EMOTION FOCUSED THERAPY FOR COUPLES IN ADDICTION TREATMENT: THE RELATIONSHIP BETWEEN QUALITY OF RECOVERY, ATTACHMENT STYLE, AND RELATIONAL SATISFACTION

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by

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ABSTRACT

This study investigates the efficacy of Emotion Focused Therapy (EFT) for couples in an addiction recovery program. The literature review revealed that individuals with a secure attachment style experience increased relational satisfaction and report better ability to manage life's challenges as compared with individuals with an insecure attachment style. A pretest-posttest design was used to investigate the effect of EFT on quality of recovery from addiction. The primary measure's percentile rank scores were comparatively analyzed. A single case multiple baseline design was implemented to draw inferences based on examining the participants' assessment scores across baseline and intervention phases. The purpose of this study was to demonstrate the effect of EFT by showing that participants reported increased quality of recovery from addiction, movement away from an insecure attachment style and toward a secure attachment style, and increased relational satisfaction when and only when the intervention was applied. This research serves to further the understanding of the role of EFT couple therapy in addiction recovery. Increased knowledge related to how an interpersonal connection can facilitate the recovery process is helpful to practitioners serving this population.

DEDICATION

I dedicate my dissertation work to my professors, family, and friends who have supported me along this journey. Thank you all for participating in this amazing experience together with me.

I am grateful to my chair, Dr. Jenkins, whose inspirational instruction and counsel gave me a deep appreciation for the research process. His clever ideas and enthusiastic navigation through challenges allowed for the completion of this study. I appreciate Dr. Thomas and Dr. Volk for serving on my committee and for providing their expertise and time. I give special thanks to Dr. Sosin for her kindness in reaching out to me to provide encouragement.

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CHAPTER ONE: INTRODUCTION

As relational beings, a universal human tendency is to foster connections with others. Close relationships are important to most people's happiness (Hazan & Shave, 1994). Beginning in childhood, people desire loved ones who are attentive, responsive, and emotionally engaged (Johnson, 2004). It is through the experience of being loved and cared for that one learns how to relate with others. As adults, people seek the ability to engage in reciprocal relationships with their loved ones, to find comfort, support, and understanding in one another, and, ideally, to create a healthy interdependence that is supportive of both partners (Johnson, 2003). A person's romantic relationship, often culminating in marriage, is one of the most impactful and potentially meaningful bonds that can be experienced. The stability and quality of one's significant romantic relationship extends beyond the relationship into all aspects of one's life experience. The mutual encouragement found in a supportive marriage has the potential to lift both of the individuals to levels of psychological wellness beyond which either could have found themselves independent of the other (Johnson, 2004).

Conversely, marital discord and divorce often correlate with an all-encompassing misery for both partners. The enormous distress of marital discord may increase partners' susceptibility to both physical and psychological pathology (Amato, 2000; Johnson, 2004). Relational duress has been shown to have direct adverse effects on cardiovascular, endocrine, immune, and neurosensory health (Snyder & Halford, 2012). Additionally, relationship stress is a major contributing factor to the development of an individual psychological disorder. An association has been established between relationship distress and depression, anxiety, and substance abuse disorders (Snyder & Halford). Many couples who have diverged from a loving way of being together need help finding their way back to each other.

Some factors serve to protect a couple's relationship while other factors place strain on the relationship and thus increase the risk that the couple will experience relational duress. Substance abuse is a factor that many divorced individuals cite as contributing to their relational distress (Amato & Previti, 2003). Substance use often becomes paramount while partners' needs are neglected. Substance use tends to increase with relational discontent, and the converse also holds true that relational satisfaction is a protective factor against substance abuse (Homish, Leonard, & Cornelius, 2010). This cycle of decomposition, linking relational dissatisfaction and substance use, gives credence to the concept of interrupting the coalition in effort to work toward both increased marital satisfaction and decreased substance abuse. As partners begin to perceive the other as no longer attentive and responsive, their affection wanes. Marital duress tends to prompt partners to use dysfunctional coping strategies such as defensiveness, withdrawal, stonewalling, and contempt, during conflict. The spouses see one another as contrary and the individuals are likely to become more ambivalent about their relationship (Huston, Neihuis, & Smith, 2001).

Divorce rate is a salient and reliable indicator of relational duress. In almost all developed countries, divorce rates have increased since the mid-1970s. The United States currently has the highest divorce rate with about half of married couples choosing to divorce (Snyder & Halford, 2012). Research indicates that divorce rates continue to rise (Coontz, 2007; Daatland, 2007) since well over a third of persons who marry chose later to either divorce or separate permanently (Bramlett & Mosher, 2002) and have an increased likelihood of multiple divorces over their lifespan (Amato, 2000; Clinton, Hart, & Ohlschlager, 2005).

Background of the Problem

Living with a substance-abusing partner is incompatible with creating and maintaining a healthy romantic connection. The relational tension common in the dyads with a partner struggling with addiction often creates a dynamic that continuously triggers the substance-abusing partner to either increase substance use or relapse from recovery (Fals-Stewart, Lam, & Kelley, 2009). The partner who does not abuse substances often feels hurt and anger associated with carrying the heavy burden of maintaining the relationship while forgoing their own individual and relational longings (Cropley, 2006). The reciprocal causality between addiction and relational stress creates a negative cycle in which each construct activates the other. Couples often have trouble escaping the downward spiral of addiction and marital duress (Fals-Stewart et al., 2009). The process of recovery from addiction requires both intrapersonal and interpersonal restoration (Finzi-Dottan, Cohen, Iwaniec, Yaffa-Sapir, & Weizman, 2003).

Romantic attachment is a reciprocal process, with each partner at various times feeling anxious and seeking security within the relationship and at other times meeting their significant other's attachment needs (Hazan & Shaver, 1987). Partners struggling with issues of addiction are not able to provide security and care for each other. A couple struggling with addiction may need help in developing a new interactive cycle (Bradley & Furrow, 2004) as they learn to trust each other in escaping the addictive lifestyle and fostering a secure attachment bond. Substance recovery programs that include couples therapy as a treatment component have been shown to result with positive recovery outcomes (O'Farrell & Fals-Stewart, 2000).

One's romantic attachment relationship can serve as either a haven from or a trigger for substance abuse (Hofler & Kooyman, 1996). A secure attachment is a vital resource to an individual in recovery from addiction. Grounded in attachment theory, Emotion Focused

Therapy (EFT) fosters the development of a secure attachment between partners (Johnson, 1999). The inclusion of EFT in a substance abuse recovery program may facilitate a connection within the couple in which each individual can engage and respond to the other in a way that meets the attachment needs and helps to soothe dysregulation.

Research indicates the efficacy of EFT in creating secure attachments with couples in duress (Bradley & Furrow, 2004; Clothier, Manion, Gordon Walker & Johnson, 2001; Johnson & Greenberg 1985). Other studies demonstrate an association between secure attachment and addiction recovery (De Rick, Vanheule, & Verhaeghe, 2009; Finzi-Dottan et al., 2003; Molnar, Sadava, DeCourville, & Perrier, 2010; Zapf, Greiner, & Carroll, 2008). This study builds on the work of previous investigators who have predominately focused on the use of EFT in creating secure attachment styles and increasing marital satisfaction. This study contributes to the field as seminal research exploring the use of EFT with couples in recovery from substance addiction.

Purpose of the Study

The purpose of this study was to determine the efficacy of Emotion Focused Therapy (EFT) in enhancing recovery when working with couples in which one of the partners is recovering from substance addiction. The EFT model was implemented in an effort to help the couples increase the quality of their recovery from addiction by way of establishing secure attachments within the relationship, thus increasing relational satisfaction. A secure attachment in the primary relationship may enable the individuals to create a secure attachment style that will permeate their relational worldview of themselves and of others. This study aimed to determine whether couples who received the EFT model of couples therapy as a component of an addiction recovery program are better able to obtain and then sustain increased quality of recovery from addiction when the EFT intervention is administered.

Research Hypotheses

This study tests three hypotheses. The first null hypothesis states that there is no difference between the pretest outcome scores and posttest outcome scores before and after EFT treatment on addiction recovery assessment scores. The second null hypothesis states that attachment style assessment scores remain at predicted baseline trends throughout the intervention phase. The third null hypothesis states that marital satisfaction assessment scores remain at predicted baseline levels throughout EFT treatment. The dependent variables are quality of recovery from addiction, attachment style, and relational satisfaction, respectively.

Assumptions and Limitations

There are several limitations to the study, which decrease generalizability across populations. The participant selection might have influenced the findings since long-term treatment is no longer readily available to most people (Evans, 2006); thus it is likely that the participants at the treatment center are different than the general population. Most people struggling with addiction are not afforded the opportunity to participate in intensive long-term therapy (Menz, 2009). The study generalizes only to populations similar to those of this study.

The use of self-report instruments may be a source of limitation in the study, since the results are accurate only to the degree that the participants understood the instruments and answered them honestly. Some participants may have felt compelled to report what they perceived to be socially desirable responses. Additionally, the theoretical construct of quality of recovery from addiction is difficult to define and is innately comprised of some degree of variability.

Significance of the Study

This study offers an alternative to current models for addiction recovery programs. This research serves to further the understanding of the role of couples therapy in addiction recovery. Increased knowledge related to how an interpersonal connection can facilitate the recovery process may be helpful to practitioners serving this population. Clinicians may find efficacy in the addition of EFT couples therapy in addiction recovery programs.

Definition of Terms

The following terms are operational definitions taken from relevant research. The definitions are provided in the following section in an effort to provide clarity in this study.

Attachment Theory was originally derived from John Bowlby's theory (1969; 1973; 1980) and supported by Mary Ainsworth's (1969, 1982; Ainsworth, Blehar, Waters, & Wall, 1978) empirical research. It is the concept that people are innately driven to seek proximity with significant caregivers for the purposes of safety and emotion regulation (Ainsworth, 1969; Ainsworth, 1982; Bowlby; Weaver, 2011). Children form either a secure or an insecure attachment style with their primary attachment figures (Surcinelli, Rossi, Montebarocci, & Baldaro, 2010).

Adult attachment is an attachment system found in adult romantic relationships (Hazan & Shaver, 1987). It is differentiated from the parent-child attachment system because of the reciprocal nature of the relationship; each partner serves as a secure base and safe haven for the other, whereas a parent attachment is complementary since the caregiver is the secure base and safe haven for the child but not the child for the parent (Dinero, Conger, Shaver, Widaman, & Larsen-Rife, 2008). This term is often used synonymously with romantic attachment (Weaver, 2011).

Romantic attachment specifies an attachment system found in adult love relationships (Hazan & Shaver, 1987). It is differentiated from a parent–child attachment system because of the reciprocal nature of the relationship; each partner serves as a secure base and safe haven for the other, whereas a parent attachment is complementary since the caregiver is the secure base and safe haven for the child but not the child for the parent (Dinero et al., 2008). This term is often used synonymously with adult attachment (Weaver, 2011).

Internal mental models are cognitive structures that act as a prototype for relationships, thus influencing interactions with others. The two types of internal mental models are an internal mental model of self and an internal mental model of others. One's attachment style is dictated by the degree of positivity or negativity of both of the internal mental models (Surcinelli, Rossi, Montebarocci, & Baldaro, 2010).

Secure attachment describes an attachment style that is fostered by consistent and sensitive parenting. It is characterized by interpersonal trust and comfort with intimacy (Surcinelli et al., 2010).

Insecure attachment is an attachment style that is fostered when a child's bids for proximity with and soothing from their significant attachment figure are ignored, rebuffed, or responded to inconsistently. It is characterized by a negative mental model of self, a negative mental model of others, or a negative mental model of both self and others (Surcinelli et al., 2010). Insecure attachment is further classified as anxious attachment, avoidant attachment, and fearful attachment.

Anxious attachment is an insecure style of an attachment system that leads to hyperactivation of attachment behavior in order to maintain proximity and have needs met by an inconsistent attachment figure (Karen, 1998). This type of attachment organization in adults is

sometimes referred to as *preoccupied* (Bartholomew, 1990; Weaver, 2011). Ainsworth's original label for this classification was *ambivalent* (Ainsworth et al., 1978).

Avoidant attachment describes an insecure style of an attachment system which leads to a deactivation of attachment behavior in an attempt toward self-reliance when needs are consistently left unmet by a neglectful, rejecting, or overwhelming attachment figure (Karen, 1998; Weaver, 2011).

Fearful attachment delineates an insecure style of an adult attachment system derived from the need to maintain proximity to an attachment figure that is abusive or fear-inducing. This attachment style lacks a consistent strategy to pursue the attachment figure (Bartholomew, 1990). This type of attachment in children is referred to as a *disorganized attachment* (Karen, 1998; Weaver 2011).

Emotion regulation is a process of self-soothing that influences the duration, intensity, or composition of emotional and physiological duress. The process modulates attention, motivation, and behavior in an effort to adapt to circumstances and to achieve set goals (Gross & Thompson, 2007). These abilities are first learned and developed within primary attachment relationships (Mikulincer, Shaver, & Pereg, 2003; Weaver, 2011). The ability to regulate emotions differs considerably between attachment styles (Maas, Laan, & Vingerhoets, 2011).

Negative affect characterizes a state of emotional duress which can include depression, anxiety, frustration, stress, tension, and anger (Bradley, 2011; Weaver, 2011).

Addiction is defined as compulsive and repetitive substance use despite negative social, psychological, or physical consequences (Lingford-Hughes & Clementi, 2008) Addiction is characterized by continuous or periodic impaired control over substance abuse, preoccupation with the substance, and use of the substance despite adverse consequences. Use of the substance

causes distortions in thinking and is typically accompanied by denial as a defense mechanism (Angres & Bettinardi-Angres, 2008).

Recovery is defined as the process through which individuals, families, and communities impacted by substance abuse use internal and external resources to resolve the addiction, heal the wounds inflicted by the substance use lifestyle, and develop a healthy, meaningful and productive life (Dodge, Krantz, & Kenny, 2010).

