The Relationship between Negative Life Events as Measured by Family Experiences and the Working Alliance

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Abstract

The purpose of the current study was to further the research involving the relationships between client negative life events and the therapeutic working alliance. The working alliance construct stems largely from the work of Bordin, who defined the working alliance as an integrated relationship involving three concepts of tasks, bonds, and goals that work together to determine the quality and strength of the therapeutic relationship (Bordin, 1976). The working alliance has been found to relate to therapy outcome (Crits-Christoph, Gibbons, Hamilton, Ring-Kurtz, & Gallop, 2011), making it an important topic for study. This dissertation explored the relationship between client family experiences and the working alliance in therapy.

Participants used in the study were college students who were participating in therapy at one of 38 college counseling centers across the nation. Data was gathered through the Research Consortium of Counseling and Psychological services in Higher Education during the time period of 1997 to 1998. Participants completed a Family Experiences measurement where they reported information regarding events that have occurred within their family of origin. These items were developed specifically for the research consortium. Participants also completed the Working Alliance Inventory – Client Version (WAI; Horvath & Greenberg, 1989) to assess the working alliance with their therapist.

A canonical correlation revealed no statistically significant relationship between Family Experiences items and subscales on the WAI. Four multiple regressions were completed, which showed no statistically significant relationship between Family

Experiences items and the WAI subscales of Goals, Bond, and Tasks as well as overall WAI scores. Further analyses of these relationships were explored with confidence intervals, which showed small relationships between WAI subscales and Family Experiences.

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Chapter 1

Introduction

The college and university student population has been studied by researchers for many years. Research has focused on a variety of issues within this population. The relationship between client and therapist has been a consistent area of interest. One of the reasons for this interest and its importance, is because of the association found between strong relationships and successful outcomes in therapy (Crits-Christoph, Gibbons, Hamilton, Ring-Kurtz, & Gallop, 2011). The "working alliance" is a term that has been used to describe the relationship between client and therapist and how effectively they work together. Previous researchers have addressed the working alliance as it relates to attachment and have explored attachment as it relates to negative life events, but they have not thoroughly explored the direct relationship between the working alliance and client childhood negative life events. This dissertation explores how negative life events in childhood relate to the therapeutic working alliance within the college population. The current chapter will provide a discussion of the statement of the problem and address the significance of studying this topic. In addition, a summary of the chapters included in this dissertation is presented.

Statement of the Problem

In the present study, the question to be answered is: *are* childhood negative life events related to a client's ability to form effective therapeutic working alliances? Additionally, the present study seeks to understand *how* negative life events are related to the working alliance. Research has mostly focused on negative life events and their

relation to clients' attachment as well as the relationship between client attachment and the therapeutic working alliance. There has been little research thus far that explores the relationship between client negative life events and the working alliance. The present study addresses this relationship and also focuses specifically on whether negative life events are related to a client's ability to bond with their therapist, agree on therapeutic tasks, and work effectively towards therapeutic goals in therapy. The study not only addresses *if* there is a relationship between these variables, but also assesses the *degree* of the relationships. Participants in the study included a representative sample of students who had been clients seen at college and university counseling centers at one of 38 different locations who participated in a nationwide study conducted by the Research Consortium of Counseling and Psychological Services in Higher Education during the time period of 1997 to 1998.

Significance of the Problem

The current study attempts to expand the research by exploring the relationship between negative life events in childhood and a client's ability to form effective therapeutic relationships within the college population. There are several reasons why a study of this nature is important. First, the college and university population is an important one to consider because of the frequency of these clients reaching out for counseling services. College counseling centers are usually conveniently located on campus; therefore students have access to these centers and are able to easily utilize their services. Second, in working with college students in therapy, it is important to note important factors that will contribute to a successful therapy outcome. Since the

therapeutic working alliance has been shown to relate to therapy outcome (Crits-Christoph, Gibbons, Hamilton, Ring-Kurtz, & Gallop, 2011), this is an important relationship to further explore. It is important for a therapist to be aware of any weak therapeutic working alliance factors in order to address ways to heal alliance ruptures. Once aware, they can then engage in certain behaviors that will help a weaker alliance become stronger (Forman & Marmar, 1985).

Summary of Chapters

Chapter One includes an introduction to the current research study as well as a discussion of the statement of the problem and the significance of studying this topic. Chapter Two provides a literature review of research related to the current study, including studies researching the relationship between client attachment and the working alliance, the link between client negative life events in early childhood and attachment, and finally, the direct relationship between client negative life events and the therapeutic working alliance. Chapter Three discusses the methodology and design of the current research study. Chapter Four describes the results of the study as they relate to the hypotheses. Last, Chapter Five includes an overview of the study, limitations, and recommendations for future research.

Chapter 2

Literature Review

Introduction

Chapter Two consists of a literature review of the current and historical research in the areas of childhood negative life events, client attachment, and the therapeutic working alliance. The review is separated into five sections.

The first section describes the background regarding the Working Alliance Inventory, which is the measurement used in the current study to assess the therapeutic working alliance. The second section includes the background of attachment measurements that have been included in the current study. The third section consists of research focusing on the relationship between client attachment and the therapeutic working alliance. Research articles that incorporated the Working Alliance Inventory – Client Version were included in the literature review as a way to narrow the scope of the review. The WAI-C is the measurement of focus because it is the assessment used in the current research study. Previous research has demonstrated that clients' ratings of the therapeutic working alliance may be more robust than therapist ratings (Diener & Monroe, 2011). To measure client attachment, the articles included here in the literature review used the Adult Attachment Scale (AAS; Collins & Reed, 1990) and the Relationship Questionnaire (RQ; Bartholomew & Horowitz, 1991).

The fourth section of the literature review focuses on the research regarding the relationship between negative childhood life events and client adult attachment. Negative childhood life events were measured several ways within the selected research studies.

Several studies listed life events and participants had to respond whether or not they experienced the listed event. Specific measures to assess negative life events included the Life Events Scale (Egeland & Deinard, 1975). Participant attachment was measured using the Strange Situation (Ainsworth & Wittig, 1969; Ainsworth, Blehar, Waters, & Wall, 1978), the Adult Attachment Interview (AAI; George, Kaplan, & Main, 1985), and the Experience in Close Relationship – Revised Questionnaire (ECR-R; Sibley & Liu, 2004).

The fifth and final section of this literature review focuses on the research exploring the relationship between childhood negative life events and the therapeutic working alliance. To measure negative life events in childhood, the Social History Questionnaire (SHQ; Alden et al., 2004) was used while the Working Alliance Inventory – Short Form – Client Version was used to assess the therapeutic working alliance between client and therapist. The literature review will summarize the research as well as discuss limitations of each presented study. The final piece of the literature review will discuss implications.

History of the Working Alliance

Bordin (1976) was one of the first researchers to discuss the concept of the working alliance. He defined the working alliance as an integrated relationship involving three concepts (i.e. tasks, bonds, and goals) that work together to determine the quality and strength of the therapeutic relationship. According to Bordin, *tasks* refer to the thoughts and behaviors that occur in the counseling session that form the substance of the therapeutic relationship. Both client and therapist must view the tasks as relevant and

effective as well as accept the responsibility to perform these acts. The term *goals* refer to the objectives that are the target of the intervention and endorsed by both client and therapist. Finally, the term *bond* refers to the positive attachment between therapist and client that includes the concepts of trust, acceptance, and confidence.

Horvath and Greenberg (1989) developed a measurement based on Bordin's theory of the working alliance called the Working Alliance Inventory (WAI). The WAI is a self-report measure used to assess the quality of the therapeutic working alliance. The WAI consists of 36 self-report items measuring therapeutic goals, bonds, and tasks and an overall total working alliance score. The WAI – Client Form involves the client assessing the working alliance from his or her viewpoint. There is also a Therapist Form of the WAI, in which the therapist rates the quality of the working alliance. In addition, both the client version and the therapist version also have a short form of only 12 items. This short form also assesses the same concepts of tasks, bond, and goals as does the full version. All versions of the WAI direct the respondent to rate each item on a Likert scale. Higher scores on the WAI reflect a stronger therapeutic working alliance (Horvath & Greenberg, 1989). The WAI has been found to demonstrate good reliability and validity (Horvath & Greenberg, 1989). While other measurements have been developed to assess the therapeutic working alliance, research using the WAI to measure the working alliance will be the focus of the current paper. To narrow down the scope of this paper even further, all studies will include the client version of the WAI. Another reason this paper will focus solely on the client version of the WAI relates to research findings that demonstrate clients may perceive the therapeutic alliance in ways that are more

similar to their attachment styles compared to their therapist's rating of the working alliance. As a result, client ratings of the alliance may be more robust (Diener & Monroe, 2011).

Since the development of the WAI, researchers have studied factors that affect working alliance scores. One factor studied is client attachment. Overall, research has demonstrated a relationship between client attachment and the working alliance, as measured by the WAI (Satterfield & Lyddon, 1995; Satterfield & Lyddon, 1998; Kivlighan, Patton, & Foote, 1998; Mallinckrodt, Coble, & Gantt, 1995; Reis & Grenyer, 2004). The following section will explore the different measurements that have been used in the literature to assess client attachment. This discussion will provide a better understanding of the attachment measurements discussed in the literature review in Chapter Two. The studies mentioned in the literature review have used different ways of measuring client attachment, both in infancy and adulthood; thus a background discussion in this area is warranted.

Attachment Theory and Attachment Measurements

Most of the studies that discuss the link between client attachment and the therapeutic working alliance incorporate the attachment theory that stems from the work of Bowlby (1969/1982). Bowlby suggested that the quality of a child's early relationships will influence their relationships later in life. According to his theory, a child's experiences with primary caregivers in infancy are internalized by the child. The child then forms expectations regarding their caregiver's accessibility and responsiveness (Bowlby, 1982). These expectations, or "working models", will influence the way a

child construes themselves, others, and the environment. Secure working models will develop if the child's caregiver is accessible and responsible to the child's needs. Insecure working models, however, develop if the caregiver is inconsistent in responsiveness or accessibility. Bowlby suggested that these "insecure" or "secure" working models remain relatively constant from infancy through adulthood. However, Bowlby suggested that there could be changes in attachment. For example, if an individual, who developed a secure working model early in life, experienced many negative experiences, they could transition to an insecure working model. Bowlby suggested that certain life events could directly interfere with a family's ability to care for a child and thus interfere with the child's ability to maintain attachment security. Bowlby specifically mentioned the events of never establishing a family, chronic severe illness of parent or child, parent with a psychiatric disorder, death of a parent, separation or divorce of parents, and physical or sexual abuse of the child as negative life events that could alter an individual's attachment status.

There have been several instruments and strategies developed to assess both infant attachment and adult attachment. Attachment research has essentially been generated from two different paths: the developmental route and the social psychology route (Shaver, Belsky, & Brennan, 2000). The first path, developmental psychology, has developed different ways to measure attachment in both infancy and adulthood. In regard to infancy, one of the most well-known strategies used to assess attachment is the Strange Situation (Ainsworth & Wittig, 1969; Ainsworth, Blehar, Waters, & Wall, 1978). The procedure consists of 8 episodes presented in a standard order. The order of the episodes

is specifically arranged so that the infant experiences a series of increasingly stressful situations (i.e. a new room, unfamiliar adult, separation from mother, alone, etc.). Infants are then classified into the differing attachment styles of Secure, Avoidant, and Ambivalent by independent raters. The Avoidant and Ambivalent styles are considered to be insecure attachment classifications.

According to Ainsworth, Blehar, Waters, and Wall (1978) the Secure infant is characterized as being more positive towards her/his mother compared to the other groups. They also show less separation disturbance. The Ambivalent group is considered to be more anxious about their attachment with their mother and do not seem confident with their mother in regard to accessibility and responsiveness. They are more likely to be distressed around strangers and when the mother is not physically present. Finally, the Avoidant group is characterized as being more avoidant of their mothers as demonstrated by ignoring or behaving more angrily towards them.

Another measurement developed from the developmental psychology route that has been commonly used to assess adult attachment is the Adult Attachment Interview (AAI; George, Kaplan, & Main, 1985; Main & Goldwyn, 1993). The AAI is an approximately one hour structured interview that assesses adult attachment by eliciting information about childhood experiences as well as the individual's views about the influence of those experiences on their personality. The interview, scored from a verbatim transcript, uses the discourse style (i.e. anger, lack of memory, idealization, etc.) to classify the individual with either a Secure, Dismissing, Preoccupied, or Unresolved attachment style. The Adult Attachment Interview defines attachment styles slightly

differently than Ainsworth, Blehar, Waters, and Wall (1978) and includes a fourth style. Secure individuals are easily able to describe both good and bad childhood experiences, they value attachment relationships, and view their experiences as influential to their development. Dismissing individuals often devalue the influence of attachment relationships and have a difficult time recalling events. Preoccupied individuals seem enmeshed in their past attachment relationships, have a difficult time integrating their past experiences, and are either passively or angrily still engaged in those experiences. Unresolved attachment styles are given to individuals who still have unresolved feelings in regard to past loss or traumatic experiences. They discuss attachment experiences and traumatic events in a disorganized way. The AAI has shown to demonstrate good reliability and validity (Shaver, Belsky, & Brennan, 2000).

