significant negative correlations between neediness, connectedness, and dismissing attachment have only been found in a student sample (McBride et al.). The strongest correlations found between the two forms of dependency and attachment have been the correlations between neediness and preoccupied attachment and connectedness and preoccupied attachment. Both neediness and connectedness have been found to correlate significantly with preoccupied attachment in both a clinical and student sample (McBride et al., 2006; Whiffen et al., 2000). The relationship between insecure attachment styles and connectedness, like the relationship between connectedness and depression symptoms, points to connectedness as a less maladaptive construct than neediness rather than as an adaptive construct. Today, connectedness is generally understood as a less maladaptive construct than neediness.

Despite the differentiation between neediness and connectedness by Rude and Burnham in 1995, researchers continue to use the unitary construct of dependency in their research (see Blatt, 2004; Luyten et al., 2007; Marshall, Zuroff, McBride, & Bagby, 2008; Whiffen et al., 2000). It has been suggested that researchers may find more consistent and stronger results if the unitary construct of dependency is replaced with neediness and connectedness (Zuroff et al., 2004). Until this happens, the body of literature showing the relationship of neediness and connectedness to other constructs will remain small, and research will continue to be confounded by the connectedness construct which is embedded within measures of dependency.

The Differentiation between Forms of Self-criticism

Thompson and Zuroff (2004) have proposed that self-criticism may be a complex and multifactorial concept containing different subtypes. Using Blatt and Blass' (1992) description of introjection, which proposed that prior to maturity, standards of conduct are externalized and with maturity, standards of conduct are internalized, the regulation of affect comes from within the self, and an integrated self develops, Thompson and Zuroff (2004) identified and operationalized two levels of self-criticism. One, a type of self-criticism that was based on externalized standards, which would result in an individual perceiving self-criticism and hostility from others, and two, a type of self-criticism based on internalized standards. Thompson and Zuroff named the first type *comparative self-criticism* (CSC) which is defined as "a negative view of the self in comparison with others" (p. 421). A person who tends towards CSC

views the other as critical and hostile and this leads to a certain degree of interpersonal hostility and distrust. This type of person suffers with a nagging sense of inferiority in comparison to others. Thompson and Zuroff propose that it is because of this dimension embedded within the self-criticism construct that self-criticism has been associated with low levels of Extraversion and Agreeableness on the NEO (Zuroff, 1994) and interpersonal hostility and distrust (Zuroff & Fitzpatrick, 1995).

The other type of self-criticism proposed by Thompson and Zuroff (2004) is *internalized self-criticism* (ISC), which is referred to as introjective self-criticism by Blatt (2004). A person who tends towards ISC has "a negative view of the self in comparison with internal, personal standards" (Thompson & Zuroff, p. 421). The internal personal standards set are typically excessively high and unattainable which leads to the continual failure to meet goals. Thompson and Zuroff emphasize that setting high personal standards in and of itself is not indicative of ISC, but rather, the raising of standards after meeting a goal because the person is not satisfied with the success combined with negating the achievement and redefining it as a failure is indicative of ISC. The obvious difference between CSC and ISC is that the focus of an individual with ISC is not on the opinions others have about the self, but on the self as a deficient being.

Thompson and Zuroff (2004) developed the Levels of Self-Criticism Scale (LOSC) to measure these two related but independent types of self-criticism. Both CSC and ISC have been found to correlate with psychological

distress, low self-esteem, and neuroticism as measured by the NEO (Thompson & Zuroff). As expected, CSC negatively correlated with Conscientiousness, Extraversion, and Agreeableness. In addition, CSC was correlated with a less collaborative way of handling conflict, reflecting the generally hostile way of being with others, and ISC with a more accommodating way of handling conflict (Thompson & Zuroff). For both university and high school students, CSC has been found to be an independent predictor of depression (Ongen, 2006).

In one study by Thompson and Zuroff (2004), the relationships between CSC, ISC, and attachment have been explored. CSC was strongly correlated with fearful attachment and had a strong negative correlation with secure attachment (Thompson & Zuroff, 2004). CSC also correlated with preoccupied attachment, although Thompson and Zuroff proposed that this association was attributable to Neuroticism. ISC was not found to be related to attachment (Thompson & Zuroff). This study seems to point to CSC as an extremely harmful personality trait that hinders the development of positive interpersonal relationships.

The Forms of Self-criticism and Dependency and the Working Alliance and Outcome

There has been very little research investigating the relationships between the forms of self-criticism and dependency and the working alliance and outcome, although there are some reports of the relationships between self-criticism and dependency as unitary constructs and therapy. In this section, the

responsiveness of self-criticism and dependency to different types of treatment will be explored. After this there will be a short discussion of the relationships between dependency, self-criticism, the working alliance, and outcome, and finally, a discussion of the burgeoning research on the forms of self-criticism and dependency and their relationship to the working alliance and therapy.

The research on the responsiveness of people with self-critical or dependent personality types to different types of therapy is small and inconsistent. In a study by Marshall, Zuroff, McBride, and Bagby (2008) people scoring high on self-criticism prior to treatment had poorer treatment outcome when in interpersonal therapy, and better outcome when in pharmacotherapy with clinical management. Conflicting results were found by Blatt and Maroudas (1992) who found that self-critical individuals had poorer outcome when in pharmacotherapy. Additional conflicting results were found by Rector et al. (2000) who found that self-criticism was independent of response to treatment for pharmacotherapy. When researching the responsiveness of people with dependent or self-critical personality types to cognitive behavioural therapy, Marshall et al. found that people scoring high on dependency seemed to show poorer outcomes than people scoring high on self-criticism. This finding is consistent with Blatt and Maroudas who proposed that self-critical individuals may respond better to cognitive behavioural therapy than dependent individuals due to their nature which may make them more responsive to assignments and goal-setting. The research study by Rector et al. did provide some evidence that with cognitive behavioural therapy, self-critical

individuals can show a significant reduction in self-criticism at termination. Although there is research indicating that cognitive behavioural therapy may be well-suited for self-critical individuals, results from the research on the responsiveness of people with high self-criticism or dependency to therapy have been somewhat inconsistent (Marshall et al.).

Self-criticism is viewed as a therapeutic problem and has been related to lower working alliance ratings (Whelton et al., 2007). Although there are few research studies linking self-criticism to the working alliance, there are several linking perfectionism, a similar construct, to the working alliance. When examining the relationship between perfectionism and the working alliance, Zuroff et al. (2000) found that perfectionism was related to lower ratings of the working alliance and that these lower ratings explained poor treatment outcome (Zuroff et al.). In addition, Blatt, Zuroff, Bondi, Sanislow, and Pilkonis (1998) found that perfectionism was associated with a decline in the alliance from mid-therapy. Blatt et al. proposed that nearing the end of treatment, perfectionist individuals were critical of their involvement in therapy and developed a sense of failure.

Dependency too has been shown to have an effect on the psychotherapeutic process. Although dependency is a personality trait which seems to increase risk for psychopathology (Blatt, 2004), there have been several studies that point to the positive effect dependency can have on the alliance and outcome. It has been suggested that dependency may be a predictor of attendance in therapy. For example, Necev (1980) found that dependent

individuals missed fewer sessions of therapy. Not only is it suggested that dependent individuals are more likely to attend therapy, but in a study by Poldrugo and Forti (1988), it was found that dependent individuals were more compliant with treatment. This seems to be related to a dependent individual's need to maintain close relationships and therefore not wanting to jeopardize the client-therapist relationship by failing to comply with treatment. In contrast to these studies, some negative effects of dependency on the therapeutic relationship have been found. For instance, Alexander and Abeles (1968) found that the early development of dependency needs by the client is a predictor of unsuccessful therapy and early termination. Despite this possibly detrimental effect of early termination, Alexander and Abeles found that if the client lasts through therapy, good outcome is possible. It seems as though certain components of dependency, such as the fear of being rejected by others, increases risk of psychopathology, but other components, such as compliance with suggestions from an authority figure, may be beneficial to therapy (Bornstein & Bowen, 1995). The inconsistent results may be related to the undifferentiated dependency construct used in the above mentioned studies.

Outcome studies looking at self-criticism and dependency have produced some interesting results. Fonagy et al. (1996) found that self-critical clients showed greater therapeutic improvement than dependent clients. This empirical finding is in line with Blatt's (2004) conceptualization of dependency, which he views as more developmentally immature than self-criticism, and therefore more difficult to change. In another line of outcome research,

therapeutic change has been found to be in different areas depending on whether the client is self-critical or dependent. For example, dependent clients have been found to show more change on measures of interpersonal relations and self-critical clients show more change on measures of cognitions (Blatt, 2004). Therefore, to be most effective at measuring which personality trait is most resistive and most responsive to change, outcome should be measured by both scales of interpersonal relations and cognitive change.

To date, there have been no studies published about the effects of neediness, connectedness, ISC, and CSC on the working alliance and outcome. As previous research on the self-criticism and dependency suggest, this line of research could provide practically useful information for the treatment of people with these types of personality traits. As no research is currently available to provide information about the relationships between these constructs and therapy, it is only possible to hypothesize what these relationships may be based on the theoretical understandings of the concepts themselves.

From the understanding of neediness as a more maladaptive personality trait than connectedness, it is possible that neediness may have more detrimental effects on the working alliance and outcome. People who score high on the neediness subscale are understood as people who want very badly to be protected and cared for by others, but expect to be hurt (Zuroff et al., 2004). This expectation of being hurt would suggest that needy individuals may be very guarded during the therapeutic process and may miss opportunities to develop a strong therapeutic alliance and in turn may make themselves less

available to therapeutic change. Those who score high on the connectedness subscale are understood as people who are insecure and yet have developed warm ways of relating with others (Zuroff et al., 2004). Based on this understanding, it is possible that individuals scoring high on the connectedness subscale may be more open to forming working alliances with their therapists and therefore may show more positive outcomes than needy individuals.

Continuing with this reasoning, a theoretically sound assumption in regards to CSC and ISC is that CSC may have a more detrimental effect on the working alliance and outcome. CSC is viewed as a more primitive, harmful form of self-criticism and has been related to a high degree of psychological distress. A person who scores high on CSC tends to view others as critical and hostile and this leads to a certain degree of interpersonal hostility and distrust. CSC has also been associated with fearful attachment style and a less collaborative way of dealing with conflict. Although ISC too has been related to psychological distress, at this point research has indicated that it is not related to attachment styles, suggesting that the ISC personality trait has less of an effect on interpersonal relationships than CSC. With the high degree of interpersonal hostility and distrust, it is likely that CSC poses more of a threat to a strong working alliance and possibly outcome than ISC.

Additional research is required to understand the interpersonal problems and psychological costs associated with the two forms of dependency and the two forms of self-criticism (McBride et al., 2006). What is especially required is additional research on the impact of connected and needy personality traits

and CSC and ISC on the working alliance and therapy outcome. Not only will this assist future researchers, it will also guide practitioners in treatment decisions.

Rationale

Therapy is a tool that has been developed to support personal growth and help ameliorate concerns affecting psychological health. One construct of therapy, the working alliance, has been shown by many researchers to be a necessary condition of therapeutic change (Beck, 1995; Greenberg, 2002; Safran et al., 2001). To help account for why some clients form stronger working alliances than others, several researchers have turned to the study of personality factors. It is now believed by many that client personality factors play a role in the development of a working alliance (see Bordin, 1979; Horvath, 2005; Lambert & Barley, 2001; Puschner et al., 2008).

Two significant factors of personality which are believed to underlie the entire field of psychopathology are self-criticism and dependency (Blatt & Shichman, 1983). Self-critical and dependent individuals have difficulty establishing close, personal relationships with others, and frequently experience difficulties such as feelings of anxiety, depression, and loss (Blatt et al., 1995; Blatt, 2004). For these reasons, self-critical and dependent individuals would likely benefit from psychotherapy, yet research shows that these individuals often show little improvement over the course of therapy (Blatt & Maroudas, 1992; Marshall, Zuroff, McBride, & Bagby, 2008). As interpersonal difficulties are a common experience of self-critical and dependent individuals, it is

possible that these individuals struggle to establish close working relationships with their therapists.