Theoretical and Conceptual Framework

Substance abuse has been found to create problems in marital relationships (Caetano & Clark, 1998) in addition to hindering the development of intimacy and relational growth (Collins, Ellickson, & Klein, 2007). Individuals who abuse substances may self-medicate in an effort to regulate affect and reduce fear associated with romantic attachment (Khantzian, 2003). Married couples who abuse substances are more likely to divorce than couples who do not. The rate at which a marriage decomposes correlates with frequency of substance use (Collins et al., 2007). Levels of substance abuse and dependence on substances are higher for divorced individuals as compared with married individuals (Caetano & Clark, 1998). Substance abuse is detrimental to a marriage and marital duress impedes the recovery process.

Fostering a secure attachment with one's romantic partner in conjunction with the treatment of addiction benefits those in recovery (Zapf, Greiner, & Carroll, 2008). Securely attached individuals are more likely than insecurely attached individuals to adopt healthy behaviors and habits while insecurely attached people are more likely to engage in harmful and risky behaviors (Brennan & Shaver, 1995).

Each individual in a couple may be able to integrate a secure attachment style, modifying their model of self and others, and thus establish additional secure relationships with family

members and friends (Groh, Jason, Davis, Olson, & Ferrari, 2007). The establishment of secure relationships allows for a healthy support system and thus encouragement from others toward healthy life choices. Fellowship and social support play a key role in successful abstinence from substances for the recovering addict (Groh et al., 2007). Since a secure attachment style enables a person to acknowledge distress and seek support from loved ones, (Bowlby, 1982; Hazan & Shaver, 1994) a secure romantic attachment may help both the addict and the loved one to regulate affect and manage the emotional turmoil that so often is a part of the recovery process (Thorberg & Lyvers, 2010). It seems promising that the establishment of a secure attachment style together with addiction treatment may contribute to positive results in recovery.

Organization of the Remaining Chapters

The present chapter serves as a general overview of the background and context of the study. Chapter Two comprehensively explores relevant theory and research. The chapter also examines the main variables in this study. Chapter Three describes the methods of this study and addresses the validity and reliability of the three assessments that are used to gather data. Also, research questions are proposed and inform the hypotheses that predict the directionality of the data generated from this study. Chapter Four presents the comparative and visual data analysis and study results. Finally, Chapter Five offers a summary of the study's findings, an identification of relevant conclusions that can be drawn from the analyses, and a rationale for the recommendations for future research direction and practice.

Chapter Summary

This study explores the impact that EFT has on quality of recovery from addiction, attachment styles, and relational satisfaction in a population with one partner in recovery from addiction. A secure attachment within a loving romantic relationship may be a key component in

the stability of one's recovery. Investigating these variables may contribute to the development of addiction recovery programs. The following research is intended to contribute to a better understanding of the complex nature of relationships in which one partner is recovering from addiction.

CHAPTER TWO: LITERATURE REVIEW

Introduction

Previous research indicates that addiction is affected by an adult's attachment style as the desire to regulate the negative affect induced by an activated attachment system often prompts substance use (Baucom, Shoham, Mueser, Daiuto, & Stickle, 1998; Cavacuiti, 2004; Finzi-Dottan, Cohen, Iwaniec, Yaffa Sapir, & Weizman, 2003; Hofler & Kooyman, 1996; Molnar, Sadava, DeCourville, & Perrier, 2010; Surcinelli, Rossi, Montebarocci, & Baldaro, 2010). Research indicates the efficacy of emotion focused therapy (EFT) in creating secure attachments with couples in duress (Bradley & Furrow, 2004; Clothier, Manion, Gordon-Walker & Johnson, 2001; Johnson & Greenberg, 1985), and the benefit of a secure attachment with addiction recovery (DeRick, Vanheule, & Verhaeghe, 2009; Finzi-Dottan et al., 2003; Molnar et al., 2010; Zapf, Greiner, & Carroll, 2008). This chapter reviews literature and theory that link addiction with attachment insecurity and the potential for EFT to simultaneously foster secure attachment bonds and decrease addictive behavior. This chapter concludes with a discussion of why the topic is important to study.

Attachment Theory

An attachment bond involves a deep desire for attention, emotional responsiveness, and reciprocal interest (Johnson, 2004). Through her initial research, Mary Ainsworth offered the beginnings of an explanation of the development of an infant's worldview and thus the establishment of security, development of personality, and prediction of future relationships (Ainsworth, Blehar, Waters, & Wall, 1978). John Bowlby (1982) developed the theory of attachment to explicate the system of survival behaviors with the purpose of gaining or maintaining proximity with an attachment figure. Since that time much work has been done to

create a coherent framework from which we understand the complexities of attachment relationships.

The Strange Situation

Through naturalistic observational studies of mothers and infants, Ainsworth developed a system to measure relationships, and provided empirical evidence to demonstrate three distinct patterns of attachment styles (Ainsworth et al., 1978). With the creation of the Strange Situation, a longitudinal study of attachment during an infant's first year of life, Ainsworth investigated infants' responses to their caregivers. The infant's attachment bond, the specific affectional bond necessary for survival, was explored by Ainsworth and her research colleagues. The study consisted of the researcher's in-home observation of 26 mothers and their children for 12 months, for a total of 72 hours in each family's home. Attention was given to each mother's style of responding to her infant as related to feeding, crying, cuddling, eye contact, and smiling. At one year of age the mother and baby presented to the lab and the infant was observed as the mother was separated from the child. The separation occurred twice, one time a stranger to the infant was in the room, and the next interval the baby was alone.

With this data, Ainsworth (1982) delineated the infants into attachment categories based on similar response behaviors. The babies were labeled as either having a secure attachment or an insecure attachment, with insecurely attached babies being divided into ambivalent and avoidant subsets of the insecure attachment type. The year of in-home observation allowed Ainsworth to make correlations between the babies' attachment styles and the mothers' parenting style. Mothers of securely attached babies were found to be more responsive to the feeding signals and the crying of their infants and to eagerly return their child's smiles. They were

consistent and sensitive in their parenting. Mothers of insecurely attached babies were inconsistent, unresponsive, or rejecting of their child's bids for security.

Ainsworth (1982) found the behavior of the babies to be quite different between the various attachment style categories. The infants demonstrated the use of different yet consistent strategies to manage anxiety and promote their sense of security. The three identified attachment styles are coherent systems with biological and psychological functions used to organize a strategy of attachment with significant attachment figures. The mother-infant attachment is not reciprocal in that the attachment figure provides protection and security as well as responsiveness to the infant's appeal for proximity while the infant is not able to respond to the needs of the adult (Hofler & Kooyman, 1996).

Ainsworth's Strange Situation provided empirical evidence to reinforce the tenets of attachment theory formulated by John Bowlby and was published in his three-volume study *Attachment and Loss* (1982). Attachment theory has evolved into a much-researched explanation of how one internally develops and organizes perceptions of oneself and others, thus shaping one's sense of security in relationships.

The Attachment System

Familiarity and responsiveness determine the infant's selection of a primary attachment figure (Hazan & Shaver, 1994). Infants attach to their primary care takers, usually one or both parents. When an infant is separated from the attachment figure, the infant responds in a predictable manner of emotional responses: initially protest, then despair, followed by detachment (Hazan & Shaver, 1987). The repetition of this complex protective behavior based on attachment emotion creates the attachment system. Infants can survive only if an adult is willing and able to provide safety and care for them. A child's organization of emotional

experiences and regulation of felt security is scaffolded by the caregiver's responsiveness and sensitivity to the child's affective signals (Fuller & Fincham, 1995). The goal of attachment behavior, which is activated when a person is distressed, ill, or afraid, is to gain proximity to and a response from one's significant attachment figure (Bowlby, 1976). Even once people are able to meet their own basic needs independently, proximity to responsive attachment figures provides a safe haven in which to find comfort and protection. Confidence in the caregiver's provision of refuge supports exploration and coping. Threats to these bonds prompt primary fears of loss, isolation, and helplessness, thus intensifying needs for closeness, comfort, and soothing (Johnson, 2005).

The attachment system functions in relation to one's perception of trust on two fronts: (1) trust that, particularly during times of distress, significant attachment figures are available and responsive and (2) trust in the self as lovable (Cassidy, 2001). Security is characterized by the demonstration of attachment behavior that reflects the truth of the individual's emotion (Cassidy, 2001), allowing for an authentic expression of affect. While attachment behavior may at times undermine one's desire for engagement, the primary goal of attachment behavior is a sense of security (Hazan & Shaver, 1994). Attachment theory emphasizes individuals' interdependence on one another, which entails fostering the desire to establish and maintain powerful affectional bonds with significant others (Makinen & Johnson, 2006).

Internal Working Models of Self and Others

Bowlby (1982) conceptualized that children develop expectations of their primary caregivers based on the caregiver's responses to them, which they then synthesize into internal working models of self and others. These internal working models of self and others are then generalized to other attachment relationships (Cassidy, 2001). New experiences are assimilated

into one's working models via the individual's perception, interpretation, and response to the new experience. The subjectivity of this process promotes stability of the attachment style over time (Fuller & Fincham, 1995). A reorganization of working models is thought to be most likely during times of dramatic change such as the formation or loss of an attachment relationship and during life transitions (Fuller & Fincham, 1995). The established internal models will likely remain consistent throughout the lifespan unless the individual actively seeks intrapersonal and interpersonal change (Hazan & Shaver, 1994).

Mental Model of Self

Repeated interactions with attachment figures teach a child what to expect in future exchanges (Hazan & Shaver, 1994). A child who has positive experiences upon turning to caregivers will develop a model of self as valued and worthy of love (Cassidy, 2001). A negative model of self is developed as the child has experiences of being dismissed or treated in an insensitive manner by their attachment figure. This negative model of self begets a perception of oneself as not worthy of the love of another. It is characterized by fear of rejection and dependence on others for a sense of self-worth (Surcinelli, Rossi, Montebarocci, & Baldaro, 2010). Childhood interactions with primary attachment figures actualize one's model of self as either positive or negative.

Mental Model of Others

In a similar manner, one's mental model of others is formed during childhood based on interactions with attachment figures (Griffin & Bartholomew, 1994). Primary caregivers who are sensitive and responsive, particularly when the child is upset and petitions for comfort, facilitate a representation of the parent as trustworthy to be available, responsive, and comforting (Cassidy, 2001). A positive model of others is established as the caregiver is consistently

attentive and accurately responsive to the child's cues. A child forms a negative mental model of others in response to consistent experiences in which the attachment figure ignores or rebuffs the child's appeal for support and protection (Haggerty, Hilsenroth, & Vala-Stewart, 2008). A negative model of others is distinguished by the fear of intimacy and a self-reliant stance (Surcinelli et al., 2010). A person's expectations about significant others' availability and support are formulated by their internalized working mental model of others.

Internal Working Models

The infant's mental representations of the self and of the attachment figure develop in concert so as to mutually confirm each other (Hazan & Shaver, 1994). These mental representations develop into internal working models to help the child predict, integrate, and plan attachment-motivated behavior (Hofler & Kooyman, 1996). Children integrate their internal working models of self and others to anticipate the likely availability and responsiveness of their attachment figures (Hazan & Shaver) and to form the standard from which they judge future adult social relations (Griffin & Bartholomew, 1994). The quality of early attachment relationships provides a sense of felt security from which the individual internalizes mental models of self and others and later forms the prototype for adult relationships (Bartholomew & Horowitz, 1991).

People create a sense of self and perception of others through experiences of relations with others (Johnson, 2007). The enduring fundamental model of self and others prompts individuals to continually form new relationships based upon expectations about relationships developed during previous interactions (Hazan & Shaver, 1994). An adult's internal model of self and others is complex and resistant to change, so much so that a person has a propensity toward distorting their perception of interactions in order to make the new messages received in

relational dialogue congruent with their long established working models of self and others (Bowlby, 1976; Fraley & Shaver, 2000). An individual's perception of aptitude to self-regulate, along with the expectations one has of a loved one's attributes will determine consistent relationship behavior (Creasey, Kershaw, & Boston, 1999). Individuals often choose their significant others on the basis of that person's ability to confirm attachment related expectations, even when the expectation is undesirable (Hazan & Shaver). The reorganization of one's working models is most likely to occur during times of transition, particularly during the formation or loss of an attachment relationship (Fuller & Fincham, 1995). A person's style of attachment usually continues consistently from infancy throughout the entire lifespan but has the potential to be updated and revised in light of new relational experiences (Fraley & Shaver).

Attachment Styles

Attachment styles are maintained through the internal working models of self and others, constructed through experiences in significant relationships with others (Hazan & Shaver, 1994). Bowlby (1982) defined attachment styles as patterns of expectations, needs, affect regulation strategies, and social behavior. One's style of connecting with others is actuated by beliefs generated through interactions with significant others since childhood. An adult's attachment style modifies their perception of self and others (Collins & Read, 1990; Feeney & Noller, 1990) through both conscious and unconscious processes (Creasey et al., 1999), thus infiltrating all of their relational interactions. This continuity of an attachment style persists due to the mental model of self and others that the child develops during interactions with their primary caregivers (Bowlby, 1982).

A person's sense of trust and degree of intimacy in interpersonal relationships are determined largely by his or her attachment style (Hazan & Shaver, 1987). While experiencing

distress, individuals with different attachment styles experience various degrees of anxiety, as well as diverse levels of both positive and negative affect (Fuller & Fincham, 1995). The original work of Bowlby (1976) and Ainsworth (1978) served to classify individuals into two main attachment styles: secure and insecure. Insecure attachment is further divided into anxious and avoidant attachment styles. An additional subset of avoidant attachment, labeled fearful attachment, was introduced to the literature by Bartholomew and Horowitz (1991).

Secure Attachment

A secure attachment style is characterized by a positive model of self and a positive model of others (Surcinelli et al., 2010.) Securely attached individuals view themselves as capable of self-regulation and worthy of affection and security from others. These individuals also view others as able and willing to provide love and security to them (Bowlby, 1976; Bartholomew & Horowitz, 1991) as well as being generally trustworthy and beneficent (Brennan & Shaver, 1995; Locke, 2008). A positive representation of self and others fosters a secure attachment, allowing for the vulnerability necessary in developing intimacy and for the comfort provided by seeking care (Cassidy, 2001).