As discussed previously, social psychology researchers have also developed ways to assess adolescent and adult attachment. One common tool is the Adult Attachment Scale (AAS; Collins & Reed, 1990) which is a self-report measure used to assess adult attachment. The AAS has 18 items in which individuals respond along a 5-point Likert scale. There are three subscales---the Depend, Anxiety, and Close scales. The Depend scale measures the ability of individuals to rely on or trust others. The Anxiety scale measures individuals' fear of abandonment. The Close scale measures individuals' comfort with intimacy. High scores on the Depend and Close scales indicate that the individual is able to rely on and trust others and is comfortable with intimacy, respectively. High scores on the Anxiety scale indicate that the individual endorses more

fears of abandonment. The measurement has been demonstrated to show good reliability and validity (Collins & Reed, 1990).

Another measure used to assess adult attachment that stems from the social psychology route is the Relationship Questionnaire (RQ; Bartholomew & Horowitz, 1991). The RQ is a measure of adult attachment that assigns individuals to a Secure, Preoccupied, Fearful, or Dismissing attachment style. The Preoccupied, Fearful, and Dismissing attachment styles are considered insecure forms of attachment. The individual is required to rate the degree to which they believe they resemble each of four descriptions on a 7-point Likert scale. The four paragraphs are each descriptive of one of the four attachment styles. After individuals respond to each paragraph they can be classified into one of the four attachment styles based on the paragraph that most resembles them. The Secure style is characterized by individuals viewing themselves as worthy of support and love from another and believing others are accessible and responsive. The Preoccupied style involves the individual feeling personally unworthy of love and support but viewing others as reliable and accessible. The Fearful style involves the individual feeling personally unworthy of love and support and believing others are untrustworthy and rejecting. Finally, the Dismissing style is characterized by the individual viewing themselves as worthy of support and love but viewing others as untrustworthy and rejecting. The RQ has shown to demonstrate good reliability and validity statistics (Bartholomew & Horowitz, 1991).

The Revised Experiences in Close Relationships questionnaire (ECR-R; Fraley, Waller, & Brennan, 2000) has also been developed to assess adult attachment,

specifically attachments in romantic relationships. The ECR-R is a self-report measure consisting of 36 items that comprise the two subscales of Attachment Anxiety and Attachment Avoidance. Each subscale is made up of 18 items. The ECR-R has been found to have good psychometric properties (Sibley & Liu, 2004). An example item from the attachment anxiety subscale includes, "I'm afraid that I will lose my partner's love." An item from the attachment avoidance subscale is, "I prefer not to show a partner how I feel deep down." Responses are in Likert scale format, ranging from 'strongly disagree' (1) to 'strongly agree' (5).

While these measurements, developed to assess client attachment, differ in a variety of ways, they are all similar in that they have largely been developed from Bowlby's theory regarding attachment. The following section addresses the literature regarding the link between client attachment and the working alliance and the link between negative life experiences and client attachment. Lastly, research regarding the relationship between negative life events and the therapeutic working alliance is discussed.

Client Attachment and Working Alliance

Satterfield and Lyddon (1995) studied the relationship between client attachment and the therapeutic working alliance. Participants were first-time clients and the counselors were counselor trainees. All participants were seeking services at a college counseling clinic. There were a total of 60 participants used in the study with 43 of them female and 17 of them male. Ages of the clients ranged from 18 to 45 (M = 21.93, SD = 4.22). Thirty-nine of the participants were Caucasian and 18 were African-American.

Three participants did not report their ethnic background. In regard to the counselors used in the study, there were 38 in total, three of them being doctoral students and the rest being master's degree students. Counselors' ages ranged from 22 to 45 years of age (M = 27.60, SD = 6.21). Of the counselors, 36 were Caucasian, 1 was African-American, and 1 was Asian-American.

Participants were given a written consent form asking them to participate in the study. Clients who agreed to participate were asked to complete the Adult Attachment Scale (AAS; Collins & Read, 1990) in addition to their standard intake paperwork. After the third counseling session, clients were asked to complete the Working Alliance Inventory – Client Version (WAI; Horvath & Greenberg, 1989).

The authors hypothesized that clients' attachment scores on the AAS would be related to global working alliance scores on the WAI. Specifically, the authors hypothesized that there would be a positive relationship between the Depend scale of the AAS and Total WAI scores and a positive relationship between the Close scale of the AAS and Total WAI scores. They also hypothesized that there would be a negative relationship between the Anxiety scale of the AAS and Total WAI scores. Data was analyzed using the Pearson correlation method. Results indicated that there was a significant positive relationship between the Depend scale of the AAS and global working alliance scores on the WAI. No other correlations were significant. The authors reported that these results suggest that the construct of the Depend subscale--- whether a client feels that they can depend on their counselor--- may be more important to the

formation of the working alliance than a client's comfort with intimacy and closeness or fears of abandonment.

The Satterfield and Lyddon (1995) study includes several limitations. For example, since all of the counselors were counselors in training, caution should be taken when generalizing the findings. Generalizability is also limited because all participants were first-time clients. Also, most of the participants and counselors in the study were Caucasian and female which also affects generalizability. Another limitation involves the high attrition rate involving the participants. Originally, 96 participants agreed to their involvement in the study. Of those original 96, 8 individuals were removed from the study due to incorrectly completing the questionnaire, 15 terminated counseling before they were able to take the WAI, and 13 continued therapy but never took the WAI. This high attrition level should be considered when interpreting the findings of the study. Finally, another limitation of the study involves the information used from the WAI. As mentioned earlier, the WAI measures therapeutic goals, bonds, and tasks in addition to an overall total working alliance score. The current study only used the total working alliance score from the WAI. Perhaps more information could have been found if the study also looked at the independent subscales of the WAI.

Later, Satterfield and Lyddon (1998) studied the relationship between client attachment and the therapeutic working alliance. There were a total of 63 participants used in the study including 51 women and 12 men. All individuals were first-time clients who sought counseling at a college counseling site. These individuals ranged in age from 18 to 44 years old with a mean age of 23.4. Thirty-nine were Caucasian, 18 were

African-American, 3 were Native-American, 1 was Hispanic, and 1 was Asian-American. One of the participants did not provide ethnic background information. In addition to standard intake paperwork, participants also completed the Relationship Questionnaire (RQ; Bartholomew & Horowitz, 1991) at intake. After the third counseling session, participants completed the Working Alliance Inventory – Client Version (WAI; Horvath & Greenberg, 1989).

The authors hypothesized that there would be a positive relationship between the RQ's Secure dimension and all three individual subscales of the WAI as well as the overall global WAI rating. They also hypothesized that there would be negative relationships between each of the Preoccupied, Fearful, and Dismissing attachment styles of the RQ with each of the WAI subscales and overall total WAI rating. Findings suggest partial support for these hypotheses. Data was analyzed using the Pearson correlation method. Results indicated there was a significant positive relationship between the Secure dimension of the RQ and the Bond subscale of the WAI. An additional positive relationship was found between the Secure dimension of the RQ and the Goals subscale of the WAI. The Secure dimension of the RQ and the global WAI ratings also produced a significant positive relationship. There was a negative relationship found between the Fearful dimension of the RQ and the Bond subscale of the WAI. No other correlations were found to be significant. The authors suggested that these findings reveal that clients may be more likely to bond and make goals with their therapist if they view themselves as worthy of love and support as well as believing others are trustworthy and accessible. The authors further suggested that clients who believe they are unworthy and others are

untrustworthy and rejecting may find it more difficult to form bonds with their therapist. In addition, the authors suggested that clients with Preoccupied and Dismissing styles may be ambivalent towards the counseling relationship and, therefore, do not have either strong positive or strong negative evaluations of the alliance. This could have led to insignificant correlations in either direction between the WAI and these two styles of the RQ.

The Satterfield and Lyddon (1998) study has some limitations. First, there were many more women than men in the study. The study did not look to see if any sex differences arose. Also, generalizability is limited because all participants were first-time clients. Results may have been different if there were participants who had previous experience in counseling. In addition, the authors reported that the distribution of WAI scores was negatively skewed and thus there were inflated ratings of the WAI. Interpretation of the results should include awareness of this aspect.

Kivlighan, Patton, and Foote (1998) also studied the relationship between client attachment and the therapeutic working alliance. The authors hypothesized that client attachment style would moderate the relationship between counselor experience and the therapeutic working alliance. Participants in the study came from two university counseling centers in the midwestern United States. They were recruited for the study by the receptionist and to encourage participation, a raffle was offered. There were 40 participants used in the study, 27 females and 16 males. Their ages ranged from 18 to 36 with a mean of 24.68 years of age. Thirty-six participants were Caucasian and four were African-American. Eighteen participants had some previous experience with counseling

and 22 had no previous experience. There were 17 female counselors and 23 male counselors for a total of 40. Eighty-five percent of the counselors were Caucasian and 15% were minorities. The mean age of the counselors was 33.8 years of age. At the first session, participants were given an information sheet that described some of the details of the study. After they agreed to participate in the study, they filled out routine paperwork and the Adult Attachment Scale (AAS; Collins & Read, 1990). After the third counseling session, participants then filled out the Working Alliance Inventory – Client Version (WAI; Horvath & Greenberg, 1989) to measure the therapeutic working alliance.

The authors hypothesized that there would be a relationship between clients' attachment groupings and the working alliance. They also hypothesized that clients' attachment ratings would moderate the relationship between counselor experience and the working alliance. Data for this study was analyzed using Pearson correlations and a hierarchical multiple regression. Correlations among the working alliance, client attachment, and counselor experience revealed significant positive relationships between clients' Close and Depend ratings and the Total WAI score. In other words, clients who were comfortable with intimacy and clients who could rely on others were able to form stronger overall working alliances. There were no significant relationships found between the anxiety ratings and the working alliance or between counselor experience and the working alliance.

For the multiple regression, the Total WAI score was used as the dependent variable and client attachment, counselor experience, and their interaction were used as predictors. In their first step of their three-step hierarchical multiple regression analysis,

the authors entered the three attachment scales (i.e. Close, Depend, Anxiety). As a group, the attachment variables accounted for 33% of the variance in the working alliance. Specifically, the Close scale of the attachment measurement served as a significant predictor of the working alliance. The authors added counselor experience in the second step of the regression and this only accounted for an additional 1% of the variance in the working alliance. The third step of the regression included the addition of the attachment-counselor experience interaction terms, which was overall found to be a significant predictor of the working alliance. The overall interaction accounted for an additional 12% of the variance in the working alliance. Specifically, the counselor experience × Close interaction was significant; when clients were uncomfortable with intimacy, working alliance and counselor experience were related. When clients were comfortable with intimacy, however, counselor experience was unrelated to the working alliance. Finally, the regression equation involving all seven predictor variables was also significant. These findings confirm the authors' hypothesis of the moderating effect of client attachment on the relationship between the working alliance and counselor experience. In regards to the relationship between client attachment and the working alliance, these results confirm the findings in Satterfield and Lyddon (1995) study involving the relationship between the Depend scale of the AAS and the total working alliance. In addition to this finding, the Kivlighan, Patton, and Foote (1998) study also found a significant relationship between the Close scale of the AAS and the total working alliance. Together, these studies suggest that the client's early life experience can positively or negatively affect whether a trusting counseling relationship can develop. In

addition, these results suggest that an experienced counselor is better able, than an inexperienced one, to create a positive relationship with a client who finds it difficult to trust others.

There are several limitations of the Kivlighan, Patton, and Foote (1998) study. First, because of the correlational nature of the design, causal relationships between client attachment and the therapeutic working alliance cannot be interpreted. Secondly, in the beginning of the study, 76 clients agreed to participate in the study and filled out the AAS but only 40 of those participants completed the WAI. The authors reported that they are unsure whether the attrition was a result of participants dropping out of counseling or due to participants failing to complete the WAI measure after the third session. This could have skewed the data in some way, particularly if there was a high dropout rate. Further analysis of AAS scores, from clients who no longer participated in the study, could have been informative: do more clients with insecure attachment styles discontinue their participation? In addition, caution involving the generalizability of this study should be noted due to the location of the study and the predominantly Caucasian sample.

Mallinckrodt, Coble, and Gantt (1995) also studied the relationship between client attachment and the therapeutic working alliance. Specifically, the authors were interested in examining the relationships between client attachment, social competencies, and the working alliance. Participants who were used in the study were solicited at a university counseling center, an outpatient hospital-based clinic, a community college counseling center, and a training clinic for a counseling psychology program. There were a total of 76 female participants used in the study. There were no male participants. Originally,

there were 138 participants who completed the necessary surveys for the study, but due to the varying numbers of sessions that different clients completed, only 83 individuals who had completed between 5 and 12 individual counseling sessions were considered. Because there were only 7 men left in the sample, they were dropped from the study, leaving 76 women. Participants varied in age from 18 to 64 years old (M = 33.6, SD = 11.7). Eighty-eight percent of the participants were Caucasian, 3% were Hispanic, 1% were Native American, and 8% indicated "other" for their ethnic background. The counselors used in the study included senior staff members, interns, and master's and doctoral students still in training. In 66 of the 76 counseling dyads, the counselors' sex was known. Seventy percent of the counselors were women and 30% were men. No other demographic information was mentioned in the study.