Although self-criticism and dependency have been shown to have a detrimental impact on the working alliance and therapeutic outcome and their relationships with many other variables have been well studied (Blatt & Maroudas, 1992; Marshall et al., 2008; Rector et al., 2000), they have now been identified as multidimensional constructs. Dependency is believed to be comprised of neediness and connectedness, which are more and less maladaptive forms of dependency, respectively (Rude & Burnham, 1995). Self-criticism is believed to be comprised of comparative and introjective self-criticism, which are more and less maladaptive forms of self-criticism, respectively (Thompson & Zuroff, 2004). The relationship of these multidimensional constructs to the working alliance and outcome are not yet understood.

In this study, the levels of self-criticism and forms of dependency will be related to different types of internal working models classified in attachment theory. By relating these variables to attachment, specifically by relating these variables to healthier and unhealthier internal working models, a greater understanding of the subtypes of self-criticism and dependency will be achieved. The subtypes of dependency and self-criticism will also be related to the working alliance and therapeutic outcome. By observing the co-relationships between connectedness, neediness, comparative and internalized self-criticism and attachment, the working alliance, and outcome, the

personality traits which are related to weak working alliances and little improvement over the course of therapy will be identified. This will allow for a deeper understanding of these variables. With an increased understanding of the subtypes of self-criticism and dependency, appropriate adjustments can be made to help make therapy more effective for these individuals.

Hypotheses

Based on the literature, this study presents five main hypotheses:

1. The working alliance measured at session one and session five will predict outcome on both a measure of psychological distress and interpersonal problems measured at termination.
2. Attachment style will be related to the working alliance and outcome.
    a. A secure attachment style will correlate positively with a high working alliance at the beginning, middle, and end of therapy, and with good outcome as measured by psychological distress and interpersonal problems.
    b. An insecure attachment style (including preoccupied, dismissing, and fearful attachment styles) will correlate positively with a low alliance over the course of therapy and poor outcome. A fearful attachment style will have the most negative relationship with the working alliance and outcome.
3. The forms of dependency and self-criticism will related to attachment as follows:

   a. Neediness will be more closely linked to insecure attachment styles than connectedness. Neediness and connectedness will both correlate positively with a preoccupied attachment style but neediness will be negatively associated to a secure attachment style.
   b. CSC will have a stronger positive correlation with insecure attachment styles than ISC. Specifically, CSC will be more closely linked to preoccupied and fearful attachment styles and have a stronger negative correlation with secure attachment than ISC.

4. The forms of dependency and self-criticism will be related to the working alliance and outcome as follows:
   a. Neediness will be more closely linked to a poor working alliance over the course of therapy and with poorer outcome than connectedness.
   b. CSC will be more closely linked to a poor working alliance over the course of therapy and with poorer outcome than ISC.
5. Neediness, CSC, and fearful attachment will be the best predictors of outcome.

Methodology

Participants

Participants in this study were 124 individuals at least 18 years old who received personal counselling services at a free, urban mental health clinic between September 2008 and April 2009. These 124 volunteered from out of 176 adults who were eligible to participate, an initial response rate of 70.5%. Counselling was provided by Master's and Doctoral students supervised by registered psychologists. Participants presented with diverse concerns and issues including anxiety, divorce, childhood trauma, depression, interpersonal issues, and addictions. The average number of sessions participants attended was 13.2 (SD = 5.6).

As expected, the response rate for this study declined over time due to premature withdrawal from the study or early termination of therapy. Of the 124 participants who agreed to participate in research and completed the initial research package, 116 responded following the first session, 87 responded following the fifth session, and 73 completed the termination research package. The result was a drop-out rate of 41% between the initial research package and the termination package. There were a total of 65 clients who completed all four research packages and it is with the data from these 65 clients that all following statistical analyses were conducted.

Of the 65 participants who completed the study, there were 44 females and 20 males (the demographic variables for one participant was not obtained) with an age range of 19 to 83 years old (M = 31.7, SD = 12.3). The majority of

participants were Caucasian (84.6%), female (67.7%), single (58.5%), and self-referred (47.7%). In addition, many participants indicated some post-secondary education (53.9%). For additional demographic information of participants, refer to Table 1.

To check for differences on demographic variables between the 124 clients who volunteered to participate in research and the 52 clients who chose not to participate, analysis of variance (ANOVA) and chi-square analyses were used. Differences were checked for on the following variables: age, gender, ethnicity, relationship status, education, income, referral source, if past counselling had been received, and length of past counselling. There were no differences on these variables indicated between these groups of clients. When variables were grouped into broader categories, for example, high income versus low income (rather than the four levels as listed in Table 1) or high education versus low education (rather than the five levels as listed in Table 1), there were still no significant differences between those who did and did not participant in the research on these broader categories of demographic variables. This indicates that the sample of participants in the study (N = 124) were representative of the population of eligible clients receiving counselling at the community clinic (N = 176) on these variables.

Due to the decline of participants over the course of the study, ANOVA and chi-square analyses were used to determine whether demographic differences existed between the 65 participants who completed the study and the

Table 1

Demographic Variables of Research Participants (n = 65)

Demographic variable	n	Percentage
Gender		
Female	44	67.7
Male	20	30.8
Ethnicity		
Caucasian	55	84.6
Asian	4	6.2
East Indian	1	1.5
First Nations	1	1.5
Mixed ethnicity	1	1.5
Other	2	3.1
Relationship status		
Single	38	58.5
Married or common law	17	26.2
Divorced/separated	9	13.8
Education level		
Graduate or professional education	15	23.1
College or university degree	18	27.7
Partial college or university	17	26.2
Certificate in a trade or technology	3	4.6
High school	11	16.9
Average household income		
Less than $10,000	10	15.4
$10,000 - $30,000	19	29.2
$30,000 - $50,000	20	30.7
$50,000 or more	15	23.1
Referral		
Self	31	47.7
Physician	5	7.7
Agency	12	18.8
Other	16	24.6
Received counselling in the past		
Yes	12	18.5
No	52	80.0
Length of past counselling		
One year or less	47	72.3
One to three years	5	7.7
Three to six years	4	6.1
Six years or more	7	10.8

59 clients who agreed to participate in research but did not complete the study. ANOVA indicated no difference in age. Chi-square analyses indicated no differences on the following variables: gender, ethnicity, relationship status, education, referral source, past counselling, and length of past counselling. However, chi-square analyses did indicate a significant association between whether or not a participant completed the study and annual household income, $\chi^2(1, 120) = 10.34$, $p < .001$. Of the clients in the less than $50,000 income bracket, 64.5% (n = 49) completed the study as compared to only 34.1% (n = 15) of the clients in the $50,000 or more income bracket. Overall the sample of participants who finished the study (N = 65) seems to be fairly representative of the sample of participants who agreed to participate in the study (N = 124). Clients with an income of $50,000 or less were more likely to complete the study.

In addition to measuring demographic differences between the 65 participants who completed the study and the 59 who did not complete the study, possible differences were also explored between these two groups on measures at intake. ANOVA indicated that there were no significant differences in scores from all six measures at intake between participants who completed and did not complete the study. This indicates that there was no association between psychological distress, interpersonal problems, attachment style, and various personality dimensions as measured at intake and participants' decisions to complete the study.

Overall, these analyses indicate that there were no differences on measured demographic variables between clients who participated (N = 124) or did not participate in the study (N = 52). In addition, there were no differences on personality traits, attachment style, psychological distress, or interpersonal problems as measured at intake between clients who participated and completed all four research packages (N = 65) and participants who agreed to participate in research but did not complete the study (N = 59). Participants with an annual household income of less than $50,000 were more likely to complete the study. This indicates that the sample of clients who agreed to participate in the research was representative of the population of clients receiving counselling at the clinic and that the participants who completed the research were representative of the original sample except in area of income.

Measures

Seven different measures were used in this study. These measures are summarized below. In addition, participants were asked to complete a demographic form which requested information about gender, age, ethnicity, marital status, level of education, household income, and previous counselling experience (Appendix A).

Self-Criticism

To measure self-criticism, participants were administered the Levels of Self-Criticism Scale (LOSC) developed by Thompson and Zuroff (2004) which measures both comparative self-criticism (CSC) and internalized self-criticism (ISC). It was created by developing a 34-item measure, for which the items

were generated rationally, administering the measure to 282 participants, and then subjecting the items to reliability and item analyses which lead to a two factor measure. The resulting measure consisted of 22 items: 10 items for ISC and 12 items for CSC (Thompson & Zuroff, 2004). For each item in the LOSC, participants were asked to rate how well each item described them on a Likert scale ranging from 1 (not at all) to 7 (very well). A sample item for CSC is "I often worry that other people will find out what I'm really like and be upset with me" and for the ISC, "If I fail in one area, it reflects poorly on me as a person" (Thompson & Zuroff, 2004). To score the LOSC, the number circled for each item in a scale are added and the total is used to quantify the level of ISC and CSC indicated by each participant.

Internal consistency (Cronbach's coefficient alpha) reported by Thompson and Zuroff (2004) for the CSC and ISC scales were .81 and .87, respectively. The two scales are moderately correlated with one another (r = .44, $p < .05$) (Thompson & Zuroff, 2004). Reasonably good evidence was found in support of the convergent and discriminant validity of the LOSC. CSC and ISC were moderately correlated with low self-esteem (r = - .66, $p < .05$; r = - .52; $p < .05$), psychological distress (r = .53, $p < .05$; r = .44, $p < .05$), and self-criticism (r = .62, $p < .05$; r = .55, $p < .05$) as measured by the Depressive Experiences Questionnaire, respectively. Both scales were significantly correlated in predictable ways with three different scales of perfectionism as measured by the Multidimensional Perfectionism Scale. The correlation between Self-oriented Perfectionism and ISC (r = .45, $p < .05$) was much higher

than that with CSC ($r = .21$, $p < .05$) and the correlation between Socially Prescribed Perfectionism and CSC, when the shared variance between ISC and CSC was taken into account, was significant (Thompson & Zuroff, 2004).

To demonstrate convergent validity, CSC and ISC were compared to the personality scales within the NEO Five-Factor Inventory (Costa & McCrae, 1992). Both CSC and ISC were related to Neuroticism ($r = .60$, $p < .05$; $r = .54$, $p < .05$), and CSC was related to Conscientiousness ($r = -.34$, $p < .05$), Agreeableness ($r = -.35$, $p < .05$), and Extraversion ($r = -.37$, $p < .05$) (Thompson & Zuroff, 2004). In addition, when analyzing the relationships between CSC, ISC, and attachment styles as measured by the Attachment Scales (Bartholomew & Horowitz, 1991), CSC was found to be positively correlated with fearful-avoidant attachment ($r = .30$, $p < .05$) and preoccupied attachment ($r = .47$, $p < .05$) and negatively correlated with secure attachment ($r = -.44$, $p < .05$) (Thompson & Zuroff, 2004). The original analyses conducted by Thompson and Zuroff, and the following comparisons of the LOSC to other personality and attachment dimensions, demonstrate the LOSCs reliability and validity.

