FACTORS AFFECTING THE COUNSELING WORKING ALLIANCE FOR
INDIVIDUALS SEEKING SUBSTANCE ABUSE TREATMENT

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ABSTRACT

Research has established that individuals who experience trauma and meet the criteria for substance dependence often demonstrate higher rates of treatment dropout when compared to those with one condition. Individuals who have experienced child-maltreatment exhibit many characteristics which may interfere with treatment engagement. A strong counseling working alliance has been cited as a major protective factor for individuals who are seeking trauma and substance abuse treatment, and is a significant predictor of treatment adherence. This study included adults (n = 114) who self-identified as having experienced childhood maltreatment, and were currently seeking inpatient treatment for substance dependence. The purpose of this study was to examine the relation between child-maltreatment, experiential avoidance, difficulties in emotion regulation, trust, and the counseling working alliance for individuals who are seeking inpatient treatment for substance dependence. Results of this study revealed that emotion dysregulation and experiential avoidance were significantly negatively correlated to counseling working alliance ratings; while results of regression analyses demonstrated that trust was significantly and positively related to positive working alliance ratings. Suggestions for future research, counselor training programs, and practitioners are examined in detail.
TABLE OF CONTENTS

LIST OF TABLES .................................................................................................................. vii

ACKNOWLEDGEMENTS ....................................................................................................... viii

CHAPTER ONE: INTRODUCTION ................................................................. 1
   Counseling Working Alliance ....................................................................................... 1
   Child Maltreatment ...................................................................................................... 3
   Emotion Regulation .................................................................................................... 5
   Experiential Avoidance .............................................................................................. 6
   Adult Attachment ...................................................................................................... 7
   Trust ............................................................................................................................. 9
   Rationale for Current Study ...................................................................................... 10
   Purpose of Current Study ......................................................................................... 13

CHAPTER TWO: REVIEW OF THE LITERATURE ........................................ 15
   Working Alliance ....................................................................................................... 15
     Substance Abuse Counseling .................................................................................. 17
     Trauma Counseling ................................................................................................ 18
   Child Maltreatment ................................................................................................... 20
     Psychosocial Issues .................................................................................................. 21
     Substance Abuse Disorders ..................................................................................... 22
     Disability .................................................................................................................. 25
   Emotion Regulation ................................................................................................... 26
   Experiential Avoidance .............................................................................................. 29
   Adult Attachment ...................................................................................................... 32
CHAPTER THREE: METHODOLOGY ........................................................................38

Research Design ...............................................................................................38
Participants .........................................................................................................38
Data Collection and Procedures ........................................................................44
Instruments ..........................................................................................................45
  Demographic Questionnaire ..............................................................................45
  Working Alliance Inventory ..............................................................................46
  Childhood Trauma Questionnaire .....................................................................48
  Difficulties in Emotion Regulation Scale .........................................................49
  Acceptance and Action Questionnaire .............................................................50
  Adult Attachment Scale Revised ......................................................................51
  Measures of Psychosocial Development Trust Scale .........................................54
Variables and Research Questions ......................................................................55
Data Analysis .......................................................................................................58
Power Analysis ....................................................................................................60

CHAPTER FOUR: RESULTS ..................................................................................61

Preliminary Analyses ..........................................................................................61
  Data Re-Coding .................................................................................................61
  Statistical Assumptions ......................................................................................61
  Chi-Square Analyses ........................................................................................62
Primary Analyses ................................................................................................63
  Research Question One: Descriptive Analysis ..................................................63
Research Question Two: Two-tailed Pearson Correlation..........................66

Research Question Three: Simultaneous Multiple Regression......................71

CHAPTER FIVE: DISCUSSION........................................................................75

Current Evidence Based Practices ..................................................................83

Implications for Substance Abuse Counselors ..............................................85

Implications for Counselor Training Programs and Facilities .....................86

Study Limitations .........................................................................................87

Future Research Implications ......................................................................88

Conclusion .....................................................................................................89

REFERENCES ...............................................................................................91

APPENDICES ...............................................................................................110

A: Scatterplots for Independent and Dependent Variables ............................110

B: Histograms and Box Plots for Measured Variables ..................................113

C: Normal P-P Plot of Regression Standardized Residual ............................119

D: Instruments ..............................................................................................120
LIST OF TABLES

Table 1: Participant Demographic Characteristics .................................................41
Table 2: Score Classification for the Childhood Trauma Questionnaire..................43
Table 3: Reported Maltreatment Severity by Maltreatment Type.........................65
Table 4: Pearson Correlations between Abuse Subscales on the Childhood Trauma Questionnaire........................................................................67
Table 5: Sample Means and Standard Deviations for all Variables..........................68
Table 6: Two Tailed Pearson Correlations among Variables.................................70
Table 7: Regression Model: Analysis of Variance.................................................72
Table 8: Working Alliance Inventory Regressed on Selected Predictor Variables.....73
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CHAPTER 1
INTRODUCTION

The following section will introduce the selected variables for this study and provide working definitions of each construct. The importance and relevance of each construct will be discussed in later sections.

**The Counseling Working Alliance**

The working alliance is frequently cited as an essential aspect of therapy which significantly contributes to positive therapeutic outcomes in both short-term and long-term counseling goals (Leibert & Dunne-Bryant, 2015; Martin, Garske, & Davis, 2000; Bordin, 1979; Horvath & Symonds, 1991: Horvath & Greenberg, 1989; Horvath, 2006; Wampold, 2001; Lambert & Barley, 2001). The working alliance serves as a comprehensive term for the therapeutic relationship between counselor and client which emphasizes not only the bond between counselor and client, but also what occurs during the therapeutic process. Specifically, Bordin (1994) described the working alliance as the formulation of a working relationship between client and practitioner which involves: (a) mutual understanding and agreement regarding therapeutic goals, (b) necessary tasks to progress toward these goals, and (c) the establishment of a collaborative relationship to maintain progress in therapy (Bordin, 1994). Each of these factors in combination conveys the general essence of the working alliance.

A great deal of emphasis has been placed on “common factors” which are elements present in all therapeutic contexts (Wampold, 2001; Leibert & Dunne-Bryant, 2015; Messer & Wampold, 2002); specifically the *relationship* which is developed between the counselor and their client. Studies (Leibert & Dunne-Bryant, 2015; Messer & Wampold, 2002) have noted that this relationship serves as a foundational aspect of therapy to which all other aspects (therapeutic
tasks and goals) are built upon. Research (Messer & Wampold, 2002; Wampold, 2001) has demonstrated that the compatibility of the therapist and client along with the approach used is accountable for a respectable degree of variance in outcomes, even when considering factors attributable to the client or therapeutic approach used. Rogers (1946) emphasized the relationship between counselor and client and noted that warmth, open-mindedness, trust, and unconditional acceptance were indispensable aspects of the therapeutic relationship. Rogers (1950) maintained a basic and relatively straightforward approach to promoting change. In this approach six conditions were to be met in order for change to occur (a) psychological contact between client and therapist, (b) the client brings forth a presenting issue, (c) a relationship between counselor and client, (d) the therapists’ unconditional acceptance of the client, (e) therapists’ empathic understanding of the clients’ world, and (f) the clients’ perception of the aforementioned aspects of therapy. According to many studies (Palmer, Murphy, Piselli, & Ball, 2009; Ackerman & Hilsenroth, 2003; Wampold, 2001; Martin et al., 2000) this relationship between counselor and client is significantly predictive of positive outcomes in therapy.

Teyber and Holmes-McClure (2011) further suggest that personal characteristics of the therapist make a substantial contribution to the working alliance. The working alliance enhances when a client recognizes that the practitioner is a skilled and dependable collaborator who demonstrates concern and aptitude in assisting with presenting issues. The foundations of the working alliance involve (a) an understanding of the client’s problem and recognizing their difficulty, (b) demonstration of empathy, (c) facilitation of a collaborative relationship which is focused on the client’s interest, and (d) accountability on the therapist’s part to assist the client as long as the client needs. Ackerman and Hilsenroth (2003) further expand that therapist flexibility, honesty, respect, credibility, openness, self-confidence, and sincerity are found to
have a positive impact on the working alliance. Therapists’ skill in attending to and repairing ruptures within the working alliance are also important in preserving the therapeutic bond and contributing to positive outcomes in therapy.

Bordin (1979) emphasized that the working alliance not only consisted of the relationship between client and counselor, it also involved the therapeutic process. The therapeutic process encompasses specific goals related to the clients’ presenting concern and therapeutic tasks to achieve these goals. The therapeutic goals which are established and collaborative nature of the therapeutic relationship are closely associated to the composition of the relationship between practitioner and client (Bordin, 1979). Therapeutic goals should be developed collaboratively, centered on the client’s presenting issue (the primary reason for engaging in the therapeutic process), and revisited throughout the therapeutic process. This process ensures that the client understands what is being done in therapy, and how these particular tasks are relevant to their presenting concerns.

Child maltreatment

Child maltreatment involves any type of abuse or neglect of a child (age 18 or younger) by a caregiver or another individual in a protective role (Centers for Disease Control, 2015). Specifically, four common types of child maltreatment exist: (a) physical abuse (use of deliberate force against a child i.e. hitting, shaking, kicking); (b) sexual abuse (engaging in sexual acts with a minor i.e. genital touching, penetration, or subjecting a child to further sexual activities); (c) emotional abuse (behaviors which damage a child’s self-image or emotional security i.e. insulting, degrading, denying affection, intimidating); and (d) neglect (emotional or physical: inability to meet the basic needs of a child i.e. affection, nourishment, clothing, housing). The U.S. Department of Health and Human Services (2015) defines child maltreatment
as “any recent act or failure to act on the part of a parent or caretaker which results in death, serious physical or emotional harm, sexual abuse or exploitation” or “an act or failure to act which presents an imminent risk of serious harm.” Several states also include failure to provide medical treatment into their definitions of child maltreatment.

Child maltreatment signifies a severe public health issue. In 2012, 686,000 children were victims of child maltreatment, unfortunately producing 1,640 fatalities resulting from abuse and neglect (Centers for Disease Control and Prevention, 2014). Exposure to maltreatment and the environmental stress which frequently transpires has detrimental effects on children’s current health status (physical injury, neglect, malnourishment, psychiatric diagnoses) as well as long-term health and functioning (i.e. drug abuse, behavioral disorders, suicide, and chronic disease).

In many cases, children who are exposed to maltreatment or neglect may experience trauma or stressor-related disorders including Posttraumatic Stress Disorder (PTSD). According to the American Psychiatric Association (APA) (2013) trauma-related disorders include instances in which individuals are subjected to a traumatic or stressful event. Individuals demonstrate extensive variation in response to stressful events, recent updates to the Diagnostic and Statistical Manual (DSM-5) demonstrate particular characteristics of trauma and stressor-related disorders. Typically individuals who are exposed to a traumatic event experience: lack of pleasure in otherwise enjoyable activities, depressive symptoms, anger, anxiety, and fear (APA, 2015). In some cases individuals may meet the criteria for PTSD in which they are exposed to: (a) death or experience the possibility of death, severe injury, or sexual violence, (b) recurring, spontaneous, and invasive disturbing memories or dreams of the traumatic event, or experience dissociative reactions in which the individual re-experiences the event, (c) continued evasion of
stimuli related to the event, (d) distressing changes in thoughts and feelings associated with the event, (e) change in arousal or reactivity related to the event.

**Emotion Regulation**

According to Dialectical Behavior Theory (DBT), emotions serve as multifaceted, instinctive, patterned reactions to internal and external events (Neacsiu, Ward-Ciesielski, & Linehan, 2012). These reactions usually govern individual behavior and are heavily influenced by thought processes (whether functional or dysfunctional). Individuals regulate their emotions by regulating internal thought processes, internal and external experiences, actions, and verbal reactions to internal or external events. Individuals who demonstrate emotion-dysregulation frequently experience negative mood, have difficulty controlling physiological arousal, demonstrate impulsiveness, often have dysfunctional or irrational thoughts, have a skewed assessment of certain situations, are heavily focused on emotional experiences, and demonstrate the propensity to dissociate when distressed (Linehan, Bohus, & Lynch, 2007).

Emotion regulation is defined as an attempt to use suitable approaches to control emotional responses (Gratz & Roemer, 2004). Emotion regulation is a multifaceted concept which involves: emotional understanding and acceptance, capacity to participate in purposeful behavior, ability to evade impulsive actions, and access to effectual emotion regulation strategies. Studies (Gross and Munoz 1995; Gratz & Roemer, 2004) have emphasized that emotion dysregulation is often involved in the development and continuance of mental health diagnoses and maladaptive behaviors. Hayes, Luoma, Bond, Masuda, and Lillis (2006) emphasized that experiential avoidance and emotion dysregulation are two distinct constructs. Individuals who make attempts to regulate emotions make constructive effort to reduce the
intensity or duration of a dysfunctional emotion whereas individuals who engage in experiential avoidance attempt to evade the unpleasant experience completely.

**Experiential avoidance**

Experiential avoidance is defined as an occurrence in which individuals demonstrate aversion to negative thoughts, feelings or physiological sensations (Hayes, Wilson, Gifford, Follette, & Strosahl, 1996). Bond et al., (2011) noted that experiential avoidance involves the manner in which an individual relates to certain negative experiences (thoughts, situations, physiological sensations). Individuals who demonstrate experiential avoidance often take steps to avoid or alter the form or incidence of negative events (whether internal or external) and the contexts which encourage them.

The construct of experiential avoidance is heavily influenced by Acceptance and Commitment Therapy (ACT) (Hayes et al., 2004). According to ACT, well-functioning individuals positively relate to thoughts, feelings, recollections, and physiological sensations which were previously avoided due to fear or anxiety. Reframing and accepting these events allow individuals to gain clarity regarding personal values, and engage in behavior modification when necessary. Failure to accept these inner experiences perpetuates a cycle of dysfunctional thinking, feeling, and behaving. According to ACT acceptance of these inner experiences allows individuals to be fully present, attend to situations as they arise, and engage in behaviors which are informed by individual values.

Experiential avoidance has shown to be highly associated with psychological and behavioral disorders including: suicidal behaviors (often an attempt to escape from negative events), substance abusing behaviors (an attempt to numb negative experiences), and anxiety related disorders (anxiety often serves to evade greater arousal and suffering) (Hayes et al.,
The present outcomes of experiential avoidance are seemingly constructive; however the long-term consequences of engaging in such behavioral processes frequently encourages a destructive cycle of ridged negative coping strategies. For instance, substance abuse may numb negative emotions; however, this process only alleviates symptoms for a short period. Substance abuse, although highly effective acutely, fails to absolve the underlying cause of the present emotional state (and in many cases exacerbating anxiety and depression). Many individuals who demonstrate experiential avoidance can recognize the destructive nature of this construct; however fail to fully experience negative situations which may promote effective and constructive coping.

**Adult attachment**

Bowlby (1988) defined attachment as a working model of the relationship between self and other individuals (both biologically and emotionally), which serves as a foundation for the formation of emotional bonds between individuals. Early relationships which individuals form with early caregivers serve as a powerful influence on child development. Emotional bonds (especially between mother and infant) persist through adolescence as they are the primary means for communication prior the infant’s ability to speak. This emotional bond serves as a significant aspect of intimate relationships throughout life, and becomes the foundation for future exploration of experiences with social relationships.

Attachment behavior can be conceptualized as any behavior that results in an individual establishing a relationship with another individual who is considered as better able to manage stressors (Bowlby, 1988). These behaviors are often maintained through adulthood, as distinct dissimilarities in attachment patterns are initiated by the accessibility and receptiveness of early attachment figures (i.e. parents or caregivers). This early social environment (whether nurturing
or harmful) serves as a foundation for how children perceive themselves in relation to others and the world. According to Bowlby (1988) distinct variations in attachment models are contingent upon the accessibility and responsiveness of early caregivers. Individuals who experience available and responsive caregivers frequently perceive the world as a safe place and other individuals as considerate and consistent. This internal working relational model of self and others sets the groundwork for independent exploration of the environment and becomes the foundation used to navigate experiences in social relationships.

Ainsworth (1972) noted that two distinct attachment patterns exist as a result of these early experiences. Individuals who demonstrate a secure attachment style have experienced caregivers who are available and responsive to their needs, thus they perceive that they can rely and depend on others to be responsive to their needs in times of distress. Individuals who demonstrate an insecure attachment style often experienced caregivers who were not dependable, and may have experienced indifference, lack of interest, or unsuccessful attempts to meet their needs from primary caregivers. Mikulincer and Shaver (2007) emphasized that individuals who develop an insecure attachment style may respond to social relationships in two ways, (a) they may develop an avoidant attachment style, demonstrating extreme independence as they rely only on self to meet their attachment needs, or (b) they may develop an anxious attachment style in which they are overly dependent on others attempting to convince others to provide more attention and support.

Adult attachment has received a great deal of attention in counseling literature (Davila & Levy, 2006; Diener & Monroe, 2011; Zorzella, Muller, & Classen, 2014) as this internal working model of relating often plays out within the counseling relationship. According to Diener and Monroe (2011) attachment patterns often explain interpersonal patterns within the counseling
relationship. Individuals often bring learned unspoken assumptions about the relationships which they have with self and other individuals which inevitably influence the quality of the relationship between counselor and client. These assumptions may inherently help or hinder the development of a therapeutic bond, ultimately influencing therapeutic progress.

**Trust**

Erikson (1963) created a psycho-developmental framework to conceptualize psychosocial development throughout the lifespan. This theory affords a foundation for understanding an individual’s view of self, others, and the world. It also provides a foundation for understanding the creation and maintenance of potential maladaptive thoughts or feelings. According to his theory of psychosocial development, each individual experiences eight developmental stages over the course of their life. Central to each stage is a characteristic crisis or conflict that each individual will encounter which is the result of interrelated biological, psychological, and cultural influences. Each stage involves a set of personality attributes which result from either positive or negative resolution of that particular developmental stage. Further, the resolution of each developmental stage determines characteristics of the individual personality.

The first stage of Erikson’s (1963) model (trust versus mistrust) is encountered in early infancy. It is important to note that Erikson did not view positive or negative resolution of any psycho-developmental stage to be permanent; he viewed resolution as a lifelong process which occurs on a spectrum. Erikson (1963) noted that individuals who have positively resolved the trust versus mistrust stage demonstrate a fundamental level of trust in themselves and in other individuals. Frequently these individuals demonstrate a laid-back, positive, and charitable attitude, and have a basic belief that their needs (physical and emotional) will be met. These individuals also hold to the belief that people are essentially good natured, and believe that they
have the capacity to successfully cope with life in general. They are also very accepting of new experiences, individuals, and perspectives. Individuals who have positively resolved this stage also engender a mature sense of time and consider that their personal goals are predictable enough to work and wait for.