All clients who participated in the study completed several instruments in addition to demographic items. The authors measured parental bonds with the Parental Bonding Instrument (PBI; Parker, Tupling, & Brown, 1979). This measurement has a total of 50 items, 25 items that assess client bonds with the mother and 25 items that assess client bonds with the father. Subscales on the PBI include the Care scale and the Overprotection scale for both the mother and the father separately. The Care scale refers to emotional responsiveness and warmth. Higher scores on this scale indicate more desirable characteristics. The Overprotection scale refers to the degree to which a parent was intrusively controlling and interfered with autonomy. Higher scores for this scale demonstrate more undesirable characteristics. Clients' social competencies were assessed using both the Adult Attachment Scale (AAS: Collins & Read, 1990) and the

Self-Efficacy Scale (Sherer, Maddux, Mercadante, Prentice-Dunn, Jacobs, & Rogers, 1982). While the Self-Efficacy Scale contains a General and a Social subscale, only the six items of the Social subscale were used by the researchers. Finally, therapeutic working alliance was measured using the Working Alliance Inventory – Client Version (WAI; Horvath & Greenberg, 1989).

Relationships between all subscales of each instrument were found by analyzing the data from a 12 × 12 matrix correlational method. In regards to significant relationships found involving the working alliance and client attachment, only the Anxiety subscale of the AAI was found to have a significant negative relationship with both the Tasks subscale of the WAI and the overall Total WAI score. In other words, clients who endorsed more feelings of fear of abandonment were more likely to endorse working alliance tasks as less effective and relevant as well as poorer total working alliances. In addition, mother overprotection on the PBI and the Goal subscale of the WAI were found to have a positive relationship. Clients who rated their mothers as more overprotected were more likely to endorse a stronger working alliance. Correlational data also found several negative relationships between father overprotection on the PBI and the Tasks, Bond, and Total subscales of the WAI. Clients who rated their father as being more overprotected were more likely to endorse poorer working alliances in regards to the Tasks, Bond, and Total WAI scores.

The authors conducted two, three-step hierarchical multiple regressions using the Total WAI score as the criterion variable in both analyses. For the first step in the first regression, the authors entered length of therapy to control for this factor. Results

indicated no significant relationship between length of therapy and the total working alliance. For the second step in the first regression, the four parental bond variables were entered. The second step significantly predicted total working alliance with parental bonds accounting for 36% of the variance. The four social competencies were entered for step three, which was also found to be a significant predictor of total working alliance and accounted for 14% of the unique variance. The Close and Anxiety subscales of the attachment measurement served as significant predictors of the total working alliance.

For the second regression, length of therapy was entered for step one, social competencies were entered for step two, and parental bond variables were entered for the third step. Length of therapy, again, was not a significant predictor of the total working alliance. Social competencies was found to be a significant predictor of the total working alliance and accounted for 27% of the unique variance. Parental bonds was also a significant predictor of the total working alliance and accounted for 23% of the unique variance. Father care, mother overprotection, and father overprotection were all found to be significant predictors.

Overall, social competencies and parental bonds were found to each individually be unique predictors of the working alliance. The degree to which a client is comfortable with intimacy and emotional closeness and the degree to which they are afraid of abandonment each predict their ability to form strong working alliances. In addition, the degree to which a client views their father as caring and emotionally responsive can predict their ability to form strong working alliances. Finally, the degree to which clients

rate their fathers and mothers as controlling also each individually predict their ability to form a strong working alliance.

The Mallinckrodt, Coble, and Gantt (1995) study has several limitations. First, caution is advised when generalizing these findings because all of the participants in the study were female; therefore, the results cannot be generalized to male populations. Also, many of the counselors used in this study were students in training. This should also be considered when generalizing the findings. In addition, the authors note a limitation results from the working alliance measure being completed after varying number of sessions for each participant. This variability could have also affected the study's findings. In regards to methodology, another limitation involves the authors grouping both self-efficacy measurements and attachment measurements into one category of "social competencies". Had the authors entered each of these as independent steps in the hierarchical regression, it may have been more clear as to how much attachment independently accounted for the unique variance in total working alliance.

Reis and Grenyer (2004) also studied the relationship between client attachment and the working alliance. In their study, the authors specifically examined the relationship between adult attachment styles, the therapeutic working alliance, and treatment response for clients who were attending therapy for major depression. There were a total of 58 participants who were used in the study. Twenty-four were male and 34 were female. All individuals had a DSM-IV diagnosis of major depression. The age of participants ranged from 21 to 70 years old (M = 45.98, SD = 10.97). Eighty-two percent of participants were Australian, 8% were English, 3% were Welsh, and 7%

identified themselves as other nationalities. The therapists used in the study were trained doctoral level clinical psychologists. The therapy model that was used during the sessions was supportive-expressive dynamic psychotherapy. Clients were seen for a total of 16 sessions at an outpatient university clinic.

Clients who agreed to participate in the study completed the Relationship Questionnaire (RQ; Bartholomew & Horowitz, 1991) and the Hamilton Rating Scale for Depression (HRSD; Hamilton, 1960) prior to starting therapy. Participants also filled out the HRSD after their sixth session and at the end of therapy. The HRSD is a 17-item measure of depression that assesses the presence and severity of depression symptoms using a structured interview format. From HRSD scores, clients were classified as "remitted" if they had a HRSD score of seven or below, or "depressed" if they had a HRSD score of greater than seven after the 16 sessions. In addition to the RQ and the HRSD, participants also completed the Working Alliance Inventory – Client Version (WAI; Horvath & Greenberg, 1989) after the third session. Only the WAI Total score was used in the study.

The authors used independent *t* tests to test for gender differences. *T* tests found no significant differences between males and females on any of the measures; therefore, gender was not controlled in later analyses. In regards to analyses of remitted versus non-remitted participants, *t* tests revealed a significant difference between depression scores on the HRSD between intake ($M = 23.24$, $SD = 4.54$) and termination ($M = 10.85$, $SD = 6.36$). On average, participants endorsed more depressive symptoms at intake than at termination. Independent *t* tests were also completed to determine any differences

between “remitted” and “depressed” participants at the end of therapy in regards to their attachment style. Results indicate that “remitted” clients reported lower levels of preoccupied and fearful attachment compared to “depressed” clients.

In order to test the relationship between attachment style and working alliance, the authors used both Pearson correlations and multiple regression techniques to analyze the data. Pearson correlations indicated a significant negative relationship between WAI Total score and the Dismissive attachment style of the RQ. This suggests that participants who viewed themselves as worthy of love and support and others as untrustworthy and rejecting had lower ratings of the working alliance. No other attachment style was significantly related to the working alliance. For the multiple regression analysis, all attachment styles were simultaneously entered in as independent variables with working alliance as the dependent variable. Results showed a significant negative relationship between WAI Total score and the Dismissive attachment style of the RQ. In addition, results showed a significant positive relationship between Secure attachment and WAI Total score ratings. These results suggest that clients who view themselves as worthy of love and support and view others as accessible, reliable, and trustworthy had higher ratings of the working alliance. Clients who viewed themselves as worthy of love and support but others as untrustworthy had lower ratings of the working alliance.

In regard to the relationship between attachment style and treatment response, Pearson correlations indicated a significant negative relationship between Fearful attachment and overall treatment response after 16 sessions. Multiple regression results

also indicated similar findings when the variance from the other attachment styles was partialled out. This suggests that clients who view themselves as unworthy of love and support and others as untrustworthy and rejecting showed less improvement in depression following all 16 sessions of therapy.

Fearful attachment also had a negative relationship with early treatment response (i.e. after six sessions) as indicated by Pearson correlations and multiple regression results (which controlled for the other attachment styles). This suggests that those with Fearful attachment also showed less improvement in depression after the first six sessions of therapy. Finally, both Pearson correlation and multiple regression results indicated that Preoccupied attachment was negatively related to late treatment response (i.e. sessions 7 to 16). This suggests that clients who viewed themselves as unworthy and viewed others as trustworthy and reliable showed less improvement in depression during sessions 7 to 16. No other significant relationships were found.

There are several limitations to the Reis and Grenyer (2004) study. First, since the majority of participants were Australian, it is important not to generalize these findings to a U.S. population or any other population. Also, these individuals were all diagnosed with major depression; therefore, the results cannot be generalized to individuals with any other diagnoses. The therapy model used was supportive-expressive dynamic psychotherapy. It is possible that the results may have been different if other types of therapy were used instead. Also, therapists' demographic information was not given. These considerations should also be noted when interpreting the results. Another limitation is that only the WAI Total score was used in the analyses. It would have been

helpful for the authors to use the individual subscales of the WAI to see if any of the subscales individually were related to attachment style.

In regard to the relationship between adult attachment and the working alliance, overall research has demonstrated a link between the two. In fact, a recent meta-analysis exploring the relationship between adult attachment and the therapeutic alliance found a consistent relationship between the two (Diener & Monroe, 2011). Research demonstrates that attachment security is associated with stronger therapeutic alliances while attachment insecurity is associated with weaker therapeutic alliances. Studies have shown that individuals with secure attachment styles are more likely to have higher total working alliance measures and are more able to work towards goals with their therapist, bond with their therapist, and work effectively with their therapist compared to individuals with insecure attachment representations or styles. In addition to the research that explores client attachment and the working alliance, there are also studies that evaluate different factors that may influence a client's attachment. One of these factors that has been studied is the influence of negative life events on client attachment.

Negative Life Events and Client Attachment

Waters et al. (2000) studied the relationship between negative life events and adult attachment. Specifically, the authors were interested in examining the stability and change of attachment from infancy to adulthood and possible underlying mechanisms of change in attachment. Fifty participants were used in the current study. Participants were first recruited via newspaper birth announcements at age 12 months. Participants

were also contacted 20 years later. Their ages varied from 20 years to 22 years old. There were 21 males and 29 females in total that were used in the study.

At 12 months old, participants were seen in the Strange Situation (Ainsworth & Wittig, 1969). Participants were classified as having a Secure, Avoidant, or Resistant attachment style by two independent coders. Both the Avoidant and Resistant styles were classified as insecure styles. Most participants also participated in a follow-up in the Ainsworth and Wittig Strange Situation at 18 months old, where they were again classified with an attachment style. In 45 out of 50 of the cases, raters agreed on the attachment classifications. For the five where there was disagreement, it was resolved at a conference.

Twenty years after participants first participated in the Strange Situation, they completed the Adult Attachment Interview (AAI; George, Kaplan, & Main, 1985) to assess adult attachment. Thirty-seven interviews were conducted in a library, three in participants' parents' homes, and ten by telephone. Negative life events were assessed from participants' AAI transcript and were defined as a loss of a parent, parental divorce, life-threatening illness of parent or child, parental psychiatric disorder, and physical or sexual abuse by a family member. Cohen's κ was computed to test the relationships between infant attachment and adult attachment. Thirty-two out of 50 participants had corresponding attachment classifications in infancy and adulthood. Thirty-six of the 50 participants received the same attachment classification using the secure-insecure dichotomy. Of those participants who did change attachment classifications, the authors were interested in testing whether those changes were related to negative life events. For

those who did not endorse any negative life events, attachment stability was 72%, whereas for the secure versus insecure dichotomy there was 78% attachment stability.

A hierarchical multiple regression was completed using the presence or absence of negative life events, secure or insecure infant attachment classification, and their interaction to predict whether attachment classification changed or remained the same from infancy to adulthood. The authors entered negative life events in the first step of the analysis and found no difference in the likelihood that secure versus insecure infants would change attachment classification. Negative life events accounted for 1% of the variance in the stability in attachment classification. In the second step of the regression, infant attachment classification was entered. Results indicated that participants who experienced one or more negative life events were more likely to change attachment classifications. Infant attachment classification accounted for 9% of the variance in attachment stability. The third step of the regression included the addition of the negative life events and infant classification interaction terms. This was found to be significant. The overall interaction accounted for an additional 14% of the variance in attachment stability. Negative life events were significantly related to the likelihood of secure infants becoming insecure in adulthood.

The Waters et al. (2000) study had some limitations as well. Since there were two separate measurements for infant attachment and adult attachment, reliability and validity issues could account for some of the changes between classifications. This should be noted when interpreting the results. In addition, the authors reported that negative life events were obtained from participants' AAI transcript. However, on several occasions

the authors discuss participants' mothers as having reported the negative life events. Therefore, it is unclear as to whether participants' mothers or the participants themselves reported the negative life events used in the study.