Dependency

To measure dependency, participants were administered 29 items from the Depressive Experiences Questionnaire (DEQ) which make up two dependency subscales: connectedness and neediness. The DEQ was originally developed by Blatt, D'Afflitti, and Quinlan (1976) to measure dependency, self-criticism, and efficacy. The original DEQ consisted of 66 rationally developed

items that measured concerns about rejection, loneliness, and the need for close relationships, which are experiences frequently reported by people who are depressed but are not actual symptoms of depression. The DEQ is scored by calculating Z scores for each item and then multiplying these Z scores by factor weights (Nietzel & Harris, 1990). In this way, all 66 items contribute to both factor scores. The factor structure of the DEQ is highly replicable. For dependency and self-criticism respectively, the test-retest reliabilities are very high, r = .81 and r = .75, and the internal consistencies of the scales are quite high, r = .81 and r = .80 (Zuroff, Quinlan, & Blatt, 1990). In addition, there is considerable evidence for the construct validity of the DEQ (Zuroff, Moskowitz, Wielgus, Powers, & Franko, 1983), as it has been related to measures of depression such as the Beck Depression Inventory (BDI), to other personality traits such as neuroticism and introversion (Costa & McCrae, 1992), and to interpersonal orientations (Horowitz & Vitkus, 1986).

In 1995, Rude and Burnham (1995) identified a two-factor structure within the dependency subscale of the DEQ. To determine its existence, the 66 item DEQ was administered to 431 undergraduates. Following the administration, the items which had a dependency scoring weight of at least .04 and for which the dependency weight was greater than the weight for self-criticism were selected. There were 29 items selected in total. These 29 items were submitted to principal factor analysis and a two factor solution emerged. Both factors were found to be highly stable (Rude and Burnham, 1995). A different group of researchers using a different method (facet theory and

Smallest Space Analysis) also found evidence for a two factor solution within the dependency subscale of the DEQ (Blatt, Zohar, Quinlan, Zuroff, & Mongrain, 1995). They found the neediness and connectedness scales to be both reliable and internally consistent (Blatt et al., 1995).

The first factor found by Rude and Burnham (1995) was named connectedness as is seemed to reflect "sensitivity to the effects of one's actions on others and valuing interpersonal relationships" (p. 327) and the other was termed neediness as it indicated anxiety about being criticized and about being alone. According to Rude and Burnham (1995), the correlation between the neediness and connectedness scales was $r = .29$, $p < .01$. Connectedness was found to be associated with gender but not symptoms of depression. Specifically, women had significantly higher scores on the connectedness factor than men, $t(1, 421) = 5.56$, $p < .001$. In contrast, neediness was found to be associated with symptoms of depression but not gender. The correlation between neediness and the Beck Depression Inventory was $r = .33$, $p < .01$ (Rude & Burnham).

For the current study, the 29 dependency items identified by Rude and Burnham (1995) were used to measure neediness and connectedness. A sample item that loads heavily on neediness is "If someone I cared about became angry with me, I would feel threatened that he (she) might leave me" and a sample item that loads heavily on connectedness is "I am very sensitive to the effects my words or actions have on the feelings of other people." To score, the original factor weights were used from the analysis conducted by Blatt,

D'Afflitti, and Quinlan (1976). As scoring using factor weights is tremendously time consuming, a scoring program was used, although the program was developed for the entire 66 items. In order to make the scoring program compatible with the 29 items of the DEQ, Dr. Avi Besser, an Associate Professor of Psychology from Sapir Academic College in Israel, one of the original creators of the DEQ scoring program, was contacted and was able to manipulate the program to be compatible with the 29 items. Once scored by the program, z-scores are reported for both the neediness and connectedness scales.

The neediness and connectedness scales of the DEQ are strongly correlated with similar scales as measured by the Sociotropy/Autonomy Scale (Beck, Epstein, Harrison, & Emery, 1983). The discriminant validity of the neediness and connectedness subscales were demonstrated by analyzing their relation to the NEO Personalities Inventory (Bacchiochi, Bagby, Cristi, & Watson, 2003). The difference in the correlations between Neediness and Neuroticism ($r = .45$, $p < .05$) was significantly higher that the correlation between Connectedness and Neuroticism ($r = .16$, $p > .05$). The difference in the correlations between Connectedness and Extraversion ($r = .22$, $p > .05$) and Connectedness and Conscientiousness ($r = .17$, $p > .05$) was significantly higher that the correlation between Neediness and Extraversion ($r = -.22$, $p > .05$) and Neediness and Conscientiousness ($r = -.28$, $p > .05$). These studies indicate that the 29 items of the DEQ are a highly reliable and valid way to measure neediness and connectedness.

Attachment Styles

The Relationship Styles Questionnaire (RSQ) (Griffen & Bartholomew, 1994b) was used to measure four attachment styles (fearful, preoccupied, dismissing, and secure), which are thought of as existing in a two-dimensional space defined by avoidance and anxiety. The two-dimensional model this measure was based on was the original conceptualization of the different attachment styles proposed by Bowlby (1969). The RSQ is a 30-item inventory. Respondents are asked to indicate the extent to which they believe a statement describes how they feel about close relationships on a 5-point Likert-type scale ranging from 1 (Not at all like me) to 5 (Very much like me).

There are five items contributing to the secure and dismissing scales and four items contributing to the preoccupied and fearful scales. Sample items from each scale are as follows: "I find it easy to get emotionally close to others" (secure), "I want to be completely emotionally intimate with others" (preoccupied), "It is very important to me to feel independent" (dismissing), and "I worry that I will be hurt if I allow myself to become too close to others" (fearful). To score, the number indicated for each item in a scale is added and an average is calculated. Higher scores in a category are reflective of that attachment style.

Although adult attachment has been studied for decades, the psychometric properties of most adult attachment measures have not been thoroughly studied (Bartholomew, 1994). Despite this, there is evidence for the reliability and validity of attachment scales generally, and for the reliability and

validity of the RSQ specifically. Attachment styles have been related to a number of psychological and behavioural dimensions such as relationship satisfaction, jealousy, parental-drinking, support seeking, and well-being (Shaver & Hazan, 1993). The relationship between attachment styles and these dimensions gives evidence for the predictive validity of attachment styles. Specifically in regards to the RSQ, the two dimensional model of attachment has been shown to have good discriminant validity, convergent validity, and predictive validity which was demonstrated by comparing self and other models to self-concept and interpersonal orientation (Griffin & Bartholomew, 1994a). Research indicates that the RSQ is a very reliable instrument with reasonable internal consistency for each of the four subscales (Milkulincer & Shaver, 2007).

The Working Alliance

The California Psychotherapy Alliance Scales, Patient Version, (CALPAS-P), was developed by Marmar and Gaston (1988) to measure four components of the working alliance. The four components as measured by the working alliance and an item within each scale are as follows: patient working capacity ("Did you find yourself tempted to stop therapy when you were upset or disappointed with the therapy?"), patient commitment ("Did you feel that you were working together with your therapist, that the two of you were joined in a struggle to overcome your problems?"), therapist's understanding and involvement ("Did you feel that you disagreed with your therapist about the kind of changes you would like to make in therapy?"), and patient-therapist

agreement on goals and strategies ("Did the therapy you received in this session match with your ideas about what helps people in therapy?").

The CALPAS-P incorporates many ideas of what is encompassed by the working alliance, including a focus on the client's bond with the therapist, agreement on goals and tasks, the therapist as an empathic listener, and the client's capacity for a working alliance. The CALPAS-P consists of 24 items, with 7 items in each scale. Respondents are asked to indicate the degree to which the questions describe their experience on a scale ranging from 1 (Not at all) to 7 (Very much so). To score the CALPAS-P, after reverse scoring the appropriate items, the number indicated for each item in a scale is added.

According to Gaston, Marmar, Gallagher, and Thompson (1991), the internal consistency estimates for the CALPAS-P are .43, .51, .64, and .73. In addition, the reliability of the scales were .95, .96, .97, and .95 for the patient working capacity, patient commitment, therapist's understanding and involvement, and patient-therapist agreement on goals and strategies scales respectively. Correlations between scales range from .37 to .62. Fenton, Cecero, Nich, Frankforter, and Carroll (2001) demonstrated the predictive validity of the CALPAS. They found that the CALPAS was significantly related to outcome in a study using cognitive-behavioural therapy and twelve-step facilitation ($r = .37$, $p < .001$). The validity of the CALPAS is also demonstrated through its comparison to other measures of the working alliance. Fenton et al. (2001) and Cecero, Fenton, Nich, Frankforter, and Carroll (2001) found that the CALPAS was highly correlated to three other measures of

therapeutic alliance (Penn Helping Alliance Rating Scale, Vanderbilt Therapeutic Alliance Scale, and the Working Alliance Inventory) and that these scales seemed to be measuring a similar construct.

In an article by Martin, Garske, and Davis (2000), a meta-analysis was conducted of previous research on the relationship between the working alliance and outcome. Besides concluding that a moderate relationship between the working alliance and outcome exists, it was concluded that the CALPAS, along with several other measures, has received "far more empirical scrutiny than any of the other alliance scales and therefore should be used in future research studies . . ." (Martin et al., 2000, p. 447). This study, in addition to the internal consistency and predictive validity of the CALPAS, indicates that it is a sound measure to use in research.

Psychological Distress

Psychological distress was measured using the 28 item version of the General Health Questionnaire (GHQ-28; Goldberg & Hillier, 1979). It measures short-term changes in psychological distress and emotional well-being in an adult population (Conoley, Impara, & Murphy, 1995). The GHQ consists of four scales with seven items each for a total of 28 items (Goldberg & Hillier, 1979). The four scales with a sample item each include: Somatic Symptoms ("Have you recently been getting a feeling of tightness or pressure in your head?"), Anxiety and Insomnia ("Have you recently lost much sleep over worry?"), Social Dysfunction ("Have you recently been satisfied in the way you carry out your task?"), and Severe Depression ("Have you recently felt that life

is entirely hopeless?"). There is also a scale measuring suicide, which is calculated by adding four items from the Severe Depression scale. The GHQ requests that respondents report how their health has been over the past two weeks on a 4-point Likert-type scale ranging from 0 (Not at all to 3 (Much more than usual). To score the GHQ, all items in a scale are added for a total. The higher the total in each scale, the higher the level of psychological distress. The Global Health score, which is calculated by added all items in all scales, is an indicator of overall psychological distress and ranges from 0 to 84.

Although there are several versions of the GHQ (GHQ-12, GHQ-30, GHQ-60; Goldberg &Williams, 1988), the GHQ-28 is the most commonly used as it is the only scaled version. To develop the GHQ-28, factor analysis was conducted on the 60 item GHQ after administration of 523 questionnaires (Golberg & Williams, 1979). The GHQ is intended mainly for research purposes, but can also be used in clinical settings (Conoley et al., 1995). The GHQ-28 has been translated into 38 languages and shows sensitivity across a variety of cultures (Conoley et al.). In a study where the GHQ was used in a community clinic in which the population was primarily university students, it was found to be an effective way to measure improvement in psychological health from comparison of measures at pre- and post-therapy (Mathers & Shipton, 1993).

The GHQ is one of the most thoroughly tested questionnaires of mental health and has high reliability and validity (Mathers et al., 1993). The reliability (Cronbach's alpha) of the GHQ ranges from .84 to .93, the test-retest reliability

is .90, and the split-half reliability is .95. Concurrent validity has been demonstrated by comparing GHQ-28 scales to other clinical measures and psychiatrist's ratings of an individual's mental health (Goldberg & Hillier, 1979). In addition, the construct, predictive, and discriminant validity of the GHQ-28 is well documented and has been demonstrated across cultures (Conoley et al., 1995).

Interpersonal Problems

Interpersonal problems were measured using the 32 item version of the Inventory of Interpersonal Problems (IIP-32; Barkham, Hardy, & Startup, 1996). The IIP-32 measures an individual's most salient interpersonal problems which allow the clinician or researcher to consider the individual's degree of distress (Horowitz, Alden, Wiggins, & Pincus, 2000). The 32 item version is intended mostly for screening purposes, although it has been adopted by many psychotherapy clinicians and researchers to measure outcome (Barkham et al.). As the centrality of interpersonal problems in therapy is evident, the need to include measures assessing a wider range of psychological problems, including interpersonal issues, is increasingly recognized in psychotherapy outcome research.