Consequently, individuals who have negatively resolved this stage view the world as an unreliable, distressing, demanding, and intimidating place. Overall, they view life as unstable. They often believe that worthwhile things never last, and distrust that their needs will be met. They often perceive the world as a dangerous, uncaring place. Individuals who negatively resolve this stage are often cautious of other individual’s motives, and are frequently guarded as they believe they may be taken advantage of. They also have negligible assurance in their capability to productively manage their experiences in life.

Trust is an essential factor of the therapeutic relationship (Wampold, 2001; Bordin, 1979, Wampold et al. 2010); however individuals who have experienced childhood maltreatment demonstrate lesser social competence, dissatisfaction within intimate relationships, increased rates of divorce, demonstrate lesser interpersonal trust and poorer communication skills than non-abused peers (DiLillo, 2001; Courtois & Ford, 2013; Brooks & McHenry, 2009). These factors denote the importance of paying particular attention to developing and maintaining trust within the working alliance for individuals with traumatic histories.

**Rationale for the Current Study**

The working alliance is consistently cited as the most important element in successful therapeutic outcomes (Wampold, 2001; Martin et al., 2000; Messer & Wampold, 2002; Wampold & Brown, 2005). The working alliance has been shown to be an important indicator of successful treatment outcomes for individuals with substance dependence (Oene, Schippers,
Jong, & Schrijvers, 2001) and trauma related symptomology (Wampold et al., 2010; Burke & Carruth, 2012). Early working alliance is also a consistent predictor of treatment engagement and treatment adherence for individuals with substance use disorders (Meier, Barrowclough, & Donmall 2004; Meier, Donmall, McElduff, Barrowclough, & Heller, 2006).

Many clients who meet the criteria for co-occurring trauma and substance use diagnoses demonstrate developmental deficits which can have a profound impact on the therapeutic relationship, treatment adherence and engagement with the peer support community (Brooks & McHenry, 2009). Individuals with trauma histories experience further complexity in developing a strong therapeutic bond, as they frequently demonstrate difficulty in developing trusting, supportive relationships. These factors highlight the importance of paying particular attention to the working alliance for individuals with co-occurring trauma and substance use diagnoses; but also understanding the issues (both individual, and those which surface during therapy) which can affect treatment engagement, treatment retention, and positive therapeutic outcomes. For this reason, this study aims to understand factors which may interfere with the working alliance such as: child maltreatment, adult attachment, experiential avoidance, emotion regulation, and trust. No study to date has examined the impact of the aforementioned variables on the working alliance for individuals who are seeking treatment for substance abuse who have a history of child maltreatment.

Multiple studies (Norman, Tate, Wilkins, Cummins, & Brown., 2010; Read, Brown, & Kahler, 2004; Ouimette, Moos, & Finney, 2003; Ouimette, Goodwin, & Brown, 2006; Ford, Hawke, Alessi, Ledgerwood, & Petry, 2007) have consistently demonstrated that clients who meet the diagnostic criteria for co-occurring trauma and substance use diagnoses regularly have poorer treatment outcomes when compared to individuals with a single disorder. High rates of
treatment dropout among this population suggest that many of the aforementioned issues have a profound impact on treatment adherence, and overall recovery rates (Torchalla, Nosen, Rostam, & Allen, 2012). Multiple studies (Najavits, Weiss, Shaw, & Muenz, 1998; Brady, Dansky, Back, Foa, & Carroll, 2001; Najavits, Gallop, & Weiss, 2006; McGovern, Xie, Segal, Siembab, & Drake, 2006; Hien et al., 2009) have suggested that a substantial quantity of individuals who could benefit from treatment within this population are not having their needs met because of treatment drop-out.

Programs designed to address trauma, substance use and mental health diagnoses have demonstrated efficacy overall (Hien et al., 2009; Torchalla et al., 2012); however, treatment compliance is a major concern in many of the clinical trials (Torchalla et al., 2012; Hien et al., 2009). In some samples (Najavits et al., 2006), only 27% of participants completed treatment, in others (Hien et al., 2009; McGovern et al., 2009) participants attended approximately half of the sessions on average. When testing the efficacy of the Seeking Safety model (currently the most investigated integrative treatment model), researchers (Najavits et al., 2006) found that participants less than half of their sessions, only 1.33 of which were devoted to trauma related material. Brady et al. (2001) considered the efficacy of exposure therapy for individuals with co-occurring trauma and substance use diagnoses, also reported that 75% of participants dropped out before exposure therapy was initiated.

The working alliance has shown to be the most significant predictor of positive therapeutic outcomes, as well as treatment adherence (Meier et al., 2004; Meier et al., 2006). Rosen, Ouimette, Sheikh, Gregg, and Moos (2002) emphasized that individuals with co-occurring trauma and substance use diagnoses are at higher risk for negative treatment outcomes and demonstrate difficulty in establishing a positive working alliance. If more were understood
regarding the precise factors that interfere with the working alliance for this population, educational programs, research facilities, and practitioners could focus efforts on these factors to promote positive therapeutic outcomes for this population.

**Purpose of the Current Study**

The purpose of the current study is to investigate factors which may interfere with the working alliance for individuals who meet the criteria for child maltreatment and are seeking treatment from a substance abuse facility. Noll (2008) emphasized the importance of defining specific variables which mediate the relation between childhood maltreatment and negative health outcomes in order to design prevention and intervention strategies to support maltreated children, and adults who experienced maltreatment as children. Meier et al. (2004) also noted that very little is known regarding specific ingredients that promote or interfere with the working alliance for substance abusing clients.

A comprehensive literature review has identified several factors (adult attachment, emotion regulation, experiential avoidance, child maltreatment, and trust) to be factors which may influence the development of a positive working alliance (which is a key aspect of positive therapeutic outcomes). This study will provide information regarding rates of child-maltreatment within substance use treatment facilities, and provide a description of factors reported by individuals seeking substance use treatment who also have a maltreatment history. Results of this study will also provide information regarding the rates and type of disability reported by participants. This study will examine the relations between each factor and the counseling working alliance, and consider factors which predict the development of a positive working alliance. The findings of this investigation will provide counselor education programs, researchers, and practitioners with information to design training strategies, effective prevention
efforts and interventions for this population, and provide a foundation for future research in the area of child maltreatment, mental health counseling, and substance abuse counseling.
CHAPTER 2

REVIEW OF THE LITERATURE

The following section offers an in-depth literature review focusing on factors relevant to this study.

Working Alliance

The working alliance is consistently cited as the most important ingredient in successful therapeutic outcomes (Leibert & Dunne-Bryant, 2015; Wampold, 2001; Horvath & Symonds, 1991; Martin et al. 2000). Horvath and Symonds (1991) conducted a meta-analysis regarding the working alliance and treatment outcomes, and noted a significant, moderate effect size (.26) for positive therapeutic outcomes in relation to client ratings of the therapeutic alliance. Horvath and Symonds (1991) also emphasized that the relation between the working alliance and positive outcome in therapy was not related to the type of therapy used, length of treatment, or number of participants involved in each study.

The working alliance is accountable for 5 to 8 percent of positive client outcomes in psychotherapy (Martin et al., 2000; Messer & Wampold, 2002; Wampold, 2001; Wampold & Brown, 2005). This is quite substantial as 55 percent of the variables which lead to successful outcomes are outside of the practitioner’s control (Lambert & Barley, 2001; Wampold, 2001). For instance client characteristics account for 40 percent of positive outcomes in psychotherapy, these factors (i.e. environmental circumstances, resilience, and social support) assist in recovery regardless of engagement in therapy. Also, expectancy effects, account for nearly 15 percent of the variance in client outcomes, which are often heavily influenced by the therapist (Wampold, 2001). Effect size estimates regarding the effect of working alliance on positive therapeutic outcomes are Cohen’s $d = .54$, constituting a medium effect size (Messer & Wampold, 2002).
The working alliance along with variables which are attributable to the person of the therapist accounts for a majority of positive outcome variance in psychotherapy (Wampold, 2001; Horvath & Bedi, 2002).

Martin et al. (2000) completed an extensive meta-analysis regarding the relations between the working alliance and counseling outcomes. Authors (Martin et al. 2000) included 79 studies in their analysis, and found that overall a positive therapeutic alliance was significantly and moderately correlated with positive therapeutic outcome with an overall medium effect size $d = .45$ ($n = 261; SD = .20; p < .05$). According to Messer and Wampold (2002) this medium-sized effect accounts for 5% of the variance in outcomes which is substantially more than any specific therapeutic ingredient (i.e. techniques or specific approach used). This relationship remains stable irrespective of numerous variables which could influence the relationship between initiation of counseling and therapeutic outcome (Martin et al., 2000). Common factors (warmth, empathy, encouragement of risk taking) account for about 30% of successful outcomes in therapy (Wampold, 2001); it appears that techniques used account for 15% of outcomes; however strict adherence to protocol outlined in treatment manuals appears to result in depreciation of the therapeutic relationship (Henry, Strupp, Butler, Schacht, & Binder, 1993). Further (Ahn & Wampold, 2001) found no evidence for any specific factor in treatment and its relation to positive therapeutic outcomes.

Making the working alliance the highest priority in early stages of therapy has received a great deal of empirical support (Horvath & Bedi, 2002; Wampold, 2001; Meier et al., 2004; Meier et al., 2006; Knuuttila, Kuusisto, Saarnio, & Nummi, 2012). The initial stages of therapy involve considering the stressors, disturbances, and frustrations which the client experiences (Bordin, 1979). A great deal of trust and bonding is necessary within the therapeutic relationship
as the therapeutic process involves much attention to the often safeguarded internal processes of the client’s experience. Studies (Leibert & Dunne-Bryant, 2015; Messer & Wampold, 2002) have emphasized that the bond between client and counselor serves as a foundational aspect of therapy to which all other aspects (tasks, goals) are built upon.

The client’s experience of a collaborative relationship with the practitioner, the practice of therapy, and the aims of the therapeutic process serve a critical role in facilitating treatment adherence and positive therapeutic outcomes (Horvath & Bedi, 2002). The practitioner’s ability to repair fractures in the therapeutic bond, respond flexibly with the client’s needs in mind, and continuously assess the quality of the therapeutic alliance all play a substantial role in positive therapeutic outcomes. Also, when clients perceive that they are understood, reinforced and provided with a sense of optimism, the alliance is often strengthened, especially in early stages of therapy. Therapists should also understand that the client’s perception of these factors can vary, and may deviate pointedly from what the therapist intends. Therapist’s responsiveness and ability to negotiate interventions to suit clients has a positive relation to alliance and outcome.

The working alliance: Substance abuse counseling. The working alliance is an indispensable aspect related to successful treatment outcomes for individuals with substance dependence (Oene et al., 2001; Meier et al., 2004). Early working alliance is a consistent predictor of treatment engagement and treatment adherence for individuals with substance use disorders (Meier et al., 2004; Meier et al., 2006; Knuuttila et al., 2012; Oene et al., 2001). Studies (Oene et al. 2001; Horvath & Symonds, 1991) have emphasized the clients’ perception of a quality therapeutic bond was one of the most important factors in treatment outcome and treatment retention, accounting for 8% of the variance in treatment outcome. Weaker working alliance serves as a strong predictor of client dropout from substance abuse treatment (Meir et
Meir et al. (2006) found that for every one point increase in counselor related working alliance the likelihood of a client dropping out of treatment prematurely decreased by six percent.

Palmer, Murphy, Piselli, and Ball (2009) conducted a qualitative analysis surveying both treatment staff and clients in an inpatient substance abuse facility regarding reasons for client dropout. Results of this study indicated that clients repeatedly emphasized the importance of developing a strong working alliance with their counselors. The absence of a connection with their counselor played a big part in the desire to discontinue treatment. Clients reported that it was important that their counselors were caring and were invested in their recovery. Staff also emphasized the importance of developing strong connections with their clients in recovery. Palmer et al. (2009) emphasized the importance of developing trust with their clients in order to engage them in treatment and to increase motivation to maintain behavior change.

Ilgen, McKellar, Moos, & Finney (2006) noted that higher motivation and a positive perception of the working alliance by the therapist predicted remission of substance using behaviors at 6-month and one-year follow up. Ilgen et al. (2006) also found that a positive therapeutic alliance was especially important for clients who lacked motivation at baseline, and significantly predicted positive outcomes at 6-month and one-year follow up. Further Urbanoski, Kelly, Hoeppner, and Slaymaker (2012) noted that substance abusing clients who developed a stronger working alliance with their counselor experienced greater decreases in distress during treatment. A positive working alliance is especially important for individuals with co-occurring substance use and psychiatric diagnoses (Meier et al., 2004).

The working alliance: Trauma counseling. The working alliance is also an essential aspect in the successful treatment of trauma- related symptomology (Wampold et al., 2010).
Wampold et al. (2010) noted that the creation of a safe, considerate, and trusting therapeutic relationship is a crucial factor in the successful treatment of PTSD. Consistent with Bordin’s (1979) definition of the working alliance, Wampold et al. (2010) also suggested that therapeutic goals and tasks within treatment for PTSD, and collaborative agreement regarding the goals and tasks of therapy were essential factors in the successful treatment of PTSD. Ventura (2012) maintained that counselors who provide treatment to traumatized clients must emphasize security, trust, attachment, communication and understanding. Trauma survivors in particularly are especially attuned to the slightest signs of inattentiveness, desertion, or betrayal from their counselors. Counselors who work with this population must exercise a prodigious degree of self-awareness to ensure that ruptures in the therapeutic alliance are quickly recognized and addressed.

Pearlman and Courtois (2005) stress that forming a therapeutic bond with trauma survivors is often quite complicated. Individuals who have experienced relational trauma often demonstrate great difficulty in developing and maintaining interpersonal relationships. These clients often avoid people who induce recollections of the event, have difficulty with emotion regulation, and feelings of detachment. Burke and Carruth (2012) noted that individuals who have experienced trauma and subsequently developed substance dependence often have experienced a great degree of interpersonal isolation. It is important to remember that many individuals who seek treatment have been isolated from their family or other close relationships due to addictive behaviors. These issues make it difficult to relate to others, and in many cases make it difficult for others to relate to them. Also, many clients who have experienced early trauma have no standard for a “normal” relationship; these factors make it very difficult to maintain an interpersonal relationship even when someone (such as the therapist) is dependable,
secure, and truthful (Pearlman & Courtois, 2005). In many cases clients who have experienced early trauma may view the therapeutic relationship as threatening as they often have no experience navigating this type of relationship.

Paivio and Patterson (1999) conducted an analysis of 33 individuals who were seeking counseling services as adults for child-maltreatment histories. Results of this analysis indicated that childhood maltreatment and difficulties in interpersonal functioning were predictive of early counseling working alliance difficulties. These difficulties dissipated however over the course of treatment. Authors (Paivio & Patterson, 1999) did mention that sample size was a major limitation to this study, and suggested further consideration in future research studies regarding the development of the counseling working alliance for individuals with a history of child maltreatment. Authors were not able to discern specific client characteristics which may have contributed to a positive working alliance, and suggest that future research continue to be conducted in the area of child maltreatment and the development of the counseling working alliance.

**Child maltreatment**

As mentioned previously, child-maltreatment is especially prevalent among individuals who meet the diagnostic criteria for posttraumatic stress disorder (PTSD) (Fergusson, McLeod, & Horwood, 2013), trauma related symptomology, and later substance abuse and substance dependence (Fergusson, Boden, & Horwood, 2008). According to the U.S. Department of Health and Human Services (USDHHS; 2015), in 2011, 1.1 million reported allegations of child maltreatment were found to be substantiated resulting in 686,000 victims. Victims often experience multiple types of maltreatment (UHDHHS, 2012; Courtois & Ford, 2013) including: neglect (81%), physical abuse (18%), sexual abuse (9%), psychological maltreatment (9%), and
11% reported parental substance abuse or threatened physical abuse (UHDHHS, 2012). Further, child maltreatment in the United States is estimated to result in an economic burden of $124 billion annually (Feng, Brown, Florence, & Mercy, 2012).

In a large prospective population-based study, researchers (Mills et al. 2013) found that each type of child maltreatment rarely occurs in isolation. Most children in this study were exposed to multiple types (neglect, sexual abuse, emotional abuse, physical abuse). Authors (Mills et al., 2013) emphasized that all maltreatment types must be given adequate attention in treatment provision; as those who experience emotional abuse and neglect equally demonstrate long term psychological dysfunction, and high rates of mental health problems; especially depressive disorders (Chapman et al., 2004). While these statistics only represent 0.9% of the total population ages 0-17; regrettably 1640 fatalities were reported as a result of child maltreatment in 2011 (UHDHS, 2012). These factors stress the importance of understanding the unique issues that face this population in order to develop appropriate treatment strategies.

*Psycho-social issues related to child-maltreatment*

Multiple studies (Courtois & Ford, 2013; Vranceanu, Hobfoll, & Johnson, 2007; Mills et al., 2013; Hildyard & Wolfe, 2002; Fergusson et al., 2013) have emphasized that the experience of abuse in childhood not only engenders distress and disturbance at the time, it regularly creates long term adverse effects on social, mental, and physical health and functioning which later surface in adolescence and adulthood. Children who have experienced child maltreatment experience substantial deficit within social, emotional, cognitive, and behavioral development (Hildyard & Wolfe, 2002). These children also demonstrate a higher propensity for mental health diagnoses (Mills et al., 2013, Chapman et al., 2004; Fergusson et al., 2008; Fergusson et al., 2013; Zickler, 2002). Further, Goodman, Rosenberg, Mueser and Drake (1997) noted that
between 51 and 97 percent of individuals with a history of physical or sexual abuse, meet the diagnostic criteria for serious psychiatric disorder.

Not only are maltreated children more susceptible to psychiatric disorders both in childhood and adulthood, Fergusson et al. (2008) found that childhood sexual abuse independently attributed to 13 percent of later psychiatric issues. Further, Noll, Haralson, Butler, & Shenk (2011) noted that females who have experienced childhood sexual abuse are at further risk for re-victimization. Studies (Fergusson et al., 2013; Mullen, Martin, Anderson, Romans, & Herbison, 1996) have noted that victims of childhood maltreatment often develop decreased self-esteem, diminished life satisfaction, early onset of sexual activity, lower socioeconomic status, and are frequently drop out of high-school. Poorer life-long outcomes are only exacerbated for adults who experience more than one type of abuse as a child.