Beckwith, Cohen, and Hamilton (1999) also studied the relationship between negative life events and adult attachment. Specifically, the authors examined whether maternal sensitivity and negative life events were related to adult attachment. There were 86 participants in total that were used in the study. All individuals were born prematurely and participated in the study from birth until 18 years old. There were 33 women and 53 men. The participants came from various ethnic and socioeconomic backgrounds. Participants were recruited at the University of California Los Angeles Medical Center shortly after their birth. Originally, there were 126 individuals who participated in the study but due to dropout and failure to return completed assessments, the information from these 40 former participants were not included in the final analysis. Hotelling T^2 and chi-square tests revealed no differences between the final participants and the 40 who were not included in the study in regards to gender, birth rate, gestational age, and length of hospitalization. However, the groups did differ in ethnic group, maternal education, and social class. Further details were not reported.

Maternal sensitivity in infancy was assessed using the Maternal Sensitivity During Infancy (Beckwith & Cohen, 1984) when participants were 1, 8, and 24 months of age. Infants were observed during their time awake. Mothers' responses and reactions to the infants were recorded to measure maternal sensitivity. When participants were 12 years old, maternal sensitivity was again measured with the 12 Year Maternal Sensitivity

(Beckwith, Rodning, & Cohen, 1992). This time, maternal responsiveness was measured from videotaped interactions between mother and child.

When participants were 18 years old, they completed the Adult Attachment Interview (AAI; George, Kaplan, & Main, 1985) to measure their attachment styles. Participants were classified as having a Secure, Dismissing, Preoccupied, or Unresolved attachment style based on this interview. None of the individuals fit the attachment category of unresolved so only the three remaining styles were used in the analyses. Negative life events were measured by having participants' parents indicate whether or not any of the specific events occurred during their child's lifetime. Parents were asked about the events when the participants were 2, 5, 8, 12, and 18 years of age. Events included: never establishing a family (i.e. in foster care), severe illness of parent or child, parent with a psychiatric disorder, death of a parent, parental separation or divorce, and physical or sexual abuse of the child.

An initial chi-square analysis showed that the distribution of attachment classifications significantly deviated from nonclinical samples. Attachment classifications were not associated with socioeconomic background or maternal education but were associated with gender (i.e. men more likely to be Dismissing) and non-native English speakers were more likely to be Dismissing and less likely to be Secure.

To test the first hypothesis, that maternal sensitivity in infancy was related to adult attachment, a 3(attachment classification) by 3(time points) repeated measures ANOVA was completed to analyze the data. Results indicated a significant main effect for attachment classification. Tukey's pairwise comparisons showed that Dismissing

individuals received lower maternal sensitivity scores than the Secure and Preoccupied attachment groups. A main effect for time was also found, as well as a significant interaction between time and attachment. Mothers of Secure participants and mothers of Preoccupied participants engaged in less sensitive and responsive acts when their infants were 8 months compared to when they were 1 and 24 months. Tukey's comparison also showed that the Dismissing attachment group differed from the other groups at 1 month with this group having lower maternal sensitivity compared to the other groups. There were no differences between all groups at 8 months but they again differed at 24 months with the Dismissing group having lower maternal sensitivity than the Preoccupied group. Overall, results indicate that maternal sensitivity in infancy was related to adult attachment.

Another hypothesis tested involved whether negative life events were related to attachment. Chi-square analyses were completed to test this hypothesis. Results indicated that one third of either Secure or Dismissing participants experienced a negative life event while almost all Preoccupied participants had experienced a negative life event. The most common negative life event was parental divorce. Results indicated that while parental divorce occurred in all attachment classifications, most of the Secure individuals had intact families until at least 12 years old while most of the Preoccupied individuals experienced parental divorce at an earlier age. Chi-square results of attachment classification and parental divorce indicated significant differences between the Preoccupied group and the other two groups. Results indicate that the presence of negative life events was related to insecure attachments in adulthood, particularly

Preoccupied individuals. Results also demonstrate that Preoccupied individuals experienced significantly higher occurrences of other negative life events including physical and sexual abuse, serious physical illness, and death of a parent. These events were very rare in Secure participants.

Another chi-square analysis was completed to test the moderating effect of negative life events on the association between maternal sensitivity and adult attachment. Results indicated significant differences between attachment classifications based on different levels of maternal sensitivity and negative life events. Results found that among those who experienced higher maternal sensitivity in infancy and no negative life events, the number of Secure participants significantly increased. Among those who had experienced lower maternal sensitivity in infancy and no negative life events, the number of Dismissing participants increased significantly. Only one individual who was classified as Preoccupied did not experience any negative life events. Results indicated that negative life events was a moderator between maternal sensitivity and adult attachment.

There are several limitations to the Beckwith, Cohen, and Hamilton (1999) study. First, generalizability is limited because all participants were born prematurely and thus results cannot be generalized to other populations. Secondly, other factors may have influenced the distribution of attachment classifications since there were differences between gender and native versus non-native English speakers. This should also be noted when considering results.

Hamilton (2000) also addressed the relationship between negative life events and attachment in adolescence. Specifically, the author studied whether negative life events were related to change in attachment from infancy to adolescence. There were 30 participants in the study with an average age of 17.5 years old. The study did not indicate how many participants were male or female. The sample of participants came from a larger sample drawn from the Family Lifestyles Project (FLP). In the larger sample, family lifestyle (i.e. single mother, conventional two-parent families, etc.) was not associated with infant attachment classification; however, in the subsample, infant insecurity was significantly associated with conventional lifestyles. Participants' families were recruited by mail during the mothers' third trimester of pregnancy with participants.

Attachment during infancy was assessed when participants were 12 months old using the Strange Situation (Ainsworth, Blehar, Waters, & Wall, 1978). There was 90% rater agreement regarding the classifications of attachment. Negative life events included prolonged physical separation of mother and child in early childhood, parental drug use, loss of a parent, parental divorce, life-threatening illness of parent or child, parental psychiatric disorder, and physical or sexual abuse by a family member. Life events were collected through interviews with parents and participants during adolescence, home observation notes, interviews with teachers, school records, and phone record logs made by project staff from birth to adolescence. The details regarding these different methods were not discussed further in the study. Negative life events were scored based on the presence or absence of each event. The adolescent version of the Adult Attachment Interview (AAI; George, Kaplan, & Main, 1985) was used to assess client attachment in

adolescence. No further details regarding the revisions were discussed. Interviews were audio taped and transcribed. Interrater agreement was 80% across all three attachment categories (i.e. Secure, Dismissing, Preoccupied). No participant received an unresolved classification.

Analysis of the crosstabulation illustrated that 77% of participants remained the same in regards to a secure or insecure classification from infancy through adolescence. Goodman and Kruskal's Tau was used to analyze the data based on three-way classifications. The author noted that this statistic was used because it is a measure of predictive association that is robust to uneven distributions. Results indicated that infant attachment classification predicted adolescent attachment classification.

A 2 (no negative event versus one or more event) by 4 (attachment categories) chi-square was used to analyze the influence of negative life events on attachment. The four attachment categories included: secure in infancy and secure in adolescence (secure-secure), insecure in infancy and insecure in adolescence (insecure-insecure), secure in infancy and insecure in adolescence (secure-insecure), and insecure in infancy and secure in adolescence (insecure-secure). Results indicated that attachment patterns can powerfully minimize the effects of negative life events. The negative life events primarily maintained insecure attachments. Participants who were insecure in infancy and adolescence were most likely to have one or more negative life events. However, adolescents who were classified as secure in infancy and secure in adolescence were equally likely to experience negative life events. A further qualitative analysis of the differences of the negative life events indicated that the insecure-insecure group

experienced divorce in their family at a younger age compared to the secure-secure group. This finding is similar to the finding of Beckwith, Cohen, and Hamilton (1999). Also, the insecure-insecure group experienced a higher occurrence of other negative events. For the secure-secure adolescents, their negative life event seemed to have occurred in isolation, without the presence of additional negative events.

The Hamilton (2000) study also has some limitations. For example, the subsample in the study was found to differ from the larger sample in that there was an association between infant attachment classification and conventional lifestyles (i.e. two-parent families) in the subsample but not the larger sample. Another limitation involves certain participants being "targeted for inclusion" in the current study based on their less frequently occurring infant attachment classification. These limitations should also be noted when interpreting the results. Also, since the analyses grouped all the insecure attachment classifications together, the results do not give further information regarding how each insecure group differs from one another.

Hinnen, Sanderman, and Sprangers (2009) also explored the association between negative life events and adult attachment. Specifically, the authors examined whether attachment would mediate the association between childhood recollections (including family context, parental rearing behavior, and negative life events) and participant satisfaction in adult life. In other words, the authors hypothesized that the endorsement of less family harmony and openness (i.e. family context) and more dysfunctional parenting would be associated with increased attachment anxiety and avoidance, thus leading to less satisfaction in adult life. It was also hypothesized that attachment anxiety and

avoidance “would carry the impact” of negative life events on adult life satisfaction. There were 437 participants in total that were used in the study and more than 90% were female with a mean age of 37. Ethnic and socioeconomic backgrounds were not reported. Participants were recruited through a web link on the homepage of a Dutch psychological magazine.

Family Context (i.e. recollections regarding harmony and openness in the family of origin) was assessed using the Family of Origin Scale-Dutch (FOS-D; Lange, Kiss, Jansen, & Neerscholten, 2003). Parental Rearing Behavior was also measured using the short version of the Egna Minnen Betraffande Uppfostran (EMBU; Winefield et al., 1994). The EMBU consists of three subscales including the Supportive scale, the Rejection scale, and the Overprotection scale. Life Satisfaction was measured with three questions (i.e. I am satisfied about myself; I have a good feeling about my current life; and I am satisfied about my relationships).

In addition, Childhood Adversities (i.e. negative life events) were measured with a list of 20 adverse childhood experiences. Participants were asked whether each of these events occurred before the age of 16 in a “yes” or “no” format. Finally, Adult Attachment Style was assessed with the Experience in Close Relationship – Revised Questionnaire (ECR-R; Sibley & Liu, 2004). This measure includes two subscales assessing attachment anxiety and attachment avoidance with 18 items each.

The study was controlled for demographics, relationship status, and living condition since ANOVA results indicated an association between these factors and attachment anxiety, attachment avoidance, and life satisfaction. Multiple hierarchical

regression analyses were used to test the hypotheses. A linear regression analysis using the Anxiety × Avoidance interaction term showed the contribution of this interaction on life satisfaction was non-significant; thus the regression analyses excluded the interaction term.

Results showed that more recollections of openness and harmony in the family of origin (i.e. family context) were associated with less attachment anxiety (β = -0.20, p = 0.01) and less attachment avoidance (β = -0.21, p = 0.02). Parental rejection was associated with increased attachment anxiety (β = 0.13, p = 0.04) while parental support was associated with decreased attachment avoidance (β = -0.20, p = 0.01). Results also showed that attachment anxiety (β = -0.48, $p < 0.001$) and attachment avoidance (β = -0.25, $p < 0.001$) were both associated with life satisfaction, explaining 42% of the variance in life satisfaction. Multiple regressions also found that family context (β = 0.32, $p < 0.001$), parental rejection (β = -0.27, $p < 0.001$), and parental support (β = 0.30, $p < 0.001$) were all associated with life satisfaction. The association between childhood recollections and life satisfaction were reduced when controlling for adult attachment; thus beta coefficients decreased when attachment was entered into the regression model.

In regard to the association between negative life events and attachment, multiple regressions found several statistically significant relationships. Specifically, parental divorce (β = 0.21, $p < 0.001$) and the long absence of a parent (β = 0.16, $p < 0.01$) were associated with increased attachment anxiety. Parental divorce (β = 0.11, $p < 0.05$) and the long absence of a parent (β = 0.12, $p < 0.05$) were also positively associated with attachment avoidance. Childhood neglect was found to be positively associated with

attachment anxiety ($\beta = 0.25$, $p < 0.001$) and attachment avoidance ($\beta = 0.23$, $p < 0.001$). Childhood physical abuse was associated with increased attachment anxiety ($\beta = 0.22$, $p < 0.001$) and attachment avoidance ($\beta = 0.22$, $p < 0.001$) as well. Childhood sexual abuse was also found to be associated with increased attachment anxiety ($\beta = 0.22$, $p < 0.001$) and attachment avoidance ($\beta = 0.18$, $p < 0.001$). In addition, rape was associated with attachment anxiety ($\beta = 0.15$, $p < 0.01$) but not statistically significantly associated with attachment avoidance. An endorsement of a death threat was found to be associated with increase attachment avoidance ($\beta = 0.14$, $p < 0.01$) but not with attachment anxiety. In regard to parental psychopathology, parental depression was positively associated with attachment anxiety ($\beta = 0.20$, $p < 0.001$) and attachment avoidance ($\beta = 0.17$, $p < 0.01$) while parental alcohol abuse was also positively associated with attachment anxiety ($\beta = 0.13$, $p < 0.001$) and attachment avoidance ($\beta = 0.12$, $p < 0.05$). Ongoing parental conflict defined as "constant rows" between parents was found to be associated with increased attachment anxiety ($\beta = 0.24$, $p < 0.001$) and attachment avoidance ($\beta = 0.23$, $p < 0.001$) while violence between parents was also found to be associated with increased attachment anxiety ($\beta = 0.12$, $p < 0.05$) and attachment avoidance ($\beta = 0.10$, $p < 0.05$). Lastly, an endorsement of serious financial problems of parents was found to be associated with increased attachment anxiety ($\beta = 0.16$, $p < 0.01$) and attachment avoidance ($\beta = 0.13$, $p < 0.01$). Overall, adult attachment was found to be a mediator between negative life events and life satisfaction. According to the authors, childhood adversities were found to be associated with adult life satisfaction through affecting individuals' attachment styles.