The IIP-32 measures two types of experienced difficulties: those that are "too hard" to do and those which the individual engages in "too much" (Barkham et al.). The IIP-32 requests that participants consider the degree to which each item has been a problem for them on a five-point Likert-type scale ranging from 0 (Not at all) to 4 (Extremely). The eight scales and a sample item

for each are as follows: Domineering/Controlling ("I try to control other people too much"), Vindictive/Self-Centered ("It is hard for me to really care about other people's problems"), Cold/Distant ("It is hard for me to show affection to other people"), Socially Inhibited ("It is hard for me to introduce myself to new people"), Nonassertive ("It is hard for to tell a person to stop bothering me"), Overly Accommodating ("It is hard for me to say 'no' to other people"), Self-Sacrificing ("I try to please other people too much"), and Intrusive/Needy ("I tell personal things to other people to much"). To score the IIP-32, all items in a scale are added and these scores are transformed into standard T scores (M = 50, SD = 10). Separate norms are used to calculate T scores for females and males. A total score can also be calculated to measure overall interpersonal problems across domains. Higher scores on individual scales or overall are indicative of more interpersonal problems.

To develop the IIP-32, the original 127 item version was administered to 250 psychotherapy clients. The items were then subjected to principal component analyses following which eight clear factors emerged (Barkham et al.). Research has shown the IIP-32 to have high reliability and validity (Barkham et al.; Horowitz et al.). Cronbach's alpha for each of the scales are as follows: Domineering/Controlling (.73), Vindictive/Self-centered (.83), Cold/Distant (.87), Socially Inhibited (.82), Nonassertive (.83), Overly Accommodating (.70), Self-Sacrificing (.78), and Intrusive/Needy (.68). The Cronbach's alpha for the overall scale is .93. The test-retest reliability coefficients for the IIP-32 are comparable to longer versions of the IIP and

indicate that the scale is fairly stable over time. Convergent validity has been demonstrated by comparing scores on the IIP-32 with other assessments of psychological symptoms, specifically depression, anxiety, and global measures of psychological symptoms. Interpersonal difficulties as measured by the IIP-32 were found to be related to but not highly predictive of depression, anxiety, and subjective distress.

Procedure and Ethical Considerations

The measures in this study were administered by clinicians who were all graduate students in a Counselling Psychology program with 1 to 8 years of experience. They were all closely supervised by registered psychologists. Prior to counselling clients, all student clinicians were introduced to the study so they would be prepared to introduce the study to their clients. During the clinicians' introduction to the study, the voluntary nature of the study and the freedom to withdraw participation at any time was stressed. It was emphasized that clinicians should reassure clients that participation or non-participation in the study would not affect the services received. In addition, the importance of confidentiality and anonymity was explained to clinicians. To maintain confidentiality and anonymity, consent forms, questionnaires, and envelopes were marked with identification numbers prior to the administration of research packages. In addition, clinicians were instructed to leave the room during the completion of the research packages and clients were instructed to seal their completed research packages in the provided envelopes and personally place the envelopes in the provided locked chest in the clinic. Clinicians were instructed

to periodically check with their clients while completing packages in order to answer any questions. In case of questions or difficulties, the research assistant's contact information (Kendell Banack) and a form containing a suggested script to use for presenting the research were both provided to clinicians (Appendix B).

During the intake session of counselling, adult clients were asked by their respective clinicians to complete a standard clinic intake package which included a demographics form and six different measures: the GHQ-28, IIP-32, MSPSS, DEQ-29, LOSC, and RSQ. These packages were administered to all adult clients. Prior to administration, clients were informed that a summary sheet (Appendix C) of the information reported would be provided to their respective clinician following the completion of the intake package. The purpose of the summary sheets, which was to inform their clinician of possible areas of concern and growth, was explained to clients. Clients were also informed that clinicians would not see the original questionnaires, but only the summary sheet in order to prevent socially desirable responses.

Also during the intake session, clients were informed by their respective student clinician of the research being conducted at the clinic, including the nature and purpose of the study, the risks and benefits, and the time commitment involved. The confidentiality, anonymity, and voluntary nature of participation in the study were explained to clients. Clients were also provided with an information form (Appendix D) containing information about the research including the researcher's name and the contact number for the Chair of the

Faculties of Education, Extension, and Augustana Research Ethics Board. Following the introduction to the study and after reading the information form, clients were given the option to participate or to not participate in the research. If clients volunteered to participate, they signed a form consenting to research (Appendix E), which also meant that the initial standard intake package previously completed by the client would be included in the research.

Following the completion of the standard clinic intake package and the introduction to the study, the counselling session began. For clients who volunteered to participate in the study, 15 minutes prior the end of the session, participants were asked to complete the Session #1 research package which contained the CALPAS-P.

After the fifth session, research participants were asked to complete the Session #5 research package which contained two questionnaires: the CALPAS-P and the GHQ-28. Research participants were asked to complete the Termination research package on the second to last session. This was done to increase the number of Termination packages received as absence at a final counselling session is not uncommon. The Termination research package consisted of five questionnaires: the GHQ-28, IIP-32, MSPSS, DEQ-29, and CALPAS-P. Following the completion of the Termination package, data collection for the client was considered complete. The Intake, Session #1, Session #5, and Termination packages were estimated to require the following times to complete: 20, 8, 12, and 15 minutes, respectively.

Results

To test the main hypotheses, the present study looked at the relationships between the personality variables measured at intake, the working alliance across therapy, and two measures of outcome. These relationships were measured using the following statistical analyses: t-tests, analysis of variance (ANOVA), correlations, and hierarchical multiple regression. To measure outcome, both the GHQ-28 and IIP-32 scores were converted into change scores in order to indicate symptom improvement and improved interpersonal relations. Change scores for the GHQ-28 were calculated by taking the difference between total GHQ-28 scores at termination and the total GHQ-28 scores at intake. Likewise, change scores for the IIP-32 were calculated by taking the difference between total IIP-32 scores at termination and the total IIP-32 scores at intake. The characteristics of the data obtained and other descriptive analyses will first be reported.

Characteristics of the Data

The data was first checked for normality (Field, 2005). This was done by using the Kolmogorov-Smirnov (K-S) test which compares a distribution of interest to a normal distribution with the same mean and standard deviation (Field). A significant test indicates that the sample is different from a normal distribution. As thirteen scales were used to test the hypotheses (ISC, CSC, connectedness, neediness, four attachment scales, three measures of the working alliance, and the GHQ-28 and IIP-32 change scores), thirteen scales were checked for normality using the K-S test. Of the thirteen scales, four were not

normally distributed: the IIP-32 change score (*K-S*(65) = .11, $p < .05$), the dismissing scale of the RSQ (*K-S*(65) = .17, $p < .01$), the preoccupied scale of the RSQ (*K-S*(65) = .12, $p < .05$), and the total working alliance score as measured by the CALPAS-P at termination (*K-S*(65) = .19, $p < .001$). These four scales violate the normality assumption of many parametric tests. Some statistical tests, such as ANOVA, are robust against violations of normality, whereas others, such as regression, are not (Field). As tests of correlation do not rely on distributional assumptions, these variables may be used for such analyses.

To check for skewness, the values of skewness for the 13 distributions used in the analyses were divided by their respective standard errors of skewness as provided by SPSS. In doing so, a Z score was calculated which for allowed comparisons to a normal distribution. As suggested by Field (2005), a Z score greater than 1.96 is significant at $p < .05$, a score above 2.58 is significant at $p < .01$, and greater than 3.29 is significant at $p < .001$. Kurtosis was checked for in precisely the same way. A Z score was calculated using the values of kurtosis and their respective standard errors of kurtosis and then compared to a normal distribution.

In the data, four distributions had significant values of skewness and kurtosis: the IIP-32 change score ($Z_{skewness}$ (65) = -3.78, $p < .001$; $Z_{kurtosis}$ (65) = 5.84, $p < .001$), and the total working alliance score as measured by the CALPAS-P at session one ($Z_{skewness}$ (65) = -2.43, $p < .05$; $Z_{kurtosis}$ (65) = 2.37, $p < .05$), session five ($Z_{skewness}$ (65) = -2.84, $p < .01$; $Z_{kurtosis}$ (65) = 2.82, $p < .01$), and

termination ($Z_{skewness}$ (65) = -4.63, $p < .05$; $Z_{kurtosis}$ (65) = 3.41, $p < .05$). The high values of kurtosis in these distributions indicate few scores in the tails of the distribution and the significant values of negative skewness indicate a concentration of scores in one end of the distribution (Field, 2005). In this case, participants in the clinic had a high number of interpersonal problems and generally rated their relationship with their clinician as strong. Although this type of response pattern is expected as clients attending therapy typically have more interpersonal difficulties than most people and typically rate their relationship with clinicians as strong (Martin et al., 2000), the severity of the skewness and kurtosis must be taken into consideration when conducting statistical analyses. For distributions which are negatively skewed, the means are biased downwards increasing the risk of a type II error resulting in the decreased ability to find a significant effect (Miles & Shevlin, 2001). Due to the kurtosis of these distributions, the standard errors of the mean are likely too large. This also increases the risk of a type II error. Despite this, the effects of skewness and kurtosis are usually small unless the skewness or kurtoses of the distributions are severe (Miles & Shevlin).

Although there were some outliers in certain distributions, none were consistent across distributions. In addition, the few outliers that existed in several scales, when removed, did not significantly change the distribution in measures of normality. For these reasons, no outliers were removed. These characteristics of the data were explored to ensure that the assumptions of the conducted statistical analyses were met. Doing so increases the probability that

the statistical models found are an accurate representation of the data and also increases the probability that the model is generalizable to the rest of the population (Field, 2005).

Descriptive Analyses

The means and standard deviations for all measures used in the analyses are presented in Table 2. When looking at the scales measuring different types of self-criticism, the mean for ISC (M = 48.72, SD = 12.87) was higher than that for CSC (M = 44.94, SD = 13.01), despite the range for ISC (0 to 70) being smaller than the range for CSC (0 to 84). This indicates that on average, participants scored higher on the ISC scale than the CSC scale.

The means and standard deviations for the measure of dependency (DEQ-29) were calculated as Z scores. The mean of the connectedness subscale was -.26 (SD = .84) and the mean of the neediness subscale was .31 (SD = .89). This indicates that the neediness personality trait was much more prevalent than aspects of the connectedness trait in this sample.

The means on the attachment subscales (RSQ) were: dismissing (M = 3.49, SD = .49), preoccupied (M = 3.17, SD = .77), fearful (M = 3.00, SD = 1.01), and secure (M = 2.92). It was most likely for participants in this sample to have a dismissing attachment style, and, as expected, least likely for participants to have a secure attachment style. The lowest mean of the insecure attachment styles scales was fearful attachment.

The means for the measure of working alliance (CALPAS-P) increased from session one (M = 138.71, SD = 11.84) to session five (M = 145.26, SD =

Table 2

Means and Standard Deviations of Scales (N = 65)

Scale	M	SD
LOSC		
Internalized Self-Criticism	48.72	12.87
Comparative Self-Criticism	44.94	13.01
DEQ-29		
Connectedness	-.26	.84
Neediness	.31	.89
RSQ		
Secure	2.92	.67
Preoccupied	3.17	.77
Dismissing	3.49	.49
Fearful	3.00	1.01
CALPAS-P		
Grand Total at Session One	138.71	11.84
Grand Total at Session Five	145.26	13.17
Grand Total at Termination	147.29	15.63
GHQ-28		
Grand Total at Intake	31.92	15.22
Grand Total at Session Five	23.09	11.56
Grand Total at Termination	18.95	12.78
Change Score	-12.97	20.03
IIP-32		
Grand Total at Intake	43.46	20.20
Grand Total at Termination	34.71	20.97
Change Score	-8.75	19.64

13.17) to termination (M = 147.29, SD = 15.63). The variation in scores also increased over these intervals. A repeated measures ANOVA was conducted to determine whether there were significant differences between these means. A significant difference was found ($F(2, 65) = 16.34$, $p < .01$) indicating that the working alliance increased significantly over the course of therapy. Although this F value should be interpreted with caution since the measures of the working alliance were not normally distributed, typically only severe violations of normality affect the F ratio (Field, 2005). It was also noted that the assumption of sphericity was met meaning that the scores in different conditions were independent.