*Child-maltreatment and substance use disorders*

Amidst the many other issues facing this population, victims of child maltreatment have exceptional risk of developing a substance use disorder (U.S. Department of Health and Human Services Substance Abuse and Mental Health Services Administration, 2002). Dube et al., (2002) conducted The Adverse Childhood Experiences Study which is one of the largest ($N = 8613$) retrospective studies on household dysfunction examining the relationship between 10 types of child maltreatment and illicit drug use. Authors (Dube et al., 2002) found that adverse experiences were very common affecting 66 percent of the sample. For each adverse childhood experienced the likelihood of early initiation of drug use increased by two to four times. Individuals who experienced greater than five adverse experiences during childhood were seven to ten times more likely to have issues related to illegal drug use, substance dependence, and intravenous drug use.
Other studies (Draucker & Mazurcyk, 2013; Fergusson et al., 2008; Fergusson et al., 2013) have cited the increased occurrence of substance related diagnoses, eating disorders (Mullen et al., 1996), and polysubstance abuse (Triffleman, Marmar, Delucchi, & Ronfeldt, 1995) among this population. According to Zickler (2002) women who meet the diagnostic criteria for a drug or alcohol dependence are three times more likely to have experienced sexual abuse as a child; these individuals are also 2.6 times more likely to have a co-occurring disorder. Child maltreatment has also been shown to be a significant predictor of the development of post-traumatic stress disorder (Fergusson et al., 2013); which further escalates the risk of future substance dependence (Ouimette et al., 2006). These clients are also at greater risk for suicidal ideation (Fergusson et al., 2008; Fergusson et al., 2013); suicide attempts (Joiner et al., 2007; Mullen et al., 1996) and self-harming behaviors (Fergusson et al., 2008; Fergusson et al., 2013; Noll, Horowitz, Bonanno, Trickett, & Putnam, 2003).

Understanding the developmental course of both trauma and substance use diagnoses involves a high degree of complexity which spans multiple disciplines (Burke & Carruth, 2012). According to Noll (2008) maltreated children frequently experience maladaptive developmental processes which involve psychological, emotional, social, and physiological processes. The experience of maltreatment often resonates throughout life, even into adulthood as many individuals who have experienced child maltreatment demonstrate insecure attachment patterns which have a substantial impact on the quality of their relationships (Waldinger, Schulz, Barsky, & Ahern, 2006). The development of a substance use disorder may be an adaptive strategy to cope with the emotional and psychological response to a traumatic event or a history of interpersonal trauma (Burke & Carruth, 2012). Conversely, substance use disorders make
individuals more susceptible to situations that might involve trauma (including sexual assault); potentially leading to trauma complications such as PTSD.

Many of the issues experienced by individuals with co-occurring trauma and substance use diagnoses have a high degree of mutual influence on one another as trauma and substance related symptomology co-vary concurrently, and over time (Ouimette, Read, Wade, & Tirone, 2010). Abstinence from substances does not resolve trauma symptomology; in reality, some trauma systems may be exacerbated by reducing substance use (Brady, et al., 2001). Further, those who experience trauma often develop emotional, interpersonal, behavioral, physiological, and perceptual dysregulation problems, which are frequently exacerbated by substance use (Karl et al., 2006; Harrington, 2013).

Individuals with co-occurring trauma and substance use diagnoses experience intense psychological and emotional pain which creates greater impairment in their social, occupational, and family responsibilities when compared to individuals with SUD (substance use disorder) only diagnoses (Reynolds et al., 2005). Likewise clients with co-occurring trauma and substance use diagnoses also report more psychiatric diagnoses, more intense psychiatric symptoms, higher levels of psychological distress (Ouimette et al. 2006), and higher levels of trauma-related distress (Reynolds et al., 2005; Clark, Masson, Delucchi, Hall, & Sees, 2001 ). Additionally clients with co-occurring trauma and substance use diagnoses report greater distress associated with the target trauma, frequent memories associated with the event, and more distress associated with traumatic memories once drug use is arrested. These clients are 36% more likely to have a concurrent diagnosis of depression, 31% more likely to be diagnosed with a panic disorder, and 14% more likely to meet the diagnostic criteria for mania (Ouimette, et al., 2006). These individuals in particular are substantially more likely to have had a suicide attempt in their
lifetime. The addition of psychiatric disorders to substance use and trauma diagnoses further compounds the complexity of treating substance use disorders in trauma victims; and further exacerbates the intense emotional and psychological distress experienced by these victims of trauma.

Individuals with trauma histories and alcohol use disorders in particular report more physiological arousal and re-experiencing of symptoms than individuals without alcohol use disorders (Read et al., 2004). Those who experience trauma often develop emotional, interpersonal, behavioral, physiological, and perceptual dysregulation problems, often exacerbated by substance use (Karl et al., 2006; Harrington, 2013). Individuals with co-occurring trauma and substance use diagnoses also report making more efforts to get substances, more often using until intoxicated and stronger urges to use than individuals that do not have a PTSD diagnosis (Norman et al., 2010; Ouimette, Coolhart, Funderburk, Wade, & Brown, 2007). Relapse frequently occurs in response to coping with depression of an interpersonal source than individuals without PTSD (Norman, Tate, Anderson, & Brown, 2007); which suggests that problematic use is purported to manipulate negative emotional states (Khantzian, 1999). Researchers (Clark et al., 2001) have also noted that trauma and psychological distress for individuals with substance use diagnoses moderate addiction severity. Even when trauma is preceded by a substance use disorder, researchers (Reynolds et al., 2005) have observed an increase in substance abusing behaviors post-trauma.

*Child-maltreatment and disability*

Studies (Sullivan & Knutson, 2000; Kendall-Tackett, Lyon, Taliaferro, & Little, 2005) have demonstrated that children with disabilities are much more likely to experience maltreatment when equated to children who do not have disability. Conversely, Sullivan and
Knutson (2000) established that children with disabilities were 3.4 times more likely to experience physical, emotional, or sexual abuse. According to Brown and Schormans (2014) maltreatment can contribute to or intensify the stress related to having a disability for children. Authors (Brown & Schomans, 2014; Kendall-Tackett et al. 2005) have emphasized the importance of researching this vulnerable population in order to better understand the scope of the issue, how maltreatment impacts children with disability, and how health professionals can be of best assistance.

**Emotion Regulation**

For survivors of childhood maltreatment, the detrimental long-term psychological, emotional and developmental toll experienced by victims is difficult to ignore. It is clear that physiological, biological, and cognitive mal-development is a key piece in the maintenance of both substance abuse, psychological, and trauma related symptomology. Difficulty in emotion regulation is one of the most persistent complications associated with childhood maltreatment (Cloitre, Stovall-McClough, Miranda, & Chemtob, 2004; Ehring & Quack, 2010; Noll, 2008; Cloitre, Miranda, Stovall-McClough, & Han, 2005); it typically involves an individual’s ability to identify, acknowledge, and understand emotions while engaging in effective strategies to cope with distress effectively.

When trauma occurs early in development, individuals often demonstrate complications in regulating emotions presently and later in life (Cloitre et al., 2005), which encourages the use of substances to manage emotional pain. In fact, research (Clark et al., 2001) has shown that addiction severity is a function of the severity of trauma and psychological distress. Traumatized individuals who have higher levels of distress often demonstrate more severe substance dependence (Norman et al. 2010), and are more likely to use substances to cope with emotions
(Staiger, Melville, Hides, Kambouropoulos, & Lubman, 2009), suggesting a lack of otherwise more constructive means of doing so. As individuals seek relief from heightened levels of distress through the use of substances, they fail to learn functional coping mechanisms thus potentiating the addictive cycle. Individuals who have experienced maltreatment as children are very likely to develop substance dependence (Fergusson et al., 2008). Early onset of substance abuse may impede the development of cognitive and emotional maturation, and encourage more stress-reactive substance use later in development (Spear, 2014), further potentiating difficulties in emotion regulation.

Research (Tull, Barrett, McMillan, & Roemer, 2007; Weiss, Tull, Anestis, & Gratz, 2013; Ehring and Quack, 2010) has demonstrated that severity of trauma symptomology is closely related to an individual’s reluctance to accept emotional experiences, lack of emotional intelligibility, absence of strategies to regulate emotions, inability to participate in goal directed behavior, demonstrating impulsiveness when distressed; these factors are exacerbated by substance abuse (Karl et al., 2006; Harrington, 2013). Individuals with co-occurring trauma and substance use diagnoses have difficulty tolerating extreme emotional states without immediate action, which may explain premature treatment disengagement (Weiss et al., 2013). Research (Tull et al. 2007) has demonstrated that individuals who meet the criteria for PTSD also demonstrate more pronounced levels of emotion dysregulation when compared to individual without a PTSD diagnoses, suggesting that inability to regulate emotions has a substantial impact on the development and maintenance of PTSD symptomology.

Emotion dysregulation as a result of child maltreatment frequently extends into adulthood, predominantly within interpersonal relationships. Research (Goldsmith, Chesney, Heath & Barlow, 2013) has shown that interpersonal trauma (especially trauma committed by
someone very close to the victim) significantly predicts difficulties in emotion regulation. These factors may pose great difficulty when considering the development of a positive working alliance as the process of therapy is interpersonal in nature, and individuals who have experienced maltreatment as children often experienced this trauma within the context of close relationships. Difficulties in emotion regulation may hinder the development of a therapeutic bond and become a potential barrier to processing traumatic material.

Owens, Haddock, and Berry (2013) emphasize the role of the therapist in teaching emotion regulation skills to their clients. The ability to regulate emotions is learned early in development from caregivers as parents are sensitive to changes in emotional states through verbal and non-verbal cues. When infants are distressed, attentive caregivers help the child to manage emotions before they become overwhelming. A similar process occurs in therapy as trained practitioners focus on the subtle non-verbal cues from the client to inform therapeutic interventions, a process in which teaches the client to become able to recognize and cope with their emotions more efficiently. Owens et al. (2013) found that capacity to regulate emotions predicted positive working alliance for individuals \((N=81)\) seeking treatment for severe psychological diagnoses. Cloitre et al. (2004) also found that a positive working alliance predicted symptom reduction in women who were seeking treatment for childhood abuse and were diagnosed with PTSD; this relation was mediated by client capacity to regulate emotions during emotionally intense interventions. Individuals who demonstrate difficulty in regulating emotions experience more extreme trauma symptomology and poorer interpersonal skills, potentially impacting the working alliance.

Studies (Tull et al., 2007; Cloitre et al., 2005) have emphasized that paying particular attention to emotion regulation processes during treatment would have a significant positive
impact on treatment outcome. Individuals who have experienced early trauma and have initiated substance abuse early in development often lack functional coping skills for dealing with distress. A major aspect of therapy for individuals with trauma involves processing traumatic material which can serve as a trigger for many clients. Individuals with traumatic histories are frequently driven to avoid these activities which heighten arousal (Shenk, Putnam, Rausch, Peugh, & Noll, 2014; Weiss et al., 2013; Daughters et al., 2005); which may convince these clients to prematurely disengage from therapy.

**Experiential Avoidance**

Studies (Shenk, Putnam, & Noll, 2012; Gratz, Bornovalova, Delany-Brumsey, Nick, & Lejuez, 2007) have emphasized that maltreated children demonstrate increased levels of experiential avoidance; indicating that this population has an exceptional tendency to avoid arousal inducing thoughts, memories, experiences, and physiological processes. Experiential avoidance may have a profound effect on the working alliance for individuals who have experienced early trauma and are seeking treatment for substance dependence. The therapeutic process often involves revisiting traumatic material which can cause a great deal of discomfort for individuals with trauma histories (Courtois & Ford, 2013), and those with a substance abuse disorder in addition to the trauma frequently demonstrate fewer skills to cope with distressing emotions (Cloitre et al., 2005).

These factors suggest that experiential avoidance (in the form of substance abuse) may be a primary method of coping with trauma-related distress (Khantzian, 1999; Tomlinson, Tate, Anderson, McCarthy, & Brown, 2006). When a primary coping mechanism is abandoned and therapy is pursued, individuals who have coped with distress through the use of substances may have difficulty engaging in therapy as learning new skills to reduce distress is often painful. No
study was found to date to examine the relations between the counseling working alliance and experiential avoidance: however, the high rates of treatment dropout among this population (Torchalla et al., 2012), and the prevalence of experiential avoidance amidst maltreated children (Shenk et al., 2012) suggest that this is an important relationship to consider.

Studies (Shenk et al., 2012; Shenk et al., 2014) have found that experiential avoidance is a substantial contributor to posttraumatic stress symptoms for maltreated children. Individuals who demonstrate higher levels of experiential avoidance exhibit more severe PTSD symptomology. Palm and Follette (2011) found that experiential avoidance plays a significant role in the development of psychological distress, and suggested that an individuals’ appraisal of distressing events contributes to greater avoidance. Those individuals who perceive experiences or events more negatively often experience more distress, which influences the use of experiential avoidance in the absence of more constructive coping mechanisms. Further Maack, Tull, and Gratz (2012) emphasized that those who develop PTSD may be more inclined to evaluate triggering stimuli more negatively which in turn encourages them to avoid any internal or external stimuli which are associated with the event. In particular, research (Gratz et al. 2007) has shown that individuals who experience early maltreatment and meet the criteria for substance dependence often negatively evaluate emotional responses; increasing the likelihood of attempting to escape distressful emotions or situations. Other research studies (Buckner, Zvolensky, Farris, & Hogan, 2014) have suggested that experiential avoidance plays an important role in the maintenance of substance abusing behaviors in response to psychological distress.

Penninx, Hemert, Rooij, and Spinhoven (2014) conducted a longitudinal study examining the relationship between experiential avoidance and emotional disorders. Results of the analysis
indicated that the presence of experiential avoidance remained consistent for several years in a cohort of \(N = 2316\) adults; suggesting that experiential avoidance is a relatively stable construct. Results also demonstrated that experiential avoidance contributed to the development of psychiatric diagnoses, and that higher levels predicted the presence of more severe emotional issues. Results suggest that experiential avoidance is often an ineffectual approach to dealing with distress, which promotes further complication with emotion, and in many cases emotional disorders.

Authors (Shenk et al. 2012) suggest that experiential avoidance not only plays a role in the development of PTSD symptoms, it inhibits maltreated children from experiencing and coping with the trauma in a constructive way. Individuals with co-occurring trauma and substance use diagnoses also contend with high levels of anxiety sensitivity, and frequently have the inclination to evade traumatic memories as well as any arousal provoking incidents (Saladin, Brady, Dansky, & Kilpatrick, 1995; Weiss et al., 2013). According to Hayes et al (1996) painful emotions are frequently experientially significant as they serve as an indication that cognitive or behavioral change is necessary. At times behavioral change may create psychological and emotional discomfort, potentially encouraging further experiential avoidance (possibly disengagement from therapy, or avoidance of painful stimuli related to the therapeutic process). Excessive experiential avoidance is often related to higher levels of psychopathology and poorer quality of life (Penninx et al., 2014).

It is important to note that experiential avoidance and emotion dysregulation are often significantly correlated (Ehring & Quack, 2010); however they are separate constructs. Experiential avoidance is often the product of emotional dysregulation as it serves as a coping mechanism for individuals in distress (Hayes et al. 1996). When emotions indicate that change is
necessary (i.e. anxiety prior to an examination), the use of experiential avoidance can be
damaging as it inhibits necessary change (i.e. studying or preparing for an examination) by
allowing the individuals to avoid a distressful circumstance altogether thus encouraging further
distress (failing to prepare for an exam may result in a poor result). Experiential avoidance
typically involves emotion dysregulation, however not all individuals who have issues regulating
emotions demonstrate experiential avoidance.

Attachment

According to Bordin (1979) the development of a therapeutic bond through attachment is
a crucial aspect of the therapeutic relationship. The ability to form a strong therapeutic alliance is
a reliable predictor of positive therapeutic results (Martin et al., 2000; Wampold et al., 2010;
Wampold, 2001); however, the experience of interpersonal trauma brings forth many challenges
in developing a positive therapeutic bond (Perlman & Courtois, 2005). It appears that individuals
who have experienced child maltreatment frequently demonstrate a negative view of others and a
strong sense of mistrust which has a profound impact on relationship development (Unger & De
Luca, 2014; Pearlman & Courtois, 2005). Understanding an individual’s attachment style is an
essential aspect of therapy as it provides a developmental context in which therapists may
conceptualize interpersonal difficulties and psychological concerns.

Bowlby (1988) defined attachment as a working model of relationship between self and
other individuals (both biologically and emotionally) and serves as a foundation for the
formation of emotional bonds between individuals. Individuals frequently interpret the behavior
of others in ways that are congruent with past life experiences, and respond in ways that are
consistent with these anticipations. These early social and emotional experiences provide a
blueprint for navigating future relationships; however the occurrence of childhood trauma often
negates a secure attachment base as children may question the security of their environment and the credibility of others (Muller, Thornback, & Bedi, 2012). Studies (Muller et al., 2012; Unger & De Luca, 2014) have found that the experience of childhood maltreatment has an enduring negative impact on attachment throughout life.

Multiple studies (Muller et al., 2012; Fowler, Allen, Oldham, & Frueh, 2013; Unger & De Luca, 2014; Smith, Msetfi, & Golding, 2010) have cited that the experience of maltreatment in childhood often produces insecure attachment styles which inhibit current and future development of healthy relationships. Other studies (Diener & Monroe, 2011; Smith et al., 2010) have emphasized that these negative beliefs and behaviors are often projected onto the therapist. These behaviors and belief systems are likely to have adverse effect on the working alliance and treatment outcomes. These findings provide further evidence that the internal working model as proposed by Bowlby (1988) provides a stable foundation for navigating future relationships, often including the working alliance between client and counselor.

Studies (Unger & De Luca, 2014; Muller et al., 2012; Fowler et al. 2013) have shown that physical and psychological abuse in childhood was significantly related to negative attachment patterns, poorer psychological development, and lower quality relationships throughout life. The experience of physical or emotional abuse directly affects the manner in which children perceive current relationships (i.e. I am unwanted, despised, insignificant; unsafe); having a substantial impact on the manner in which individuals perceive future interactions with others. Aspelmeier, Elliott, & Smith (2007) noted that a history of child sexual abuse is frequently related to more intense trauma symptomology and poorer levels of attachment security in adult, intimate, and peer relationships. Individuals who report experiencing childhood sexual abuse in particular report being more dismissive in relationships,
more distant, and more fearful than individuals who report no abuse. These individuals also report feeling more alienated and experience less trust and less communication in their close relationships than individuals with no trauma history.