The secure attachment style that is reinforced through repeated interactions with attachment figures during childhood will likely remain consistent throughout the individual's life span (Shi, 2003). Partners with secure attachment styles are able to create a secure attachment bond within the dyad. The essence of a secure romantic bond is mutual emotional accessibility and responsiveness within the couple (Johnson, 2005). A secure attachment is associated with positive care seeking as well as care giving behavior (Cassidy, 2001; Fraley & Shaver, 2000; Shi). Securely attached partners cultivate intimacy with both high responsiveness to their partners and high levels of self-disclosure (Feeney, Noller, & Callan, 1994). These partners are

willing to trust each other and disclose ideas and emotions in a flexible manner, remaining sensitive to their partner's needs and concerns. Secure romantic attachments are associated with positive aspects of relational functioning including high levels of trust, commitment, and interdependence. These partners report feeling more known and understood by their partner than do partners of insecure attachment styles (Cassidy). A secure attachment facilitates comfort with autonomy, an aspect vital to intimacy as it allows freedom from both the fear of being consumed by the other and fear of loss of the loved one (Cassidy). Securely attached adults are more likely than adults with insecure attachment styles to rate their love experiences as happy with a tendency toward supporting and accepting their partners (Meyers & Landsberger, 2002) and to encourage each other toward the creation of optimal experiences (Makinen & Johnson, 2006). A secure attachment offers each individual a secure base in his or her partner from which to explore his or her environment with the confidence necessary to risk, learn, and reflect (Johnson, 2004).

Securely attached partners generally trust each other during the conflict resolution process. Partners with a secure attachment engage in an increased frequency of verbal agreement (Collins & Read, 1990), more self-disclosure (Mikulincer & Nachshon, 1991), and collaborative discussion and understanding of the other's viewpoint (Feeney et al., 1994). They are more likely to assert themselves, presumably expecting their authentic expression to enhance the relationship (Locke, 2008). They tend to take an active role in problem solving, and compromise in conflict resolution, thus enabling resolution that satisfies both partner's concerns (Shi, 2003). Secure relationships are not conflict free, but rather involve trust in each other, which is conducive to constructive disagreements and effective problem solving (Hazan & Shaver, 1994). Securely attached individuals believe themselves to be cherished by their significant other and perceive

their partner as dependable (Johnson, 2005). Thus, they trust that their partner ultimately considers their best interest in the decision making process.

Insecure Attachment

A young child cannot tolerate the concept of the self as unlovable or the attachment figure as unavailable; therefore, the child adopts maladaptive attachment behaviors aimed to regulate their emotion and decrease distress. Over time, this construction of a strategy to deactivate the attachment system and suppress attachment needs generates an insecure attachment system (Jaeger, Hahn, & Weinraub, 2000). Insecurely attached individuals are subcategorized into anxious and avoidant attachment styles (Ainsworth, 1982; Bowlby, 1982; Feeney et al., 1994; Fraley & Shaver, 2000; Hazan & Shaver, 1987), with fearful attachment more recently added as a subset of the avoidant attachment style (Bartholomew & Horowitz, 1991). Research indicates that secure attachment is the norm with the distribution of all ages across attachment categories, being 55% secure, 20% anxious, and 25% avoidant (Hazan & Shaver, 1994). Insecure attachment styles are the root of much relational dissatisfaction (Hazan & Shaver), and those with insecure attachment styles, anxious and avoidant, report higher levels of frustration with previous partners than do securely attached individuals (Brennan & Shaver, 1995). Adults involved in relationships characterized by an insecure attachment pattern with their romantic attachment partners find themselves in the dilemma in which their partner is both the source of and a solution to emotional pain (Johnson, 2005).

Anxious attachment. Anxiously attached adults have a negative model of self, perceiving themselves to be unworthy of the love of another and relationally inadequate, while holding a positive mental model of others (Shi, 2003; Surcinelli et al., 2010). An anxious attachment style reflects a lack of confidence in the reliable responsiveness of one's attachment

figures (Hazan & Shaver, 1994). These individuals perceive themselves to be able to gain the attention of and receive care from their partner only by sending out exaggerated signals of need (Cassidy, 2001). They also have a tendency to sacrifice concern for self to satisfy the desires of their partner (Shi). Individuals with an anxious attachment style have a persistent fear of rejection in that their loved one may abandon them or judge them to be unworthy of love and care (Locke, 2008).

Partners with an anxious attachment style are preoccupied with their romantic relationship, characterized by hypervigilance to negative affect (Feeney & Ryan, 1994) in constant assessment for signs of potential rejection. They tend to magnify minor, fleeting, and even meaningless interpersonal events. Since individuals with anxious attachments styles are prone to poor impulse control and a high need of approval from others, they are likely to report falling in love at first sight and then longing intensely for their partner's reciprocation (Brennan & Shaver, 1995). They describe their love relationships as obsessive, involving jealousy, and extreme sexual attraction to their partner (Meyers & Landsberger, 2002). Their romantic love experiences are undermined by their simultaneous fear of rejection and anger at their partner for being insufficiently accessible and fallaciously responsive to their burdensome attachment needs (Brennan & Shaver, 1995). The hyperactivation of the attachment system manifests as a seemingly insatiable desire for closeness, which interferes with intimacy in that both partners usually become resentful of the expectation to completely merge without the opportunity to realize natural strivings for autonomy (Cassidy, 2001). Anxiously attached individuals take on more than their share of the burden in maintaining relational connections (Cassidy), often ultimately sabotaging their attempts to foster intimacy. The partner on the receiving end of the

anxious partner's seemingly endless pursuit may find it wearying or even impossible to meet the attachment needs of their frequently dysregulated loved one.

Because of their deep rooted fear of rejection and ultimately abandonment (Feeny et al., 1994), individuals with an anxious attachment style have a tendency to dominate the conflict resolution process with pressure, contempt, and hostility (Simpson, Rhodes, & Phillips, 1996) as well as blame, threats, and aggression in either physical or verbal form, in attempt to ensure their partner's availability (Shi, 2003). Their thoughts and emotions predominately focus on their partner and, in particular, on whether their partner is available and responsive to them (Locke, 2008). These individuals perceive their emotional wellbeing to be contingent upon optimal relationships, thus they react to potential relationship loss with contention, often in attempt to invoke guilt or sympathy from their partner. These individuals exhibit high incidents of self-disclosure but lack flexibility and topical reciprocity (Feeney et al.). They report a tendency to engage in explosive arguments punctuated by intense anger (Creasey et al., 1999). The primary tendency for a person with an anxious attachment is to pursue, often in the form of criticism (Johnson, 2004), and frequently escalating to high levels of negativity (Creasey et al.). The primary goal of the conflict for an anxiously attached individual is temporary relief from the anxiety that comes with the fear of abandonment (Shi).

Avoidant attachment. Individuals with an avoidant attachment style have a positive view of self, perceiving themselves to be resilient and independent, but a negative and distrustful view of others (Brennan & Shaver, 1995; Surcinelli et al., 2010). An avoidant attachment style is developed through consistent experiences with an unresponsive caregiver in which a child's bids for comfort from distress are rejected. The pain of this rejection and the resulting sense of isolation lead these children to adapt by developing a strategy in which their attachment system

is deactivated. They learn not to seek care or help from their attachment figures but rather to shift their attention away from their care giver and engage in self-soothing behavior when distressed, attempting to distance themselves from the pain of likely dismissal (Cassidy, 2001). An avoidant attachment style is accompanied by one's defensive denial of attachment needs, anxieties, and feelings of vulnerability (Brennan & Shaver), unwillingness to acknowledge the importance of relationships, and the adoption of a self-reliant stance (Feeney & Ryan, 1994), despite evidence of increased autonomic arousal when attachment needs are unmet or are threatened (Brennan & Shaver). Individuals with an avoidant attachment style have learned not to depend on others to engage with them, and therefore will deactivate their attachment system and suppress their attachment needs as a means to regulate the fear of rejection (Johnson, 2004).

Avoidantly attached adults dismiss the importance of intimacy and interdependence in close relationships (Locke, 2008) and have a pessimistic view of close relationships (Hazan & Shaver, 1994). Since they perceive themselves to be fully adequate and capable of independently meeting their own emotional needs, social contact and intimacy are of little or no importance to them (Fuller & Fincham, 1995). They regulate anxiety by distracting themselves from their concerns (Hazan & Shaver). These individuals maintain distance by means of low self-disclosure and disapproval of self-disclosure in others (Feeney, Noller, & Callan, 1994). The strategy constructed by avoidantly attached individuals for maintaining a sense of security involves the avoidance of intimate social contact, particularity in response to distress (Hazan & Shaver). An avoidant individual tends to attempt to become self-sufficient in an effort to escape the emotional pain associated with interdependence and intimacy (Bowlby, 1969).

Partners with an avoidant attachment style expect their loved ones to be unavailable and are thus likely to emotionally detach during relational duress. These individuals view others as

undependable and are therefore uncomfortable becoming vulnerable with and relying on their partners (Brennan & Shaver, 1995; Haggerty et al., 2009). Additionally, individuals with an avoidant attachment style are unlikely to accept their partner's faults (Brennan & Shaver). When their attachment system becomes activated and induces anxiety, they tend to withdraw from their partners, failing to share their concerns and denying the existence of conflict (Cassidy, 2001). They have developed a pattern of turning away from attachment figures when distressed in an effort to manage their fear of a loss of the connection (Shi, 2003). Their fear of intimacy truncates their ability to foster deep and meaningful emotional relationships with their primary tendency being to withdraw from the interaction and thus the relationship (Shi).

The positive model of self and negative model of others inherent in the avoidant attachment style prohibits these individuals from trusting their partner enough to risk the vulnerability essential to exposing themselves in a dialogue that is fundamental to the conflict resolution process and from seeking support from their partner while in distress. They choose instead to withdraw from conflict (Creasey et al., 1999). Partners with an avoidant attachment style are unlikely to implement positive conflict management strategies. Specifically, they report less use of emotion disclosure, affection, and support (Creasey et al.). They are unlikely to engage in compromising and integrating resolution behaviors with their partners (Corcoran & Mallinckrodt, 2000). These individuals lack emotional self-awareness as evidenced by others rating them as hostile while they indicate that they are not privy to their own hostile behavior (Brennan & Shaver, 1995). A fear of intimacy permeates the interactions of avoidantly attached adults (Meyers & Landsberger, 2002). A partner with an avoidant attachment style will withdrawal from interactions with their attachment figure in an attempt to quell painful interpersonal interactions as a means to regulate fears of rejection (Johnson, 2004).

Fearful attachment. Bartholomew and Horowitz (1991) introduced a second avoidant attachment style, which they labeled fearful attachment (i.e., labeled *disorganized attachment* in child attachment literature). Caregivers who are depressed, disturbed, or abusive foster the development of an infant's attachment style as disorganized (Hazan & Shaver, 1994). These children have had experiences with their attachment figure engaging in behavior that is so frightening or unpredictable that the child is unable to develop an organized strategy to establish felt security (Cassidy, 2001). Instead they learn to manage anxiety induced from thwarted proximity-seeking attempts with a manifestation of a mixture of anxious and avoidant attachment behavior (Hazan & Shaver). The frightening behavior from the attachment figure activates a paradoxical tendency: to flee to the parent as a safe haven and to flee from the parent in fear. Neither proximity seeking nor proximity avoiding offer a solution, therefore, the child must seek care from the frightening attachment figure (Cassidy). The child may approach the caregiver backwards, or halt suddenly in the midst of motion, or sit still appearing to be absent minded (Ainsworth et al., 1978). The child's behavior is suggestive of a collapse of an attachment strategy (Karen, 1990). Children with a disorganized attachment style are not able to obtain the felt security they need to regulate themselves when they are distressed.

Children with a disorganized attachment style have formed mental representations of themselves as unlovable and unworthy of love and their caretakers as untrustworthy and rejecting (Bartholomew & Horowitz, 1991). The enduring mental model likely continues into adulthood, fostering a negative evaluation of both themselves and others (Bartholomew & Horowitz). As adults, these partners tend to take on subservient roles in close relationships. They are unable to rely on others, disclose little of themselves, have low self-esteem, are less involved in romantic relationships, and develop relationships lacking in intimacy (Cassidy, 2001).

The disorganized attachment relationships in adulthood enables these individuals to protect themselves emotionally from the fear of hostile, violent, incoherent, and frightening behavior from which they were unable to escape at the vulnerable life stage, during which they required care yet experienced frightening rejection.

Attachment Styles Summary

The most basic human need, felt security, is regulated by the attachment system (Hazan & Shaver, 1994). Individuals organize attachment behavior into styles in an effort to regulate anxiety when their attachment system has been activated. An individual's attachment style generally becomes fully activated during times of relational duress (Creasey et al., 1999). As one's style of attachment functions similarly across the lifespan (i.e., absent a reorganization of mental models), individuals choose adult partners with characteristics shown to be essential in the selection of an attachment figure during childhood, specifically familiarity and responsiveness (Hazan & Shaver). Seeking and maintaining attachment relationships is an innate longing in human beings across the lifespan (Johnson, 2004).

Romantic Attachment

A safe emotional connection with another person is an innate and primary need. This connection provides adults with a secure base from which to explore the world (Johnson, 2007). Romantic love is a reciprocal attachment process experienced differently by different people, with each partner at various times feeling anxious and seeking security within the relationship and at other times providing security and care for the other (Hazan & Shaver, 1987). All forms of romantic attachment, both secure and insecure, originate as reasonable adaptations based on one's attachment history (Hazan & Shaver). Throughout the lifespan, people feel more secure with knowledge that their attachment figure is accessible and will be responsive. At all ages, the

process of developing attachments involves proximity seeking, followed by safe-haven behavior, followed by the establishment of a secure base (Hazan & Shaver, 1994). In early childhood, this is accomplished by seeking physical proximity with the attachment figure. Adults have more options for achieving this connection (Hazan & Shaver). Adults are able to achieve felt security from the mere knowledge that their attachment figure will emotionally engage with them when they experience distress. Attachment styles correlate with satisfaction in romantic relationships, with securely attached adults reporting more positive romantic love experiences than adults with an insecure attachment style (Brennan & Shaver, 1995; Feeny, Noller, & Callan, 1994; Fuller & Fitchman, 1995). Adults with different attachment styles experience their romantic relationships differently (Brennan & Shaver).