Psychological distress (GHQ-29) was measured at intake (M = 31.92, SD = 15.22), session five (M = 23.09, SD = 11.56), and termination (M = 18.95, SD = 12.78). The means at each interval decreased indicating decreased symptoms of psychological distress. To measure whether the differences between these means were significant, a repeated measures design was not able to be conducted as the data did not meet the assumption of sphericity. However, a dependent samples t-test was conducted to determine whether a significant difference existed between means as measured at intake and at termination. From the analysis, it was indicated that psychological distress significantly decreased over the course of therapy ($t(64, 65) = 5.22$, $p < .001$).

The means for the measure of interpersonal problems (IIP-32) also decreased from intake (M = 43.46, SD = 20.20) to termination (M = 34.71, SD = 20.97). To measure whether the difference in means was significant, a

dependent sample t-test was conducted ($t(64, 65) = 3.59$, $p < .001$). This indicates that over the course of therapy, there was a significant drop in the mean number of interpersonal problems in this sample.

The Working Alliance and Outcome

The relationship between the working alliance and outcome was intended to be measured using simple regression. As the distribution of the interpersonal problems change score (IIP-32) and the working alliance total score (CALPAS-P) at session one, five, and termination were not normal, and as regression is not robust against violations of normality, a regression analysis was not conducted. Rather, Pearson correlations were computed to determine the extent to which the working alliance was related to outcome. These results are shown in Table 3.

From the table, it can be seen that there are significant positive relationships between measures of the working alliance at different sessions. The working alliance at session one was positively associated with the working alliance at session five ($r(65) = .62$, $p < .01$) and at termination ($r(65) = .51$, $p < .01$). No significant relationships were found between the working alliance and outcome. The working alliance at session one was not significantly associated with a change in psychological distress ($r(65) = .11$, $p > .05$) or a change in interpersonal problems ($r(65) = -.22$, $p > .05$). In addition, a significant relationship was not found between the working alliance at session five and a change in psychological distress ($r(65) = -.05$, $p > .05$) or a change in interpersonal problems ($r(65) = -.24$, $p > .05$).

Table 3

Intercorrelations between the Working Alliance and Outcome (N = 65)

Variable	1	2	3	4	5
1. CALPAS-P at Session 1[a]	—	.62**	.51**	.11	-.22
2. CALPAS-P at Session 5[b]		—	.62**	-.05	-.24
3. CALPAS-P at Termination[c]			—	-.17	-.23
4. GHQ-28 Change Score[d]				—	.53**
5. IIP-32 Change Score[e]					—

*p < .05. **p < .01.

[a]California Psychotherapy Alliance Scale, Patient Version, measured at session one
[b]California Psychotherapy Alliance Scale, Patient Version, measured at session five
[c]California Psychotherapy Alliance Scale, Patient Version, measured at termination
[d]General Health Questionnaire – 28 Change Score
[e]Inventory of Interpersonal Problems – 32 Change Score

Attachment, the Working Alliance, and Outcome

To determine the extent to which attachment was related to the working alliance and outcome, Pearson correlations were computed. These results are shown in Table 4. It was expected that a secure attachment style would be positively associated with a strong working alliance at the beginning, middle, and end of therapy. These relationships were not found. Secure attachment was not associated with a strong working alliance at session one ($r(65) = .05$, $p > .05$), session five ($r(65) = .20$, $p > .05$), or termination ($r(65) = .04$, $p > .05$). A secure attachment was also expected to be positively associated with good outcome as measured by change in psychological distress and interpersonal problems. These relationships too were not found to be significant. Pearson correlations between secure attachment and change in psychological distress and change in interpersonal problems were found to be $r(65) = .18$, $p > .05$ and $r(65) = .23$, $p > .05$, respectively.

When analysing the relationships between insecure attachment styles and the working alliance and outcome, several significant relationships were found. A strong negative association was found between preoccupied attachment and change in psychological distress ($r(65) = -.43$, $p < .01$) and change in interpersonal problems ($r(65) = -.43$, $p < .01$). A fearful attachment style was expected to have the most negative association with change in psychological distress ($r(65) = .00$, $p > .05$) and change in interpersonal problems ($r(65) = -.21$, $p > .05$), but these relationships were not found to be significant. In addition, although insecure attachment styles were expected to be

associated with a low alliance over the course of therapy, no significant relationships were found between insecure attachment styles and the working alliance at session one, five, or termination.

Table 4

Intercorrelations between Attachment, the Working Alliance, and Outcome (N = 65)

Variable	1	2	3	4	5	6	7	8	9
1. RSQ S[a]	—	-.63**	-.22	-.42**	.05	.20	.04	.18	.23
2. RSQ F[b]		—	.32**	.30*	.03	-.06	-.03	.00	-.21
3. RSQ D[c]			—	.13	.14	.13	.13	.05	.05
4. RSQ P[d]				—	.04	.05	.09	-.43**	-.43**
5. CALPAS-P, 1[e]					—	.62**	.51**	.11	-.22
6. CALPAS-P, 5[f]						—	.62**	-.05	-.24
7. CALPAS-P, T[g]							—	-.17	-.234
8. GHQ-28 Change[h]								—	.53**
9. IIP-32 Change[i]									—

*p < .05. **p < .01.

[a]Relationship Styles Questionnaire, Secure Attachment
[b]Relationship Styles Questionnaire, Fearful Attachment
[c]Relationship Styles Questionnaire, Dismissing Attachment
[d]Relationship Styles Questionnaire, Preoccupied Attachment
[e]California Psychotherapy Alliance Scale, Patient Version, measured at session one
[f]California Psychotherapy Alliance Scale, Patient Version, measured at session five
[g]California Psychotherapy Alliance Scale, Patient Version, measured at termination
[h]General Health Questionnaire – 28 Change Score
[i]Inventory of Interpersonal Problems – 32 Change Score

The Forms of Dependency and Self-Criticism and Attachment

Pearson correlations were computed to measure the relationships between the forms of dependency and self-criticism and attachment. These results are shown in Table 5. It was expected that neediness would be more closely linked to insecure attachment styles than connectedness. A significant negative association was found between neediness and secure attachment ($r(65) = -.54$, $p < .01$) and positive associations were found between neediness and fearful attachment ($r(65) = .30$, $p < .05$ and preoccupied attachment ($r(65) = .68$, $p < .01$). Connectedness too was found to be positively associated with fearful attachment ($r(65) = .29$, $p < .05$) and preoccupied attachment ($r(65) = .42$, $p < .01$), although to a lesser degree than neediness. Connectedness was negatively associated with secure attachment ($r(65) = -.20$, $p > .05$), although this association was not significant. As expected, the association between neediness and insecure attachment styles was stronger than that for connectedness, although connectedness was significantly associated with several insecure attachment styles and the negative association between connectedness and secure attachment was also unanticipated.

When looking at the relationships between the forms of self-criticism and attachment, it can be seen that comparative self-criticism was found to be strongly linked to preoccupied ($r(65) = .41$, $p < .01$) and fearful attachment ($r(65) = .61$, $p < .01$) and also had a strong negative correlation with secure attachment ($r(65) = -.69$, $p < .01$). As expected, similar, yet weaker, relationships were found between Introjective self-criticism and these variables.

Introjective self-criticism was negatively associated with secure attachment ($r(65) = -.59$, $p < .01$) and positively associated with preoccupied attachment ($r(65) = -.44$, $p < .01$) and fearful attachment ($r(65) = .51$, $p < .01$). In addition, introjective self-criticism was significantly associated to dismissing attachment ($r(65) = .33$, $p < .01$).

Table 5

Intercorrelations between the Forms of Dependency and Self-Criticism and Attachment (N = 65)

Variable	1	2	3	4	5	6	7	8
1. Neediness[a]	—	.26*	.65**	.49**	-.54**	.30*	-.06	.68**
2. Connectedness[b]		—	.13	.33**	-.20	.29*	.11	.42**
3. Comparative SC[c]			—	.65**	-.69**	.61**	.15	.41**
4. Introjective SC[d]				—	-.59**	.51**	.33**	.44**
5. RSQ S[e]					—	-.63**	-.22	-.42**
6. RSQ F[f]						—	.32**	.30*
7. RSQ D[g]							—	.13
8. RSQ P[h]								—

*p < .05. **p < .01.

[a]Depressive Experiences Questionnaire – 29, Neediness
[b]Depressive Experiences Questionnaire – 29, Connectedness
[c]Levels of Self-Criticism Scale, Comparative Self-Criticism
[d]Levels of Self-Criticism Scale, Introjective Self-Criticism
[e]Relationship Styles Questionnaire, Secure Attachment
[f]Relationship Styles Questionnaire, Fearful Attachment
[g]Relationship Styles Questionnaire, Dismissing Attachment
[h]Relationship Styles Questionnaire, Preoccupied Attachment

The Forms of Dependency and Self-Criticism

and the Working Alliance and Outcome

To determine the extent to which the forms of dependency and self-criticism were related to the working alliance and outcome, Pearson correlations were computed. These results are shown in Table 6. It can be seen that neediness was not associated with the working alliance, but connectedness was positively and increasingly associated with the working alliance measured at session one ($r(65) = .25$, $p < .05$), session five ($r(65) = .28$, $p < .05$), and termination ($r(65) = .34$, $p < .01$). As expected a strong negative association was found between neediness and outcome. Neediness was negatively associated with therapeutic change both on a measure of psychological distress ($r(65) = -.38$, $p < .01$) and on a measure of interpersonal problems ($r(65) = .33$, $p < .01$). Connectedness was not associated with therapeutic outcome.

When looking at the relationships between the forms of self-criticism and the working alliance and outcome, it can be seen that comparative self-criticism was negatively associated with the working alliance at session five ($r(65) = -.28$, $p < .05$). Introjective self-criticism was not related to the working alliance. Although comparative self-criticism was expected to be associated with little change on measures of psychological distress and interpersonal problems at termination, no significant relationships were found between comparative self-criticism and outcome. In addition, no significant relationships were found between introjective self-criticism and outcome.

Table 6

Intercorrelations between the Forms of Dependency and Self-Criticism and the Working Alliance and Outcome (N = 65)

Variable	1	2	3	4	5	6	7	8	9
1. Neediness[a]	—	.26*	.65**	.49**	-.07	-.05	.13	-.38**	-.33**
2. Connectedness[b]		—	.13	.33**	.25*	.28*	.34**	-.07	-.00
3. Comparative SC[c]			—	.65**	-.15	-.28*	-.08	-.09	-.23
4. Introjective SC[d]				—	-.04	-.09	.03	-.16	-.20
5. CALPAS-P, 1[e]					—	.62**	.51**	.11	-.22
6. CALPAS-P, 5[f]						—	.62**	-.05	-.24
7. CALPAS-P, T[g]							—	-.17	-.23
8. GHQ-28 Change [h]								—	53**
9. IIP-32 Change[i]									—

*p < .05. **p < .01.