Frequently the cognitive distortions which result from early trauma generate a challenge in establishing relationships, often adversely affecting the therapeutic alliance (Lawson, Davis, & Brandon, 2013). Many individuals who have experienced long-term relational trauma have no foundation from which to navigate current relationships (Pearlman & Courtois, 2005), and often lack the skills to develop consistent relationships. Diener and Monroe (2011) suggest that these enduring patterns of relationships outside of the therapy room provide a model for engagement with the therapist.

Authors (Zorzella et al., 2014) provided support that individual differences in attachment style are significantly correlated with perception of the therapeutic alliance, as well as perception of group climate for individuals who have experienced trauma. Authors (Mikulincer and Nachshon, 1991; Slade, 2000) emphasized that the attachment patterns which individuals demonstrate within relationships also have a substantial influence on the quantity of information which they disclose. Insecure attachment patterns may also encouraged individuals to avoid intense negative emotions, have difficulty trusting their therapist, and maintain emotional distance in intimate relationships.

Adult attachment plays an instrumental part in the foundation of relationships in adulthood (Bowlby, 1988; Aspelmeir et al., 2007) and the quality of the therapeutic alliance (Diener & Monroe, 2011) for individuals who have experienced child maltreatment. It is essential that mental health practitioners pay special attention to the quality of the working alliance for individuals who have experienced early trauma, and repair any ruptures which may
occur along the way. The counseling working alliance provides a safe foundation for challenging dysfunctional interpersonal patterns, and may help individuals to challenge negative dysfunctional beliefs related to others. Because individuals who have experienced early trauma often demonstrate more negative attachment patterns, it is essential that researchers and practitioners pay close attention to the impact that these beliefs and behaviors may have on the working alliance. Pearlman and Courtois (2005) have emphasized that research on the effectiveness of trauma treatment for individuals who have experienced complex interpersonal trauma is limited, and stressed the importance of understanding the development of a therapeutic bond for this population.

**Trust**

Trust is an essential factor of the therapeutic relationship (Wampold, 2001; Bordin, 1979, Wampold et al. 2010); however individuals who have experienced childhood maltreatment demonstrate lesser interpersonal trust and poorer communication skills than non-abused peers (DiLillo, 2001; Courtois & Ford, 2013; Brooks & McHenry, 2009). Individuals with trauma histories experience further complexity in developing a strong therapeutic bond, as they frequently demonstrate difficulty in developing trusting, supportive relationships. Complex psychological and physiological reactions following the experience of a traumatic event frequently occur in response to triggering events, experiences, certain individuals, and feelings (Courtois & Ford, 2013). When these events are committed by human beings, children and adults alike often develop mistrust of other individuals (Lawson et al., 2013; Pearlman & Courtois, 2005; DiLillo, 2001; Courtois & Ford, 2013).

Victims of child maltreatment often experience an impoverished relational environment that produces substantial risk for disrupting conventional psychological development (Courtois
& Ford, 2013). Trauma resulting from repeated and long-term abuse deleteriously influences a coherent and stable sense of self, often leading to distrust of self and others. Consistent with Bowlby’s (1988) attachment theory, individuals who have experienced early trauma frequently demonstrate a negative view of others which has a profound impact on relationship development (Unger & De Luca, 2014).

Erikson (1963) proposed that children often begin developing trust during infancy. During the Trust vs. Mistrust stage of his psychosocial developmental theory, children begin to develop an internal working model of self and others. Primary caregivers play a crucial role in this stage, as infants are completely reliant on them to meet their needs. When children cry, and caregivers consistently and predictably respond (usually through feeding), children learn that they can rely on their caregivers should a need arise. Children who have caregivers who do not respond to their needs learn that others cannot be relied upon in their time of need. These beliefs are then generalized and carried into later stages of development.

According to Erikson (1963) the Trust vs. Mistrust stage serves as a foundation for navigating development, if negatively resolved individuals often demonstrate a view of self in a relatively unpredictable and unsafe place. Individuals who develop trust frequently believe that people are essentially good natured, and are confident that they have the capacity to successfully cope with life. They are also very accepting of new experiences, people, and views. Individuals who have positively resolved this stage also engender a mature sense of time and consider that their personal goals are predictable enough to work and wait for. Consequently, individuals who demonstrate low levels of trust perceive the world as an unreliable, distressing, demanding, and intimidating place (Erikson, 1963). Overall, individuals who lack trust perceive life as unstable, distrust that their needs will be met. They often perceive the world as a dangerous, uncaring
place, are often cautious of other individual’s motives, and are frequently guarded as they believe they may be taken advantage of.

Erikson (1963) did not address the occurrence of trauma in his original theory, nor did he discuss whether traumatic events could encourage an individual to retroactively negatively resolve developmental stages. Other theorists (Bowlby, 1988) and researchers (Butler, Chapman, Foreman, & Beck, 2006) since have determined that an individual’s view of self, others, and the world fluctuates throughout life based on experience and therapy. Individuals who have experienced interpersonal trauma often cope by avoiding situations and individuals which cause distress (Maack et al., 2012). These individuals and situations cause distress as they are often perceived by the victim as a threat. This behavior may have once served as a survival or coping mechanism to protect from further harm; however, when distrust enters the therapeutic relationship it can have detrimental effects. These factors emphasize the importance of emphasizing the role of trust in the therapeutic relationship. It is important for maltreated clients to understand the role that distrust has played in their lives (from a survivor perspective) and to understand the role that these often maladaptive schemas may have on current relationship development (including the working alliance). Trust is an essential factor in the formation of a therapeutic bond (Diener & Monroe, 2011), the absence of which often has a negative impact on the working alliance, and treatment outcome (Leibert & Dunne-Bryant, 2015).
CHAPTER 3
METHODOLOGY

This section offers information regarding research questions, sampling procedures, participants, and research design. Information pertaining to data collection and statistical analyses are also presented. Instruments are defined in terms of psychometric properties and their relevance to this research study.

Research Design

A non-experimental, retrospective, cross-sectional survey research design was employed for this study with the intent of providing a quantitative depiction of selected constructs to be measured in this study namely: child-maltreatment, adult attachment, emotion dysregulation, experiential avoidance, trust, and the perceived counseling working alliance. Survey research provided an efficient means to collect the necessary sample size for analyses from a representative, geographically diverse sample. Surveys consisted of six questionnaires along with a demographic questionnaire which are described in detail in subsequent sections. Demographic and descriptive data allowed the comparison of multiple variables across many levels, while permitting control variables to be considered for analyses.

Participants

This study involved of a targeted sample which involved clients who were seeking treatment from an inpatient substance abuse treatment facility who self-identified as experiencing child maltreatment in at least one domain (physical abuse, emotional abuse, sexual abuse, physical neglect, or emotional neglect). Four inpatient substance abuse treatment facilities in one southern state, and one state in the northeast were contacted and agreed to participate in data collection. All facilities provided inpatient substance abuse treatment which included 1-2 individual counseling sessions a week, group counseling daily, and focused on substance
dependence and co-occurring mental health diagnoses. The average length of stay was 28 days to 30 days; facilities utilized Licensed Professional Counselors (LPC) and Licensed Chemical Dependency Counselors (LCDC) to provide clinical services (facilities also employed LPC-Supervisors to supervise practitioners who were interns). Facility directors were contacted via email by the primary investigator and provided with a summary of the investigation, survey materials, time requirements, information on incentives for participants, perceived benefits to participants and the agency, and methodology for the study. Follow-up phone conversations also occurred with two facilities to answer remaining questions. Recruitment materials emphasized the sensitive nature of the survey materials, and notified each facility and participant that they were free to discontinue taking the survey at any time. Individuals who had adverse reactions to survey material were immediately asked to discontinue taking the survey, and were redirected to facility staff who then provided the necessary counseling services. These individuals were asked to keep incomplete surveys along with informed consent materials in order to provide them with this researchers’ contact information, emergency contact information, and to review survey materials with their individual counselor.

Prior to traveling to each facility, this researcher contacted administrative staff who informed clients of the study using provided recruitment materials. Upon arrival, facility staff made an announcement to all patients notifying them to meet in a designated area to take part in a research study. Participants were then notified of the inclusion criteria prior to completing surveys, and eligible participants completed surveys. Overall only 3 individuals discontinued the survey due to adverse reactions, these surveys were returned back to the participant for therapeutic purposes. Overall $N = 141$ participants took part in this study, 3 individuals submitted incomplete surveys (i.e. only demographic information was submitted, no
questionnaires were completed); resulting in a total of $N = 138$ completed surveys. One facility in Texas yielded 29 completed surveys with a 27 percent response rate. The other facility in Texas generated 19 surveys with a 53 percent response rate. One facility in Pennsylvania generated 72 completed surveys with a 58 percent response rate. The other facility in Pennsylvania generated 18 completed surveys with a 72 percent response rate; resulting in an overall completion rate of 53 percent. Participant demographic data is presented in Table 1.
Table 1: Demographic Characteristics of Study Participants

<table>
<thead>
<tr>
<th>Participant Demographic characteristics</th>
<th>(N = 114)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>18-69 years</td>
</tr>
<tr>
<td></td>
<td>( M = 32.6; SD = 11.92 )</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>50%</td>
</tr>
<tr>
<td>Female</td>
<td>47.4%</td>
</tr>
<tr>
<td>Transgender</td>
<td>1.8%</td>
</tr>
<tr>
<td>Other</td>
<td>0.9%</td>
</tr>
<tr>
<td>Sexual Orientation</td>
<td></td>
</tr>
<tr>
<td>Strait/heterosexual</td>
<td>85.5%</td>
</tr>
<tr>
<td>Bisexual</td>
<td>8.7%</td>
</tr>
<tr>
<td>Lesbian/gay</td>
<td>5.1%</td>
</tr>
<tr>
<td>Other</td>
<td>0.7%</td>
</tr>
<tr>
<td>Relationship status</td>
<td></td>
</tr>
<tr>
<td>Single/never married</td>
<td>52.2%</td>
</tr>
<tr>
<td>Married/partnered</td>
<td>24.6%</td>
</tr>
<tr>
<td>Divorced</td>
<td>11.6%</td>
</tr>
<tr>
<td>Separated</td>
<td>5.8%</td>
</tr>
<tr>
<td>Living with partner</td>
<td>5.1%</td>
</tr>
<tr>
<td>Widowed</td>
<td>0.7%</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
</tr>
<tr>
<td>White/Caucasian</td>
<td>89.5%</td>
</tr>
<tr>
<td>Hispanic/Latino(a)</td>
<td>4.4%</td>
</tr>
<tr>
<td>African American/Black</td>
<td>3.5%</td>
</tr>
<tr>
<td>Other</td>
<td>2.6%</td>
</tr>
<tr>
<td>Education</td>
<td></td>
</tr>
<tr>
<td>Some college</td>
<td>29.8%</td>
</tr>
<tr>
<td>High school graduate</td>
<td>26.3%</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>14.9%</td>
</tr>
<tr>
<td>Associate’s degree</td>
<td>11.4%</td>
</tr>
<tr>
<td>Some high school</td>
<td>8.8%</td>
</tr>
<tr>
<td>Graduate degree</td>
<td>6.1%</td>
</tr>
<tr>
<td>Less than high school</td>
<td>2.6%</td>
</tr>
<tr>
<td>Employment status</td>
<td></td>
</tr>
<tr>
<td>Unemployed</td>
<td>58.8%</td>
</tr>
<tr>
<td>Employed</td>
<td>40.4%</td>
</tr>
<tr>
<td>Disability status</td>
<td></td>
</tr>
<tr>
<td>Without a disability</td>
<td>38.4%</td>
</tr>
<tr>
<td>With a disability</td>
<td>61.6%</td>
</tr>
<tr>
<td>Psychiatric</td>
<td>38.7%</td>
</tr>
<tr>
<td>Physical</td>
<td>10.6%</td>
</tr>
<tr>
<td>Physical and psychiatric</td>
<td>9.9%</td>
</tr>
</tbody>
</table>

Note: Percentages may not total 100 due to rounding
Central to the purpose of this study, only individuals who screened for child maltreatment were included in statistical analysis. Of the $N = 138$ individuals who completed the survey, 24 participants did not meet the screening criteria for any type of child maltreatment. These individuals were removed from subsequent analysis which resulted in a final sample of $N = 114$. Screening criteria were outlined by Bernstein and Fink (1998) and are included in Table 2. Only participants who met criteria for low to moderate, moderate to severe or severe to extreme scores on any subscale were included in analysis. Essentially, any individual who scored higher than low to moderate in any abuse category were included in analysis.
Table 2: Score Classification for the Childhood Trauma Questionnaire

<table>
<thead>
<tr>
<th>Scale</th>
<th>None or minimal</th>
<th>Low to moderate</th>
<th>Moderate to Severe</th>
<th>Severe to extreme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional Abuse</td>
<td>5-8</td>
<td>9-12</td>
<td>13-15</td>
<td>≥ 16</td>
</tr>
<tr>
<td>Physical Abuse</td>
<td>5-7</td>
<td>8-9</td>
<td>10-12</td>
<td>≥ 13</td>
</tr>
<tr>
<td>Sexual Abuse</td>
<td>5</td>
<td>6-7</td>
<td>8-12</td>
<td>≥ 13</td>
</tr>
<tr>
<td>Emotional Neglect</td>
<td>5-9</td>
<td>10-14</td>
<td>15-17</td>
<td>≥ 18</td>
</tr>
<tr>
<td>Physical Neglect</td>
<td>5-7</td>
<td>8-9</td>
<td>10-12</td>
<td>≥ 13</td>
</tr>
</tbody>
</table>

Note: Table source Berstein and Fink 1998
One facility in a southern state and one facility in a northeastern state allowed participants to receive incentives for the study. Participants were entered into a drawing for a $25 Visa gift card, and were also provided with snacks during survey completion. Participants wrote their names on a single piece of paper, one participant was chosen from a drawing at random. All identifying information was destroyed prior to leaving each facility. One facility in each geographical region did not permit the use of incentives due to facility policy.

As previously noted, this study was intended to assess the relation between child maltreatment and the counseling working alliance for individuals who are seeking substance abuse treatment. Specifically adult attachment, trust, emotion regulation, and experiential avoidance were selected as a result of a comprehensive literature review to be potential predictors of this relationship. As such, inclusion criteria required participants to be currently seeking inpatient services from a substance abuse treatment facility, to be at least 18 years of age, and to have completed at least 3 individual counseling sessions their individual counselor. The latter criteria was established as authors (Horvath & Greenberg, 1989) set a cutoff of 3 individual counseling services when initially developing and validating the Working Alliance Inventory (WAI) as it is generally accepted that 3 sessions is an adequate timeframe to develop a therapeutic alliance (Kivlighan & Shaughnessy, 1995; Horvath & Greenberg, 1989). Participants who did not meet these criteria were asked not to complete surveys; the researcher outlined these criteria in the informed consent, and verified inclusion criteria this information prior to survey completion and survey submission.

Data Collection and Procedures

Data were collected through physical copies of surveys. The primary investigator traveled to each facility at a designated time and date in order to collect data and provide debriefing
services if necessary which included a total of 9 site visits. Facilities were contacted to determine the number of eligible participants, subsequent data collection dates were established as new patients obtained treatment from each facility. All eligible participants were screened to ensure that they did not complete the survey in a previous session and that all eligibility criteria were met.

After receiving verification that the eligibility criteria were met, participants were provided with an implied consent form which outlined the rationale for the study, risks, and potential benefits. Participants were notified both verbally and in the informed consent of the sensitive nature of some of the survey materials (namely the Childhood Trauma Questionnaire) and notified that they could discontinue the survey at any time. Those participants \( n = 3 \) who had adverse reactions were provided with debriefing services and facility staff were notified to provide necessary support, survey materials were given back to these participants for reference in counseling sessions. It was anticipated that surveys would take between 15 and 20 minutes to complete, completed surveys were then submitted to the primary investigator, placed in a sealed envelope, and stored in compliance with this researchers Internal Research Board’s regulations.

**Instruments**

**Demographic Questionnaire.** Participants were asked to complete a demographic questionnaire which was developed by the primary investigator for the purposes of this study. Participants were asked to supply the following information on the demographic form: gender, age, race/ethnicity, disability status, marital status, education received, peer support engagement, substances abused, mental health diagnoses, number of sobriety attempts, number of times the individual has sought treatment for substance abuse, and number of weeks the individual has been in treatment.
**Working Alliance Inventory.** The Working Alliance Inventory-Short Revised (WAI-SR) (Munder, Wilmers, Leonhart, Linster, & Barth, 2010) is a 12-item self-report assessment which is intended to measure the counseling working alliance as defined by Bordin (1979). The working alliance is comprised of: (a) tasks (behaviors which occur during counseling which are the foundation of the counseling process), (b) bonds (productive personal relationship between the counselor and clients such as trust, acceptance and support), and (c) goals (treatment outcomes) which in combination define the quality and depth of the working alliance (Bordin, 1979). The instrument yields an overall composite score which indicates the degree of working alliance present between counselor and client; it also provides an overall total for each scale (bond, tasks and goals). Participants are asked to respond on a 7-point Likert scale (1 = “Never”; 7 = “Always”) as to how they think or feel about their therapist or counselor. Sample items include “My counselor understands what I am trying to accomplish in therapy”, “My counselor and I trust one another”, and “I am confident in my counselor’s ability to help me”.

Munder et al. (2010) conducted confirmatory factor analysis for the WAI-SR. Patients for the study were recruited from an inpatient and outpatient psychotherapy clinic in Germany (N = 243). Results of the factor analyses designated that the three factor model (Horvath & Greenberg, 1989) was a respectable fit (Comparative Fit Index = 0.95; Root Mean Square Error < 0.09; and Tucker-Lewis Index = 0.93) demonstrating an acceptable fit for the three factor model. Internal consistency reliability was good for the WAI-SR subscales (α = .80), and excellent for the overall composite score (α = .90). The Working Alliance Inventory demonstrated an excellent degree of internal consistency for this sample, Cronbach’s α = .937.