Hazan and Shaver (1987) were the first to suggest a correspondence between the attachment styles of infant-mother relationships and romantically attached adults. Attachment related behaviors in a romantic context are informed by each partner's mental models of self and other (Bartholomew, 1990). An attachment relationship involves the partners seeking proximity maintenance with each other, conceptualizing the other as a safe haven in times of illness, danger, or threat, and relying on their partner as a secure base from which to explore (Fraley & Shaver, 2000). Partners with different attachment styles hold different beliefs about love, experience different characteristic levels of loneliness (Brennan & Shaver, 1995), and thus respond differently when their attachment system is activated. Securely attached partners generally describe their romantic relationships as happy and trusting with emphasis placed on being supportive and accepting of their partners. Individuals with a secure attachment style are most likely to partner with others with secure attachment styles (Brennan & Shaver). Anxiously attached romantic partners characterize their love experiences as obsessive, involving jealously

and extreme sexual attraction to their partners. Avoidantly attached adults indicate that their love experiences are typified by fears of intimacy (Meyers & Landsberger, 2002). An adult's experience of romantic love and behavior in romantic relationships varies according to their attachment style in the context of romantic relationships.

Relational Conflict

Happy couples tend to behave together like good friends and handle their conflicts in positive ways (Gottman, 1999). Conflict engagement is an important aspect of the process of conflict resolution (Jacobson & Addis, 1993), yet it is especially likely to activate one's attachment system due to the threat to the stability of the significant relationship (Corcoran & Mallinckrodt, 2000). Working models of self and others form the foundation for one's interpersonal communication and conflict styles. Securely attached couples are likely to engage in integrating and compromising conflict styles, even while their attachment systems are activated (Shi, 2003). The positive working model of self and others associated with a secure attachment style allows for increased insight through exploration of the partner's perspective and in creative problem solving (Corcoran & Mallinckrodt, 2000). Positive conflict resolution behaviors inclusive of disclosure of one's emotions and viewpoint, a willingness to compromise and negotiate in finding areas of agreement, an integration of the opinions of the other, and an expression of care and empathy during the conflict resolution process are associated with a secure attachment style (Shi). Partners with an insecure attachment style are apt to avoid mutual engagement in conflict resolution (Corcoran & Mallinckrodt). A partner with an anxious attachment style will perceive their emotional wellbeing to be contingent upon an optimal and perhaps even an insatiably close connection within their partner. These individuals tend to react to relational duress with extreme anger and hostility (Creasey et al., 1999). Individuals with an

avoidant attachment style, who avoid intimacy in relationships and have a limited ability to understand another person's perspective, will likely not be able to be vulnerable enough with their partner to join them in stressful times of relational conflict (Shi). These individuals are likely to deactivate their attachment system during times of relational duress (Creasey et al., 1999). Partners with different attachment styles experience relational conflict with different degrees of anxiety and use various strategies to regulate felt security (Fuller & Fincham, 1995).

Romantic Attachment Summary

While adult romantic partners do not necessarily develop an attached relationship with eachother, a romantic attachment generally develops in a relationship over the course of about two years. Individuals with a secure attachment style are more likely than individuals with an insecure attachment style to form an attachment bond with a romantic partner (Hazan & Shaver, 1994). The attachment relationship expands from external observable interactions to internally represented beliefs and expectations of self and others (Main, Kaplan, & Cassidy, 1985). There is an association between partners' attachment style and the couple's relational satisfaction, with secure attachment in a romantic relationship corresponding with increased relational satisfaction (Feeney, 1994; Meyers & Landsberger, 2005). Partners with an insecure attachment may be able to modify their attachment style and thus their experience of love by accessing, reprocessing, and reorganizing their internal working mental models of self and others.

Attachment Theory Summary

Attachment theory, with roots in ethology, biology, and psychology, was formulated by John Bowlby and delineated in three volumes (1969, 1972, 1980). Mary Ainsworth and colleagues (1978) provided empirical evidence to support the theory. Since that time, much

research has been done to investigate the interaction between internal working models, attachment styles, and romantic love.

Emotion Focused Therapy

Emotion focused therapy (EFT) is a model of couples therapy created by Sue Johnson and Leslie Greenberg (1985), which aims to help the couple create a secure attachment with each other. The model is based in attachment theory and integrates humanistic and experiential interventions to restructure emotional experiences while reorganizing the couple's interactions with each other (Johnson, 2004; Johnson, 2007; Johnson, Hunsley, Greenberg, & Schindler, 1999). EFT assumes that the key factors in marital distress are the perpetual creation of absorbing states of distressed affect and the constrained, destructive interactional patterns that arise from, reflect, and then reciprocally determine continued negative affect (Johnson et al., 1999; Johnson & Talitman, 1996). This negative cycle affirms an insecure bond within the couple in which attachment needs cannot be met (Johnson & Talitman). The goal of EFT is to reprocess, experience, and reorganize interactions to create a secure attachment between the partners (Johnson, 2004).

The EFT therapist's primary focus is on the here-and-now responses between partners (Johnson, 2005). The therapist tracks and expands on both internal experiences and interactional patterns, while attending to the couple's key emotions. This process facilitates insight into the attachment significance of the individual's key emotions (Johnson, 2005, 2007). The therapist works to slow down the couple's interaction, thus facilitating a fuller connection with expanded inner experiences and intercommunication. Developing this process helps the couple to create new patterns of emotional engagement and responsiveness together (Bradley & Furrow, 2004) in which each partner is able to join the other in regulating negative emotion. A successful EFT

treatment will reshape the attachment style from insecure to secure, thus decreasing relational distress (Johnson, 2004). Each individual will be able to find security in the other, increasing their emotional connection and effective dependence on each other so that they are confident to pursue individual as well as joint goals (Johnson, 2007).

EFT is a collaborative process model consisting of two basic tasks: (1) to access, deepen and distill key emotional experiences and (2) to create new responses and interactional patterns that allow for a more secure bond between the partners (Johnson, 2007). The model is comprised of three stages with nine steps within the stages. The dual foci of the model are emotion regulation and communication within the couple. The partners work to join each other in providing a safe haven for each other within the relationship. The therapist tracks the couple's cycle of emotional moves and countermoves with each other (Johnson, 2004). The primary emotions of joy, surprise, shame, sadness, anger, and fear cue the therapist as to a route to change the couple's negative cycle with each other. The therapist helps create moments in which each partner is able to take a risk in asking for their attachment needs to be met by the other (Johnson, 2007). The therapeutic process fosters bonding events in which partners emotionally engage and respond to each other's needs in a way that builds trust, intimacy, and support with each other (Johnson, 2002).

Emotion Focused Therapy Stages

Johnson and colleagues (2005) delineate the stages of the EFT treatment process and the steps within each stage in their workbook. Stage one is the de-escalation phase. Steps within the first stage include assessment and alliance building, identification of the negative cycle and attachment issues, gaining access to the underlying primary attachment emotions, and framing the problem in terms of the cycle and the underlying attachment needs and emotions. The aim of

the de-escalation phase is to enable the couple to see the cycle as their joint enemy, allowing them to step out of the cycle as it happens. The couple will be able to be more open and genuine with each other and may be able to express hope for the relationship by the conclusion of the de-escalation phase.

The second stage focuses on restructuring the attachment bond. While in this stage the therapist promotes engagement with disowned attachment-related emotions and needs. The couple works to change interaction patterns to revise models of self and others. The couple's previously latent emotions are integrated into their interactions. Each partner can experience the other differently and accept the new interaction cycle. As a final step in the reconstruction phase, the clinician structures open and responsive emotional engagement, facilitating the expression of attachment needs, thus allowing the couple to create new interactional stances. It is during the second phase that couples who have sustained attachment injuries, incidents characterized as a perceived abandonment, betrayal, or breach of trust from their partner in a critical moment (Makinen & Johnson, 2006) come to a place of resolution with the incident. Bonding events are facilitated as the individual with the avoidant attachment style, who has been the withdrawer in the cycle, re-engages and the individual with the anxious attachment style, who has been the previous blamer, softens toward their partner. A secure attachment within the couple is facilitated during the second stage of EFT.

Consolation is the goal of the third stage. The therapist facilitates the emergence of new solutions to old relationship problems, new healthy cycles are enacted, and new stories are created together. The therapist supports the couple as they shape new solutions to pragmatic issues. Ultimately, the couple's new positions and cycles of attachment behaviors are consolidated (Barnett, 2011). During the third stage, the partners use their reorganized mental

models of self and others to consolidate new flexible positions with each other, fostering accessibility and responsiveness. The relationship becomes a secure base from which to explore and a safe haven that provides security (Johnson, 2004).

Emotion Focused Therapy Efficacy

Efficacy research in couple therapy indicates that behavioral couple therapy (BCT), cognitive-behavioral marital therapy, insight-oriented marital therapy, and EFT demonstrate positive outcome results (Heatherington, Friedlander & Greenberg, 2005). Of these couple therapy models, BCT and EFT have the strongest empirical research demonstrating efficacy for the treatment of relationship distress (Denton, Burleson, Clark, Rodriguez, & Hobbs, 2000). In a meta-analysis of empirically supported couple and family interventions, Baucom et al. (1998) evaluated the efficacy and clinical significance of various treatment interventions. In all of the three studies reviewed, EFT had results superior to the wait list control groups. EFT was equally effective or better than the two treatment conditions to which it was compared (i.e., behavioral marital therapy, an enhanced version of EFT including a communication skills component). The study found EFT to be efficacious in treating marital problems reported by mildly or moderately distressed couples. A four month follow-up comparing systemic couples therapy and EFT led the authors to conclude that EFT might not be optimal for severely distressed couples, as the couples who received EFT were found to experience significant relapse in the four months following treatment. Byrne, Carr, and Clark (2004) concluded from a review of the literature that EFT is consistently found to be efficacious in reducing mild to moderate couple distress and that couples treated with EFT tend to continue to improve after the treatment has ended. In their own research, couples treated with EFT fared 89% better than untreated couples and couples treated with BCT fared 83% better than untreated couples in relation to dyadic adjustment (Byrne, Carr

& Clark). Several approaches to couple therapy have demonstrated clinically significant reductions in marital distress. Of these therapy models, only BCT and EFT have consistently demonstrated efficacy in multiple randomized controlled trails (Snyder & Halford, 2012).

Section Summary

EFT is a holistic and humanistic practice with health defined as the ability to be open to experience, flexible in responding to one's environment, and empowered to choose and actively construct one's daily life and relationships with others (Johnson, 2007). Grounded in attachment theory, the process identifies each partner's attachment needs and facilitates a connection in which each individual can engage and respond to their partner in a way that regulates emotion. EFT modifies distressed couples' constricted interaction patterns and emotional responses to foster the development of a secure attachment (Johnson, 1999).

Addiction and Recovery

The consequences of substance addiction have severe implications for the individual. The addiction often becomes paramount causing all other aspects of life including relationships, health, professional aspirations, and spiritual connection to suffer. Individuals who fail to complete treatment have similar recovery outcomes to those who do not receive treatment at all, both with very little hope for the establishment of a sober lifestyle (Nordjfaern, Runmo, & Hole, 2010).

Substance abuse treatment efficacy is limited to the participation and engagement of those seeking recovery. It is therefore important that the individuals and their partners value the treatment in which they are participating. The factors that addicted individuals rate as most important to successful recovery include decreased substance use, increased ability to regulate emotion, increased positive interpersonal relations, and increased levels of self-esteem

(Nordjfaern, Runmo, & Hole, 2010). Therapeutic relationships characterized by positive regard, understanding, and availability result in positive perceptions of treatment and recovery among individuals with substance addiction and their significant others (Nordjfaern, Runmo, & Hole).

Recovery from substance addiction allows for the alignment of values and aspirations with behavior (Lam, 2010). While substance addiction thwarts the individual's ability to regulate emotion in a healthy way and to foster interpersonal relationships (De Rick, Vanheule, & Verhaeghe, 2009), abstinence challenges the unhealthy family dynamic, presenting an opportunity to learn together how to regulate affect and connect in a meaningful way. Recovery from addiction is a transformative journey from a state of bondage to a sense of hopefulness in looking toward the future.

Addiction and Attachment

The complex attachment system correlates with an addict's relationship with the addictive substance (Hofler & Kooyman, 1996). Access to the substance is the primary concern of the addicted person, similar to an individual's proximity-seeking behavior with their attachment figure (Hofler & Kooyman). The drug may provide a much longed for secure base by offering a neutral object as a solution to those with an insecure attachment style who perceive either themselves as unlovable or others as undependable (Hofler & Kooyman). The threat of removal of the substance prompts the addicted person to place even greater importance on the substance, representing separation protest (Padykula & Conklin, 2010). The addicted person is able to withdraw from intimate relationships and attach rather to the secure base found in the substance. Addiction can, therefore, be conceptualized as an attempt at secure attachment with attachment needs shifted from a significant other to the substance of choice (Hofler & Kooyman; Padykula & Conklin).

The process of recovery from addiction requires both intrapersonal as well as interpersonal change (Finzi-Dottan et al., 2003). Individuals who abuse substances often have insecure attachment styles manifested by negative mental models of self and others. These negative mental models inhibit the individual's ability to maintain stable interpersonal relationships (Hofler & Kooyman, 1996). Substance-abusing individuals with an anxious attachment style tend to be more likely to binge on greater quantities of the substance as compared with both secure and avoidant attachment styles (Molnar et al., 2010). This heavy consumption is reported to be an attempt to regulate emotion (Molnar et al.). Individuals with avoidant attachment styles may abuse substances in an attempt to cope with negative internalized emotions for which they have no healthy outlet. These individuals tend to abuse substances on a more frequent basis, as compared with individuals with both secure and anxious attachment styles (Molnar et al.). This is likely in an effort to reduce tension, avoid emotional dependency, maintain low levels of intimacy, and decrease commitment in romantic relationships (Brennan & Shaver, 1995). The establishment of a secure attachment style may protect individuals from seeking a secure base via substance abuse (Hofler & Kooyman). Thus, a secure attachment style is a resource vital to the recovering addict, fostering emotion regulation and healthy lifestyle choices.