There are several limitations to the Hinnen, Sanderman, and Sprangers (2009) study. First, the large majority of participants were Dutch females; therefore, generalizability is limited. Secondly, life satisfaction was only assessed with three items. Future research may want to use assessments with additional items to measure life satisfaction. Also, the ECR-R was developed to assess attachment in romantic relationships, not attachment in general. This should be considered when interpreting the results as well.

Weinfield, Sroufe, and Egeland (2000) also studied the association between negative life events and adult attachment. Unlike the previously discussed studies, however, this study did not find a significant relationship between negative life events and adult attachment. The sample consisted of 57 participants whose mothers had been recruited from public health clinics during the third trimester of pregnancy with participants. Participants were followed from birth to ages 18 and 19. There were 25 males and 32 females with 61% European Americans, 16% African-Americans, and 23% having a mixed racial background. Participants came from a larger sample of 267 individuals from the Minnesota Mother – Child Project. The subgroup did not differ from the original sample in regards to attachment classifications, maternal education and age, SES, or ethnicity. All of these participants were considered children at risk for poor developmental outcomes. The subsample was selected from a larger group of individuals through one of two routes. The first route included participants who participated in a nursery school through the Project and attended a summer camp at age 10. The second route included participants who had become parents by age 19. This route was selected,

according to the authors, because the Adult Attachment Interview had been previously used with teen mothers.

The Strange Situation (Ainsworth & Wittig, 1969) was used to assess infant attachment when participants were both 12 months and 18 months of age. In the current study, however, only one of the two classifications was used for each participant. Each Strange Situation was coded by two coders with an interrater agreement of 89% for the 12 month classification and 93% for the 18 month classification. For participants whose classification was inconsistent from 12 months to 18 months, an interrater conference was held. To assess adult attachment the Adult Attachment Interview (AAI; George, Kaplan, & Main, 1985) was used. This was completed around participants' nineteenth birthdays. Coders for these interviews had an interrater agreement of 82%.

Negative life events were assessed from participants' mothers completing the Life Events Scale (Egeland & Deinard, 1975) at 11 different time points from when participants were infants until 19 years old. This scale includes 40 items that assesses life events in an interview format. Event examples included family conflict, instability of living situation, health problems, and legal troubles. An average score was obtained and used in the current analyses. Interrater agreement for each time point ranged from $r = .86$ to $r = .96$.

Child maltreatment was assessed using mother interviews and home observations. Physical abuse, verbal abuse, neglect, or maternal psychological unavailability were considered forms of maltreatment. Maternal depression was assessed from the Center for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977) and the Beck

Depression Inventory (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961). Finally, family functioning, particularly the quality of parent-child interaction, was assessed using the Balance Scales (Fleeson, 1988) during an interactional observation when participants were 13 years old. These scales measure security of roles, support of developmental needs, relationship satisfaction, and teamwork within the family.

Pearson correlations found positive relationships between negative life events and child maltreatment and between negative life events and maternal depression. There were negative relationships found between negative life events and family balance and between child maltreatment and family balance. To assess continuity of attachment for the three categories of Secure/Avoidant/Resistant (infant classifications) to Secure/Dismissing/Preoccupied (adult classifications) a three-level chi-square analysis was used. Results indicated no significant attachment continuity between infancy and adulthood. This result is in striking contrast to the other studies reported in this literature review thus far. A two-level chi-square analysis was then completed to assess continuity of attachment for the two categories of secure/insecure in infancy and secure/insecure in adulthood. These results also indicated no continuity for attachment between infancy and adulthood.

Although this study did not find significant continuity in regard to attachment, an a priori examination of correlates of stability and change was still carried out because continuity has been established in previous literature. Participants were placed into four groups that represented the possibilities of continuity and discontinuity. The four groups included infant insecure and adult insecure (insecure-insecure), infant secure and adult

secure (secure-secure), infant insecure and adult secure (insecure-secure), and infant secure and adult insecure (secure-insecure). Planned contrasts were used to analyze the data. In regard to negative life events as measured by maternal life stress, there were no significant differences between any of the groups. These negative life events were not found to have a relationship with stability and change in attachment. In regard to child maltreatment, it was not found to differentiate the secure-secure group from the secure-insecure group but it did differentiate the insecure-insecure group from the insecure-secure group. Those in the insecure-insecure group were more likely to have experienced child maltreatment compared to the insecure-secure group. In regard to maternal depression, it did not differentiate the insecure-insecure group from the insecure-secure group but it did differentiate the secure-secure group from the secure-insecure group. Those in the secure-insecure group were more likely to have mothers who were depressed than the secure-secure group. Finally, in regard to family functioning, the only significant difference between the insecure-secure group and the insecure-insecure group was that the insecure-secure group was more likely to have better family functioning. Unlike other studies discussed, this study did not find continuity in regard to attachment nor did it establish a relationship between negative life events and attachment.

The Weinfield, Sroufe, and Egeland (2000) study also has its limitations. First, the sample consisted of individuals who were at high risk for poor developmental outcomes. Therefore, this needs to be considered when generalizing the findings. Secondly, the subgroup of the study consisted of two groups: participants who participated in a nursery school through the Project and attended a summer camp at age

10 and participants who had become parents by age 19. While the subgroup was developed from two different groups, the authors analyzed the data using the large subgroup instead of looking at any differences between the two groups. The two groups may have differed from one another. This could have affected the validity of the study. Also, while the study authors did not find a link between negative life events and attachment, they did find a relationship between attachment and child maltreatment and between attachment and maternal depression. Other studies have included similar categories as negative life events.

Overall, research has demonstrated a relationship between negative life events and adult attachment. Individuals with insecure attachment styles as an adult are more likely to have experienced negative life events compared to individuals with secure attachment. Negative life events can, but do not always, contribute to a change in attachment classification from infancy to adulthood.

The Link Between Negative Life Events and the Working Alliance

While research overall has found that negative life events are related to adult attachment and attachment is related to the therapeutic working alliance, there is limited research that directly studies the relationship between negative life events and the working alliance. One study that does look at this relationship is a study by Alden, Taylor, Laposa, and Mellings (2006). The primary question for the study was whether differences in social development experiences are related to the therapeutic relationship. This study included 27 participants who were diagnosed with Generalized Social Phobia as confirmed by the Anxiety Disorders Interview Schedule – IV (ADIS-IV; Brown,

Dinardo, & Barlow, 1994). Sixty-two percent of the participants were male and 38% were female, with an age range of 20 years to 59 years (M = 34.8). Sixty-eight percent of individuals were Caucasian, 21% were Asian, 8% were Indo-Canadian, and 3% were First Nations.

The article does not discuss in detail how participants were recruited for the study, other than they were seeking treatment for their Generalized Social Phobia. Participants completed 12 group sessions of cognitive-behavioral therapy based on the Generalized Social Phobia model (Clark & Wells, 1995; Rapee & Heimberg, 1997). Participants completed several questionnaires and measures. The Social History Questionnaire (SHQ; Alden et al., 2004) was completed by participants to assess their accounts of early family social experiences. Examples include assessing the presence of physical abuse, emotional abuse, emotional neglect, and parental alcoholism. From these items, the SHQ is broken down into four underlying dimensions including parental abuse, parental alcoholism, low family socializing, and parental overprotection.

The Working Alliance Inventory – Short Form – Client Version (WAI-C) and Therapist Version (WAI-T) (Horvath & Greenberg, 1986; Tracey & Kokotovic, 1989) were completed after sessions 3 and 8 by both clients and therapists, to assess the therapeutic working alliance. To assess treatment outcome, participants also completed the Social Phobia Scale (SPS; Mattick & Clark, 1998), the Social Interaction Anxiety Scale (SIAS; Mattick & Clark, 1998), and the Beck Depression Inventory – II (BDI-II; Beck, Steer, & Brown, 1996) both at pretreatment and posttreatment. Lastly, interpersonal ratings were measured by both therapist and client to assess their view of

their interpersonal interactions with one another. Therapists rated clients on the dimensions of irritability/resistance and disengagement while clients rated therapists on dimensions of support and control.

Due to few participants endorsing parental alcoholism on the SHQ, this dimension was dropped from further analysis due to its extremely skewed distribution. Pearson correlation coefficients were computed for the remaining three dimensions of the SHQ, the client and therapist ratings on the WAI, and interpersonal interactions ratings after both session 3 and session 8. For session 3, results indicate a significant negative relationship between parental abuse and therapist working alliance measures. Specifically, as participants endorsed more themes of parental abuse, therapists' ratings on the Tasks, Goal, and Bond subscales of the WAI decreased. Participants with higher parental abuse scores also had higher scores of irritability/resistance as assessed by their therapist. Neither of the other two dimensions of the SHQ were significantly related to the working alliance as measured by therapists. For session 8, only the Tasks subscale of the working alliance was found to have a negative relationship with parental abuse. The positive relationship between parental abuse and irritability/resistance still remained. No other relationships were significant for session 8.

In regards to client ratings of the WAI, for session 3 none of the relationships between participants' family social history, their ratings of the therapeutic relationship, and their interpersonal ratings of their therapist were significant. For session 8, however, participants who endorsed less family socializing on the SHQ had lower ratings of bonding with their therapist as measured on the WAI-C. Also, higher parental abuse

scores were associated with a weaker bond for the working alliance. Participants who endorsed more parental abuse and participants who endorsed lower family socializing rated their therapists as less supportive. Participants who endorsed more parental overprotection rated their therapists as being more supportive.

The final analyses completed consisted of three, two-step hierarchical multiple regressions, with each treatment response measure as the dependent variable (i.e. SIAS, SPS, BDI). For each equation, the pre-assessment score was entered as the first step while the three SHQ dimensions were entered as the second step. Results indicate that parental abuse measured at pre-assessment predicted higher symptoms on both the SPS and the BDI. As the authors suggested, participants who endorsed higher levels of parental abuse received less benefit from treatment. No other variables were found to be significant predictors of treatment outcome.

There are several limitations to the Alden, Taylor, Laposa, and Mellings (2006) study. First, all participants in the study were diagnosed with Generalized Social Phobia and all completed group cognitive-behavioral therapy. Therefore, generalizability is limited to this population. Secondly, the WAI was completed after the third and eighth sessions even though 12 sessions were completed altogether. It is unclear why the authors did not look at correlations after the eighth session. This should also be considered when interpreting the results. Finally, there were only four categories of social development experiences or negative life events involved in this study. Additional research should focus on other negative life events in relation to the working alliance.

Implication of the Literature Review

This literature review focused on the working alliance, attachment patterns and negative life events. The therapeutic working alliance has been a topic of study that researchers have been interested in for several decades. One of the reasons it is so important is because of the association between strong working alliances and successful outcomes in therapy (Crits-Christoph et al., 2011). It is necessary to continue to research variables related to the working alliance because of its importance. Also, assessing the working alliance in practice can be a helpful tool in better understanding the working alliance and can allow therapists to address any weak alliances that may exist. For example, Forman and Marmar (1985) found that therapists can engage in certain behaviors that will help a weaker alliance between therapist and client to become stronger. An example includes the therapist addressing the client's defenses and problematic feelings regarding the relationship (Forman & Marmar, 1985). Understanding the working alliance better can help therapists and clients work more effectively together in therapy.

This review has discussed the current literature regarding the relationship between client attachment and the therapeutic working alliance in addition to the relationship between negative life events and client attachment. While research has thus far focused on these relationships, there is relatively little research that explores the direct relationship between negative life events and the working alliance. Based on the relationships discussed above, one could hypothesize that negative life events would have a negative relationship with the working alliance. In other words, participants who

endorse more negative life events would have lower scores on the Working Alliance Inventory. The current study attempts to test this hypothesis. It would be helpful for research to focus on a wider range of negative life events as well as larger sample sizes within the college population. Also, in regard to the Working Alliance Inventory, some research had only used the total working alliance score in their analyses. The current study looks at each individual subscale of the Working Alliance Inventory in addition to the total score to get a better sense of how negative life events are related to each subscale. A further exploration of these relationships may help therapists in understanding their clients' history more effectively and how it relates to the current therapy relationship between them.

Chapter 3

Methodology

Chapter Three describes the steps of this study: the design, the background of the subjects, variables included, measurements, procedures, hypotheses, and the statistical analyses. This study explores the relationships between negative life events in childhood and the therapeutic working alliance in the college population. College students enrolled in universities nationwide were included. Multiple methods were used to analyze the data collected.