The initial version (Horvath & Greenberg, 1989) of the WAI consisted of 36 self-report items designated to measure each of the three components of the working alliance. Three studies
were conducted in order to determine the appropriate factor structure, the final study resulted in a high level of internal consistency (α = .93). The scale also demonstrated a high degree of predictive validity as subscales of the WAI correlated significantly (Bond, r = .46, p < .05; Task r = .50, p < .001; Goal, r = .37, p < .05) with the Client Post-therapy Questionnaire (Strupp, Wallach, & Wogan, 1964) which is an instrument designed to measure positive therapeutic outcomes in individuals who are receiving therapy related to client progress, satisfaction, perceived change, and perceived adjustment. Hatcher and Gillaspy (2006) also found that each subscale of the WAI was highly correlated with the corresponding subscales of the WAI-SR for a sample of (N = 231) clients seeking therapy in an agency setting: Bond, r = .94, p < .05; Goal, r = .91, p < .05; and Task, r = .83, p < .05; along with a sample of (N = 235) of clients seeking more intensive outpatient therapy: Bond, r = .91, p < .05; Goal, r = .86, p < .05; and Task, r = .87, p < .05.

The WAI-SR demonstrated acceptable levels of convergent validity (r = .71) when compared to a similar measure, the Helping Alliance Questionnaire (HAQ) (Luborsky, 1976) which measures client satisfaction with the counseling relationship along with the outcome of the therapeutic process (Munder et al., 2010). The HAQ consists of two scales (Relationship and Outcome). The Total WAI-SR scales were moderately to highly correlated with both scales; Bond (r = .56), Task (r = .70), and Goal (r = .63). The HAQ Relationship scale was moderately correlated with the Bond (r = .65, p < .05), Task (r = .64, p < .05), and Goal (r = .69, p < .05) subscales; along with the Total WAI-SR score (r = .75, p < .05). Munder et al. (2010) also noted that the HAQ Outcome scale failed to significantly correlate with any of the WAI-SR subscales indicating that the WAI-SR does not confuse outcome and alliance constructs.
The Childhood Trauma Questionnaire (CTQ) (Bernstein & Fink, 1997) is a screening instrument which is utilized to detect a history of childhood abuse or neglect. The instrument involves 28 self-report items which measure five types of maltreatment: emotional, physical, and sexual abuse, and emotional and physical neglect. Responses on the instrument involve a 5-point Likert scale is used for responses which range from “Never True” to “Very Often True”. Sample items from each domain include: Physical Abuse, “I got hit so hard by someone in my family that I had to go see a doctor or go to the hospital”, Emotional Abuse, “People in my family called me things like stupid, lazy, or ugly”, Sexual Abuse, “Someone tried to touch me in a sexual way or tried to make me touch them”, Emotional Neglect, “There was someone in my family who helped me feel that I was important or special” (item reverse scored), Physical Neglect, “I didn’t have enough to eat”, and Minimization or Denial, “I had the perfect childhood”.

Several research studies (Waldinger, Schulz, Barsky, & Ahern, 2006; Driessen et al., 2000) have used an overall composite score for the CTQ demonstrating sufficient levels of internal consistency reliability Chronbach’s $\alpha$ for the overall scale was 0.82. For this sample, the overall score for the CTQ demonstrated an excellent degree of internal consistency reliability ($\alpha = .924$).

Normative data were collected from 231 patients engaged in substance abuse treatment from two veterans’ affairs hospitals in New York City (Bernstein et al., 1994). Within the sample Latino and African American clients were over-represented. The aforementioned factor items resulted in high levels if internal consistently reliability as Cronbach’s alpha coefficients ranged from $\alpha = .79-.94$; the entire scale resulted in a Cronbach’s alpha coefficient of $\alpha = .95$. Test-retest reliability was also high for the instrument ($r = .88$) for individuals ($N = 40$) who were asked to
complete the CTQ again after 3.6 months. The CTQ sexual abuse \((r = .58)\), physical abuse \((r = .42)\), and emotional abuse \((r = .51)\) scores were highly correlated with corresponding factors on the Childhood Trauma Interview (a highly structured in-person interview) indicating a high degree of convergent validity. Also, discriminant validity for the CTQ was established using measures of verbal intelligence \((r = .10)\) and social desirability \((r = .10)\); no significant correlations were found between these measures and the CTQ.

**The Difficulties in Emotion Regulation Scale.** The Difficulties in Emotion Regulation Scale (DERS) is an instrument designed to assess difficulty in regulating emotions in stressful situations (Gratz & Roemer, 2004). The DERS differs from the Acceptance and Action Questionnaire (AAQ) as the DERS is intended to assess difficulty in regulating emotions when distressed whereas the AAQ is intended to assess avoidance of distressing situations. This scale includes items which are intended to measure: (a) emotional awareness and understanding, (b) emotional acceptance; (c) capacity to employ goal directed behavior and avoid impulsiveness when distressed, and (d) access to strategies to regulate emotions. The items on the DERS are measured on a 5-point Likert-type scale from 1 (almost never; 0-10% of the time) to 5 (almost always; 91-100% of the time). Selected items on the DERS are reverse coded to produce an overall composite score; higher scores indicate higher levels of emotion dysregulation. Sample items on the DERS include: “when I am upset, I feel guilty about feeling that way”, “I pay attention to how I feel”, and “when I am upset I feel that I am in control of my behaviors.” Scale totals and an overall composite score can be used for data analysis (Gratz & Roemer, 2004).

Gratz and Roemer (2004) conducted exploratory and confirmatory factor analysis on the initial 40 items on the DERS. Authors used a sample of \(N = 357\) undergraduate students to provide data for analyses. Gratz and Roemer (2004) conducted a scree test to establish the factor
structure for the DERS which confirmed that a six-factor solution was sufficient; items with factor loadings greater than .40 were deemed important and retained for further analysis. Authors retained 36 of the initial 40 items on the DERS, accounting for 55.68% of the total variance. The DERS demonstrated a high degree of internal consistency reliability, Cronbach’s \( \alpha = .93 \); each subscale had sufficient internal consistency as Cronbach’s \( \alpha \geq .80 \). Internal consistency reliability for this sample was high (\( \alpha = .942 \)). Construct validity was also established by comparing the DERS to similar measures of emotion regulation; the DERS significantly correlated with the Acceptance and Action Questionnaire (\( r = .60; p < .01 \)) (a measure of experiential avoidance) and as expected did not significantly correlate with a measure of emotional expressivity (Emotional Expressivity Scale) (\( r = .23; p < .01 \)) (Gratz and Roemer, 2004). Test-retest reliability was analyzed after 4-8 weeks, results indicated that the DERS had an acceptable level of test-retest reliability, \( r = .88; p < .01 \).

**Acceptance and Action Questionnaire (AAQ-II).** The Acceptance and Action Questionnaire II (Hayes et al., 2004) is a self-report assessment which is designed to measure experiential avoidance and psychological inflexibility. The initial version of this assessment included 22 items which are rated on a 7-point Likert scale which ranges from “Never True” to “Always True”. Higher scores on the scale indicate higher levels of experiential avoidance; indicating greater avoidance of negative thoughts and feelings. Participants are asked to assess 10 statements regarding each statements accuracy in their personal life (Bond et al., 2011). Sample items include: “Emotions can cause problems in my life”; “It is OK if I remember something unpleasant”; and “I am afraid of my feelings”.

Exploratory factor analyses were conducted with an initial pool of 49 items. Items were eliminated that had coefficients below .30, which resulted in the elimination of 22 questions.
Exploratory factor analyses were then conducted on the remaining 27 items in order to examine the resulting factor structure. Items were eliminated which had an eigenvalues below 4, resulting in a 10 item instrument with a single factor structure which accounted for 46.41% of the variance. The resulting internal consistency reliability for the scale was $\alpha = .88$. Internal consistency reliability for this sample was moderately high ($\alpha = .861$).

Confirmatory factor analyses were conducted with a large geographically and culturally diverse sample $N = 1306$ (Bond et al., 2011). The sample included undergraduate students, individuals seeking treatment for substance abuse, and employees of an international retail bank. The single factor structure was supported as indices indicated a good model fit; results were consistent across the three samples as well. All unstandardized factor loadings were statistically significant; $p < .0001$. Test-retest reliabilities were acceptable at 3-month follow-up, $r = .81$ and 12-month follow up, $r = .79$. Convergent validity was assessed by examining the relation between the AAQ-II and the AAQ-1 ($r = .97$) Beck Depression Inventory ($r = .71$), the Beck Anxiety Inventory ($r = .61$), and the White Bear Suppression Inventory (an assessment which measures thought suppression ($r = .61$); all four coefficients were significant at $p < .001$. The AAQ-II also demonstrated high levels of predicative validity. Bond et al. (2011) also surveyed individuals in substance abuse treatment, and those in treatment for psychiatric issues. These samples demonstrated substantially higher scores, indicating more experiential avoidance and more psychological inflexibility than individuals in in other samples (undergraduates, international retail banking).

**Adult Attachment Scale Revised (AAS-R).** The AAS-R (Collins, 1996) is a 16-item self-report instrument which is designed to measure the degree of attachment which individuals experience in their close relationships. Participants are asked to respond on a 5-point Likert scale
(1 “Not at all characteristic of me”, 5 “Very characteristic of me”) as to how they usually experience intimate relationships. Sample items include “I find it relatively easy to get close to people”, “I find it difficult to allow myself to depend on others”, and “I am uncomfortable when anyone gets too emotionally close to me”. The AAS-R contains three subscales: the Close subscale is intended to measure comfort with intimacy; the Depend subscale evaluates personal comfort with reliance on others and the belief that others can be trusted; and the Anxiety subscale evaluates concern regarding rejection and abandonment. Collins (1996) also utilized an Avoid subscale which measures the extent to which an individual avoids interpersonal relationships; individuals who score higher in this category often feel the need to protect themselves by staying away from interpersonal relationships.

Exploratory factor analysis was conducted by (Collins & Read, 1990). Authors (Collins & Read, 1990) retained only factors with eigenvalues greater than one, extracting three factors in the final factor solution. Loadings greater than 0.3 were used to define a factor which resulted in a three factor solution (18 scale items). The factors were moderately correlated with one another: Factor one (Depend) and Factor 3 (Close) \((r = .41)\) which implies that individuals who believe that they can depend on others are more comfortable with intimacy. Also Factor 2 (Anxiety) was weakly correlated with both Factor 1 (Depend) \((r = .18)\) and Factor 3 (Close) \((r = .01)\). Internal consistency was demonstrated for all three scales: Close \((\alpha = .69)\), Depend \((\alpha = .75)\), and anxiety \((\alpha = .72)\). The revised scale (Collins, 1996) includes 16 items after consolidating two items which were highly correlated and was highly correlated \((r = .98)\) with the original version. The resulting version of the AAS-R demonstrated higher internal consistency; (a) close \((\alpha = .77)\), (b) depend \((\alpha = .78)\), and (c) anxiety \((\alpha = .85)\).
Collins and Read (1990) also established the discriminant validity of each subscale (close, depend, and anxiety) by conducting a cluster analysis. Results of a Scheffe test indicated that each of the subscales were significantly \( p < .001 \) different from one another. Cluster analysis also demonstrated convergent validity as cluster differences on each attachment dimension corresponded closely to the three attachment styles initially outlined by Hazan and Shaver (1987) i.e. secure, avoidant, and anxious/ambivalent.

Author (Collins, 1996) noted that the three scales which constitute the AAS-R can be utilized in two circumstances. Subscales can be utilized as continuous subscales (i.e. comfort with intimacy, comfort depending on other individuals, and anxiety related to rejection). This assessment can also be utilized to categorize individuals into particular attachment styles (secure, avoidant, fearful, or preoccupied) according to aggregate scores on each subscale. For example, secure attachment styles would demonstrate high scores on the Close subscale, high scores on the Depend subscale and a low score on the Anxiety subscale. Collins (1996) provides value labels as well as cutoff scores for calculating each of the four variables depending on the researchers intended use of the scale.

A positive attachment dimension was calculated for the purposes of this study as the focus was not to measure attachment style but to measure participants’ tendencies in adult relationships; item recoding is discussed in later chapters. The positive attachment dimension demonstrated an acceptable level of internal consistency reliability for this sample \( (\alpha = .80) \) and was intended to measure participants’ predisposition to think, feel, and behave more positively in relationships. According to Muller (2009) individuals who demonstrate more negative attachment styles pose difficulty in creating a strong therapeutic bond as they view themselves as independent, strong, and self-sufficient. In many cases this attachment style presents an issue in
therapy as therapeutic change is often initiated through direct activation of the attachment system; individuals who demonstrate negative attachment patterns often model defensiveness, ambivalence, and have difficulty taking the client role.

Measures of Psychosocial Development; Trust vs. Mistrust Scale. The MPD is a self-report measure that is based on Erikson’s stages of psychosocial development. The measure itself is intended to measure adult and adolescent personality development by converting Erikson’s theoretical constructs into an objective measure. This instrument affords an indication of general psychosocial health, provides an overall profile of each of Erikson’s stages, and an estimate of the amount of resolution in each stage For the purposes of this study, the trust versus mistrust stage of Erikson’s theory is of primary interest as many studies (Wampold et al., 2010; Bordin, 1979; Ventura, 2010) have cited trust as a crucial foundation of the working alliance. For this reason, only the trust scale was utilized in data collection and data analysis.

Normative data were collected based on a sample of 2,480 individuals ages 13-86; demographic variables were collected and author (Hawley, 1984) noted that normative data included an overrepresentation of whites. Norms for males and females were reported separately though normative data included an overrepresentation of females. A sample (N = 108) of individuals aged 10-93 was used to determine test-retest reliability (r = .67-.89) for each of the sixteen subscales. A sample of (N = 372) was used to determine internal consistency reliability, coefficients ranged from α = .65-.84 for each subscale. For the current study, only items reflective of positive resolution of this stage were used, as the positive resolution of this stage was hypothesized to be related to the working alliance. This reduced the number of items in this subscale from 14 to 7, which reduced the internal reliability to a marginally acceptable level (α = .661) (Clark & Watson, 1995). As such, the Spearman Brown formula (Neukreg & Fawcett,
2010) was applied to adjust and correct for this reduction in reliability; the adjusted internal reliability for the reduced scale is good ($\alpha = .79$)

Individuals who demonstrate positive resolution of this stage demonstrate a fundamental level of trust in themselves and in other individuals. Frequently these individuals demonstrate a laid-back, positive, and generous attitude, and have a basic belief that their needs (physical and emotional) will be met. These individuals also hold to the belief that people are essentially good natured, and believe that they have the capacity to successfully cope with life in general. They are also very accepting of new experiences, individuals, and perspectives. Individuals who have positively resolved this stage also engender a mature sense of time and consider that their personal goals are predictable enough to work and wait for. Individuals who have negatively resolved this stage view the world as an unreliable, distressing, demanding, and intimidating place. Overall, they view life as unstable. They often believe that worthwhile things never last, and distrust that their needs will be met. They often perceive the world as a dangerous, uncaring place. Individuals who negatively resolve this stage are often cautious of other individual’s motives, and are frequently guarded as they believe they may be taken advantage of. They also have negligible assurance in their capability to productively manage their experiences in life.

**Variables and Research Questions**

The counseling working alliance is regularly designated as the most important component in successful therapeutic outcomes (Wampold, 2001; Horvath & Symonds, 1991; Martin, Garske, & Davis, 2000). A positive working alliance is an exceptionally important aspect of substance abuse counseling (Oene, Schippers, Jong, & Schrijvers, 2001; Meier, Barrowclough, & Donmall, 2004) and trauma counseling (Ventura, 2012; Wampold et al., 2010). Multiple studies (Norman et al., 2010; Read et al., 2004; Ouimette, Moos, & Finney, 2003) have
established that clients who meet the diagnostic criteria for co-occurring trauma and substance use diagnoses frequently have significantly inferior treatment outcomes when compared to individuals with a single disorder (Norman et al., 2010). Very little is understood regarding factors that encourage treatment dropout for individuals with co-occurring trauma and substance abuse issues (Torchalla et al., 2012); however other studies (Knuuttila et al., 2012; Oene et al., 2001) have suggested that the counseling working alliance may serve as a major protective factor. Therefore it is essential to develop an understanding of factors which may influence the counseling working alliance for individuals with co-occurring trauma and substance use diagnoses.

A comprehensive literature review has identified several factors: trust (Courtois & Ford, 2013), experiential avoidance (Shenk et al., 2012), emotion dysregulation (Tull, Barrett, McMillan, & Roemer, 2007), and attachment (Unger & De Luca, 2014) to be potential predictors of a poorer working alliance for individuals with co-occurring trauma and substance use diagnoses who are seeking inpatient treatment services. This study was designed to develop an understanding of the relations between these variables, and to develop a better understanding of their relation to the counseling working alliance.

The dependent variable in this study was the Counseling Working Alliance as measured by the Working Alliance Inventory (WAI) (Munder et al., 2010). In particular this assessment measures (a) tasks (behaviors which occur during counseling which are the foundation of the counseling process), (b) bonds (constructive personal attachment between the counselor and clients such as trust, acceptance and support), and (c) goals (treatment outcomes) which in combination define the quality and depth of the working alliance.
Independent variables were assessed in regards to their direction and magnitude of relation to each other and to the Working Alliance Inventory. Child-maltreatment was assessed using the Childhood Trauma Questionnaire (Bernstein & Fink, 1998) which provided an overall measure of the degree of emotional abuse, physical abuse, emotional neglect, and physical neglect that was experienced by participants. Experiential Avoidance was assessed using the Acceptance and Action Questionnaire (Hayes et al., 2004) which provided an overall score which demonstrated participant’s aversion to negative physiological sensations, thoughts, emotions, memories, or behavioral tendencies. Emotion dysregulation was assessed using the Difficulties in Emotion Regulation Scale (DERS) (Gratz & Roemer, 2004), which provided an overall measure of each participants’ difficulty in regulating emotions in stressful situations. Adult Attachment was measured using an adaptation of the Adult Attachment Scale Revised (AAS-R) (Collins, 1996) which yielded an overall composite of each participant’s degree of positive attachment experienced in close relationships. Finally, trust was measured using the Measures of Psychosocial Development Trust Scale (MPD-Trust) which provided an overall score denoting participant’s fundamental level of trust in themselves and in other individuals based on Erikson’s (1963) theory of psychosocial development.

Based on an extensive literature review and the lack of knowledge concerning the influences of child-maltreatment, experiential avoidance, attachment, emotion dysregulation, and trust relative to the counseling working alliance, research questions for this investigation are as follows:

1. Describe the sample in terms of type of child-maltreatment experienced, disability status and category, substance(s) abused, length of time abusing substances, age of onset
(substance abuse), number of treatment attempts, number of sobriety attempts, and amount of time in current treatment.