Patterns of substance abuse are linked to attachment styles since finding indicate that partners who are insecurely attached are more likely than securely attached partners to engage in problematic substance use behaviors (Molnar et al., 2010). When the substance-abusing partner in a relationship has an anxious attachment style, the couple indicates having less ability to cope with the challenges of the recovery process (Finzi-Dottan et al., 2003). This partner may choose to abuse substances in part to soothe relational anxiety, as these individuals often report heavy

substance abuse during times of extreme relational duress (Hofler & Kooyman, 1996). Perhaps these partners find temporary relief in substance abuse from the seemingly unbearable anxiety as their attachment systems become activated. Partners with an avoidant attachment style who abuse substances tend to engage in dismissive relational interactions, likely perpetuating emotional dependence on the substance (Holfer & Kooyman). Attachment styles tend to dictate the pattern of use that a substance-abusing individual will establish.

Addicted persons are dependent upon the protection from emotional pain provided by the substance. They reach for a secure attachment with their partners until the desire for either emotion regulation or relational avoidance decreases (Hofler & Kooyman, 1996). Rather than engaging in substance use, the individual must be willing to risk reaching toward the loved one in hope of establishing a secure base (Hofler & Kooyman). The absence of an experience of an intimate, committed relationship increases incidents of problematic substance use along with the negative consequences that ensue (Sadava & Pak, 1994). Conversely, when both the recovering addict and the partner have a secure attachment style, their cohesion empowers both partners to manage their own challenges inherent in the recovery process (Finzi-Dottan et al., 2003). The establishment of a secure attachment with a romantic partner plays a significant role both in patterns of substance abuse and in the recovery process.

Securely attached adults have better overall mental health with a decreased vulnerability to psychopathology, including addiction (Surcinelli et al., 2010). Conversely, insecure attachments are shown to contribute to psychological illness because individuals with an insecure attachment style have a decreased sense of connection with others. A secure attachment serves as a safe base from which the addicted person can take emotional risks and explore a lifestyle of sobriety.

Addiction and Marital Duress

Marital conflict is considered to be both a trigger for and a consequence of problematic substance use (Baucom et al., 1998; Cavacuiti, 2004). Couples may find predictability in the chaos inherent in a substance-abusing lifestyle. A threat to this homeostasis often feels like too much of a risk for the couple to sustain. In fact, many couples do not survive the recovery process together (Cavacuiti) as evidenced by the high divorce rate for couples within the first five years of sobriety (Brown & Lewis, 1998).

Chronic substance use is correlated with a decrease in spousal marital satisfaction. Likewise, stressful marital interactions are comorbid with substance abuse and relapse from recovery. Both constructs, addiction and marital duress, heighten the severity of the other (Fals-Stewart, O'Farrell, Birchler, Cordova, & Kelly, 2005). The association between addiction and relational stress constitutes a type of reciprocal causality in which each serves as a precursor to the other, creating a negative cycle from which the couple has difficulty escaping (Fals-Stewart, Lam, & Kelley, 2009).

Substance abuse is a powerful component in an intimate relationship (Cavacuiti, 2004). The impact that substance abuse has on intimate relationships has generated limited research and is only partially understood (Cavacuiti). Problems associated with substance use typically begin in young adulthood. During the same time, the formation of an intimate relationship is a life task necessary for an individual's healthy psychological development (Cavacuiti). Individuals who began abusing substances during early adulthood may never have had a meaningful intimate reciprocal relationship (Cavacuiti). Couples in which one of the partners abuses substances usually have extensive levels of relationship dysfunction. These relationships are often characterized by high levels of relationship dissatisfaction, instability of commitment to the

relationship, a high prevalence and frequency of verbal and physical aggression, sexual dysfunction, and significant psychological duress experienced by both partners (Fals-Stewart et al., 2009). The partner who does not abuse substances often experiences extreme hurt and frustration as they focus on and attempt to alter their partner's addictive behavior (Cropley, 2006). Therefore, they are not able to pursue their own individual and relational interests or goals. The non-abusing partner struggles to maintain a relationship within the discord and unmet attachment longings that are associated with a substance-abusing lifestyle. Substance abuse within a dyad hinders the couple's maturation together (Cavacuiti), thus truncating each partner's emotional development and fulfillment.

While substance abuse and the concurrent behaviors place a strain on the relationship and decrease relationship satisfaction for both partners, relationship dysfunction typical of dyads with an addicted partner creates a dynamic that tends to increase substance abuse and relapse among addicts (Fals-Stewart et al., 2009). The dynamic that develops within the couple may inadvertently facilitate continued substance use by intermittently reinforcing the behavior that the couple seeks to extinguish (Cropley, 2006; Fals-Stewart et al.). For example, this reinforcement occurs with the non-abusing partner's expression of emotion and positive affect present in caretaking of the partner suffering from a hangover (Fals-Stewart et al.) and nurturing the substance-abusing partner in times of crisis brought upon by substance abuse (Cropley). Ultimately, the caregiver becomes resentful and withdraws from the previously established role of the nurturing partner, creating an intermittent punishment that tends to increase the partner's substance abuse (Cropley). The non-abusing partner often uses a sporadic mix of reinforcing and punishing communication strategies, with the perceived negative communication evoking equally hurtful reactions from the substance-abusing partner. This negative reciprocity

interaction pattern, typical of relationships afflicted by substance abuse (Cropley), robs a marriage of the emotional connection crucial to intimacy. Lack of intimacy in a relationship (O'Farrell & Fals-Stewart, 2000) and heightened marital conflict (Fals-Stewart et al., 2009) often precede relapse once the addicted partner is in treatment. Marital issues, specifically poor communication, problem-solving deficits, arguing, and financial stress, often trigger substance abuse (Fals-Stewart et al.). Individuals struggling with addiction commonly report increased substance abuse and relapse as a means to reduce negative affect and cope with the emotional stress of their romantic relationships (Mattson, O'Farrell, Monson, Panuzio, & Taft, 2010). Conversely, there is a lower relapse rate for substance addicts engaged in a cohesive romantic relationship (O'Farrell & Fals-Stewart, 1999). Both partners in a couple with a substance-abusing individual experience the pain of unmet attachment longings. The negative interactional cycles that so often accompany couples struggling with addiction promote further substance abuse.

Addiction and marital distress are reciprocally reinforcing as substance abuse prompts high rates of negative affect, decreased spousal support, and a pattern of withdrawal from conflict to the comfort of the substance (Johnson, 2003). Loved ones play a crucial role in the origin as well as the maintenance of addiction (Fals-Stewart et al., 2009). A couple's functioning may play an important role in decreasing problem drinking behavior and maintaining abstinence from the substance (Baucom et al., 1998).

Couples Therapy for the Treatment of Addiction

Relationships influence individuals' substance use as well as their experience of and outcome from substance abuse treatment (McCollum, Nelson, Lewis, & Trepper, 2005). The inclusion of couples therapy in the treatment of addiction has been shown to be efficacious (Fals-

Stewart, O'Farrell, Birchler, Cordova, & Kelly, 2005; O'Farrell & Fals-Stewart, 2000). Walitzer and Dermen (2004) demonstrated improved recovery outcomes when couples therapy was included with the traditional substance abuse recovery treatment.

Currently there are three theoretical perspectives that dominate the research on family-based conceptualizations of substance abuse. These include the family disease approach, the family systems approach, and family behavioral approach (Fals-Stewart et al., 2009). The family disease approach views substance addiction as an illness of the family members. Treatment generally consists of individual cognitive therapy to address the respective disease of each individual. The substance-abusing individual works toward abstinence and the family members, perceived as enablers of the disease, address issues of co-dependency. Family and couple sessions are de-emphasized in the family disease model (Fals-Stewart et al.). Alcoholics Anonymous (AA) and the alternative Twelve-Step recovery models are the most widely used resources for individuals in recovery from addiction and for addiction treatment programs. The Twelve-Step model is a spiritual program that aims to facilitate a healthier relationship with self, others, and, ultimately, a power greater than self. Treatment programs based on the Twelve-Step model and stressing participation in Twelve-Step groups demonstrate efficacy similar to other treatments for addiction. Twelve-Step approaches are most often incorporated into addiction programs, generally either of a family systems approach or of a family behavioral approach (Bogenschutz, Geppert, & George, 2006). The family system approach applies general systems theory to families struggling with addiction. The maintenance of the family dynamic is assessed. Family members' interactions and the functioning of the family as a whole are viewed as being organized around substance use (Fals-Stewart et al.). Emotion Focused Therapy (EFT) is a model that synthesizes the systemic approach with an experiential process (Johnson, 2004). To

the knowledge of this researcher, there are no EFT addiction recovery outcome studies. Family behavioral approaches conceptualize family members' interactions as reinforcement for the substance-abusing behavior. The aim of this treatment is to eliminate reinforcement for substance use while at the same time reinforcing behavior conducive to abstinence (Fals-Stewart et al.). Behavioral Couples Therapy (BCT), a model of the family behavioral approach, has the most empirical support for its overall treatment efficacy in the recovery from substance addiction. Outcome efficacy is defined as a decrease in addictive behavior as evidenced by fewer cases of relapse, fewer days of use during relapse, fewer substance abuse related arrests and hospitalizations, and longer intervals between relapse (O'Farrell & Fals-Stewart, 2000).

Treatment inclusive of couples therapy resulted in a reduction in substance abuse and an increase in frequency of abstinence and light substance use, when compared with treatment without couples therapy. A review of the literature indicates that EFT has not yet been empirically tested with couples struggling with substance abuse. BCT has the strongest empirical support for its effectiveness in treating couples with substance abuse issues (Fals-Stewart, O'Farrell, Birchler, Cordova, & Kelly, 2005).

Section Summary

A secure romantic attachment is based on individuals' sense of existence and adoration in the mind of their partner, a sense of ability to depend on their partner, and faith that the partner will ultimately cherish and protect them rather than reject and abandon them (Johnson, 2005). The lifestyle concurrent with addiction contradicts each partner's ability to meet the other's attachment needs. Therefore, the ensuing marital duress and the addition act in concert to reciprocally reinforce the continuation of the other. A couple struggling with addiction may need help in developing new patterns of emotional engagement and responsiveness (Bradley &

Furrow, 2004) as they learn to reach to one another in escaping the addictive lifestyle and fostering a secure attachment bond.

Chapter Summary

Following the review of the literature, several conclusions may now be offered. Substance abuse is a factor that many divorced individuals cite as contributing to the demise of their marriage (Amato & Previti, 2003). Furthermore, substance use tends to increase with relational discontent. The converse also holds true—that relational satisfaction is a protective factor against substance abuse (Homish, Leonard, & Cornelius, 2010). As partners learn to be together in an engaged and responsive manner, abstinence may naturally be rewarded with a reduction in relational duress. At the same time, a decrease in relational conflict may reduce the familiar antecedents to substance abuse (Fals-Steward, O'Farrell, Birchler, Cordova, & Kelly, 2005). The cycle of decomposition, linking relational dissatisfaction and substance use, gives credence to the concept of interrupting the coalition an in effort to work toward both increased marital satisfaction and decreased substance abuse.

Fostering a secure attachment with one's romantic partner in conjunction with the treatment of addiction benefits those in recovery (Zapf et al., 2008). Securely attached individuals are more likely than insecurely attached individuals to adopt healthy behaviors and habits, while insecurely attached people are more likely to engage in harmful and risky behaviors (Brennan & Shaver, 1995). Individuals who abuse substances may self-medicate in effort to regulate negative affect and reduce fear associated with the rejection and abandonment of a romantic attachment partner (Khantzian, 2003). As a secure attachment style enables a person to acknowledge distress and seek support from loved ones (Bowlby, 1982; Hazan & Shaver, 1994), a secure romantic attachment may help both the addict and the loved one to regulate affect and

manage the emotional turmoil that so often is a part of the recovery process (Thorberg & Lyvers, 2010). It seems promising that the establishment of a secure attachment style together with addiction treatment may positively contribute to recovery.

This study builds on the work of previous investigators who have predominately focused on the use of EFT in increasing marital satisfaction and will contribute to the field as it will be the first study to explore the use of EFT with couples in recovery from substance addiction. The following chapters explain the results and implications of the investigation.

CHAPTER THREE: METHODS

The purpose of this study was to determine the efficacy of Emotion Focused Therapy (EFT) in enhancing recovery when working with couples in which one of the partners is recovering from substance addiction. Case studies are a comprehensive examination of a relevant issue through the process of inquiry within an individual's social and cultural context (Saldkind, 2010). This applied research study uses a pretest-posttest design to reflect the effect of EFT in the amount of change by comparing quality of recovery from addiction between testing administrations (Kazdin, 2003). Additionally, a single case non-concurrent multiple-baseline design is employed to empirically investigate the effect of EFT by measuring addiction recovery outcomes before, during, and after the intervention (Barlow, Nock, & Hersen, 2009; Boersma et al., 2004; Kazdin, 2011). Two individuals who had already completed the first phase of an addiction program within the year were invited to participate with their significant other in the study. Each of the individuals participating in the study received baseline test batteries for a varied time period. The outcome measures served to create data that demonstrated the participant's scores during the baseline phase. After the baseline was established, the participant together with their significant other, received an intervention consisting of couples therapy from an EFT approach. Additionally, each individual was administered a pretest during the first week of the baseline phase and the same assessment as a posttest measure after the completion of 15 weeks of the treatment phase. The treatment phase consisted of two weeks on intake and individual sessions followed by 13 weeks of EFT couple therapy. A comparison of the participants' outcome scores during different phases of the study, combined with a single case non-concurrent multiple-baseline design, allow for the investigation of the efficacy of EFT on

recovery outcomes (i.e., addiction, attachment security, and dyadic satisfaction) with these couples in which one partner is recovering from addiction.