[a]Depressive Experiences Questionnaire – 29, Neediness
[b]Depressive Experiences Questionnaire – 29, Connectedness
[c]L evels of Self-Criticism Scale, Comparative Self-Criticism
[d]L evels of Self-Criticism Scale, Introjective Self-Criticism
[e]California Psychotherapy Alliance Scale, Patient Version, measured at session one
[f]California Psychotherapy Alliance Scale, Patient Version, measured at session five
[g]California Psychotherapy Alliance Scale, Patient Version, measured at termination
[h]General Health Questionnaire – 28 Change Score
[i]Inventory of Interpersonal Problems – 32 Change Score

Predicting Therapeutic Change

To test the hypothesis that connectedness, CSC, and fearful attachment would be the best predictors of outcome, two obstacles were encountered. First, due to the small sample size, the question of how many predictors to use became salient since the estimate of R from a regression is "dependent on the number of predictors, *k*, and the sample size, *N*." (Field, 2005, p. 172). With small sample sizes, the effect can be overestimated. To determine an appropriate number of predictors for a sample, Green (1991), recommends that 50 + 8k is the minimum sample size that should be used, although Field (2005) suggests that 40 to 70 participants may be a sufficient sample size for two predictors. Due to the sample size of 65, only two predictors were used. Second, as mentioned when reporting the relationship between the working alliance and outcome, the distribution of the IIP change score was not normal and because regression is not robust against data that is not normally distributed, the GHQ change score was the only available criterion. For these reasons, rather than randomly selecting two of the three variables mentioned in the hypothesis, the two personality variables that had the highest correlations with the GHQ change score were entered into a hierarchical multiple regression. These were preoccupied attachment ($r = .390$, $p < .01$) and neediness ($r = .342$, $p < .01$).

Additional assumptions are required to be met when conducting regression analyses (Field, 2005; Miles & Shevlin, 2001). These include the exclusion of multicollinear variables, independence of residuals, and homoscedasticity. Collinearity diagnostics and the tolerance values provided by

SPSS in the output indicated that multicollinearity was not a problem. The Durbin-Watson statistic provided by SPSS indicated that the residuals were independent. Finally, based on graphical analysis, the spread of residuals at all levels of the predictor variable were constant indicating that the assumption of homoscedasticity was met.

Preoccupied attachment was found to be a significant predictor of outcome. Hierarchical multiple regression indicated that 18.1% ($F_{change}(1, 65) = 13.916$, $p < .000$) of the variance was accounted for by preoccupied attachment (see Table 7). Neediness did not account for a significantly greater amount of the variance than preoccupied attachment alone ($F_{change}(1, 65) = 1.069$, $p = .305$). When considering the direction and strength of the relationship between preoccupied attachment and change in psychological distress ($r(65) = -.425$, $p < .01$), it is suggested that of all personality variables included in this study, preoccupied attachment was the strongest predictor of therapeutic outcome and had the most negative effect on therapeutic change.

Table 7

Hierarchical Regression Analyses for Variables Predicting Change in Psychological Difficulties (N = 65)

Variables	*B*	*SE B*	β
Step 1			
Preoccupied	-11.00	2.95	-.43****
Step 2			
Preoccupied	-8.17	4.03	-.32
Neediness	-3.62	3.50	-.16

Note. R^2 = .18 for Step 1 (*ps* < .000); ΔR^2 = .01 for Step 2 (*ps* = .31).

*p < .05. **p < .01. ***p < .001. ****p < .000.

Discussion

The results from this study generated several important findings. First, it was expected that the working alliance at session one and session five would be strongly associated with outcome, but this relationship was not found in the present data. Second, although it was hypothesized that secure attachment would be positively correlated with the working alliance and that insecure attachment would be negatively correlated with the working alliance, there were no relationships found between attachment styles and the working alliance. Additionally, secure attachment was expected to positively correlate with good outcome and insecure attachment with poor outcome. Although no associations were found between secure attachment and outcome, preoccupied attachment was found to have a significant negative correlation with outcome as measured by change in psychological distress and interpersonal problems. As fearful attachment was hypothesized to be most strongly associated with poor outcome, this finding was unexpected.

Third, strong correlations were found between neediness and insecure attachments (fearful and preoccupied attachment) and a strong negative correlation was found between neediness and secure attachment. Similar, yet weaker relationships were found between connectedness and these variables. These relationships were expected. When looking at the relationships between the levels of self-criticism and attachment, it was found that comparative self-criticism was strongly associated with insecure attachments (preoccupied and fearful attachment) and negatively associated with secure attachment. Similar,

yet weaker relationships were found between introjective self-criticism and these variables. These relationships between the levels of self-criticism and attachment were expected. A significant association was also found between introjective self-criticism and dismissing attachment.

Fourth, when examining the relationships between the forms of dependency and the working alliance and outcome, significant associations were found between connectedness and the working alliance across therapy. In addition, neediness was associated with poor therapeutic outcome. These relationships were expected, although no negative correlation was found between neediness and the working alliance as hypothesized. In regards to the relationship between the forms of self-criticism and the working alliance and outcome, comparative self-criticism was found to be negatively associated with the working alliance, as expected, but only at session five. Although comparative self-criticism was also expected to be associated with poor outcome, this relationship was not found. Similar, yet weaker relationships were expected between introjective self-criticism and the working alliance and outcome, yet no significant relationships were found.

Finally, it was hypothesized that neediness, comparative self-criticism and fearful attachment would be the best predictors of outcome. Due to small sample size, preoccupied attachment and neediness, the two variables most highly correlated with the GHQ change score, were entered into the multiple regression equation. Contrary to what was expected, preoccupied attachment

was found to be the strongest predictor of therapeutic outcome and to have the most negative effect on therapeutic change.

The working alliance, as measured by the California Psychotherapy Alliance Scales, Patient Version (CALPAS-P), was not associated with therapeutic outcome in this sample. This was unexpected given the plethora of research pointing to the strong link between the working alliance and outcome (Horowitz, 1974; Horvath & Bedi, 2002; Horvath & Symonds, 1991; Martin et al., 2000; Orlinsky et al., 2004; Rainer & Campbell, 2001; Zuroff et al., 2000). In addition, the working alliance did not relate to most other variables in this study as expected. This is interesting given that the CALPAS has been recommended as a sound measure to use in research (Martin et al., 2000). There are several possible explanations for these findings. One, it is possible that the CALPAS-P may not have been an accurate or valid measure of the working alliance with this sample of participants as it has primarily been used with psychiatric populations (Marmar and Gaston, 1988). In addition, many studies reporting the validity of the CALPAS scales, including the high correlations between the CALPAS and other measures of the working alliance, have included all three scales (observer, therapist, and patient) in the research (Cecero et al., 2001; Fenton et al., 2001; Martin et al., 2000). Although the independent reliability of the CALPAS-P scale is reported to be high, the independent validity of the scale is unknown.

It is also possible that the results obtained in this study provide an accurate representation of the relationship between the working alliance and

outcome. Most current theorists believe the working alliance to be a necessary, but not sufficient, condition to bring about positive change in a client (Beck, 1995; Greenberg; Safran et al., 2001). With this line of thinking, it would be possible for a client to have a strong, positive relationship with a clinician without necessarily experiencing positive change. When observing the means of the CALPAS-P (Table 2), it is seen that the ratings of the working alliance were high at session one and increased over the course of therapy. Therefore, if the results obtained are accurate, there must have been some factor impeding those who had a strong working alliance with their clinicians to have positive therapeutic outcome. It is possible that this factor is related to personality. Many theorists have hypothesized that personality factors affect the development of the working alliance (Bordin, 1979; Horvath, 2005, Lambert & Barley, 2001; Puschner, Wolf, & Kraft, 2008), but it is possible that personality factors also impede change even if a strong working alliance has been developed.

Although previous research has indicated that secure attachment is related to strong working alliances and insecure attachments are related to poor working alliances (Eames & Roth, 2000; Kivlighan et al., 1998; Mallinckrodt et al., 1995), no significant relationships were found between attachment and the working alliance in this sample. There are several possible reasons for this finding. It has been suggested by some researchers that the reliability of self-reported accounts of the quality of working alliance may vary by attachment style (Eames & Roth, 2000). For instance, it is possible that reports of the

quality of the therapeutic alliance from secure clients may be more reliable than reports from insecurely attached clients such as dismissing clients who may, for example, report positive working alliances because of their denial of the difficulty they have had engaging with a clinician on a personal and intimate level (Eames & Roth). Due to the possibility that the reliability of self-reported working alliances varies dependent on attachment style, the relationships between the working alliance and attachment style may not be an accurate representation of the actual relationship between these two variables, which may be better measured by combined client, therapist, and observer reports.

In regards to the relationship between attachment and therapeutic outcome, it was surprising that secure attachment was not associated with positive therapeutic outcome. In addition, although fearful attachment was expected to be most strongly associated with poor therapeutic outcome, preoccupied attachment had the strongest negative association with therapeutic change. Although some studies suggest that secure attachment is associated with positive change and preoccupied attachment is associated with poor outcome (Fonagy et al., 1995; Meyer et al., 2001), there is little research on the relationship between attachment and therapeutic outcome, and existing studies are in conflict with one another. As further research is required, this study offers additional support for the negative relationship between preoccupied attachment and positive therapeutic outcome.

An interesting point to consider is that therapeutic outcome and the working alliance may not only vary due to the client's attachment style, but may

also be related to the clinician's attachment style and the interaction of the two. Tyrrell et al. (1999) have found that pairing clients and clinicians on the avoidant-preoccupied dimension have led to stronger working alliances and better outcomes. For example, clients with avoidant attachment styles have stronger working alliances and show better outcomes when paired with clinicians who have preoccupied attachment styles. Therefore, significant relationships may have been found between attachment and the working alliance and attachment and outcome in this study if the clinician's attachment style was taken into account. As it is logical that most clinicians would be securely attached, strongly preoccupied clients may not have been provided with a dismissing like interaction with their clinician. Such an interaction may have created the environment necessary for a corrective emotional experience for these clients and resulted in better therapeutic outcome. For clients with a fearful attachment, the attachment style which is theoretically opposite is secure attachment. As it is likely that most clinicians would be securely attached, the right conditions may have been provided for these clients to have a corrective emotional experience. This idea is reflective of Bowlby's (1988) theory that a therapist must have a contrasting attachment style to the client in order to revise the client's internal working model of attachment. In future studies, it may be worth considering the interaction between the clinician's and the client's attachment style.

Not only has it been proposed that the clinician's and client's attachment styles interact, but also that attachment and treatment type interact (McBride et

al. 2006). In a study comparing cognitive behavioural therapy (CBT) and interpersonal psychotherapy (IPT), it was found that CBT reduced symptoms of depression in clients with dismissing attachment more often than IPT (McBride et al. 2006). No difference in effectiveness between treatments was found for clients with anxious attachment. This points to the importance of taking into account the interaction between attachment and treatment type. A limitation of the current study is that neither the clinician's attachment style or treatment type were controlled for. Not controlling for the clinician's attachment style and treatment type may have affected the measurement of the relationship of these variables to the working alliance and outcome in unknown ways.

Additionally, it is worth considering the measurement inconsistencies present in attachment research. First, in the existing attachment literature, both Bartholomew's (1990) four prototype conceptualization of attachment is used and Hazan and Shaver's (1987) three prototype conceptualization is used, depending on the researcher. Therefore, in much of the research studying the relationship between attachment, the working alliance, and outcome, fearful attachment is embedded within the dismissing dimension and reported only as dismissing attachment. With the lack of consistency between prototypes reported, it is difficult to make comparisons between studies or draw conclusions to better understand the relationships between attachment and other variables.

A second issue is related to inconsistencies in the method of attachment measurement. Some researches use the Adult Attachment Interview which

attempts to measure attachment by analyzing the narratives of participants when recalling childhood experiences (AAI; George, Kaplan, & Main, 1987) and others use a variety of self-report measures of attachment, such as the Relationship Styles Questionnaire (Griffen & Bartholomew, 1994b) used in this study. Although some studies have reported strong correlations between the two types of measures, other studies have reported no such relationships (Eagle, 2006). It has been proposed that different aspects of attachment are measured by the AAI and self-report questionnaires (Eagle). Self-report questionnaires seem to measure an "individual's conscious feelings in regard to current romantic relationships, whereas the AAI yields attachment patterns through quasi-clinical coding of narratives regarding early experiences with parents" (Eagle, p. 1094).