2. What are the relations among the selected variables: child maltreatment severity, counseling working alliance, positive adult attachment, emotion dysregulation trust, and experiential avoidance?

3. Based on the results of the correlational analysis, which variables significantly relate to and explain counseling working alliance scores for this sample?

Data Analysis

Prior to conducting data analysis, missing data analysis was performed using IBM SPSS Statistics 22. Results indicated that data followed a missing data pattern in which missing values were unsystematically dispersed throughout the data set (Enders, 2010); further analysis verified that missing values were missing completely at random. Overall 98.92 percent of the data were present prior to imputing missing values; Schlomer, Bauman, & Card (2010) note that 20% missing data would be considered an acceptable amount to proceed with analysis. Listwise deletion is a common method of handling missing data analysis in the social sciences; however, this method was not used in this study due to the sporadic nature of the missing items; 34.43 percent of cases would have been excluded from final analysis and would have resulted in biased parameter estimates (Enders, 2010). Schlomer et al. (2010) support the use of multiple imputation strategies to impute missing values (regression imputation), as this is an acceptable strategy when the amount of missing data is not extreme. Regression imputation replaces values with predicted scores from a regression equation, using a more sophisticated analysis than single imputation methods (Enders, 2010). A Chi-Square test was also conducted to ensure there were
no significant differences in demographic variables between this sample and the population (individuals seeking substance abuse treatment).

In order to address research question one, a two-tailed Pearson correlation analysis was conducted to examine the relations between variables. In order to address research question two, a multiple regression analysis using a two-step model was conducted to examine whether the aforementioned independent variables predicted a negative counseling working alliance. Prior to conducting the multiple regression analysis assumptions of Ordinary Least Squares Estimation (OLS) regression analysis were verified to provide justification for the use of this data analytic strategy. Four chief assumptions exist for OLS regression (a) a linear relationship between the independent variables, (b) normality of the error distribution, (c) homoscedasticity (the assumption that the dependent variable demonstrates equal amounts of variance across all levels of the independent variables), and (d) independence of residuals (residuals of observations must be independent of one another) (Cohen, Cohen, West, & Aiken, 2003).

Linearity was determined by examining scatterplots (Cohen et al., 2003). Normality was accessed by examining histograms displaying the normal curve, using box plots, ensuring skewness values were between 1 and -1, and kurtosis values were below 10. Homoscedasticity was established by examining box plots and by utilizing the Levine’s Test of Homogeneity of Variances. Independence of residuals were examined by observing Q-Q plots of the standardized residuals for each regression equation and by utilizing the Durbin-Watson test in which values between 1.5 and 2.5 ensure that residuals are independent. Statistical assumptions will be discussed in detail in Chapter 4; graphical representations are reported in subsequent appendices.
Power Analysis

A-priori power analysis were conducted using G*Power 3.1 (Faul, Erdfelder, Buchner, & Lang, 2009). A medium effect size of .15 and an alpha level of .05 were used to calculate Power (1- β err prob = .80) for five predictor variables. Power analyses suggested that a minimum sample of $n = 92$ was necessary to provide adequate statistical power for multiple regression analysis. The final sample consisted of $N = 114$ participants which is more than sufficient to detect a medium effect.
CHAPTER 4

RESULTS

The following chapter details statistical analysis of the sample and the results of completed surveys ($N = 114$). Descriptive, correlational and regression analysis were conducted to address primary research questions. Statistical assumptions for correlational analyses and multiple regression analyses were examined prior to conducting analysis and are also outlined in this chapter.

Preliminary Analyses

Scale Recoding

After entering data, scales were re-coded in order to score certain instruments using SPSS. Data from the Adult Attachment Questionnaire (AAQ) were recoded to create an overall dimension of positive attachment. Negative items were reverse scored, once recoded, responses on each item were summed into a total score (90 was the maximum score). Also an overall measure of Childhood Maltreatment was created by combining the emotional abuse, physical abuse, sexual abuse, emotional neglect, and physical neglect scales (the minimization/denial scale was not included in the scale total). Other studies have also examined child maltreatment using this method (Waldinger, Schulz, Barsky, & Ahern, 2006; Bernet & Stein, 1999; Driessen et al., 2000). All other scales were utilized as outlined in previous sections.

Statistical Assumptions

Prior to conducting statistical analyses, statistical assumptions for correlational analysis and simultaneous multiple regression analyses were examined (Myers, Well, & Lorch, 2010). Four assumptions exist for conducting simultaneous multiple regression analysis: (a) linear relationship between independent and dependent variables, (b) normal distribution of variables,
(c) independence and normal distribution of residuals, and (d) no evidence of multicollinearity. The linear relationship between independent and dependent variables was established by examining scatterplots between the independent and dependent variables (Appendix A). Normality was established by examining box plots and histograms of each variable to ensure normal distribution of the independent and dependent variables (Appendix B). Also a Normal P-P plot was examined and suggested no significant deviations from normality (Appendix C).

Correlational analyses also demonstrated that none of the variables entered into the regression equation demonstrated strong correlation (.80 or above) among any independent variable (Table 3); also Tolerance values were less than .10 and Variance Inflation Factor (VIF) values were less than 10 confirming no evidence of multicollinearity for the variables entered into the regression equation (Table 5) (Myers et al., 2010). No extreme outliers were observed through investigation of box plots (Appendix A); all standardized residual values fell within the -3.3 and 3.3 ranges for the regression model (Tabachnick & Fidell, 2007). Independence of residuals was evidenced by a Durbin-Watson value of $D = 1.806$, which indicates no evidence of serial correlation.

**Chi-Square Analyses**

Data were collected from two geographically different locations. Chi Square and t-test analyses were conducted to ensure groups receiving treatment in Texas and Pennsylvania were evenly matched on demographic variables in order to combine the two samples; permitting analyses to be conducted on a single sample. Analyses were performed on: gender, employment status, disability status, education, and cultural identity. The minimum expected cell frequency was met for most variables, no significant differences were found between groups on gender $[\chi^2(1, n = 114) = 4.06, p = .255, \phi = -.189]$, employment status $[\chi^2(1, n = 114) = 3.43, p = .064]$,
phi = .174], disability status \[\chi^2 (1, n = 114) = 2.92, p = .088, \phi = -.161\], or education \[\chi^2 (1, n = 114) = 9.19, p = .163, \text{Cramer’s V} = .284\]. A significant difference was found between groups on cultural identity \[\chi^2 (1, n = 114) = 10.26, p = .016, \text{Cramer’s V} = .30\] as one sample demonstrated higher rates of Hispanic/Latino(a) participants. This finding will be discussed further in the following limitations section.

**Primary Statistical Analyses**

**Research question 1: Descriptive analysis.** Participants reported being in treatment for drugs (48.7%), alcohol (21.2%), behavioral/process addiction (8.0%), drugs and alcohol (4.4%), drugs and behavioral/process addiction (8.0%), alcohol and behavior/process addiction (3.5%), and drugs, alcohol, and behavior/process addiction (6.2%). Participants reported that these substances had caused problems for \(M = 9.95\ (SD = 7.33)\) years. Participants reported age of first use to be in mid-adolescence \((M = 16.21; SD = 7.54)\), and to have on average \(M = 8.11\ (SD = 12.37)\) sobriety attempts since age of first use. On average, participants reported seeking treatment \(M = 3.72; (SD = 3.54)\) times prior to this treatment experience, and currently being in treatment for \(M = 3.38\ (SD = 4.34)\) weeks. A majority of the sample (61.6%) reported a disability, 38.7 percent of reported disabilities were psychiatric only, 10.6 percent were physical, and 10 percent were physical and psychiatric.

For research question one, descriptive analysis was conducted to examine the prevalence of child-maltreatment within the sample. As mentioned previously, of the \(N = 138\) individuals who took part in the survey, \(N = 114\) participants screened for maltreatment, indicating that 83 percent of those who took part in this study screened positively for past childhood maltreatment. *Table 1* illustrates the percentage of individuals who positively screened for emotional abuse, physical abuse, sexual abuse, emotional neglect, and physical neglect. Overall, the sample
reported moderate to severe degree of emotional abuse ($M = 12.71, SD = 5.19$), moderate to severe degree of physical abuse ($M = 9.86; SD = 5.08$), moderate to severe degree of sexual abuse ($M = 9.82; SD = 6.56$), low to moderate degree of emotional neglect ($M = 12.52; SD = 4.39$), and low to moderate degree of physical neglect ($M = 8.60; SD = 3.42$).
Table 1: Participants’ \((N = 114)\) reported maltreatment severity by maltreatment type as measured by the Childhood Trauma Questionnaire

<table>
<thead>
<tr>
<th>Scale</th>
<th>None (minimal)</th>
<th>Low to moderate</th>
<th>Moderate to severe</th>
<th>Severe to extreme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional Abuse</td>
<td>25.4%</td>
<td>28.9%</td>
<td>17.5%</td>
<td>28.1%</td>
</tr>
<tr>
<td>Physical Abuse</td>
<td>42.1%</td>
<td>16.6%</td>
<td>16.7%</td>
<td>24.6%</td>
</tr>
<tr>
<td>Sexual Abuse</td>
<td>46.5%</td>
<td>11.4%</td>
<td>14%</td>
<td>28.3%</td>
</tr>
<tr>
<td>Emotional Neglect</td>
<td>27.2%</td>
<td>42%</td>
<td>17.5%</td>
<td>13.2%</td>
</tr>
<tr>
<td>Physical Neglect</td>
<td>45.6%</td>
<td>22%</td>
<td>18.5%</td>
<td>14.1%</td>
</tr>
</tbody>
</table>

Note: Percentages may not equal 100 due to rounding
Research question 2: two-tailed Pearson correlation. All forms of abuse and neglect were positively and significantly ($p < .05$) correlated with one another (Table 2) with exception of the relation between sexual abuse and physical neglect ($r = .10; p = .27$) and emotional neglect ($r = .138; p = .15$). These findings suggest that each form of abuse and neglect did not occur in isolation with the exception of the relation between sexual abuse and emotional and physical neglect. Means and Standard Deviations for all variables are presented in Table 3.

Statistically significant correlations were demonstrated between multiple independent variables and the dependent variable. There was a moderate, positive relation between scores on the Working Alliance Inventory and the Measures of Psychosocial Development Trust Scale ($r = .386; p < .001$); indicating that participants who reported higher levels of trust also reported higher levels of working alliance with their counselor. There was also a significant negative relation between scores on the Working Alliance Inventory and the Acceptance and Action Questionnaire ($r = -.208; p < .05$), and the Difficulties in Emotion Regulation Scale ($r = -.191; p < .05$) indicating that participants who reported higher levels of experiential avoidance and difficulties with emotion regulation reported lower working alliance with their counselor.

Correlational analyses indicated that there was no statistically significant relationship between Working Alliance Inventory Scores and Total Scores on the Childhood Trauma Questionnaire ($r = -.058$) or positive attachment scores ($r = .034$).

In addition to the aforementioned analyses, several statistically significant correlations were observed between independent variables (a full description of all correlations is provided in Table 4). There was a moderate positive relation between scores on the Childhood Trauma Questionnaire and the Acceptance and Action Questionnaire ($r = .346; p < .001$); suggesting that participants who reported more severe childhood maltreatment also reported higher levels of
Table 2: Pearson Product-Moment Correlations between Abuse Subscales on the Childhood Trauma Questionnaire

<table>
<thead>
<tr>
<th>Scale</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Emotional Abuse</td>
<td>-</td>
<td>.59**</td>
<td>.23*</td>
<td>.60**</td>
<td>.44**</td>
</tr>
<tr>
<td>2. Physical Abuse</td>
<td>-</td>
<td>.34**</td>
<td>.32**</td>
<td>.30**</td>
<td></td>
</tr>
<tr>
<td>3. Sexual Abuse</td>
<td>-</td>
<td></td>
<td>.14</td>
<td></td>
<td>.10</td>
</tr>
<tr>
<td>4. Emotional Neglect</td>
<td>-</td>
<td></td>
<td></td>
<td>.59**</td>
<td></td>
</tr>
<tr>
<td>5. Physical Neglect</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: * p < .05 (2-tailed); ** p < .001 (2-tailed)
Table 3: Sample \((N = 114)\) Means and Standard Deviations for all Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working Alliance Inventory (Total)</td>
<td>63.74</td>
<td>12.77</td>
</tr>
<tr>
<td>MPD Trust Scale</td>
<td>24.16</td>
<td>4.55</td>
</tr>
<tr>
<td>Acceptance and Action Questionnaire</td>
<td>44.79</td>
<td>10.40</td>
</tr>
<tr>
<td>Difficulties in Emotion Regulation Scale Total</td>
<td>107.88</td>
<td>24.38</td>
</tr>
<tr>
<td>Adult Attachment Questionnaire-Positive Attachment</td>
<td>49.24</td>
<td>10.06</td>
</tr>
<tr>
<td>Childhood Trauma Questionnaire Total</td>
<td>53.52</td>
<td>17.07</td>
</tr>
<tr>
<td>Emotional Abuse</td>
<td>12.71</td>
<td>5.19</td>
</tr>
<tr>
<td>Physical Abuse</td>
<td>9.86</td>
<td>5.08</td>
</tr>
<tr>
<td>Sexual Abuse</td>
<td>9.82</td>
<td>6.56</td>
</tr>
<tr>
<td>Emotional Neglect</td>
<td>12.54</td>
<td>4.39</td>
</tr>
<tr>
<td>Physical Neglect</td>
<td>8.60</td>
<td>3.42</td>
</tr>
</tbody>
</table>

Note: MPD = Measures of Psychosocial development
experiential avoidance. There was also a positive significant relation between scores on the Childhood Trauma Questionnaire and the Difficulties in Emotion Regulation Scale ($r = .258; p < .001$) indicating that more severe Childhood Trauma Questionnaire scores were positively and significantly associated with difficulty in emotion regulation. A moderate negative relation was observed between scores on the Childhood Trauma Questionnaire and positive attachment ($r = -.354; p < .001$) which indicated that more severe maltreatment was associated with lower levels of positive attachment.

Positive attachment was also negatively associated with experiential avoidance ($r = -.376; p < .001$) and difficulties in emotion regulation ($r = -.383; p < .001$) suggesting that as levels of experiential avoidance and difficulties in emotion regulation increased, positive attachment decreased for this sample. Lastly, trust was significantly correlated with positive attachment ($r = .339; p < .001$), and negatively correlated with experiential avoidance ($r = -.392; p < .001$) and difficulties in emotion regulation ($r = -.385; p < .001$) which indicated that participants who reported higher levels of trust also expressed higher levels of positive attachment within close relationships. Also, individuals who reported lower levels of trust demonstrated higher levels of experiential avoidance and difficulties in emotion regulation.
Table 4: Two-tailed Pearson Correlations among Independent and Dependent Variables

<table>
<thead>
<tr>
<th>Scale</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. WAI Total</td>
<td>-</td>
<td>-.058</td>
<td>.386**</td>
<td>-.208*</td>
<td>-.191*</td>
<td>.034</td>
</tr>
<tr>
<td>2. CTQ Total</td>
<td>-</td>
<td>-.038</td>
<td>-.346**</td>
<td>.258**</td>
<td>-.354**</td>
<td></td>
</tr>
<tr>
<td>3. MPD Trust</td>
<td>-</td>
<td>-.392**</td>
<td>-.385**</td>
<td>.339**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. AAQ Total</td>
<td>-</td>
<td>.749**</td>
<td>-.376**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. DERS Total</td>
<td>-</td>
<td>-.383**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Positive Attachment Total</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: ** = p < .001; * = p < .05. WAI = Working Alliance Inventory; CTQ = Childhood Trauma Questionnaire; MPD Trust = Measures of Psychosocial Development Trust Scale; AAQ = Acceptance and Action Questionnaire; DERS = Difficulties in Emotion Regulation Scale
Research question 3: simultaneous multiple regression analyses. Simultaneous multiple regression analysis was used to assess whether independent variables predicted levels of working alliance. Results (Table 4) of the aforementioned correlational analyses were used to select independent variables for the regression equation, experiential avoidance, difficulties in emotion regulation, and trust scores were used as independent variables for the analysis. The independent variables (experiential avoidance, difficulties in emotion regulation, and trust) explained a significant proportion of variance in working alliance scores, $R^2 = .152, F (3, 110) = 6.60, p < .001$ (Table 5); which met the criteria for a medium effect size (Cohen, 1977).

Overall experiential avoidance, difficulties in emotion regulation and trust scores significantly explained 15 percent of the variance in working alliance ratings. Upon individual examination, only trust appeared to significantly predict working alliance scores, Unstandardized $\beta = 1.01, t(113) = 3.72, p < .001$; however, neither difficulties in emotion regulation scores (Unstandardized $\beta = -.004, t(113) = -0.52$) or experiential avoidance scores (Unstandardized $\beta = -.076, t(113) = -0.462$) significantly predicted working alliance scores (Table 6). Results indicate that individuals who screened for maltreatment and reported higher levels of trust also reported higher levels of working alliance. Conversely, individuals who reported lower levels of trust reported lower working alliance with their counselors. Although the overall model demonstrated significant predictive ability, trust appeared to be the most central aspect to the working alliance for this sample, over and above experiential avoidance and emotion dysregulation.
Table 5

*Regression Model 1: Analysis of Variance*  

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>2809.79</td>
<td>3</td>
<td>936.6</td>
<td>6.60</td>
<td>.001&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Residual</td>
<td>15622.88</td>
<td>110</td>
<td>142.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>18432.68</td>
<td>113</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup> Predictors (Constant): Trust, Emotion Regulation, Experiential Avoidance

<sup>b</sup> Dependent Variable: Counseling Working Alliance
Table 6  
**WAI Regressed on Selected Predictor Variables**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>(Constant)</td>
<td>43.24</td>
<td>10.41</td>
</tr>
<tr>
<td>MPD Trust</td>
<td>1.006</td>
<td>.271</td>
</tr>
<tr>
<td>ERQ</td>
<td>-.004</td>
<td>.070</td>
</tr>
<tr>
<td>AAQ</td>
<td>-.076</td>
<td>.165</td>
</tr>
</tbody>
</table>

Model Summary: R = .390, R Square = .152, Adj. R Square = .129, Std. Error of the Estimate = 11.92, Durbin-Watson = 1.806
Table 6 (continued)

**WAI Regressed on Selected Predictor Variables**

<table>
<thead>
<tr>
<th>Lower Bound</th>
<th>Upper Bound</th>
<th>Zero-Order</th>
<th>Partial</th>
<th>Part</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>22.064</td>
<td>63.882</td>
<td>.386</td>
<td>.334</td>
<td>.326</td>
<td>.827</td>
<td>1.209</td>
</tr>
<tr>
<td>.469</td>
<td>1.543</td>
<td>-.191</td>
<td>-.005</td>
<td>-.005</td>
<td>.429</td>
<td>2.329</td>
</tr>
<tr>
<td>-1.43</td>
<td>-.135</td>
<td>-.208</td>
<td>-.041</td>
<td>-.041</td>
<td>.427</td>
<td>2.344</td>
</tr>
<tr>
<td>-.403</td>
<td>.251</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Model Summary: R = .390, R Square = .152, Adj. R Square = .129, Std. Error of the Estimate = 11.92, Durbin-Watson = 1.806
CHAPTER 5
DISCUSSION

The counseling working alliance is frequently cited (Leibert & Dunne-Bryant, 2015; Wampold, 2001) as one of the most important ingredients to successful therapeutic outcomes. According to Bordin (1979) this relationship involves the development of a therapeutic bond between counselor and client, specific therapeutic goals, and therapeutic tasks to achieve these goals. Individuals who have a history of maltreatment often demonstrate several factors: low trust (Courtois & Ford, 2013), experiential avoidance (Shenk et al., 2012), emotion dysregulation (Tull et al. 2007), and insecure or avoidant attachment styles (Unger & De Luca, 2014) which may interfere not only with the development of a therapeutic bond, but also with the therapeutic process itself. Prior research (Najavits et al., 2006; Brady et al., 2001) has demonstrated staggering rates of treatment dropout, obviously resulting in unmet treatment needs. Research (Leibert & Dunne-Bryant, 2015; Meier et al., 2006) has demonstrated that strong counseling working alliance serves as a protective factor against treatment dropout. Therefore understanding factors which may interfere with the counseling working alliance was the primary focus of this study.