A pretest-posttest design was used to compare participant scores and allow for observation of the change in results on dimensions of recovery from addiction prior to and after the intervention (Salkind, 2000). Participants were asked to complete the measure during the first week of the treatment phase of this study. The treatment phase consisted of two weeks of intake and individual sessions followed by 13 weeks of EFT couple therapy. Comparative analysis allows examination of the scores before and after EFT allows for an investigation of the efficacy of EFT.

The introduction of EFT couple therapy was staggered in an effort to demonstrate the effect of the intervention (i.e., by showing that outcome changes occur when and only when the intervention is applied; Kazdin, 2011). The treatment was introduced to a couple at each time interval with one couple beginning EFT after two weeks at baseline, and the other couple after six weeks at the baseline condition. Prior to the initiation of EFT, couples remained at baseline conditions, which consisted of completing the attachment and dyadic satisfaction assessments three times weekly, on Mondays, Wednesdays, and Fridays. The baseline phase lasted for either two or six weeks, depending on the couple's assignment. After the completion of the baseline phase, participants transitioned to the treatment phase. The treatment phase lasted for 15 weeks. The self-rate reports of the couples participating in EFT were expected to change; the reports of the participants remaining at baseline were expected to continue at the established or predicted trend level. This chapter describes the research method used in investigating these variables, including the design of the study, the selected population, instruments, limitations, and an explanation of the type of statistical analyses that will support the study.

See Table 3.1 for a description of the baseline phase and the treatment phase employed for this multiple baseline design.

Table 3.1

Multiple Baseline Design: Phase Description

Phase	Description
Baseline	The baseline phase was staggered to control for extraneous events while allowing for the implementation of the treatment phase at different points in time. For this study, baseline time periods were two weeks and six weeks. During the baseline phase, participants completed the ECR and DAS three times weekly, on Monday, Wednesdays, and Fridays.
Treatment	The introduction of the intervention was staggered so that treatment effects are demonstrated by changes in observations at the time of the intervention and not during the baseline phase. The treatment phase consisted for two weeks of intake and individual sessions followed by 13 weeks of EFT. Participants continued to complete the ECR and DAS three times weekly, on Monday, Wednesdays, and Fridays throughout the treatment phase.

Research Design

This study aims to demonstrate the effect of EFT by showing that the outcome changes occur when and only when the participants received EFT. A pretest-posttest design compared participant scores at different times to observe change occurring as a result of the treatment (Salkind, 2000). This method was used to better understand changes in the quality of addiction recovery resulting from EFT. A single-case multiple baseline design allows for careful monitoring of participant variability and was used to rigorously evaluate the efficacy of EFT with a small number of cases (Barlow, Nock, & Hersen, 2009; Kazdin, 2011). A single case experimental design is an appropriate approach to confirming the theoretical hypotheses (Barlow, Nock, & Hersen, 2009; Boersma et al., 2004; Kazdin, 2011). The experimental design can provide a strong basis for establishing causal inference (Kazdin; Kratochwill et al., 2010).

The first research question asks whether, following two weeks of intake and individual sessions and then 13 weeks of EFT couple therapy, PPI subscale scores would decrease, indicating decreased addiction recovery symptom severity. The first null hypothesis states that there is no difference between the Revised Pre-Post Inventory (PPI; Davignon, 2011) subscale scores prior to treatment and at the completion of the 15-week treatment. This hypothesis was not tested; rather a preliminary investigation consisted of comparing the data. Since data was gathered before and after treatment, a two-time data collection method was suitable (Kazdin, 2003). The research hypothesis for this study states that symptom severity will decrease, thus the participant's PPI subscale scores will decrease from pre- to posttest administration.

The second research question asks whether a change in attachment style would occur during the implementation of EFT couple treatment with individuals recovering from substance abuse. The second null hypothesis states that The Experiences in Close Relationships Questionnaire (ECR; Brennan et al., 1998) mean subscale scores would remain at predicted baseline trends throughout the 15-week intervention. This was tested with the evaluation of the participant's assessment endorsement during the baseline phase and then the intervention phase of the study. The second research hypothesis states that ECR subscale scores would decrease from predicted baseline trends throughout the 15-week intervention, indicating increased attachment security. The second research hypothesis could be inferred, given a rejection of the null hypotheses (Salkind, 2010).

The third research question asks whether a change in dyadic satisfaction would occur during the implementation of EFT couples treatment with individuals recovering from substance abuse. The third null hypothesis states that Dyadic Adjustment Scale (DAS; Spanier, 1976) subscale scores and composite scores would remain at predicted baseline trends throughout the

15-week intervention. The third research hypothesis states that DAS subscale scores and composite scores would decrease from predicted baseline trends throughout the 15-week intervention, indicating increased relational satisfaction. The third null hypothesis was tested with the evaluation of the participant's assessment endorsement during the baseline phase and intervention phase of the study.

Couples were assigned to baseline phases of varying time periods; the intervention was initiated after the baseline phase at two weeks and six weeks. The participants were administered the addiction recovery measure during the first week of the treatment phase and then again after the 15-week intervention. Data was gathered continuously on the attachment style and relational satisfaction measures to test the predictions, with participants completing assessments three times weekly, on Mondays, Wednesdays, and Fridays, throughout the entire study.

Variables

Independent Variable

This experimental study compares the effects of EFT on the quality of recovery from addiction for three couples over time. The independent variable for the three hypotheses is EFT couple therapy. Participants began the baseline assessment process by completing assessments measuring attachment style and relational satisfaction three times weekly. In order to establish a baseline, individuals completed the measures on Mondays, Wednesdays, and Fridays. Beginning prior to the initiation of the intervention, one couple was assigned to complete the baseline measures for two weeks, another couple was assigned to complete the baseline measures for four weeks, and the final couple completed the baseline measures for six weeks. Unfortunately, the couple assigned to the four-week baseline did not complete the assessments at the rate required by the design and ultimately terminated therapy prior to completing the 13 weeks as delineated

by this study. Therefore, only the data of the participants assigned to the two-week and six-week baseline phase is analyzed. The four remaining participants completed the PPI during the first week of the treatment phase and again following the 15-week intervention. These participants also continued to complete the ECR and DAS three times weekly during the treatment phase during which the intervention was in effect. The couples received two weeks of intake and individual sessions followed by weekly sessions of EFT for the 15-week duration of the intervention. The therapists facilitating EFT sessions received weekly supervision from a Licensed EFT Couples Therapist, Supervisor and Trainer, to ensure that the EFT is germane.

Dependent Variables

The dependent variable for the first hypothesis is quality of recovery from addiction as evidenced by scores on the Revised Pre-Post Inventory (PPI; Davignon, 2011). The first dependent variable was measured by comparing the PPI outcome results at the two testing times. The dependent variable for the second hypothesis is attachment style as identified by scores on the Experiences in Close Relationships (ECR; Brennan et al., 1998). The dependent variable for the third hypothesis is romantic relationship satisfaction as evidenced by scores on the Dyadic Adjustment Scale (DAS; Spanier, 1976). The second and third depending variables were measured continuously.

Selection of Participants

Participants were recruited from an abstinence-based residential addiction recovery program in the metro Atlanta area. Both of the clients had completed the first phase of treatment, which consists of residential treatment, and had transitioned into the second phase of treatment, which consists of outpatient treatment, within the year prior. Two clients in the second phase of treatment, together with their romantic partner, participated in the study. The inclusion criteria

for participation required involvement in a romantic relationship in which: (a) the partner was not currently struggling with addiction, (b) had not recently struggled with substance abuse, or (c) declined participation in couple therapy. Exclusion criteria included those clients (a) whose significant other was either actively involved in an addiction lifestyle, (b) was early in addiction recovery, or (c) declined participation in couple therapy.

Clients were invited by their individual therapist to participate in the study by attending an informational session, either in person or over the phone, and by signing the informed consent form. The participants then began completing the three times weekly assessments to create a baseline in addition to completing the PPI during the first week of the treatment phase, prior to the 13 or 15 weeks of EFT couple therapy. The three-time weekly assessments continued throughout treatment and the PPI was administered again as a post-test after intervention.

Instrumentation

For the purpose of data collection, self-report scales were administered to measure the three variables in this study, which are recovery from addiction, attachment style, and romantic relationship satisfaction. Self-report measures allow for a direct assessment of the participants' feelings, thoughts, and perceptions, and thus is the most appropriate tool for this study due to the subjective nature of the factors being addressed (Kazdin, 2003). The individuals' own perception of wellbeing is an important domain of recovery (Dodge, Krantz, & Kenny, 2010). Self-report measures are the most commonly used type of measurement within the clinical counseling field, thus they have been established as a standard research practice (Kazdin, 2003).

This study uses a pre-post assessment as the primary measure of change. It permits assessment of the participant's perception of their substance use problem severity. The Revised Pre-Post Inventory (PPI; Davignon, 2011) was administered twice, first prior to treatment and

then again after completion of the 13- or 15-week EFT treatment. The pretest scores served as a baseline against which the posttest was compared. This method meets the requirements of the pretest-posttest design (Salkind, 2000).

The second and third measures used to meet the design requirements, the Experiences in Close Relationships (ECR; Brennan et al., 1998) and the Dyadic Adjustment Scale (DAS; Spanier, 1976) were administered continuously on an ongoing basis, three times weekly (Kazdin, 2011). As long as there is at least one outcome measure that is continuous, the requirements of the single case non-concurrent multiple-baseline design are met; this study has two and, as such, meets requirements. Supplemental measures are useful and informative even though they do not meet the essential features of the design (Kazdin, 2003).

The instruments were not altered from their original forms and permission for their use was obtained from the authors (e.g., the PPI) or is available within the public domain (e.g., the ECR and the DAS). Background demographic information was collected in order to give a detailed overview of the participants being assessed.

Background and Demographic Information

The participant's background and demographic information was gathered in an effort to understand the characteristics of the sample. Clients were asked to specify their date of birth, gender, ethnicity, relationship status, previous therapy attendance, mental health diagnosis and medications, religious affiliation, and past experience of abuse and trauma. The information provided allows for the determination of whether the individuals in this study are a representative sample of the target population for generalization purposes (Salkind, 2010; see Appendix E).

Addiction Recovery

The Revised Pre-Post Inventory (PPI; Davignon, 2011; see Appendix A) measures substance use problem severity. The scale was revised from the original Pre-Post Inventory (PPI; Davignon, 1998) in 2011 at which time the author replaced one of the scales, the Resistance Scale with two additional scales, the Anxiety Scale and the Depression Scale, previously used in a different assessment by the same author, The Treatment Inventory Intervention (TII; Davignon, 1998). Data collected from this instrument was used to address this study's first hypothesis. The PPI was designed to evaluate substance abuse recovery program efficacy. The PPI is a paper and pencil instrument with 161 items written at a 6th grade reading level. The scale includes true-false items, 4-point Likert scale items, and 5-point Likert scale items. It takes participants about 30 minutes to complete the measure. Lower posttest scores and a larger drop in scores from pretest to posttest represent more positive addiction recovery. The total score, used to assess the participant's recovery from addiction in this study, is simply the summation of the instrument's scales. Davignon (2002) designed and investigated the reliability and validity of the PPI and all eight sub-scales; hence the author is frequently cited in this review of the instrument's psychometric properties.

The PPI's outcome results are objective, verifiable, and reproducible, indicating that the instrument is reliable, thus obtaining consistent results upon re-administration (Davignon, 1998). Calculations of the coefficients' alphas (Cronbach, 1951) for each of the PPI scale scores demonstrate internal consistency, signifying homogeneity of the items within each scale (Davignon, 2002). Test-retest consistency for the entire instrument is $r = 0.71$, $p < .01$, indicating that the PPI scores are reproducible and reliable. These reliability coefficients reflect the stability of the test scores over time (Davignon).

Davignon (2002) examined the validity of the PPI in a sample of 749 participants. The study assessed the accuracy with which the PPI identified problem drinkers, problem drug abusers, and participants who admitted to having distress and resistance problems. The percentage of participants who admitted to problems and who scored in the problem risk range on the pretest PPI scales were compared to the same participants who scored in the low risk range also on the pretest PPI scales. Participants who reported problems also scored in the 70th percentile range and above on the instrument, providing evidence of instrument accuracy in identification of problems. This score indicates that the full instrument has predictive validity. In an effort to ensure that the instrument is measuring the construct of interest, the criterion validity of the PPI was tested by correlating five of the PPI scales with validated and comparable scales of the Minnesota Multiphasic Personality Inventory (MMPI; Hathaway & McKinley, 1943). All of the correlations were significant and in the predicted directions, supporting the validity of the PPI scales. Further discussion is included below in the scale descriptions.

The PPI consists of eight scales: the Truthfulness Scale, the Self-Esteem Scale, the Anxiety Scale, the Depression Scale, the Distress Scale, the Alcohol Scale, the Drugs Scale, and Stress Management Scale. These scales evolved from scale items represented in other established assessment tools. A large item pool was reduced by experts in the field, with final item selection based on empirical evidence of statistical item configurations, resulting in inter-item reliability coefficients and high correlation with respective scales (Davignon, 2002).

The Truthfulness Scale determines how honest the client is while completing the assessment, thus determining whether or not the profile is accurate. It identifies respondents who are self-protective, recalcitrant and guarded, as well as those who minimized or concealed information while completing the assessment. A challenge inherent in the assessment of

addiction recovery is the prevalence of respondent's attempts to minimize their problems. The Truthfulness Scale measures the honesty of the respondent's answers and then applies a correction to other scales based on the Truthfulness Scale score, ensuring accurate assessment (Davignon, 2002).