Design

The study used multiple methods to analyze the data in order to fully examine the relationships between negative life events and the working alliance. First, a canonical correlational analysis was completed to test if there was an overall relationship between negative life events and working alliance subscales. Secondly, three multiple regressions were completed to test if there were any significant relationships between negative life events and each of the three subscales of the Working Alliance Inventory. Finally, another multiple regression was completed to test if there was a significant relationship between negative life experiences and overall working alliance, as measured by the WAI Total scale.

Participants

The study sample included subjects drawn from a pool of 4,679 clients who were seen for therapy at university and college counseling centers. These individuals participated in a nationwide study conducted by the Research Consortium of Counseling

and Psychological Services in Higher Education. The consortium, established in 1990, was developed to conduct research focusing on the concerns and practices of university counseling centers and the clients seen at those facilities. The consortium accumulated data from 38 different college and university counseling centers throughout the United States. The data used in the current study is part of the data that was routinely collected by centers participating in the consortium during the time period of 1997 to 1998. In the current study, data was included in the analyses for individuals who had completed both the Working Alliance Inventory – Client Version and the Family Experiences measurement. The sample sizes varied among WAI subscales, from 711 to 747 participants.

Instruments

All participants used in the study completed the Working Alliance Inventory – Client Version (WAI; Horvath & Greenberg, 1989). The WAI measures the therapeutic working alliance between participants and their therapists. The measure consists of 36 self-report items in which clients rate aspects of the working alliance. There is an overall working alliance score as well as subscale scores. The three subscales of the WAI include the Goals, Tasks, and Bond subscales while the WAI Total scale measures the overall therapeutic working alliance. Clients give their answers to each item on a 7-point Likert scale. Appendix 1 includes the items used in the measurement.

In addition to the WAI, participants also completed a Family Experiences measurement where they reported information regarding events that occurred within their family of origin. These items were developed specifically for the Research Consortium

of Counseling and Psychological Services in Higher Education to help assess clients' experiences regarding events that occurred within their family. The scale items were used to measure participants' negative life events in the study. Many of Bowlby's negative life events (Bowlby, 1969/1982) are represented in the measure. There are a total of 18 self-report items in which participants respond to each family experience with a "yes", "no", or "unsure" answer. Appendix 2 includes items used in the measurement.

Variables

The independent variables used in the analyses were negative life events as measured by the Family Experiences questionnaire. The dependent variables used in the study were the subscales of the Working Alliance Inventory – Client Version.

Procedures

As mentioned earlier, all data included in this study represent a subset of data from a larger study that was conducted from 1997 and 1998 by the Research Consortium of Counseling and Psychological Services in Higher Education. The Research Consortium's participants completed a number of assessments but only the data regarding demographic variables, participants' family experiences, and their ratings on the Working Alliance Inventory – Client Version were used in the current study. The first step of the analysis included reordering the Family Experiences item responses so that quantitative methods could be used to analyze the data. The original item responses included assigning a "1" for response items marked "yes", a "2" for items marked "no", and assigning a "3" for response items marked "unsure". Since these item responses did not lend well to quantitative analysis, a rearrangement was conducted in order to create a

Likert scale style of item responses. The following values were assigned to specific item responses that allowed for better quantitative analysis: items were assigned a "1" for response items marked "yes", a "2" was assigned for items marked "unsure", and a "3" was assigned to items marked "no". When using this new ordering system, a quantitative analysis could be completed to gather statistics of more appropriate value.

Hypotheses

There are several null hypotheses posed in this study which include the following:

1. There will not be an overall relationship between negative life events (as measured by the Family Experiences items) and the subscales of the Working Alliance Inventory.
2. The Goals subscale of the Working Alliance Inventory will not be related to Family Experiences items.
3. The Tasks subscale of the Working Alliance Inventory will not be related to Family Experiences items.
4. The Bond subscale of the Working Alliance Inventory will not be related to Family Experiences items.
5. Family Experiences items will not be related to Total working alliance on the Working Alliance Inventory.

Analyses

There were several steps involved in the analyses of this study. The analyses conducted were chosen with the purpose of best exploring the relationships between Family Experiences items and the Working Alliance Inventory. The first part of the

analyses focused on determining whether there was a statistically significant relationship between Family Experiences items and Working Alliance Inventory subscales. The second part of the analyses focused on determining whether there was a statistically significant relationship between Family Experiences items and each of the subscales of the Working Alliance Inventory, individually. The third part of the analyses involved determining the strength of each relationship between Family Experiences items and Working Alliance Inventory subscales. The data were examined in various steps. In the following sections, each step will be separately reviewed.

Step 1: Overall relationship among Family Experiences items and Working Alliance Inventory subscales. The first step of the analysis explored the overall relationship among Family Experiences items and Working Alliance Inventory subscales. A canonical correlational analysis was completed to examine these relationships. As discussed in Hardoon, Szedmak, and Shawe-Taylor (2004), "canonical correlation analysis is a method of correlating linear relationships between two multidimensional variables" (p. 2640). The test statistic that was used for the canonical regression was Wilk's Lambda.

Step 2: Relationships between Family Experiences items and each subscale of the WAI. Prior to the analyses, it was decided that four multiple regressions would be completed regardless of whether the canonical correlation produced statistically significant results. The completion of the four multiple regressions occurred with due consideration of familywise error rate. Each regression involved one of the subscales of the Working Alliance Inventory. The first multiple regression used the Goals subscale of

the Working Alliance Inventory as the dependent variable and the Family Experiences items as the independent variables. This assisted in determining whether any of the Family Experience items could predict scores on the Goals subscale of the Working Alliance Inventory. Next, another multiple regression included Family Experiences items as the independent variables and the Tasks subscale of the Working Alliance Inventory as the dependent variable. The next multiple regression included the Family Experiences items as the independent variables and the Bond subscale of the Working Alliance Inventory as the dependent variable. Additionally, there was a final multiple regression completed with the Total Working Alliance Inventory scores as the dependent variable and Family Experiences items as the independent variables. This tested whether Family Experiences items were able to predict an overall therapeutic working alliance score.

Step 3: The degree of relationship between Family Experiences items and WAI subscales. It was decided prior to the analyses that confidence intervals would be used to determine the degree of relationships between Family Experiences items and Working Alliance Inventory subscales, regardless if there were any statistically significant results. Confidence intervals consist of "a range of values that encompass the population or 'true' value, estimated by a certain statistic, with a given probability" (Nakagawa & Cuthill, 2007, p. 593). Even if the null hypotheses are not rejected, including effect sizes and confidence intervals is helpful in interpreting non-significant results (Nakagawa & Cuthill, 2007).

Chapter 4

Results

In Chapter Four, the data analysis results are presented to answer the study questions: Is there an overall relationship between Family Experiences items and the Working Alliance Inventory subscales? Is there a relationship between Family Experiences items and the Goals subscale of the Working Alliance Inventory? Is there a relationship between Family Experiences items and the Tasks subscale of the Working Alliance Inventory? Similarly, is there a relationship between Family Experiences items and the Bond subscale of the Working Alliance Inventory? And finally, is there a relationship between Family Experiences items and the Total subscale of the Working Alliance Inventory? This study investigated the relationships between negative life events (as determined by the Family Experiences measurement) and therapeutic working alliances (as measured by the Working Alliance Inventory – Client Form; WAI). Data analysis included running a canonical correlational analysis and four multiple regressions to examine an overall relationship between Family Experiences items and Working Alliance Inventory subscales, the relationship between Family Experiences items and each of the three subscales of the WAI, and the relationship between Family Experiences items and the Total subscale of the WAI. The statistical results were obtained using SPSS Version 15 for Windows (SPSS Inc., 2006), Methods for the Behavioral, Educational, and Social Sciences (MBESS; Kelly, 2007b), and R2 (Steiger & Fouladi, 1992).

Descriptive statistics were completed on the data collected from participants. In the current study, data was included in the analyses for individuals who had completed

both the Working Alliance Inventory – Client Version and the Family Experiences measurement. The sample sizes varied among WAI subscales, ranging from 711 to 746 participants. Descriptive statistics were completed for participants. Tables 1 shows the descriptive statistics obtained for Family Experiences items while Table 2 shows the descriptive statistics obtained for the subscales of the WAI.

Table 1

Descriptive Statistics for Family Experiences Items

Family Experiences Items	*n*	*M*	*SD*
1	711	2.472	0.879
2	711	2.605	0.791
3	711	2.629	0.769
4	711	2.056	0.977
5	711	2.906	0.422
6	711	2.512	0.832
7	711	2.882	0.454
8	711	2.928	0.343
9	711	2.650	0.729
10	711	2.790	0.586
11	711	2.601	0.782
12	711	2.601	0.781
13	711	2.474	0.835
14	711	2.648	0.722
15	711	2.897	0.430
16	711	2.674	0.728
17	711	2.805	0.576
18	711	2.587	0.775

Table 2

Descriptive Statistics for WAI Subscales

WAI Subscale	*n*	*M*	*SD*
Goal	740	69.750	9.999
Tasks	746	71.115	9.600
Bond	733	71.097	9.120
WAI Total	711	211.994	26.793

Overall relationship among Family Experiences items and Working Alliance Inventory subscales. A canonical correlation was completed between the Working Alliance Inventory subscales and the Family Experiences scale items. As mentioned earlier, Wilks' Lambda was the test statistic that was chosen for the analysis. The canonical correlation results revealed no statistically significant relationships between Working Alliance Inventory subscales and Family Experiences items, Wilks' Lambda = 0.942, $F(54, 2057) = 0.770$, $p = 0.894$. In other words, these results show that, overall, there is no statistically significant relationships among Working Alliance Inventory subscales and Family Experiences items. Table 3 includes the output obtained from the canonical correlation analysis.

Table 3

Canonical Correlation Output

Statistic	Value	*F*	*p*
Wilks' Lambda	0.942	0.770	0.894

Relationships between Family Experiences items and subscales of the WAI.

As mentioned previously, four multiple regressions were completed to test the hypotheses regarding the relationships between Family Experiences items with each of the Goals, Tasks, and Bond subscales of the Working Alliance Inventory as well as with the Total Working Alliance Inventory scale. The first multiple regression was completed to test the second hypothesis that the Goals subscale of the Working Alliance Inventory will not be related to Family Experiences items. ANOVA results indicated no statistically significant relationship between the Goal subscale of the Working Alliance Inventory and the Family Experiences items, $F(18, 721) = 0.822$, $p = 0.676$. Findings indicate that Family Experiences items accounted for only 2% of the proportion of variance of the Working Alliance Inventory Goal subscale. Since results show no statistically significant relationship between the Goal subscale of the Working Alliance Inventory and the Family Experiences scale items, the null hypothesis could not be rejected.

Table 4

SPSS Output: Goal Subscale

R	R^2	*Std. Error*	*F*	*p*
0.142	0.020	10.021	0.822	0.676

Independent Variable: Family Experiences items

Table 5

Multiple Regression Coefficients: Goal Subscale

	Unstandardized Coefficients		Standardized Coefficients		
Family Experiences Item	*β*	*Std. Error*	*β*	*t*	*p*
1	-0.275	0.456	-0.024	-0.604	0.546
2	-0.251	0.486	-0.020	-0.516	0.606
3	0.469	0.502	0.036	0.935	0.350
4	0.657	0.433	0.064	1.515	0.130
5	-0.599	0.878	-0.026	-0.682	0.495
6	0.057	0.503	0.005	0.114	0.910
7	0.420	0.911	0.019	0.462	0.645
8	1.200	1.118	0.042	1.073	0.284
9	-0.096	0.589	-0.007	-0.163	0.870
10	0.674	0.727	0.040	0.928	0.354
11	-0.440	0.546	-0.034	-0.806	0.420
12	0.136	0.601	0.011	0.227	0.821
13	-0.620	0.525	-0.052	-1.182	0.238
14	1.178	0.626	0.086	1.881	0.060
15	-0.136	0.919	-0.006	-0.148	0.882
16	-0.090	0.534	-0.007	-0.169	0.866
17	-0.416	0.699	-0.024	-0.595	0.552
18	-0.828	0.514	-0.064	-1.611	0.108

Dependent variable: Goal Subscale of WAI

A multiple regression analysis was also completed to test the third hypothesis stating that the Tasks subscale of the Working Alliance Inventory will not be related to Family Experiences items. Results indicate that there was no statistically significant relationship between the Tasks subscale of the Working Alliance Inventory and Family Experiences items, $F(18, 727) = 0.881$, $p = 0.602$, thus again, failing to reject the null

hypothesis. In fact, Family Experiences items only accounted for 2.1% of the variance in the Working Alliance Inventory Tasks subscale.