The third issue is linked to the problem of using a dimensional model of attachment. Attachment is believed to be a nuanced construct which varies by experience. Its patterns are thought to be idiosyncratic and in this way do not fully fit into a categorical model. This has been acknowledged by many researchers, including Bartholomew and Horowitz (1991) who believed that the four attachment styles were ideals or prototypes which did not fit exclusively into any one category. Although the categorization of attachment is required for research purposes, the resulting oversimplification does not do justice to the actual experiences of individuals thus making research in this area less generalizable. Agreement on the measurement of attachment in addition to the sophistication of measurement is required in order to better understand the

actual experiences of attachment and the way that attachment interacts with other variables.

One aspect of the current study which made it quite unique was the inclusion of the forms of dependency and levels of self-criticism rather than the unidimensional constructs of these variables. As the literature base for these constructs is small, the findings of this study contribute to the knowledge of how the forms of dependency and self-criticism relate to different types of internal working models classified in attachment theory and also how they relate to the working alliance and therapeutic outcome. When looking at the relationships between the forms of dependency and attachment, strong correlations were found between neediness and insecure attachment styles (preoccupied and fearful attachment) and negative associations were found between neediness and secure attachment. This was expected as previous literature has pointed to neediness as a more detrimental form of dependency which is strongly linked to insecure attachment (see McBride et al., 2006).

Connectedness also was found to be linked to insecure attachment (preoccupied and fearful attachment) and negatively associated with secure attachment, although to a lesser degree. In the literature, the link between connectedness and other personality traits has not been as decisive. Theoretically, connectedness was originally proposed as an adaptive trait that tapped into the valuing of close relationships and the desire to be close to others (Blatt et al., 1995; Rude & Burnham, 1995). Since this time, connectedness has been linked to depression and has also been found to have small, non-significant

correlations with secure attachment which have been positive or negative depending on the population (McBride et al., 2006). In the current sample, the negative correlation between connectedness and secure attachment was significant. As research on the relationships between connectedness and other variables slowly accumulates, connectedness is becoming further understood as a less maladaptive, rather than an adaptive, form of dependency (McBride et al., 2006; Whiffen et al., 2000). The findings of this study add to the understanding of connectedness as a less maladaptive form of dependency.

Strong relationships were found between both forms of dependency and preoccupied attachment in this sample. This finding is supported in the literature and has been found to be robust across samples (McBride et al., 2006; Whiffen et al., 2000), although in previous research the unidimensional form of dependency was used. It is interesting that both neediness and connectedness are strongly associated with preoccupied attachment. As individuals with preoccupied attachment are typically described as having an incredible desire to gain the approval of others and individuals with dependent personality traits are characterized by a dependence on others to feel of value, this strong relationship between preoccupied attachment and the two forms of dependency is theoretically sound. A question that arises is how related are these two constructs? Is it possible that the forms of dependency and preoccupied attachment are tapping into a similar interpersonal way of being? Is dependency primarily a descriptor of behaviour typical of an individual with a preoccupied

attachment style? It would be interesting to further explore these questions in future research.

In regards to the levels of self-criticism and attachment, it was found that comparative self-criticism was strongly associated with preoccupied and fearful attachment and negatively associated with secure attachment. This finding adds to the work of Thompson and Zuroff (2004) who produced the only study to examine the relationships between the forms of self-criticism and attachment, in which similar relationships between the levels of self-criticism and attachment were found. Contrary to the findings of Thompson and Zuroff who reported no relationship between introjective self-criticism and attachment, introjective self-criticism was found to be associated with preoccupied, fearful, and dismissing attachment. In addition, introjective self-criticism was negatively associated with secure attachment. These findings bring into question the conclusion that introjective self-criticism is not linked to attachment as proposed by Thompson and Zuroff.

To further the discussion of the relationship between the levels of self-criticism and forms of dependency and attachment, the relationship of dismissing attachment to these variables will be explored. As hypothesized in the literature (Eagle, 2006), dismissing attachment was found to be more closely linked to self-criticism, specifically introjective self-criticism, than dependency in this study. In fact, introjective self-criticism was the only variable in this study dismissing attachment related to significantly. It is possible that the significant association between introjective self-criticism and dismissing

attachment could be explained by the nature of dismissing attachment. A person with a dismissing attachment has a positive model of the self and negative model of the other meaning that the self is viewed as loveable and of worth and others are viewed as not having value and are therefore disregarded. This results in the avoidance of relationships in order to maintain a positive self-image. Bartholomew (1990) claimed that individuals with a dismissing attachment style are able to develop a model of the self that is completely independent of others. It is logical that dismissing attachment is closely related to introjective self-criticism, as introjective self-critics are not concerned about comparing the self with others but rather to personal standards they have set for themselves. Both dismissing attachment and introjective self-criticism are related to valuing the self based on personal standards at the expense of developing relationships with others. In this way, those with a dismissing attachment style and introjective self-criticism have developed a model of the self that is independent of others.

In the research literature, there are few studies examining the relationships between dependency as a unitary construct and the working alliance and outcome, and the ones that exist are in conflict with one another (see Alexander & Abeles, 1968; Bornstein & Bowen, 1995; Necev, 1980; Poldrugo & Forti, 1988). No existing literature has been found linking the forms of dependency to the working alliance and outcome and therefore this study provides a preview of the possible associations between these variables. As expected, connectedness was associated with strong ratings of the working

alliance across therapy. This finding provides support for the idea that connectedness is tapping into a construct which measures an individual's valuing of personal relationships. Despite the strong link between connectedness and the working alliance, connectedness was not associated with outcome.

In this study, neediness was not linked to the working alliance. This was not entirely surprising as literature on dependency and the working alliance does not present a clear understanding of the relationship between these variables. Some studies have pointed to dependency having a positive effect on the working alliance (Nacev, 1980; Poldrugo & Forti, 1988) and others to dependency having a negative effect on the working alliance (Alexander & Abeles, 1968). Although no relation was found between neediness and the working alliance, neediness was found to have a strong negative association with therapeutic outcome. Specifically, neediness was negatively associated with therapeutic change on both a measure of psychological distress and interpersonal problems. A possible explanation for this finding may be related to the short-term nature of the counselling provided. The clients in the current sample were attending therapy at a clinic providing services from September through April. Prior to therapy, clients were made aware that longer-term therapy was not possible. Due to fears of loss, separation, and rejection that are typical of an individual scoring high on the neediness dimension, it may have been difficult for such an individual to engage with the therapist in a deep way knowing that the relationship was short-term. With longer-term therapy, it is

possible that an individual scoring high on the neediness dimension would experience more positive therapeutic outcomes (Alexander & Abeles, 1968). Further exploration of the differentiated forms of dependency may enhance the understanding of the impact of dependency on the working alliance out outcome.

In previous literature, self-criticism as a unitary construct has been linked to poor ratings of the working alliance (Whelton et al., 2007), yet like the forms of dependency, no existing literature has studied the relationship between the forms of self-criticism and the working alliance and outcome. In this study, few relationships were found between the forms of self-criticism and the working alliance, although comparative self-criticism was found to be negatively associated to the working alliance at session five. This association was expected as individuals scoring high on comparative self-criticism typically perceive self-criticism and hostility from others, which would clearly impede the development of a strong working alliance. It is possible that by the end of therapy, clients scoring high on the comparative self-criticism dimension were able to alter some of their long-standing beliefs and perceive their clinicians as individuals attempting to help in a non-threatening, non-judgemental way. Introjective self-criticism was not related to the working alliance. Introjective self-critics are typically more focused on the self and do not suffer from a sense of inferiority in comparison to others. It is possible that the working alliance was not related to introjective self-criticism because introjective self-critics do not have to overcome the obstacle of viewing the clinician as a helping other

rather than a hostile other. In future research, it would be interesting to investigate the relationship between the forms of self-criticism and the working alliance using a different measure of the working alliance.

Surprisingly, no links were found between the levels of self-criticism and therapeutic outcome in the current study. Other studies researching the relationships between the undifferentiated form of self-criticism and outcome have found that self-critical individuals may respond better to specific treatment types such as cognitive behavioural therapy or pharmacotherapy (Blatt & Maroudas, 1992; Marshall et al., 2008). It is possible that not controlling for treatment type confounded the measurement of this relationship. Interestingly, Fonagy et al. (1996) found that self-critical individuals showed greater improvement in therapy than dependent individuals. This finding is in line with Blatt's (2004) theoretical understanding of self-criticism as a more developmentally mature personality trait than dependency and therefore more responsive to change. In this study, neediness was found to be more strongly associated with poor therapeutic outcome than both levels of self-criticism.

This study sought to determine the best predictor of therapeutic outcome from the variables of attachment, self-criticism, and dependency. Following a hierarchical regression analysis, preoccupied attachment was found to be the best predictor. Specifically, preoccupied attachment was found to be most negatively associated to therapeutic change as measured by both interpersonal problems and psychological distress. This suggests that preoccupied attachment

is the most detrimental personality style of the studied variables in the therapeutic setting.

One explanation for the strong link between preoccupied attachment and poor outcome is the likely reaction of a clinician to such a client. It is possible that clients with a preoccupied attachment style come across as excessively needy in the therapeutic relationship. A probable reaction of the clinician is to draw back from such an intense and demanding experience, resulting in the re-creation of an interpersonal pattern commonly experienced by the client in the outside world. This exacerbates the problem for the client and reaffirms some possible long-standing beliefs about the self as an unlovable being. Rather than altering long-standing beliefs of the self while in therapy, these long-standing beliefs are further solidified. Therefore, interpersonal problems remain the same or increase and personal psychological distress, which is possibly linked to previous failures to develop close personal relationships, also remains unchanged.

It is likely that in order to help such clients, their attachment styles have first to be recognized by clinicians. Following the recognition of the attachment style, clinicians must be aware of their immediate personal reaction to the attachment style and then take steps to counter this immediate withdrawal response. Only then will clinicians be equipped to provide clients with a corrective emotional experience rather than a re-enactment of a hurtful interpersonal interaction commonly experienced in the outer world. This is congruent with Bowlby's (1988) theory that a therapist must have a contrasting

attachment style to the client in order to revise the client's internal working model of attachment.

In summary, this study presents strong evidence for the relationships between attachment styles and the more and less maladaptive forms of dependency and self-criticism. The expected relationship between the working alliance and outcome was not found. Connectedness was shown to be closely linked to a positive working alliance, and neediness to poor therapeutic outcome. Preoccupied attachment was shown to be the best predictor of therapeutic outcome. As few studies have observed the subtypes of self-criticism and dependency and their relationship to attachment, the working alliance, and therapeutic outcome, this study provides an introductory framework for understanding the relationships between these variables. In addition, this study provides support for the need to consider personality factors in the conceptualization and treatment of problems presented in therapy.

Limitations

There are several limitations of the present study. First, the correlational and hierarchical regression analyses used only served to produce associations and predictions. As such, no causal relationships between variables could be measured. Second, much of the data violated the assumptions of normality required to be met for many statistical tests to be employed. As such, many of the analyses were limited to correlations and only select variables were available for use in regression analyses. With more sophisticated analytical options available, additional relationships between variables could have been explored.

Third, the small sample size decreased the probability of finding significant effects and restricted statistical analyses. Forth, as self-report measures were used in this study, it is unclear whether similar relationships would be found between these variables using other methods. Fifth, the findings in this study pertain to the sample of individuals receiving counselling at a free, community clinic. It is unclear whether findings can be generalized to other populations of individuals receiving counselling at different clinics. Sixth, the clinician's attachment style and treatment type were not controlled for and as such, it is unclear whether measures of the relationships between the personality variables and the working alliance and outcome where confounded by these variables. Seventh, the measure of the working alliance was not related to other variables as expected bringing into question the validity and reliability of the working alliance measure used in this study. It is suggested that a different measure of the working alliance be used in future studies with a similar sample or that multiple raters (self-report, therapist, and observer) be employed.