The Truthfulness Scale has been evaluated to determine the consistency of the scale results. The pretest reliability and posttest reliability coefficient for the scale is $r = 0.86$ at pretest and $r = 0.86$ at posttest. The inter-item reliability coefficient alpha with an outpatient population sample is $r = 0.81$, indicating that the items in the scale consistently measure the factor of interest. The within test reliability with an outpatient population sample is significant at the $p < .001$ level, indicating that the scale measures the factor of interest independently from the other scales. Internal consistency of the scale is significant at $p < .001$ with coefficient alpha of $r = 0.84$, thus supporting the statistical reliability of the scale (Davignon, 2002).

The validity of the Truthfulness Scale an essential consideration since the scale's score establishes how truthful the respondent was while completing the PPI. Davignon (2002) completed several studies to ensure that the scale measures the construct of interest. One study compared a group instructed to answer honestly and a group instructed to skew their answers in an attempt present themselves in a more favorable light, taking care to respond in a manner that their inaccuracy would not be detected. Results indicated that the fakers group scored significantly higher than the honest group ($r = 0.27$, $p < .05$). The study reveals that the Truthfulness Scale accurately detects fakers from respondents who answered honestly, demonstrating criterion validity. Concurrent validity was established, as the Truthfulness Scale correlates significantly with the Lie (L) Scale of the MMPI, ($r = 0.72$, $p < .001$). The L scale of the MMPI is a validity scale that identifies individuals who are deliberately trying to avoid

answering the MMPI honestly and in a frank manner. The Truthfulness scale was also compared with a Polygraph examination specific to the nature of the scale. The product-moment correlation results between the Polygraph results and the scale indicate that there is a significant correlation in the predicted direction ($r = 0.23$, $p < .001$), supporting the concurrent validity of the scale. These studies demonstrate that the Truthfulness Scale does in fact measure how truthful the respondents were while completing the assessment (Davignon, 2002).

The Self-Esteem Scale reflects the participant's perception of self. The scale reflects the client's explicit valuing and appraisal of self as it integrates one's belief system of acceptance-approval versus rejection-disapproval (Davignon, 1998). Tests of the scale's consistency found that the pretest reliability and posttest reliability coefficient for the scale is $r = 0.91$ at pretest and $r = 0.93$ at posttest. Internal consistency of the scale is significant at $p < .001$ with coefficient alpha of $r = 0.92$, supporting the statistical reliability of the scale. These results indicate the scale is reliable (Davignon, 2002).

Construct validity assessment includes ratings between experienced counselors and the PPI Self Esteem Scale. The counselors had at least eight years of experience in the field and a master's degree in related area of study. Two counselors rated each client's self-esteem after reviewing the client's file containing court histories, progress notes, diagnoses, MMPI scores, and Incomplete Sentence materials. Each counselor also interviewed the client for 30 minutes. Pearson product-moment correlation coefficients were calculated for each rater ($r = 0.11$ and $r = 0.18$, respectively). The results of the study showed statistically significant correlations between the scale and both raters at the $p < .05$ level, supporting the accuracy of the Self-Esteem Scale (Davignon, 2002). This study indicates that the Self-Esteem Scale does measure the construct of self-esteem as understood within the counseling field.

The Anxiety Scale measures worry about everyday real life problems. Worries that are problematic are deemed to be excessive, pervasive, and pronounced. When anxiety is severe, these concerns become the individual's primary focus, which interferes with relationships, social functioning, occupational performance, and other activities. High scores on this scale indicate acute feelings of tension, agitation and apprehension along with anxious expectations that permeate the participant's life. These emotions are associated with intense, pervasive, and pronounced apprehension and worries that can seriously disrupt ongoing life activities.

Davignon (1998) investigated the reliability of the Anxiety Scale in a sample of 294 substance abuse outpatient clients. The internal consistency coefficient for the scale was r =0.81 with a significance level of $p < .001$. This study offered evidence that the scale is reliable with a substance abuse outpatient population. Davignon conducted another study in 1994, this time with a sample of 227 outpatient clients, which also demonstrated the reliability of the scale. The reliability coefficient alpha was r = 0.90 at a significance level of $p < .001$. In 1995, Davignon tested the reliability of the scale on a large outpatient population of 887 participants. This study also supports the reliability of the Anxiety Scale ($r = .90$, $p < .001$).

Davignon's 1990 study of 100 participants demonstrated validity for the Anxiety Scale. The Anxiety Scale was found to correlate significantly with the Taylor Manifest Anxiety (MAS, r = 0.56), and the Psychasthenia (PT, r =0.47) Scale of the MMPI. This statistically significant correlation with the well-validated assessments supports the validity of the Anxiety Scale.

The Depression Scale measures the severity of symptoms including chronic sadness, loss of interest, and pleasure in social, occupational, and recreational activities, poor concentration, and feelings of worthlessness. The scale defines depression as a dejected or self-depreciating emotional state that varies from normal to pathological in severity. Mild symptoms of

depression, such as melancholy and dysphoric mood, are assessed by this scale. Extreme symptoms included in this scale's classification of depression are impaired social-vocational functioning, loss of interest in usual activities, thoughts of suicide, and somatic complaints. Davignon (1990) investigated the reliability of the Depression Scale in a sample of 294 substance abuse outpatient clients. The internal consistency coefficient for the scale was $r = .83$ with a significance level of $p < .001$. This study offered evidence that the scale is reliable with a substance abuse outpatient population. Davignon conducted another study in 1994, this time with a sample of 227 outpatient clients, which also demonstrated the reliability of the scale. The reliability coefficient alpha was $r = 0.88$ at a significance level of $p < .001$. In 1995, Davignon tested the reliability of the scale on a large outpatient population of 887 participants. This study also supports the reliability of the Depression Scale ($r = 0.91$, $p < .001$). This study of 100 participants demonstrated validity for the Depression Scale (Davignon, 1990). The study found that the Depression Scale correlates significantly with the Depression (D, $r=0.57$) Scale of the MMPI. This statistically significant correlation with the well-validated MMPI supports the validity of the Depression Scale.

The Distress Scale measures the participant's experience of sorrow, pain, misery, and suffering imposed by abuse, agony, and anguish. This scale identifies distress as involving both mental and physical pain and strain. Davignon's (2002) investigation found evidence of the scale's reliability. The reliability coefficients for the scale were $r= 0.85$ at pretest and $r = 0.82$ at posttest. The internal consistency of the scale is significant at $p < .001$ with a coefficient alpha of $r = 0.81$, indicating that the scale is statically reliable in its measurement of distress, defined as mental and physical pain and strain (Davignon, 2002).

Davignon (2002) also tested the scale's validity through study that found that the Distress Scale identified 93.2 percent of study participants who admitted to having a severe distress problem. Another study (Davignon, 2002) classified scores according to the degree of symptom severity they represent. This study found scores in all categories to be accurate representations of client risk. The actual percentages of clients placed in the various risk categories based on their scale scores were compared with percentages expected. The differences between obtained and expected results were 37.7% for the low risk group, 31.3% for the medium risk group, 19.8% for the problem risk group, and 11.2% for the severe problem group. The objectively derived percentages of respondents falling in each risk range are very close to the expected percentages for each risk category. These results indicate that the scale is valid in accurately identifying symptom severity (Davignon, 2002).

The Alcohol Scale measures the severity of alcohol (i.e., beer, wine, and other liquors) use and abuse, as well as problems related to alcohol use and abuse. This scale was developed through the collaboration of experienced chemical dependency program staff. The scale's reliability was examined by Davignon (2002). The pretest reliability and posttest reliability coefficient for the scale are $r = 0.86$ at pretest and $r = 0.84$ at posttest. The inter-item reliability coefficient alpha with an outpatient population sample was $r = 0.86$, indicating that the items in the scale consistently measure the factor of interest. The within test reliability with an outpatient population sample was significant at the $p < .001$ level, indicating that the scale measures the factor of interest independently from the other scales. Internal consistency of the scale is also significant at $p < .001$ with a coefficient alpha of $r = 0.86$, supporting the statistical reliability of the scale (Davignon, 2002).

Davignon (2002) also tested the scale's validity. The Alcohol Scale was found to correlate significantly with the MacAndews Scale (MAC) of the MMPI ($r = 0.58$, $p < .001$). The MAC scale measures the participant's addiction proneness, assessing the respondent's tendency toward characteristics including social imperturbability, inclination toward authority conflicts, impulsive behavior, a propensity for unusual and bizarre thoughts, an affinity toward stereotypic masculine interests, psychosomatic complaints, extroverted personality, feelings of guilt, regrets over past deeds, feelings of victimization, enjoyment of cooking, admission to having blank spells, enjoyment of gambling, insensitivity, magical thinking, narcissism, ostentatious behavior, lack of introspection, lack of intellectual orientation, difficulty concentrating, and an idealization and devaluation of women. The Alcohol Scale was also compared with Polygraph examinations specific to the nature of the scale. The product-moment correlation results between the Polygraph and the scale indicate that there is a significant correlation in the predicted direction ($r = .54$, $p < .001$), supporting the validity of the scale (Davignon, 2002).

Concurrent validity was assessed in measuring the relationship between the scale and driving while intoxicated (DWI) evaluator ratings. The product-moment correlation coefficients between staff ratings and scale scores are highly significant at $p < .001$, with an agreement coefficient of $r = 0.63$ (Davignon, 2002). The scale was also compared to the Michigan Alcohol Screening Test (MAST; Selzer, 1971), and court screening procedures. The computed product-moment correlations are $r = 0.68$ with the MAST and $r = 0.80$ with the court proceedings. The results indicate criterion validity, demonstrating that both measurements are reflecting the same information. In a subsequent study, the Alcohol Scale identified 98.1 percent of the participants who admitted to having an alcohol use problem, thus further demonstrating the scale's construct validity.

The Drugs Scale measures the severity of illicit drug use and abuse. Drug use assessed by this scale includes marijuana, crack, cocaine, amphetamines, barbiturates, LSD, and heroin. Scores on the Drugs Scale are independent of the Alcohol Scale scores. The Drug Scale provides insight into areas of inquiry that may need to be pursued in treatment.

Davignon (2002) evaluated this scale to determine its reliability. The pretest reliability and posttest reliability coefficients for the scale are $r = 0.87$ and $r = 0.84$, respectively. The inter-item reliability coefficient alpha with an outpatient population sample is $r = 0.80$, indicating that the items in the scale consistently measure the factor of interest. The within test reliability with an outpatient population sample is significant at the $p < .001$ level, indicating that the scale measures the factor of interest independently from the other scales. Internal consistency of the scale is significant at $p < .001$ with coefficient alpha of $r = 0.85$, demonstrating the statistical reliability of the scale (Davignon, 2002).

Davignon (2002) offers several studies to verify the validity of the scale. The Drug Scale correlates significantly with the MacAndrews (MAC; $r = 0.62$, $p < .001$) and Psychopathic Deviant (Pd; $r = 0.54$, $p < .001$) MMPI scales. The MAC scale is the same as described in the Alcohol Scale description above. The Pd Scale measures the respondent’s propensity for conflict, struggle, anger, and level of respect for society's rules. The Drug scale was compared with a Polygraph examination specific to questions related to drug abuse. The Pearson product-moment correlation results between the Polygraph and the scale indicate that there is a significant correlation in the predicted direction ($r = 0.56$, $p < .001$), supporting the convergent validity of the scale. Concurrent validity was assessed by measuring the relationship between the scale and DWI evaluator ratings. The Pearson product-moment correlation coefficients between staff ratings and scale scores are highly significant at $p < .001$, with an agreement coefficient of $r =$

0.54. The scale was also compared to the Michigan Alcohol Screening Test (MAST) and court screening procedures. The computed product-moment correlations were r = 0.37 with the MAST and r = 0.32 with the court proceedings. The results indicate criterion validity, demonstrating that both measurements are reflecting the same information. The Drug Scale identified 97.6 percent of the participants who admitted to having a drug abuse problem in a study with an outpatient population (Davignon, 2002). These studies offer evidence that the scale does measure the domain of interest.

The Stress Coping Abilities Scale measures the participant's ability to cope effectively with tension, stress, and pressure. Since stress exacerbates emotional and mental health symptoms, this scale serves as an inconspicuous screening tool. A score at or above the 90th percentile indicates that the respondent meets the criteria for a psychological diagnosis.

Davignon (2002) investigated the reliability of the Stress Coping Scale. The reliability coefficients for the scale are r = 0.88 at pretest and r = 0.90 at posttest. The inter-item reliability coefficient alpha with an outpatient population sample was r = 0.81, indicating that the items in the scale consistently measure the factor of interest. The within test reliability with an outpatient population sample is significant at the $p < .001$ level, indicating that the scale measures the factor of interest independently from the other scales. Internal consistency of the scale is significant at $p < .001$, with a coefficient alpha of r = 0.88, thus providing evidence of the statistical reliability of the scale and demonstrating that the items are homogeneous and measure one factor. This research demonstrates that the Stress Coping Abilities scale is a reliable measure that consistently obtains similar results upon re-administration of the test (Davignon).

Davignon (2002) offers evidence that the scale establishes how well the client copes with stress. The Stress and Coping Abilities Scale correlates significantly with several scales that are

accepted as valid scales in the field, including the Taylor Manifest Anxiety Scale (TMAS; Taylor, 1953; $r = -0.78$, $p < .001$) and two of the MMPI scales, (the Psychasthenia (Pt; $r = -0.68$, $p < .001$), Social Maladjustment (SOC; $r = -0.54$, $p < .001$) and Social Alienation (SC1a; $r = -0.67$, $p < .001$). Negative correlation coefficients between the scales are expected because high scores on the Stress Coping Abilities Scale indicate good stress coping abilities. These results support the construct validity of the Stress Coping Abilities Scale. The TMAS is an assessment of anxiety as a personality trait. A high score on the Pt indicates a struggle with obsessive-compulsive type anxiety, a tendency towards phobias, a propensity toward irrational fears, frequent difficulty concentrating, a lack of self-confidence, and perfectionism. A high SOC score indicates the participant is reserved and has a high level of introversion, poor social skills, negative self-image, and experiences emotions of apathy and despair. A high score on the SC1a offers evidence that respondent feels misunderstood and alienated, often feels others have it in for them or wish them harm, describes family as lacking in love and support, admits never having been in love, and avoids social relationships.