An important finding resulting from this study establishes initial rates of child maltreatment for individuals seeking substance abuse treatment. Multiple studies (Read et al., 2004, Ford et al., 2007, Ouimette et al., 2006) have emphasized that 80-90 percent of individuals seeking substance abuse treatment have trauma history; however the occurrence of child maltreatment within this setting remained unclear. For this sample, 83 percent self-reported at least one form of maltreatment as indicated by the CTQ cut off scores. Of those who positively screened for maltreatment, 74.5 percent met the criteria for emotional abuse, 57.9 percent met
the criteria for physical abuse, and 53.9 percent met the criteria for sexual abuse. These findings further designate that co-occurring trauma (especially child-maltreatment) and substance use diagnoses should be expected at the level of service provision.

Consistent with other studies (Mills et al. 2013), specific types of maltreatment did not occur in isolation for this sample. Correlational analyses revealed that each abuse and neglect category was highly correlated with one another, with the exception of the relation between sexual abuse and physical and emotional neglect. These findings indicate that individuals who reported maltreatment history also reported maltreatment across several domains. The fact that sexual abuse was not related to physical or emotional neglect was not surprising as McAlinden (2006) noted that many victims of childhood sexual abuse are subjected to a “grooming” period in which the perpetrator works to build a physically and emotionally trusting relationship with the victim in order to gain access. Mills et al. (2013) emphasized that adequate attention should be given to all maltreatment types within the context of treatment provision, as individuals who experience maltreatment in each domain equally demonstrate long term psychological dysfunction, and high rates of mental health problems.

It was not surprising to uncover the high prevalence of severe to extreme maltreatment reported within this sample. Of those who met the criteria for maltreatment, 28.1 percent experienced extreme emotional abuse, 24.6 percent experienced extreme physical abuse, and 28.3 percent experienced extreme sexual abuse. For participants who screened positively for abuse, severe to extreme instances of abuse accounted for 38 percent of emotional abuse victims, 43 percent of physical abuse victims, and 53 percent of sexual abuse victims. Consistent with previous research (Dube et al., 2002; Zickler, 2002) individuals who experience more extreme
levels of maltreatment during childhood are exceptionally more likely to develop substance dependence than non-abused peers.

Another important finding was that a majority (61.6%) of this sample reported disability status. This was not unexpected as many studies (McGovern et al., 2006; Flynn & Brown, 2008) have established high rates of co-occurring mental health and substance use diagnoses for treatment-seeking individuals. Over 20 percent of this sample reported a physical disability, and 10 percent reported having both a physical and psychiatric disability. Authors (Kendall-Tackett, et al., 2005) have emphasized the importance of establishing the rates of disability among substance abuse treatment seekers, as the treatment needs for these clients may be very different from those who do not report disability status.

Researchers in the child maltreatment field have called for systematic collection of disability status among this population in order to record the rates of disability occurring with maltreatment (Kendall-Tackett, 2005; Fisher, 2009). It is widely accepted that substance use disorders and psychiatric diagnoses frequently co-occur (McGovern et al., 2006), however the majority of participants in this sample reported occurrence of child-maltreatment in addition to substance use diagnoses, psychiatric diagnoses, and physical disability. This finding further illustrates the complexity of this sample’s treatment needs as participants are likely faced with increased stress due to multiple concerns related to disability status (Falvo, 2014); in the event these needs go unmet, individuals may be encouraged to disengage from treatment. It is essential that practitioners screen for disability status in order to improve treatment provision, treatment planning, and accessibility options for clients with disabilities.

Results of the correlational analysis designated that childhood maltreatment was negatively and significantly correlated with positive attachment. This finding suggests that as
maltreatment severity increased, levels of positive attachment decreased for this sample. This finding was consistent with prior research (Muller et al., 2012; Unger & DeLuca, 2014) which emphasized the negative impact that child maltreatment frequently has on the development of positive attachment in adult relationships. This finding suggests that individuals with more severe child maltreatment histories may experience more difficulty in developing healthy relationship patterns later in life. Attachment is a critical aspect of therapy as it provides a developmental context in which therapists may conceptualize interpersonal difficulties and psychological concerns (Pearlman & Courtois, 2005). Negative attachment beliefs may influence lack of engagement in therapy, and lack of engagement in peer support networks which are a major predictor of long term recovery (Bond, Kaskutas, & Weisner, 2003). Negative attachment styles may also discourage engagement in group settings (Zorzella et al., 2014) which are a central treatment modality in most substance abuse settings.

Results of this study demonstrated a significant positive relationship between child-maltreatment and experiential avoidance and emotion dysregulation for this sample. This finding indicates that as childhood maltreatment severity increases, rates of emotion dysregulation and experiential avoidance also increase. This finding was consistent with previous research (Shenk et al., 2012; Cloitre et al., 2005) which suggested that individuals who experience child-maltreatment frequently demonstrate difficulties in regulating negative emotional states, and often engage in experiential avoidance in an attempt to alleviate distress. The relationship between maltreatment severity, experiential avoidance, and emotion dysregulation suggests that substance dependence and experiential avoidance may be an attempt to regulate distress for this sample. Though causal inferences cannot be made due to the correlational nature of this study,
previous research (Norman et al., 2010) has also demonstrated significant relationships between emotion regulation difficulties and substance use severity.

For this sample, child maltreatment severity was not significantly correlated with working alliance ratings. This finding was a surprise initially, but after further investigation one study (Leibert & Dunne-Bryant, 2015) also found no statistically significant relationship between the experience of trauma and the working alliance. Consistent with Rational Emotive Behavior Theory (Ellis, 1999) it is not an event which causes disturbance; it is the individual’s perception of the event. Individuals respond to trauma uniquely, which is a product of many social, psychological, environmental, and physiological factors. This finding further supported the complexity of the issue at hand and this studies’ emphasis on identifying factors which may interfere with the working alliance for participants in this study.

Correlational analysis also revealed no statistically significant relationship between positive attachment and the counseling working alliance. This finding is inconsistent with other studies (Diener & Monroe, 2011; Smith et al., 2010) which emphasized the importance of attachment in relation to the counseling working alliance. For the purposes of this study, it is possible that the particular measure utilized to measure attachment was not appropriate; however, a recent meta-analysis (Smith et al. 2010) highlighted several methodological issues within studies assessing attachment and the counseling working alliance. Smith et al. (2010) noted that many of the studies assessing attachment had high rates of treatment dropout, and only used data for individuals who completed therapy. These findings support the need for further investigation regarding the role of attachment in the therapeutic process.

Results of this study demonstrated a significant negative association between the counseling working alliance and difficulties in emotion regulation. This finding is also consistent
with other studies (Owens et al., 2013; Cloitre et al., 2004) which demonstrated that emotion regulation capacity was positively related to working alliance ratings. Difficulties in emotion regulation are frequently experienced by individuals who have experienced child maltreatment (Cloitre et al., 2005); which often surfaces in the context of interpersonal relationships (Goldsmith et al., 2013). The findings of this study suggest that greater levels of emotion dysregulation were related to poorer counseling working alliance ratings among this sample. The process of therapy often involves revisiting potentially traumatic and distressing material; these findings accentuate the importance of developing a collaborative therapeutic relationship where clients understand what is being done in therapy and how these tasks align with therapeutic goals.

It is essential that practitioners understand that many individuals who are seeking substance use treatment who have experienced maltreatment demonstrate difficulties in emotion regulation, and these issues may have an impact on the counseling working alliance. Practitioners who work with this population should work with clients to understand the role of substance abuse in coping with negative emotional states, and work with clients to gain access to more functional strategies. It may be important to teach clients strategies to cope with negative emotional states early on in treatment in order to provide a skill base to navigate later more challenging and potentially distressing sessions. Other studies (Owens et al., 2012; Tull et al., 2007) have emphasized the importance of teaching emotion regulation strategies to clients who have experienced trauma. Cloitre et al. (2005) demonstrated that the capacity to regulate emotions during emotionally intense interventions predicted a more positive working alliance, and in turn predicted more positive therapeutic outcomes.
Results of this study also demonstrated a significant negative relationship between counseling working alliance ratings and experiential avoidance. This finding indicates that as participants’ level of experiential avoidance increased, working alliance ratings decreased for this sample. Shenk et al. (2012) emphasized that experiential avoidance maintains PTSD-related symptomology, and encourages maltreated children from experiencing and coping with traumatic symptoms in a constructive way. It is also important to note that experiential avoidance and difficulties in emotion regulation were highly correlated ($r = .75; p = .001$) for this sample. Hayes et al. (1996) expressed that experiential avoidance is often the result of emotional dysregulation and serves as a coping mechanism for individuals who are experiencing emotional distress.

As mentioned previously, it may be important to teach clients functional methods of coping with emotional distress early on in treatment. Both emotion regulation and experiential avoidance were significantly and negatively correlated with the counseling working alliance for this sample. These factors further emphasize the importance of the therapists’ ability to collaborate with the client; frequently revisiting the client’s goals for therapy and helping them to understand how the selected therapeutic tasks align with these goals. Clients who have experienced interpersonal trauma often demonstrate a “survivor” mentality in which they attempt to avoid re-experiencing overwhelming thoughts, feelings, or sensations related to the trauma that they experienced (Perlman & Courtois, 2005). This mentality may encourage clients to avoid potentially distressing aspects of the therapeutic process, possibly hinder the development of a positive working alliance and encourage clients to disengage from therapy.

Correlational analysis revealed a positive significant relation between levels of trust and the counseling working alliance ($r = .386; p < .001$). This finding is consistent with Bordin’s
(1979) seminal theory, and the emphasis he placed on the development of a therapeutic bond through trust. Results of the regression analysis further emphasized that trust accounted for the greatest amount of variance in the counseling working alliance, over and above experiential avoidance and emotion dysregulation. These results are consistent with Bordin’s (1979) and Rogers (1946) influential work, which emphasized that the development of a quality therapeutic bond through trust serves as a foundation for the working alliance. This finding is important as practitioners who are working with this population should be skilled in building trusting relationships with the clients that they serve.

Individuals who have experienced maltreatment often demonstrate difficulty in developing trusting relationships (DiLillo, 2001; Courtois & Ford, 2013); as in many cases they experienced trauma that was committed by another human being. It is important for counselors who are working with this population to promptly identify behaviors which may indicate mistrust, and process these behaviors and beliefs and behaviors with their client. Studies (Pearlman & Courtois, 2005; Peck, 2012) have emphasized that empathy, support, authenticity, reliability, and attentiveness on the part of the therapist are important aspects of building a trusting relationship with clients who have experienced trauma. In addition to supportive behaviors from the practitioner, it may be useful for clients to gain insight into the role which these behaviors and beliefs played as a result of maltreatment (i.e. “other people are unsafe”, “I cannot rely on others”) in order to validate their usefulness from a survivorship standpoint. It is also important to process the impact that these behaviors and beliefs may have on the counseling relationship. The relationship that the client is able to create with their therapist may serve as a foundation for emotional re-learning, and can allow them to challenge dysfunctional beliefs and behaviors which may have resulted from maltreatment.
Studies (Pearlman & Courtois, 2005) have also emphasized the importance of collaboration within the therapeutic process for individuals who have experienced trauma. It is important to be mindful that the working alliance not only involves the relationship between the counselor and client, it also involves therapeutic goals and the therapeutic process (Bordin, 1979). It is important to take a step back and understand exactly what we are asking clients to do in substance abuse and trauma therapy. Essentially, practitioners are asking clients to surrender a primary coping mechanism (substances), and process traumatic material often in the absence of functional coping skills. This requires a prodigious amount of trust on the part of the client as they are entrusting their recovery completely to the process of therapy and to the person of the therapist. It is essential that practitioners work collaboratively with their clients and aid their understanding of the therapeutic process by explaining how selected therapeutic tasks are intended to serve overall therapeutic goals. It is essential that facilities who serve this population understand the importance of employing skilled practitioners who are trained and capable of providing the type of service and support that clients with maltreatment histories and substance dependence require.

**Current Evidence Based Practices for Trauma and Substance Dependence**

Cognitive Behavioral Therapy (CBT) is considered one of the leading treatments for co-occurring trauma and substance use diagnoses, and has been successful in reducing trauma and substance-related symptomology (Van Dam, Vedel, Ehring, and Emmelkamp, 2012; McGovern, Lambert-Harris, Acquilano, Xie, Alterman, & Weiss, 2009). Trauma-informed CBT includes psychoeducation regarding trauma and substance abuse, behavioral interventions, training associated with coping and contingency management, cognitive restructuring, and relapse inhibition. Exposure therapy has also received a great deal of empirical support in reducing
trauma related symptomology (Powers, Halpern, Ferenschak, Gillihan, & Foa, 2010), and has some support (Brady, Dansky, Back, Foa, & Carroll, 2001) when used in the reduction of co-occurring trauma and substance use diagnoses. Exposure therapy typically involves elements of psychoeducation related to trauma symptomology and substance dependence, cognitive therapy, behavioral approaches, and exposure (both in-vivo and imaginal) to disrupt dysfunctional thoughts and avoidant behaviors related to both substance use and trauma related diagnoses. Research is still lacking in evidence based practices for co-occurring trauma and substance related diagnoses.

Due to the complexity of treating co-occurring trauma and substance use diagnoses, most researchers recommend utilizing integrative treatment approaches which address the substance use, trauma, and mental health symptomology simultaneously (Burke & Carruth, 2012). Currently the Seeking Safety (SS) Model (Najavits, Scmitz, Gothardt, & Weiss, 2005; Najavits, Gallop, & Weiss, 2006) has received more empirical support than any integrative treatment model that exist for individuals with co-occurring trauma and substance use diagnoses (Torchalla et al., 2012). This highly structured program typically consists of 25 group or individual sessions. Clients receive two sessions a week which typically involve aspects of psychoeducation, coping, interpersonal effectiveness skills, cognitive processing, and cognitive restructuring. It is important to note that these studies (Najavits et al., 2006, Brady et al., 2001) should be considered in light of high rates of treatment dropout. Future research should continue to evaluate the efficacy of these programs, and further consider evidence based practices that will target overall success.
Implications for Substance Abuse Counselors

The results of this study emphasize the importance for substance abuse counselors to receive trauma informed training, particularly in the area of child maltreatment. This study emphasized the importance of trust within the working alliance for individuals who have experienced maltreatment, and also demonstrated that emotion dysregulation and experiential avoidance may be potential threats to building a positive counseling working alliance. Counselors who work with this population should be adequately trained at building a strong working alliance with their clients, and be able to identify instances of mistrust which may be a significant threat to building a strong therapeutic bond.

Practitioners should also pay particular attention to the quality of the therapeutic relationship for individuals with co-occurring trauma and substance use diagnoses (especially those with maltreatment histories). As mentioned previously trust is a foundational aspect of the counseling working alliance, those who reported higher levels of trust also had higher working alliance ratings in this sample. Other studies (Cloitre et al., 2004) have emphasized the importance of focusing on the therapeutic bond in initial stages of therapy. Other studies (Cloitre et al., 2005) have emphasized a focus on skill building and developing strategies to regulate emotions early on. Emotion regulation skills are essential to navigate later more emotionally distressing aspects of the therapeutic process; however, this study provides initial evidence that building a quality therapeutic bond through trust may be an essential focus of initial stages of treatment for this population. This relationship will provide a foundation for skill building relative to emotion regulation, and serve as a foundation to navigate later more distressing aspects of the therapeutic process.
Counselors should be aware of strategies to teach clients to functionally cope with emotional distress, and identify instances where dysfunctional coping might impede therapeutic process. Practitioners who work with this population should also be adequately trained in evidenced-based trauma-informed strategies. Counselors should understand that substance abuse treatment is multi-faceted and in many cases, client presenting concerns will be quite complicated, it may be necessary to seek supervision, further training, or potentially refer clients when presenting issues lie outside of a particular counselors skill set.

**Implications for Counselor Training Programs and Substance Use Facilities**

The results of this study further emphasize the complex set of issues that individuals with co-occurring trauma and substance use diagnoses experience. Due to the high rate of disability in this sample, practitioners who work in substance use treatment facilities should be prepared to work effectively with clients who have a disability, engage in effective treatment planning, and understand the experience of individuals with disability in order to consider factors which may encourage treatment disengagement. Facilities should also consider potential accommodations which may increase accessibility for individuals with physical limitations.