Table 6

SPSS Output: Tasks Subscale

R	R^2	*Std. Error*	*F*	*p*
0.146	0.021	9.633	0.881	0.602

Independent Variable: Family Experiences items
Dependent Variable: Tasks Subscale

Table 7

Multiple Correlation Coefficients: Tasks Subscale

	Unstandardized Coefficients		Standardized Coefficients		
Family Experiences Item	*β*	*Std. Error*	*β*	*t*	*p*
1	-0.586	0.433	-0.054	-1.353	0.177
2	-0.176	0.464	-0.015	-0.380	0.704
3	0.454	0.483	0.036	0.940	0.348
4	0.420	0.416	0.043	1.012	0.312
5	-0.656	0.852	-0.029	-0.771	0.441
6	0.257	0.478	0.022	0.537	0.591
7	-0.508	0.875	-0.024	-0.581	0.562
8	1.244	1.068	0.045	1.164	0.245
9	0.067	0.564	0.005	0.118	0.906
10	0.382	0.699	0.023	0.547	0.585
11	-0.569	0.523	-0.046	-1.089	0.276
12	0.698	0.569	0.058	1.227	0.220
13	-0.798	0.498	-0.070	-1.600	0.110
14	0.989	0.594	0.075	1.665	0.096
15	0.017	0.874	0.001	0.019	0.985
16	0.036	0.510	0.003	0.071	0.944
17	-0.504	0.672	-0.030	-0.750	0.454
18	-0.676	0.486	-0.055	-1.390	0.165

Dependent variable: Tasks Subscale

To test the fourth hypothesis, that there would be no relationship between the Bond subscale of the Working Alliance Inventory and Family Experiences items, another multiple regression was completed. Results, again, found no statistically significant relationship between the Bond subscale of the Working Alliance Inventory and Family Experiences items, $F(18, 714) = 0.466$, $p = 0.972$. The null hypothesis, again, was not

rejected. Family Experiences items accounted for 1.2% of the variance in the Working Alliance Inventory Bond subscale.

Table 8

SPSS Output: Bond Subscale

R	R^2	*Std. Error*	*F*	*p*
0.108	0.012	9.180	0.466	0.972

Independent Variable: Family Experiences items
Dependent Variable: Bond Subscale

Table 9

Multiple Regression Coefficients: Bond Subscale

	Unstandardized Coefficients		Standardized Coefficients		
Family Experiences Item	*β*	*Std. Error*	*β*	*t*	*p*
1	0.052	0.420	0.005	0.125	0.901
2	-0.140	0.449	-0.012	-0.312	0.755
3	0.194	0.462	0.016	0.420	0.674
4	0.476	0.399	0.051	1.193	0.233
5	-0.428	0.815	- 0.020	-0.525	0.600
6	-0.073	0.463	-0.007	-0.157	0.875
7	-0.346	0.829	-0.018	-0.417	0.676
8	1.086	1.042	0.041	1.043	0.297
9	-0.515	0.540	-0.042	-0.953	0.341
10	0.291	0.667	0.019	0.437	0.663
11	-0.532	0.505	-0.046	-1.054	0.292
12	0.110	0.553	0.010	0.199	0.842
13	-0.567	0.480	-0.052	-1.180	0.238
14	0.836	0.576	0.067	1.452	0.147
15	-0.494	0.846	-0.023	-0.584	0.560
16	-0.010	0.492	-0.001	-0.021	0.983
17	-0.366	0.647	-0.023	-0.565	0.572
18	-0.191	0.468	0.016	-0.408	0.683

Dependent variable: Bond Subscale

Finally, a multiple regression was performed to test the final hypothesis, that Family Experiences items will not be related to the Total Working Alliance Inventory score. There, again, was a failure to reject the null hypothesis showing no statistically significant relationship between the Working Alliance Inventory Total score and Family

Experiences items, $F(18, 692) = 0.750$, $p = 0.759$. Family Experiences items accounted for only 1.9% of the variance in the Total score of the Working Alliance Inventory.

Table 10

SPSS Output: WAI Total Scale

R	R^2	*Std. Error*	*F*	*p*
0.138	0.019	26.878	0.750	0.759

Independent Variable: Family Experiences items
Dependent Variable: WAI Total Scale

Table 11

Multiple Correlation Coefficients: WAI Total Scale

	Unstandardized Coefficients		Standardized Coefficients		
Family Experiences Item	*β*	*Std. Error*	*β*	*t*	*p*
1	-0.853	1.251	-0.028	-0.682	0.496
2	-0.513	1.332	-0.015	-0.385	0.700
3	1.141	1.381	0.033	0.826	0.409
4	1.477	1.187	0.054	1.244	0.214
5	-1.493	2.458	- 0.024	-0.608	0.544
6	0.727	1.387	0.023	0.524	0.600
7	-1.056	2.527	-0.018	-0.418	0.676
8	4.027	3.113	0.051	1.294	0.196
9	-0.377	1.621	-0.010	-0.232	0.816
10	2.005	2.007	0.044	0.999	0.318
11	-1.631	1.497	-0.048	-1.089	0.276
12	0.349	1.645	0.010	0.212	0.832
13	-1.877	1.425	-0.059	-1.318	0.188
14	3.308	1.716	0.089	1.928	0.054
15	-0.729	2.521	-0.012	-0.289	0.773
16	-0.222	1.452	-0.006	-0.153	0.879
17	-1.638	1.926	-0.035	-0.850	0.396
18	-1.487	1.396	-0.043	-1.065	0.287

Dependent variable: Total Scale

In summary, the canonical correlation was used to test the overall hypothesis that there would be no relationship between Working Alliance Inventory subscales and Family Experiences items. Wilk's Lambda was the test statistic used in the analysis. The analysis resulted in the failure to reject the null hypothesis, suggesting an absence of a statistically significant relationship among subscales of the Working Alliance Inventory and the

Family Experiences items. In regard to each subscale of the Working Alliance Inventory, multiple regression results also indicated no statistically significant relationships between Family Experiences items with each of the subscales of the Working Alliance Inventory. Lastly, there was also no statistically significant relationship found between Family Experiences items and WAI Total score.

The degree of relationships between Family Experiences items and WAI subscales. As mentioned previously, it was decided prior to the analyses that confidence intervals would be used to determine the degree of relationships between Family Experiences items and Working Alliance Inventory subscales, regardless if there were any statistically significant results of the canonical correlation or multiple regression analyses. Since the null hypotheses were not rejected, including effect sizes and confidence intervals can be beneficial in interpreting non-significant results (Nakagawa & Cuthill, 2007). Confidence intervals were completed for each multiple correlation coefficient squared to obtain a range that is likely to contain the true population parameter. While the correlation coefficients found from the analyses may be considered rather small, it is still helpful to determine the degree of the relationship.[1] With this reasoning in mind, confidence intervals were computed for multiple correlation coefficients squared to obtain a range of likelihood that the true population parameter would be included. This was completed to analyze the extent of the relationships between Family Experiences items with Working Alliance Inventory subscales. In other words, since multiple regression results demonstrated a lack of statistically significant relationships, confidence intervals will help determine the degree of the relationships for each subscale of the Working Alliance

Inventory with Family Experiences items. This analysis will help determine how close each multiple correlation coefficient squared is to zero.

Table 12

Confidence Interval Results for WAI Multiple Correlation Coefficients

WAI Subscale	*n*	R^2	R^2025	*Lower* Rho^2	*Upper* Rho^2
Tasks	746	0.0214	0.0111	0.0000	0.0188
Goal	740	0.0201	0.0112	0.0000	0.0166
Bond	733	0.0116	0.0113	0.0000	0.0006
Total	711	0.0191	0.0117	0.0000	0.0143

R^2: the observed multiple correlation coefficient squared
R^2 025: the cutoff value for the left 2.5% of the central sampling distribution
Lower Rho^2: the lower limit of the 95% confidence interval
Upper Rho^2: the upper limit of the 95% confidence interval

For the WAI Tasks subscale, confidence interval computation results indicated that the probability is .95 that the true population parameter for R^2 observed is found between 0.0000 and 0.0188, *CI*(.95)= 0.0000 to 0.0188. For the WAI Goal subscale, results indicated a .95 probability that the true population parameter for R^2 observed is between 0.0000 and 0.0166, *CI*(.95) = 0.0000 to 0.0166. For the WAI Bond subscale, results found that the probability is .95 that the true population parameter for R^2 observed is between 0.0000 and 0.0006, *CI*(.95) = 0.0000 to 0.0006. Lastly, for the WAI Total subscale, results indicated that the probability is .95 that the true population parameter for R^2 observed is between 0.0000 and 0.0143, *CI*(.95) = 0.0000 to 0.0143. Based on these

confidence intervals, it is determined that all of the observed values for the multiple correlation coefficients could be considered rather small.

Chapter 5

Discussion

Chapter Five consists of a summary of the study. This includes an overview of the purpose of the study as well as research methodology and results. Research limitations and implications of the study will also be addressed.

Purpose of the Study

The present study focused on the therapeutic working alliance, which has been a topic of interest for decades. Research has shown associations between strong working alliances and successful outcomes in therapy, which makes this topic an important one to study (Crits-Christoph et al., 2011). Based on this finding, it is important to continue to research variables that are related to the working alliance. In addition, understanding the therapeutic working alliance can help clinicians work more effectively with their clients and address any working alliance issues that arise.

This study explored the relationship between client negative life events and the therapeutic working alliance in order to better understand this relationship. Most of the research thus far has studied the relationship between negative life events and client attachment and how client attachment relates to the therapeutic working alliance. The current study sought to focus on the direct relationship between negative life events and the working alliance.

Several null hypotheses were included in the present study. The first null hypothesis stated that there would not be an overall relationship between negative life events (as measured by the Family Experiences items) and the working alliance subscales

(as measured by the Working Alliance Inventory). The second null hypothesis stated that the Goals subscale of the Working Alliance Inventory would not be related to Family Experiences items. The next null hypothesis stated that the Tasks subscale of the Working Alliance Inventory would not be related to Family Experiences items. Similarly, another null hypothesis stated that the Bond subscale of the Working Alliance Inventory would not be related to Family Experiences items. The final null hypothesis stated that the Family Experiences items would not be related to the overall or Total working alliance on the Working Alliance Inventory. The study also explored the degree of each relationship between the subscales of the Working Alliance Inventory and Family Experiences items.

Summary of Methodology and Results

The first hypothesis was tested using a canonical correlation. Results revealed no statistically significant relationship between items of the Family Experiences measurement and the subscales of the Working Alliance Inventory. The second hypothesis was tested using a multiple regression analysis which found no statistically significant relationship between the items of the Family Experience measurement and the Goals subscale of the Working Alliance Inventory. Another multiple regression was completed to test the third hypothesis which, again, found no statistically significant relationship between the Tasks subscale of the Working Alliance Inventory and Family Experiences items. A multiple regression was completed to test the fourth hypothesis that showed no statistically significant relationship between items of the Family Experiences measurement and the Bond subscale of the Working Alliance Inventory. Lastly, the fifth hypothesis was tested

with yet another multiple regression, which found no statistically significant relationship between Family Experiences items and the Total subscale of the Working Alliance Inventory. Overall, there was failure to reject all of the null hypotheses discussed above.

Although none of the null hypotheses were rejected, it was decided prior to the analyses that confidence intervals would be completed as a way to determine the degree of relationships between Family Experiences items and Working Alliance Inventory subscales, regardless if there were any statistically significant results of the canonical correlation or multiple regression analyses. Confidence intervals were completed for each multiple correlation coefficient squared to obtain a range in which the true population parameter was likely to contain. Results indicated that all of the observed values for the multiple correlation coefficients could be considered small. While these results cannot lead a researcher to conclude that there are no relationships between Family Experiences items and each subscale of the Working Alliance Inventory, confidence intervals presented in the research results show that the degree of each relationship is likely small, if a relationship does, in fact, exist. If there is a relationship between negative life events and the working alliance, it appears to be small and inconsequential, according the current study's results.

Discussion of Results and Limitations

Based on the extensive research literature reviewed in Chapter Two, that shows a relationship between negative life events and attachment as well as between attachment and the therapeutic working alliance, one could hypothesize that the current study would find a relationship between negative life events and the therapeutic working alliance. The

results of this study failed to show these findings. The current study showed no statistically significant relationships between client negative life events and the working alliance. Additionally, subsequent analyses showed that any differences would be considered small. There are two questions to consider. First, why did the current study fail to reject the null hypotheses? Second, why is it that the current study did not find any statistically significant relationships when other studies presented in the literature review did?

For the first question, there are several reasons that could explain why the current study failed to reject the null hypotheses. One reason may be due to the complexity involved in human behavior and the numerous interacting and confounding variables that can affect one's behavior. One confounding variable may stem from the research on resiliency. Resiliency researchers discuss different factors that can protect an individual who experiences negative life events from having those events affect their functioning in adulthood. For example, different protective factors include an individual's temperament, personality features, the presence of one good adult-child relationship, external support systems, self-esteem level, parenting style, gender, adaptability to change, activity level, education about the negative life event, interventions/treatment following the negative life event, cognitive skills, and positive responsiveness to others (Bonanno, 2004; Garmezy, 1991; Rutter, 1987). For example, Rutter (1987) found that if a child, with a parent who had a serious and persistent mental illness, viewed the poor parent-child relationship as being related to the illness, they were more likely to cope effectively and had a more positive view of themselves. The current study did not examine these protective factors

related to resiliency. Also, research has found that the age in which the event occurred can influence the degree of impact on the individual (Rutter, 1987). This finding was also established in the studies by Beckwith, Cohen, and Hamilton (1999) and Hamilton (2000), as discussed in the literature review. The current study did not examine the ages of each negative life event that was endorsed by participants. In addition, Bonanno (2004) indicated that interventions or treatment following the negative life event can affect a person's resiliency. In the current study, no information was gathered regarding whether participants had received any intervention or treatment following their negative life event.