Clinical Implications

As most clients seeking counselling have an insecure attachment style and maladaptive ways of relating to the self or others, these findings have important clinical implications for clinicians working with adult populations. As these variables are linked to the working alliance and outcome in different ways, they need to be taken into consideration when conceptualizing problems and assigning treatment modalities. For example, providing clients with preoccupied attachment styles the acceptance required to promote a corrective

emotional experience in addition to allowing for a long-term therapy. Although there has been little research dedicated to this end, two groups of research will be briefly discussed who have suggested specific treatment options for individuals with specific personality issues.

With the recognition that clients with different personality styles require different corrective emotional experiences, Gilbert designed a treatment modality specifically for clients with high self-criticism called Compassionate Mind Training (CMT). Because of the association between self-criticism and self-hatred, Gilbert suggests that therapy for highly self-critical people should revolve around developing self-reassurance and compassion (Gilbert, 2005; Irons et al., 2006). A foundational belief of the theory behind CMT is that insecurely attached or self-critical people do not have access to memories of being cared for in warm, affectionate ways (Gilbert & Irons, 2005). For this reason, their self-compassionate abilities have been underdeveloped, meaning that they are unable to trigger feelings of safeness and soothing, and their self-critical abilities have been overdeveloped. This underdeveloped ability to self-soothe may be at the core of depression for some people (Gilbert & Irons, 2005). Therefore, developing a compassionate mentality that responds to the self in a soothing rather than a self-attacking way is the goal of CMT (Gilbert & Irons, 2005). Current literature on the efficacy of CMT report that anxiety, self-criticism, and feelings of inferiority and shame can be reduced in individuals with high pre-treatment levels of self-criticism (Gilbert & Procter, 2006).

Following along the same lines, but focusing on the forms of self-criticism, Katz and Nelson (2007) proposed that client variables must be taken into consideration when making treatment choices. Both comparative and introjective self-criticism have been found to relate to past unfairness within the family and family stress. Specifically, comparative self-criticism in adulthood was predicted by perceived unfairness in childhood (felt as though parents could not be counted on to meet needs as a child) and introjective self-criticism was predicted by the parents perceiving their own parenting as unfair to the child (Katz & Nelson). Therefore, Katz and Nelson suggest that people with high comparative self-criticism may benefit from delving into perceptions of family unfairness in childhood, exploring how this may have been related to family stress and how it has informed current hostile interpersonal styles. Additionally, people with high comparative self-criticism may benefit from interpersonal therapy in order to identify and correct interpersonal hostility. It is suggested that people with high introjective self-criticism may benefit from examining how their high personal standards may have their origins in past family experiences.

As is has been shown that clients with specific attachment and personality characteristics present different needs in therapy and respond to therapy in different ways, it is essential to take these variables into consideration when conceptualizing and treating problems presented in therapy. As this study presents only a beginning framework for how attachment and the different forms of self-criticism and dependency relate to the working alliance and

outcome, much additional research is required in this area. Other future directions for research include: (a) matching clients and counsellors on interpersonal and emotional strategies; (b) exploring client variables and responsiveness to different types of treatment modalities; and (c) assessing the reliability of reported quality of therapeutic alliance depending on attachment style.

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APPENDIX A

Demographics Form

Please provide the following information about yourself by filling in the blank or circling the response:

Age: _____

Gender: Female Male

Ethnicity: Asian Black East Indian First Nations Hispanic Mixed Ethnicity White Other

Relationship Status: Single Married/Common-in-law Divorced/Separated Widowed

Highest level of education of the adult(s) in the household:

a. Graduate/professional education
b. College/university degree
c. Partial college/university
d. Certificate in a trade/technology
e. High school diploma/GED
f. Partial high school training
g. Junior high school graduate
h. 8 years of schooling or les

Approximate combined annual income of your household:

a. Less than $10, 000
b. $10, 000 to $20, 000
c. $20, 000 to $30, 000
d. $30, 000 to $40, 000
e. $40, 000 to $50, 000
f. $50, 000 or more

How were you referred? Self Physician Agency_____ Other_____

Have you had counselling in the past? Yes No

If yes, for how long? _____

APPENDIX B

Script for Presenting Research to the Client

After your client has finished filling out the intake package, please present the following before beginning your first counselling session:

"The Education Counselling Clinic is based on three fundamental mandates which make up the purpose of the center. These are: community service, teaching and training, and research. Research is a very important component of this clinic as it may help to better understand the counselling process.

"The current research being conducted in the clinic incorporates two different studies. One is looking at how different ways of relating to others, different personality styles, and social supports relate to how ready clients are to establish a connection with their therapist. The other is looking at the possible obstacles to a strong relationship between client and therapist and discovering ways to help people with interpersonal difficulties they may have. Participation in research involves filling out small packages 3 different times throughout our work together: after the first session today, after the 5th session, and lastly in our second last session together. Each package should take no more than 10 to 15 minutes to complete.

"This research is completely voluntary and your decision to participate or not to participate will not impact our work together**. I will not see the questionnaires you fill out** as you will seal them in an envelope and place them into a locked drop box. In addition, your answers will remain anonymous as each sheet is marked with only a number.

"If you agree to participate in the study, you have the right to withdraw at any point. If you have any questions or concerns, you can ask me or contact the researcher (you may want to point out the contact information on the information sheets). Would you like to volunteer to participate in the study?"

APPENDIX C

Client Feedback: Intake Assessment

Therapist: _____ Client #: _____

GENERAL HEALTH QUESTIONNAIRE – 28 (GHQ-28)		
Somatic Symptoms		Ranges (in any row): ▪ 4 – 6 = moderate ▪ 7 – 12 = high ▪ +12 = very high Note: Any number except 0 in the suicide row should be treated with caution. *Any number **above** 4 may indicate a serious concern.*
Anxiety & Insomnia		
Social Dysfunction		
Severe Depression		
Suicide		
Grand Total		0 – 30 = low 51 – 70 = high 31–50 = moderate +70 = very high
INVENTORY OF INTERPERSONAL PROBLEMS – 32 (IIP-32)		
Domineering/Controlling		Subscale scores are T-scores (M = 50, SD = 10). Scores that are: ▪ < 60 are in the normal range; ▪ 60 – 70 are in the high-normal range; ▪ > 70 are in the very high range (indicating an area of concern)
Vindictive/Self-Centered		
Cold/Distant		
Socially Inhibited		
Nonassertive		
Overly Accommodating		
Self-Sacrificing		
Intrusive/Needy		
Grand Total		
MULTIDIMENSIONAL SCALE OF PERCEIVED SOCIAL SUPPORT (MSPSS)		
Significant Other		Scores on the subscales can range from 4 to 28 with higher scores indicating more social support. Total scores range from 12 to 84.
Family		
Friends		
Social Support Total		
LEVELS OF SELF-CRITICISM SCALE (LOSC)		
Introjective Self-Criticism		▪ 0 – 37 = not very high ▪ 38 – 53 = moderate ▪ 54 – 70 = very high
Comparative Self-Criticism		▪ 0 – 45 = not very high ▪ 45 – 64 = moderate ▪ 65 – 84 = very high
RELATIONSHIP STYLES QUESTIONNAIRE (RSQ)		
Fearful Avoidance		Ranges (in any row): ▪ 0 – 1.0 = not very high ▪ 2 – 3.5 = moderate ▪ 3.6 – 5 = high
Dismissing (Avoidance)		
Secure		
Preoccupied (Anxious)		
DEPRESSIVE EXPERIENCES QUESTIONNAIRE – 29 (DEQ-29)		
Connectedness		These are Z-scores. +1.0 is one standard deviation above the norm. >+0.5 = HIGH. >+1.0 = VERY HIGH.
Neediness		

APPENDIX D

Research Information Form

The Effects of Attachment, Self-Criticism, Dependency, and Social Support on the Working Alliance and Outcome

Principal Researcher: Kendell Banack
Department of Educational Psychology
University of Alberta, Education Clinic
1-135 Education North Building
Phone: 780-492-3746

The objective of this study is to develop a better understanding of how clients' attachments to people in their lives, their personality styles, and social supports relate to how ready they are to establish a connection with their therapist. If you participate, you will be asked to complete several questionnaires. After the intake session, you will be asked to complete a questionnaire which will take about 7 to 15 minutes to complete. Following the fifth session there will be a few questionnaires which will take about 10 to 20 minutes to complete and near the end of counselling, there will be a few questionnaires which will take about 30 to 40 minutes to complete. These questionnaires are anonymous and meant to gather information about attachments to others, personality styles, social supports available, readiness to look at concerns, and general health.

Participation is voluntary and you can choose not to participate. Participation or non-participation in this study will not affect the services received at the Education Clinic. Participation may be withdrawn from the study at any time without penalty. The counsellor will explain the procedure and goals of this study so that you understand them prior to your consenting to research. It is not expected that the questionnaires will cause any discomfort or risk, however, you have the option to discuss any discomfort with your counsellor. Results of this study will be used to better understand the relationship between clients and counsellors and will assist counsellors to best meet clients' needs. While the findings of this research will be published, your identity will not be revealed to anyone. In addition, your student clinician will not see the completed questionnaires.

A summary of the main research findings will be available at the Education Clinic (1-135 Education North) after the study has been completed. The plan for this study has been reviewed for its adherence to ethical guidelines and approved by the Faculties of Education, Extension, and Augustana Research Ethics Board (EEA REB) at the University of Alberta. For questions regarding participants rights and ethical conduct of research, contact the Chair of the EEA REB at 780-492-3751.

APPENDIX E

Research Consent Form

The Effects of Attachment, Self-Criticism, Dependency, and Social Support on the Working Alliance and Outcome

Principal Researcher: Kendell Banack
Department of Educational Psychology
University of Alberta, Education Clinic
1-135 Education North Building
Phone: 780-492-3746

The objective of this study is to develop a better understanding of how clients' attachments to people in their lives, their personality styles, and social supports relate to how ready they are to establish a connection with their therapist. If you participate, you will be asked to complete several questionnaires. After the intake session, you will be asked to complete a questionnaire which will take about 7 to 15 minutes to complete. Following the fifth session there will be a few questionnaires which will take about 10 to 20 minutes to complete and near the end of counselling, there will be a few questionnaires which will take about 30 to 40 minutes to complete. These questionnaires are anonymous and meant to gather information about attachments to others, personality styles, social supports available, readiness to look at concerns, and general health.

I understand that participation is voluntary and that I can choose not to participate. I understand that participation or non-participation in this study will not affect the services I receive at the Education Clinic. I also understand that I may withdraw from the study at any time without penalty. The procedure and goals of this study have been explained to me by my counsellor and I understand them. It is not expected that the questionnaires will cause any discomfort or risk, however, I understand that I have the option to discuss any discomfort with my counsellor. Results of this study will be used to better understand the relationship between clients and counsellors and will assist counsellors to best meet clients' needs. I understand that while the findings of this research will be published, my identity will not be revealed to anyone. I also understand that my student clinician will not see the completed questionnaires.

A summary of the main research findings will be available at the Education Clinic (1-135 Education North) after the study has been completed. I understand that the plan for this study has been reviewed for its adherence to ethical guidelines and approved by the Faculties of Education, Extension, and Augustana Research Ethics Board (EEA REB) at the University of Alberta. For questions regarding participants rights and ethical conduct of research, contact the Chair of the EEA REB at 780-492-3751.

Having read and understood all of the above, I _____ agree to participate freely and voluntarily in this study.

Date: _____ Signature of Participant: _____

Signature of Counsellor: _____