Previous research (McGovern, Xie, Segal, Siembab, & Drake, 2006; Flynn & Brown, 2008) has emphasized that practitioner training is severely lacking in the area of co-occurring mental health and substance use disorders, especially in the area of trauma-informed approaches. According to the Addiction Technology Transfer Center Network (2012), 13 percent of clinical services staff working in substance use treatment facilities possessed a high school diploma, 10 percent reported some college, 9 percent an associate’s degree, and 24 percent possessed a bachelor’s degree. Only 36 percent of those surveyed possessed a master’s degree. It is essential that treatment facilities consider the factors that are facing this population and emphasize the
importance of continuing education and training for those who are providing service. In a survey of \( N = 242 \) addictions counselors, Bride, Hatcher, and Humble (2009) noted that most substance abuse counselors are not being prepared to work with individuals who have experienced trauma in substance abuse settings through formal education. Only 39 percent of the participants in this study who were active substance abuse counselors reported receiving academic coursework in the area of trauma. A little over half (57 percent) had a master’s degree, and fewer than half (40 percent) held a degree in a human services related field (i.e. Mental Health, Psychology, Social Work).

Currently, coursework in clinical mental health counseling specific to substance abuse counseling is required in counseling programs who are accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP, 2016); however current standards do not address the inclusion of trauma related material into academic coursework. Due to the high rates of trauma among those seeking substance abuse counseling services, it is essential that practitioners who are working with this population are adequately prepared to address their needs. It is essential that counselors understand the many issues which face individuals with co-occurring trauma and substance use diagnoses, and develop the necessary skills and strategies to productively and ethically work with this population. It is clear that both accrediting bodies and licensing agencies should work to develop a consistent set of standards for clinicians who work with individuals with co-occurring trauma and substance use diagnoses in order to inform training protocol.

**Study Limitations**

The results of this study should be considered in light of several limitations. First and foremost this study involved cross-sectional design which only provided a brief snapshot of
participant’s experiences in therapy. This study was also correlational which does not permit for any causal examination among variables. This study was retrospective in nature; participants were asked to self-report incidents of maltreatment which may have happened many years before seeking treatment and may have influenced participant’s responses to the Childhood Trauma Questionnaire. Participants who were White/Caucasian, and Latino(a) were over-represented in the sample, which may affect the generalizability of these findings to other groups.

Ratings of counseling working alliance were only collected at one time point, and may have fluctuated throughout the course of treatment. Also ratings of positive attachment were only collected at one time point and may fluctuate during treatment. This study only collected client’s perception of the counseling working alliance; it would have been useful to gather each counselor’s perspective of the working alliance with each participant. One-half of the Measures of Psychosocial Development Trust Scale was utilized in order to limit the size of the survey which may not have provided a precise measure of this construct. Also, the Adult Attachment Questionnaire which was utilized focused primarily on romantic relationships may not have provided an accurate measure of the relationship between counselor and client.

**Future Research Implications**

Future research should continue to assess the relationship between childhood trauma and the counseling working alliance. Future studies should incorporate prospective longitudinal analysis and measure constructs at multiple time points throughout the therapeutic process. This would permit the examination of baseline scores, and changes which may occur throughout therapy. Also, participants should be followed through treatment completion, and analysis should be conducted on individuals who may disengage from treatment. Future studies should aim to replicate these findings using longitudinal analyses, and should include rates of treatment
dropout. Although the working alliance is a major protective factor when considering dropout, longitudinal analysis would allow for examination of this construct (among others) throughout the course of treatment in order to determine if certain factors (whether individually, or in combination) predict dropout from treatment for this population.

Currently integrative treatment models (approaches designed to address both substance and trauma related symptomology simultaneously) have received the most support (Burke & Carruth, 2012; Torchalla et al., 2012) in reducing both trauma and substance related symptomology, however studies assessing these programs have demonstrated high rates of treatment dropout. While these studies have shown that integrative treatment is efficacious, a substantial number of participants drop out. Future research should focus on the working alliance in addition to current integrative treatment models as it is a major protective factor when considering treatment adherence and treatment dropout. The results of this study have provided preliminary evidence that trust, experiential avoidance, and emotion dysregulation may be important aspects in development of a positive therapeutic alliance. Training counselors on evidence based integrative, trauma-informed approaches (Cognitive Behavioral Therapy, Exposure Therapy and Seeking Safety) with a heavy emphasis on working alliance development may improve rates of treatment dropout, and may result in reduction of substance abusing behaviors, psychiatric symptoms, emotional dysregulation, and experiential avoidance.

**Conclusion**

The purpose of this study was to determine the nature of the relationship between the counseling working alliance, child maltreatment, experiential avoidance, emotion dysregulation, positive attachment, and trust for individuals who are seeking substance abuse treatment with a history of child maltreatment. Statistical analyses demonstrated significant associations among
many of the variables assessed. The widespread experience of child maltreatment for those individuals who are seeking substance abuse treatment is important to establish, maltreatment was reported by a majority (83%) of the sample. It is essential that substance abuse treatment facilities are prepared to access the incidence of child maltreatment as the needs of this population are exceptionally unique.

The findings of this study emphasize the importance of trust in establishing a quality working alliance for individuals seeking substance abuse treatment with a history of child maltreatment. Experiential avoidance and emotion dysregulation were both significantly and negatively correlated with the counseling working alliance; however, trust significantly predicted counseling working alliance scores over and above experiential avoidance and emotion dysregulation. These findings suggest that trust was foundational to establishing a quality working alliance for this sample.
References


questionnaire-II: A revised measure of psychological inflexibility and experiential avoidance. Behavior Therapy, 42, 676-688.


Zickler, P. (2002). *Childhood sex abuse increases risk for drug dependence*. NIDA Notes, 17(1)

APPENDIX A: SCATTERPLOTS FOR INDEPENDENT AND DEPENDENT VARIABLES

R² Linear = 0.149

[Graph showing scatterplot with points and linear trend line]
R² Linear = 0.037
R² Linear = 0.043
APPENDIX B: HISTOGRAMS AND BOX PLOTS FOR MEASURED VARIABLES

Histogram:
- Mean: 83.74
- Std Dev: 12.772
- N: 114

Box Plot:
- Working_Alliance_Inventory_TOTAL
Normal P-P Plot of Regression Standardized Residual

Dependent Variable: Working_Alliance_Inventory>Total
APPENDIX D: INSTRUMENTS

Demographic Questionnaire

All responses will be kept confidential; please fill out as completely as you can.

1. **Today’s date**

2. **Gender:** Male    Female    Transgender    Other (check one)

3. **Age:** (in years)

4. **Cultural Identity** (check one or all that apply):
   - White/Caucasian
   - Hispanic/Latino(a)
   - African American/Black
   - Native American
   - Asian American/Pacific Islander
   - Other
   - specify other: __________________

5. **I completed my education through:** (circle best answer):
   - Less than high school
   - Some high school
   - High school graduate
   - Some college
   - Associate’s degree
   - Bachelor’s degree
   - Graduate degree (i.e. master’s, PhD, M.D., J.D)

6. **Are you employed?** yes    no

7. **Do you have a disability, chronic illness, mental health diagnoses, or are you taking medications for anything?** yes    no
   a. If yes, please specify: ____________________________________________
   b. Age of onset: ________ (in years)

8. **Current relationship status:** (circle one)
   - Single/never married
   - Married/domestic partnership/civil union
   - Separated
   - Divorced
   - Widowed
   - Living with a partner

9. **Sexual orientation:** straight/heterosexual    lesbian/gay    bisexual    other (specify)
10. **Have you ever engaged in a peer support group for recovery** (i.e. alcoholics anonymous)?
   a. ______ yes ______ no
   b. If “yes”, estimate how long your involvement was with this group ______
   c. On average how many meetings did you attend per month? ______
   d. How would you describe your experience with this peer support group?
      ________________________________________________________________
      ________________________________________________________________
   e. What meeting or group(s) did you attend? (circle all that apply)
      Alcoholics Anonymous Narcotics anonymous Women for Sobriety
      SMART Recovery Other: ________________________________

11. **Are you in treatment for** (check all that apply):
   a. ______ drugs ______ alcohol ______ behavioral/process addiction
   b. This substance or behavior has caused problems for approximately _____
      (years/months)

12. **How old were you when you started drug/alcohol use or started?** ______ (years)

13. **Who introduced you to the substance?**
    _____ sibling _____ friend _____ peer _____ parent _____ caregiver
    _____ other (specify other) ________________________

14. **When growing up, did you have a caregiver who had a substance abuse problem?**
   a. ______ no ______ yes
   b. If “yes” who? _____ mom _____ dad _____ other (specify other) ________________________

15. **How many times have you attempted sobriety?** ______ (times)

16. **How many times have you been in treatment for substance abuse?** ______ (times)

17. **How long have you currently been in treatment?** ______ (weeks)
Measures of Psychosocial Development: Trust Scale

The following questions contain statements or phrases which people often use to describe themselves, their lives, and their experiences. For each statement circle the answer which best represents your opinion.

<table>
<thead>
<tr>
<th></th>
<th>Not at all like me</th>
<th>Not much like me</th>
<th>Somewhat like me</th>
<th>Like me</th>
<th>Very much like me</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I am calm, relaxed, easy going</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. I generally trust people</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. I am optimistic, hopeful</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. I believe good things are worth waiting for</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. I am generous</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. I am trustworthy, others trust me</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. I trust my basic instincts</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
The Working Alliance Inventory

The following section includes sentences that describe some of the different ways a person might think or feel about his or her primary counselor (please think of the counselor who provides you with individual therapy). As you read the sentences below please think of your counselor and answer each statement on the seven-point scale provided. Your answers are CONFIDENTIAL and will not be shared with your counselor. Work fast, your first impressions are the ones we would like to see.

1. My counselor and I agree about the things I will need to do in therapy to help improve my situation
   1  2  3  4  5  6  7
   Never Rarely Occasionally Sometimes Often Very Often Always

2. What I am doing in therapy gives me new ways of looking at my problem
   1  2  3  4  5  6  7
   Never Rarely Occasionally Sometimes Often Very Often Always

3. I believe my counselor likes me
   1  2  3  4  5  6  7
   Never Rarely Occasionally Sometimes Often Very Often Always

4. My counselor does not understand what I am trying to accomplish in therapy
   1  2  3  4  5  6  7
   Never Rarely Occasionally Sometimes Often Very Often Always

5. I am confident in my counselor’s ability to help me
   1  2  3  4  5  6  7
   Never Rarely Occasionally Sometimes Often Very Often Always

6. My counselor and I are working towards mutually agreed upon goals
   1  2  3  4  5  6  7
   Never Rarely Occasionally Sometimes Often Very Often Always

7. I feel that my counselor appreciates me
   1  2  3  4  5  6  7
   Never Rarely Occasionally Sometimes Often Very Often Always

8. We agree on what is important for me to work on
   1  2  3  4  5  6  7
   Never Rarely Occasionally Sometimes Often Very Often Always

9. My counselor and I trust one another
   1  2  3  4  5  6  7
   Never Rarely Occasionally Sometimes Often Very Often Always

10. My counselor and I have different ideas on what my problems are
11. We have established a good understanding of the kind of changes that would be good for me

12. I believe the way we are working with my problem is correct
Acceptance and Action Questionnaire

Below you will find a list of statements. Please rate how true each statement is for YOU. Use the following scale to make your choice.

1-----------------2------------------3------------------------4------------------------5------------------------6------------------------7

Never true   Very seldom true   Seldom true   Sometimes true   Frequently true   Almost always true   Always true

1. _____ It’s OK if I remember something unpleasant.

2. _____ My painful experiences and memories make it difficult for me to live a life that I would value.

3. _____ I’m afraid of my feelings.

4. _____ I worry about not being able to control my worries and feelings.

5. _____ My painful memories prevent me from having a fulfilling life.

6. _____ I am in control of my life.

7. _____ Emotions cause problems in my life.

8. _____ It seems like most people are handling their lives better than I am.

9. _____ Worries get in the way of my success.

10. _____ My thoughts and feelings do not get in the way of how I want to live my life.
Childhood Trauma Questionnaire

Please circle the best answer which best explains your experiences growing up as a child or a teenager.

When I was growing up....

<table>
<thead>
<tr>
<th></th>
<th>Never True</th>
<th>Rarely True</th>
<th>Sometimes True</th>
<th>Often True</th>
<th>Very Often True</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I didn’t have enough to eat</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2.</td>
<td>I knew that there was someone to take care of me and protect me</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3.</td>
<td>People in my family called me things like “stupid”, “lazy”, or “ugly”</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4.</td>
<td>My parents were too drunk or high to take care of the family</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5.</td>
<td>There was someone in my family who helped me feel that I was important or special</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6.</td>
<td>I had to wear dirty clothes</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7.</td>
<td>I felt loved</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8.</td>
<td>I thought that my parents wished I had never been born</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9.</td>
<td>I got hit so hard by someone in my family that I had to see a doctor or go to the hospital</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10.</td>
<td>There was nothing that I wanted to change about my family</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11.</td>
<td>People in my family hit me so hard that it left me with bruises or marks</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>12.</td>
<td>I was punished with a belt, a board, a cord, or some other hard object</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>13.</td>
<td>People in my family looked out for each other</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>14.</td>
<td>People in my family said hurtful or</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td></td>
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<td></td>
</tr>
<tr>
<td>15. I believe that I was physically abused</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16. I had the perfect childhood</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17. I got hit or beaten so badly that it was noticed by someone like a teacher, neighbor, or doctor</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>18. I felt that someone in my family hated me</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>19. People in my family felt close to each other</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>When I was growing up...</strong></td>
<td><strong>Never True</strong></td>
<td><strong>Rarely True</strong></td>
<td><strong>Sometimes True</strong></td>
<td><strong>Often True</strong></td>
<td><strong>Very Often True</strong></td>
</tr>
<tr>
<td>20. Someone tried to touch me in a sexual way, or tried to make me touch them</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>21. Someone threatened to hurt me or tell lies about me unless I did something sexual with them</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>22. I had the best family in the world</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>23. Someone tried to make me do sexual things or watch sexual things</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>24. Someone molested me</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>25. I believe that I was emotionally abused</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>26. There was someone to take me to the doctor if I needed it</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>27. I believe that I was sexually abused</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>28. My family was a source of strength and support</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
29. Have you ever experienced another type of trauma? _____ no _____ yes

   a. If “yes” what happened?
      ____________________________________________________
      ____________________________________________________

   b. What age were you when this occurred? ______ (years)

30. If you experienced maltreatment as a child (physical abuse, emotional abuse, sexual abuse, neglect) at what age range did this occur? (circle all that apply)

   0-1 year  1-3 years  3-6 years  6-12 years  12-19 years
Adult Attachment Scale-Revised

Please read each of the following statements and rate the extent to which it describes your feelings about romantic relationships. Please think about all your relationships (past and present) and respond in terms of how you generally feel in these relationships. If you have never been involved in a romantic relationship, answer in terms of how you think you would feel.

Please use the scale below by placing a number between 1 and 5 in the space provided to the right of each statement.

<table>
<thead>
<tr>
<th>Not at all characteristic of me</th>
<th>Very characteristic of me</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I find it relatively easy to get close to others</td>
<td>2. I do not worry about being abandoned</td>
</tr>
<tr>
<td>3. I find it difficult to allow myself to depend on others</td>
<td>4. In relationships, I often worry that my partner does not really love me</td>
</tr>
<tr>
<td>5. I find that others are reluctant to get as close as I would like</td>
<td>6. I am comfortable depending on others</td>
</tr>
<tr>
<td>7. I do not worry about someone getting too close to me</td>
<td>8. I find that people are never there when you need them</td>
</tr>
<tr>
<td>9. I am somewhat uncomfortable being close to others</td>
<td>10. In relationships, I often worry that my partner will not want to stay with me</td>
</tr>
<tr>
<td>11. I want to merge completely with another person</td>
<td>12. My desire to merge sometimes scares people away</td>
</tr>
<tr>
<td>13. I am comfortable having others depend on me</td>
<td>14. I know that people will be there when I need them</td>
</tr>
<tr>
<td>15. I am nervous when anyone gets too close</td>
<td>16. I find it difficult to trust others completely</td>
</tr>
<tr>
<td>17. Often, partners want me to be closer than I feel comfortable being</td>
<td>18. I am not sure that I can always depend on others to be there when I need them</td>
</tr>
</tbody>
</table>
Difficulties in Emotion Regulation Scale

Please indicate how often the following statements apply to you by circling the appropriate number from the scale in the box alongside them.

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I am clear about my feelings</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. I pay attention to how I feel</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. I experience my emotions as overwhelming and out of control</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. I have no idea how I am feeling</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. I have difficulty making sense out of my feelings</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. I am attentive to my feelings</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. I know exactly how I am feeling</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. I care about what I am feeling</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. I am confused about how I feel</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. When I’m upset, I acknowledge my emotions</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. When I’m upset, I become angry with myself for feeling that way</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. When I’m upset, I become embarrassed for feeling that way</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. When I’m upset, I have difficulty getting work done</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14. When I’m upset, I become out of control</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15. When I’m upset, I believe that I will remain that way for a long time</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16. When I’m upset, I believe that I’ll end up feeling very depressed</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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</tr>
<tr>
<td>17. When I’m upset, I believe that my feelings are valid and important</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>18. When I’m upset, I have difficulty focusing on other things</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>19. When I’m upset, I feel out of control</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>20. When I’m upset, I can still get things done</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>21. When I’m upset, I feel ashamed with myself for feeling that way</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>22. When I’m upset, I know that I can find a way to eventually feel better</td>
<td>1 Almost never (0-10%)</td>
<td>2 Sometimes (11-35%)</td>
<td>3 About half the time (36-65%)</td>
<td>4 Most of the time (66-90%)</td>
<td>5 Almost Always (91-100%)</td>
</tr>
<tr>
<td>23. When I’m upset, I feel that I am weak</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>24. When I’m upset, I feel like I can remain in control of my behaviors</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>25. When I’m upset, I feel guilty for feeling that way</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>26. When I’m upset, I have difficulty concentrating</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>27. When I’m upset, I have difficulty controlling my behaviors</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>28. When I’m upset, I believe that there is nothing I can do to make myself feel better</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>29. When I’m upset I become irritated with myself for feeling that way</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>30. When I’m upset, I start to feel very bad about myself</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>31. When I’m upset, I believe that wallowing in it is all I can do</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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</tr>
<tr>
<td>32. When I’m upset, I lose control over my behaviors</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>33. When I’m upset, I have difficulty thinking about anything else</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>34. When I’m upset, I take time to figure out what I’m really feeling</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>35. When I’m upset, it takes me a long time to feel better</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>36. When I’m upset, my emotions feel overwhelming</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
Vita
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Master of Education (2011): University of North Texas
  Major: Clinical Mental Health Counseling

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  Major: Psychology

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Publications