Another example includes self-esteem and self-efficacy related to resilience. High self-esteem and high self-efficacy are considered protective factors. Self-esteem increases if there is the successful accomplishment of tasks that are important to the individual (Rutter, 1987). It is plausible that the current study sample is skewed in this domain since it involves all college students, who have successfully accomplished the completion of high school and are now enrolled in college. In other words, since the current study only involved college students, these individuals may be more resilient than if the population of study included a broader range of individuals. Perhaps the current study sample involves a higher number of resilient individuals, as a correlate of admission to college and active enrollment, than would be with a sample of individuals who have not enrolled in college due to a number of factors. This point is important to consider when interpreting the results. As Rutter (1987) discusses, individuals who drop out of school lose the opportunity for experiences that may be protective, which can include opportunities for successful achievements, positive relationships, and other factors.

Another reason that the current study failed to reject the null hypotheses may be due to measurement error of the Family Experiences questionnaire. As discussed previously, this assessment was created specifically by the Research Consortium and has not been used in many research studies to date. While measurement error may have been a factor, Chronbach's alpha of the measurement is .76, which is considered an acceptable level of internal reliability (Kline, 1999). Other possible error may come from the wording of the measurement questions. In regard to specific test items, some of the items of the Family Experiences measurement are confusing in nature. For example, item number two asks whether a participant's family frequently moved, but there was no definement of "frequently." Participants could have had different interpretations of this item. Also, item number nine asks the participant to state whether physical abuse occurred in their family. It does not differentiate between who was abused. Was it the participant? Was it a sibling or parent? This is unclear. Also, the Family Experiences measurement did not ask when each family experience occurred. As discussed previously, the age at which the trauma happened can influence the degree of impact on the individual (Rutter, 1987). In addition, an individual may not remember whether a family experience occurred because the incident may have occurred in childhood when the participant may have been too young to remember the incident. Trauma research shows that trauma experienced at a very young age, before an individual forms lasting memories, can affect development (Anda et al., 2006). This is one of the difficulties with self-report measurements.

It is also possible that the current study failed to reject the null hypothesis because there is no relationship between negative life events and the therapeutic working alliance,

as measured by the Family Experiences scale and Working Alliance Inventory scale. In other words, there were no statistically significant relationships found because there was nothing to find. There may be a lack of a direct relationship between negative life events and the working alliance. The literature review of this paper only included one study that researched the direct relationship between negative life events and the working alliance because there were no other studies to include that were relevant to the current study. It is possible that there are not many studies in this particular research area due to the bias toward publishing statistically significant results. There could have been additional, similar studies completed that were not published due to a lack of statistically significant findings.

As discussed previously, the second question to be answered is: Why is it that the current study did not find any statistically significant relationships when other studies in the literature review did? One explanation could be due to the limitations of the literature. One such problem was the inclusion of multiple measurements among studies. The literature review included five different measurements of attachment because it was difficult to find studies that were consistent with measurements and relevant to the current study. There were differences in the literature review between the measurements in regard to how attachment was assessed. For example, some measurements assessed attachment into categories while others assessed attachment on linear scales. Also, for the measures that were categorical in nature, there were different subclasses of attachment categories between them. Yet other studies grouped all insecure classifications together, comparing secure attachment with insecure attachment. This makes it very difficult for researchers

and other readers, such as practitioners, to make comparisons across studies and draw summary conclusions. Also, there were several studies that included different attachment measurements within the same study (i.e. to assess attachment in childhood and adulthood) leaving room for additional error. These studies also included different means of gathering information, including self-report, other-report, interview, and observation. In addition, as discussed earlier, these measurements were developed among the two different fields of social psychology and developmental psychology with the former assessing primarily adult attachment and the latter assessing mostly child-parent attachment.

Another problem with the studies included in the literature review were the different ways of assessing negative life events and the differences in what was considered a negative life event. Some of the studies measured negative life events with only the presence or absence of events while other studies included specific types of events. Also, there were differences in what was considered a negative life event. For example, the Weinfield, Sroufe, and Egeland (2000) study concluded that they did not find a link between negative life events and attachment; however, they did find a relationship between attachment and child maltreatment and between attachment and maternal depression. Other studies have included similar categories as negative life events. Overall, the only measurement with some consistency included in the literature review was the Working Alliance Inventory – Client Version. This inconsistency among measurements should be considered a major limitation of the literature.

Other problems with the studies included in the literature review are that several of the studies had low sample sizes and the studies differed on how they analyzed the data. For example, the various methods used to analyze the data among the studies included Pearson correlations, multiple regressions, ANOVA's, and Chi-square tests. There were also high attrition rates found. For instance, Satterfield and Lyddon (1995) started with 96 participants but only obtained completed data on 60. Similarly, Kivlighan, Patton, & Foote (1998) dropped from 76 participants to 40 participants. The authors discussed that they are unsure whether the attrition was a result of participants dropping out of counseling or due to participants failing to complete the WAI measurement after the third session. This could have skewed the data in some way, particularly if there was a high dropout rate. A final example is found in the Mallinckrodt, Coble, & Gantt (1995) study in which participants dropped from 138 to 76.

Many of the studies included also had limited generalizability. For instance, some of the populations used included individuals with major depression (Reis & Grenyer, 2004), social anxiety disorder (Alden, Taylor, Laposa, & Mellings, 2006), premature infants (Beckwith, Cohen, & Hamilton, 1999), Dutch females (Hinnen, Sanderman, and Sprangers, 2009) and those from low socioeconomic backgrounds (Weinfield, Sroufe, & Egeland, 2000). This limited generalizability should be considered when interpreting results.

Another problem with the studies included in the literature review is that while many of them did find statistically significant relationships, many relationships were not found to be statistically significant. For example, The Satterfield and Lyddon (1995)

study found a statistically significant relationship between the Depend scale of the Adult Attachment Scale (AAS) and the Working Alliance Inventory (WAI) Total scale, but failed to find statistically significant relationships between the Close and Anxiety scales of the AAS with WAI Total scores. The Satterfield and Lyddon (1998) study found four statistically significant relationships between attachment and the working alliance but failed to find statistically significant relationships for 12 other relationships. Lastly, Mallinckrodt, Coble, and Gantt (1995) found two statistically significant relationships between attachment and the working alliance but failed to find statistically significant relationships on 10 other occasions, thus failing to reject those null hypotheses. In summary, while some statistically significant relationships were found within these studies, many were not. This is an important factor to consider when interpreting the results of the current study.

Other factors that may have contributed to the current study failing to find statistically significant relationships when other studies discussed in the literature review did, may be due to additional differences between this study and the others. For example, one thing that varied between the current study and the others mentioned in the literature review was the participants. The participants involved in the current study were overall more diverse with regard to presenting problems, schools attended, and geographic regions represented. In addition, the smallest sample size used in the current study was 711 participants versus the 27 participants included in the Alden, Taylor, Laposa, and Mellings (2006) study.

Future Research

The relationship between client and therapist is at the core of counseling and therapy and, therefore, deserves ongoing research investigation so that practitioners can better understand factors that influence clients' treatment. The college student client population is an important group to research due to the accessibility of college counseling centers where students can seek proper treatment for their concerns. On a general note, it would be valuable if further research continued to focus on this population to learn better ways in which therapists can work with their clients.

More specifically, the results of the current study suggest additional research should be completed to further explore the relationship between negative life events and the therapeutic working alliance with the inclusion of additional confounding variables. As mentioned above, variables that are related to resiliency should be included in future studies. Also, future research should look at the relationship between negative life events and the therapeutic working alliance in a more general population. As discussed earlier, the current study focused on the college student population. This population may be skewed in relation to resiliency factors, which relates to an individual's ability to form healthy relationships (Garmezy, 1991). Thus, college students may possess more resiliency factors as compared to other populations.

In addition, studies should incorporate a measurement with clearer items. With confusion as to the meaning of an item, personal interpretation can easily occur. Since the Family Experiences questionnaire and Working Alliance Inventory – Client Version are both self-report measurements, the information may not be as reliable as measures that are

not self-report. As Nunnally (1967) mentions, self-report instruments may not be as reliable compared to measures that are not self-report due to the fact that individuals may attempt to present themselves in a more favorable light.

As mentioned before, there is only a limited amount of research exploring the direct relationship between negative life events and the therapeutic working alliance. This could be due to the bias of publishing statistically significant results. There may have been other research studies that did explore the relationship between these two variables, but the results could have been statistically insignificant and thus not publishable. Therefore, it is unknown whether similar studies have been completed. In addition, the current study involves a large sample size, thus increasing our confidence regarding the statistical power of the study (Howell, 2007). However, the data was gathered in the time period between 1997 and 1998, which may, or may not, be considered outdated at this point. Future research could include more recent data collection.

Conclusion

The therapeutic relationship is an important area to study due to the literature showing the association between strong alliances and successful outcomes in therapy (Crits-Christoph et al., 2011). Given the complexity of the relationship between negative life events and the therapeutic working alliance, more research is necessary to better understand this relationship and identify confounding variables that may influence the relationship. In the current research study there was no statistically significant relationship between negative life events and the therapeutic working alliance. Furthermore, if a relationship does exist, it appears to be relatively small in terms of size. The benefit of this

finding suggests that clients who present in therapy with negative life events can still work effectively with their therapist towards their goals as well as form meaningful bonds and agree on therapeutic tasks. Further research on the therapeutic working alliance can not only lead to better understanding in working with clients, but can hopefully further enhance counseling theory and psychology as a field.

Footnotes

[1] Cohen's effect sizes guidelines for the squared multiple correlation coefficient, f^2, is inappropriate for this research. According to Cohen, $f^2 = R^2/(1-R^2)$. Cohen considers $f^2 = .02$ to be a small effect size. If $f^2 = .02$, then $R^2 = 0.01961$. When Rho = 0, N = 733, and there are 19 variables, the expected value of the sampling distribution of R^2 is 0.025 and the median is 0.024. When there is no relationship, that is, the population correlation is zero, a value of $f^2 \geq 0.02$ occurs 72.5% of the time when sampling at random. When there is truly no effect, one would conclude that there is at least a small effect a great majority of the time.

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Appendix A

Working Alliance Inventory – Client Form

1. I feel uncomfortable with _____.
2. _____ and I agree about the things I will need to do in therapy to help improve my situation.
3. I am worried about the outcome of these sessions.
4. What I am doing in therapy gives me new ways of looking at my problem.
5. _____ and I understand each other.
6. _____ perceives accurately what my goals are.
7. I find what I am doing in therapy confusing.
8. I believe _____ likes me.
9. I wish _____ and I could clarify the purpose of our sessions.
10. I disagree with _____ about what I ought to get out of therapy.
11. I believe the time _____and I are spending together is not spent efficiently.
12. _____ does not understand what I am trying to accomplish in therapy.
13. I am clear on what my responsibilities are in therapy.
14. The goals of these sessions are important to me.
15. I find what _____ and I are doing in therapy are unrelated to my concerns.
16. I feel that the things I do in therapy will help me to accomplish the changes that I want.
17. I believe _____ is genuinely concerned for my welfare.
18. I am clear as to what _____ wants me to do in these sessions.
19. _____ and I respect each other.
20. I feel that _____ is not totally honest about his/her feelings toward me.
21. I am confident in _____'s ability to help me.
22. _____ and I are working towards mutually agreed upon goals.
23. I feel that _____ appreciates me.
24. We agree on what is important for me to work on.
25. As a result of these sessions I am clearer as to how I might be able to change.
26. _____ and I trust one another.
27. _____ and I have different ideas on what my problems are.
28. My relationship with _____ is very important to me.
29. I have the feeling that if I say or do the wrong things, _____ will stop working with me.
30. _____ and I collaborate on setting goals for my therapy.
31. I am frustrated by the things I am doing in therapy.
32. We have established a good understanding of the kind of changes that would be good for me.
33. The things that _____ is asking me to do don't make sense.
34. I don't know what to expect as the result of my therapy.

35. I believe the way we are working with my problem is correct.
36. I feel _____ cares about me even when I do things that he/she does not approve of.

Appendix B

Family Experiences Items

Did the following occur in your family? (yes, no, or unsure)

1. Parents divorced or permanently separated before you were 18
2. Family frequently moved
3. Parent(s) unemployed for an extended period of time
4. Frequent, hostile arguing among family members
5. Death of parent(s) before you were 18
6. Parent(s) with a drinking problem
7. Parent(s) with a drug problem
8. Parent(s) with a gambling problem
9. Physical abuse in your family
10. Sexual abuse in your family
11. Rape/sexual assault of yourself or family member
12. Family member hospitalized for emotional problem
13. Family member diagnosed with a mental disorder
14. Family member attempted suicide
15. Family member committed suicide
16. Family member with a debilitating illness, injury, or handicap
17. Family member prosecuted for criminal activity
18. Family member with an eating problem