The Stress and Coping Abilities Scale has been shown to demonstrate construct validity in significantly discriminating between high stress individuals and low stress individuals. Davignon (2002) also evaluated the relationship between Ego Strength (factor C) in the Cattell 16 PF Test and the Stress Coping Abilities Scale. High scores on the C factor indicate high ego strength and emotional stability, whereas high Stress Coping Abilities scores reflect good coping skills. A positive correlation was predicted because of the assumption that emotional stability and coping skills reflect similar attributes. The correlation results indicated that the Factor C scores were significantly correlated with the Stress Abilities Coping scores ($r = 0.694$, $p < .01$), indicating that the scale is a valid measure of stress coping abilities. A subsequent study

investigated the relationship between Free Floating Anxiety (Q4) on the 16 PF Test and the Stress (S) items of the Stress Coping Abilities Scale. High Q4 scores reflect free-floating anxiety and tension, whereas high S scores measure experienced stress. A positive correlation between Q4 and S was predicted. The results indicated that the Q4 scores were significantly correlated with the S scores ($r = 0.584$, $p < .05$), supporting construct validity of the Stress Coping Abilities Scale. The study demonstrated highly significant inter-item scale consistency. These studies consistently demonstrate strong empirical relationships between the Stress Coping Abilities Scale and other established measures of stress, anxiety, and coping skills and that the Stress Coping Abilities Scale is a valid measure of how well the participant copes with stress.

Attachment Styles

This study used the Experiences in Close Relationships Questionnaire (ECR; Brennan, Clark, & Shaver, 1998; see Appendix B) as a measurement of adult attachment style. The instrument measures individuals on two subscales of attachment: Avoidance and Anxiety. The ECR was developed from all of the 14 attachment measures (including 60 subscales and 323 items) available at the time and includes data from more than 1,000 participants. Participants are instructed to rate how they typically feel and experience romantic relationships. The adult attachment instrument is a 36-item self-report questionnaire, consisting of two 18-item subscales: Avoidance and Anxiety. The measure takes about 10 minutes to complete. The Avoidance subscale assesses fear of intimacy and discomfort with getting close to others for fear of dependence on significant others. The Anxiety subscale identifies fears of rejection and preoccupation with abandonment (Vogel & Wei, 2005).

Responses are gathered on a 7-point Likert scale, with answer choice options ranging from “Disagree Strongly” to “Agree Strongly.” Higher scores on the Avoidance and Anxiety

subscales indicate a stronger propensity to the respective attachment style. Low scores on the Avoidance and Anxiety subscales indicate a tendency toward a secure attachment style. The ECR provides two continuous subscale scores for each attachment dimension (i.e., secure, fearful, anxious, and avoidant), emphasizing the difference in avoidance and anxiety scores among individuals in each category (Parker, Johnson, & Detring, 2011).

The ECR is used extensively and is strongly encouraged for use in research measuring adult attachment (Crowell et al., 2008; Fraley, 2010), since assessing adult attachment style with the ECR allows for more precise discrimination than other measures (Parker, Johnson, & Detring, 2011). Evidence indicates that the ECR is a highly reliable and valid measure of adult attachment (e.g. Lopez and Gormley, 2002; Parker, Johnson, & Ketring, 2011; Vogel & Wei, 2005).

Brennan et al. (1998) reported Cronbach alphas of r = 0.94 and r = 0.91 for the Avoidance and Anxiety scales, respectively. Two separate studies, found slightly lower yet still reliable coefficient alphas of r = 0.90 for both the Avoidance and Anxiety subscales, supporting a high degree of internal consistency of items in each scale (Crowell et al., 2008; Parker, Johnson, & Ketring, 2011). Brennan, Shaver, and Clark (2000) reported test–retest reliabilities of r = 0.70 for both the Anxiety and Avoidance subscales across a three week period. Lopez and Gormley (2002) found that the test–retest reliabilities were r = 0.68 for attachment anxiety and r = 0 .71 for avoidance across a six month period. These studies indicate that the instrument consistently measures the construct of interest.

Factor analysis supports the construct validity of the ECR, confirming anxious attachment and avoidant attachment styles to be the two dimensions of adult attachment specifically. Professional consensus indicates that the instrument is consistent with attachment

theory, as there is a positive association between attachment anxiety and reassurance seeking and emotional reactivity. Attachment avoidance is positively associated with emotional cutoff. In addition, attachment avoidance is negatively associated with a desire for intimacy and comfort with self-disclosure, which are characteristics associated with a secure attachment. There are also significant positive associations between both attachment anxiety and avoidance with depression, angst, interpersonal distress and loneliness (Bartholomew & Horowitz, 1991; Mikulincer et al., 2003). Exploratory factor analysis further supports the underlying factor structure of the ECR for assessment of attachment anxiety and attachment avoidance among a clinical sample (Parker, Johsnon, & Ketring, 2011). Brennan et al. (1998) demonstrate discriminate validity within the instrument as the anxiety and avoidance scales are shown to be unrelated to each other ($r = 0.11$), suggesting that the measure captures the two separate and conceptually distinct underlying dimensions of adult attachment. These studies indicate that the attachment instrument accurately measures the constructs of interest.

Romantic Relationship Satisfaction

In the present study, the Dyadic Adjustment Scale (DAS, Spanier, 1976; see Appendix B) total score and subscale scores were used as a measure of the respondent's global adjustment and satisfaction within their romantic relationship. The DAS is the most widely used self-report measure of relational satisfaction and is recommended over competing instruments due to the scale's brevity, applicability with couples of varying demographics, and solid psychometric properties (Carey, Spector, Lantinga, & Krauss, 1993; Funk & Rogge, 2007; Graham, Liu & Jeziorski, 2006). This tool asks participants to approximate the extent of agreement or disagreement between the assessment taker and partner on 32 items ranging on a 6-point Likert scale with answer choices ranging from "Always Agree" to "Always Disagree." The scale takes

participants about ten minutes to complete. The instrument yields a total score ranging from 0 to 151. Higher scores indicate a more positive dyadic adjustment. Cutoff scores between 92 and 107 differentiate between distressed and non-distressed partners (Funk & Rogge, 2007; Graham, 2006; Spanier). The scale provides an overall indicator of the partner's satisfaction and adjustment in the relationship.

The DAS consists of four subscales; Dyadic Satisfaction, Dyadic Cohesion, Dyadic Consensus, and Affectional Expression. The Dyadic Satisfaction subscale consists of ten items. This subscale measures the degree to which the individual is satisfied with their relationship, assessing the amount of tension in the relationship as well as the extent to which the partner has considered terminating the relationship versus the level of commitment to continue the relationship. The Dyadic Cohesion subscale consists of five items and assesses the degree of closeness and shared activities experienced by the individual as related to being a part of the couple. The Dyadic Consensus subscale consists of thirteen items and assesses the degree to which the partner perceives that the couple agrees on matters of importance to the relationship such as finances, religion, recreation, friends, household tasks, and time together. The Affectional Expression subscale includes four items and measures the level of the individual's satisfaction with the demonstrations of affection and sexual relations within the relationship. Lower subscale scores are indicative of areas of maladjustment and dissatisfaction while higher subscale scores indicate the presence of relational adjustment and satisfaction in the area. The total DAS score is calculated by a summation of the scores on the four subscales.

Psychometrically, the comprehensive scale is acknowledged as a good paper-and-pencil single indicator of dyadic adjustment and satisfaction (Cohen, 1985; Follette & Jacobson, 1985; Funk & Rogge, 2007, Johnson & Greenberg, 1985). Total DAS scores consistently distinguish

between distressed and non-distressed partners and have been shown to determine those with a high likelihood of divorce (Busby, Christensen, Crane, & Larson, 1995; Graham, Liu, & Jeziorski, 2006). The DAS was later revised in an attempt to create a more parsimonious tool, generating the Revised Dyadic Adjustment Scale (RDAS; Busby, Christensen, Crane, & Larson 1995). The original DAS is a better measure for this study since the RDAS omits important areas of dyadic functioning such as marital finances and communication (Busby et al., 1995). The inclusion of these constructs is important since both are functions of the relational growth and stability necessary for a couple to heal from the pain inherent in addiction. The DAS has been shown to perform similarly with global measures of satisfaction in longitudinal studies, which is advantageous since global measures routinely used in the field are more likely to produce research that can be integrated with similar studies (Bradbury, Fincham, & Beach, 2000).

Calculations of the coefficients alpha (Cronbach, 1951) for each of the scales of the DAS, along with the total score indicate high internal consistency within the measure (Carey, Spector, Latinga, & Krauss, 1993; Graham, Liu, & Jeziorski, 2006; Spanier, 1976). The reliability of DAS scores gives evidence of consistent findings across varying romantic relationships including variations in marital status, ethnicity, sexual orientation, and gender of the sample. This allows score reliability to be generalized across diverse samples (Graham, Liu, & Jeziorski). Carey et al. (1993) reports the calculated coefficient alpha values: Affectional Expression (4 items, $r = 0.70$); Dyadic Cohesion (5 items, $r = 0.83$); Dyadic Consensus (13 items, $r = 0.91$); Dyadic Satisfaction (10 items, $r = 0.87$); and total DAS score (32 items, $r = 0.95$). Affectional Expression, the subscale with the lowest reliability score, does fall within the generally accepted cutoff of $r = 0.70$. This subscale produces the lowest internal consistency score since the subscale

has few items and reliability is partly a function of test length, with longer test length equating with greater internal consistency (Graham, Liu, & Jeziorski, 2006).

Test-retest reliability scores for each of the scales as well as the total score indicate that the stability coefficients are highly significant, ranging from r = 0.75 to r = 0.87, and demonstrate stability of the test scores over time. Separate Pearson product-moment correlation coefficients were calculated for each of the scales, resulting in findings of high scores for Affectional Expression (r = 0.75), Cohesion (r = 0.77), Consensus (r = 0.85), Satisfaction (r = 0.81), and total DAS score (r = 0.87; Carey et al., 1993). Graham, Liu, & Jeziorski (2006) conducted a meta-analysis of 403 articles to determine the generalization reliability of the DAS by characterizing the reliability of the test scores across a wide variety of applications. Their meta-analysis found that the reliability of total DAS scores ranged from r = 0.58 to r = 0.96 with a mean score reliability of r = 0.92, conveying an acceptable level of reliability across studies. Their study also examined the reliability of the total DAS scores over time by calculating reliability rates of the total DAS scores in studies published in five-year intervals from 1980 to 2004. Reliability rates were shown to be consistent across time periods with an overall reporting reliability rate of 22.6%, which is considered to be typical of reliability rates in generalization studies. These studies demonstrate that the instrument is consistent in its measurement.

Items included in the DAS were paired down from 300 to 32 through an evaluation process led by three judges, deemed to be experts in the field. This resulted in evidence of the instrument's content validity (Graham, Liu, & Jeziorski, 2006). The criteria for item inclusion required agreement by all three judges on the item's relevance, consistency with the definitional constructs (i.e., satisfaction, cohesion, and consensus) and appropriate wording of the item (Spanier, 1976). Criterion validity was demonstrated since the scale was administered to a

sample of married persons and a sample of divorced persons. For each item, the sample of divorced individuals differed significantly from the sample of married individuals. The correlation between the samples was insignificant, indicating that the two samples are dissimilar, which is expected when measuring dyadic adjustment. The scale items correlated significantly with the external criterion of marital status (Carey, Spector, Latinga, & Krauss, 1993; Spanier, 1976). Spanier tested the correlation of the DAS with the Marital Adjustment Scale (MAS; Locke-Wallace, 1959) to assess the construct validity of the DAS. The correlation between the scales was $r = 0.86$ among married couples and $r = 0.88$ among divorced respondents, indicating that the scales measure the same constructs. Construct analysis was further supported through a factor analysis of the scale items in which four interrelated components (i.e., dyadic satisfaction, dyadic cohesion, dyadic consensus, and affectional expression) were found to exist (Spanier, 1976), reflecting consistency with the previously established definition of the theoretical constructs. Such extensive research has consistently validated this scale's ability to assess the domain of interest.

Research Procedures

Prior to data collection, the Institutional Review Board (IRB) of Liberty University was petitioned for approval of this study as delineated by the following procedures. Each participant was given an informed consent statement with particulars about voluntary participation,adapted from guidelines by Kazdin (2003, p. 516). The individual's signature, documenting acknowledgement of informed consent, was required for further participation. Beyond this point, anonymity was protected for each participant. The participants were informed that data would be gathered in an anonymous fashion (i.e., without associating the participant's first or last names). Each packet was numbered for the purpose of keeping the identity of each participant separate

and labeled with birth date to allow for a second method of participant differentiation while protecting each individual's confidentiality. The data from the PPI was entered directly into the testing website from the participants' answer sheets to produce a Pretest Scales Report and a Posttest Comparison Report. Data from the ECR and DAS were entered directly into an excel spreadsheet created for this purpose. In order to assure a high level of data accuracy, records were spot checked on a random basis.

Several additional ethical considerations were addressed. Confidentiality was discussed to assure participants that individual assessment scores are not shared with any outside parties that are not relevant to this research. Also, the assessment process was described, and follow-up information was offered. Furthermore, contact information was provided to any participants who wanted further explanation about the purposes of the study. Finally, ethical issues related to postponing couple therapy in order to stagger the baseline data were prevented. At the outset of the study, prospective participants were informed that they may be assigned to the two-week, four-week, or six-week baseline condition and that individuals ought to participate in the study only if all of these options can be tolerated. Finally, the data was stored securely to protect the participant's privacy. The assessment packets were stored at the treatment center in a locked filing cabinet. The data from the assessments were keyed into computers that were password protected. Data was shared between computers via an external disk that was stored in a locked filing cabinet. All of these ethical considerations were conveyed verbally and in written form on the consent documentation. These ethical guidelines were obtained from Kazdin (2003).

Data Processing and Analysis

The first measure of this study was comparatively analyzed to examine the effect of EFT on the participant's quality of recovery from addiction. The pretest-posttest design indicates that

a single group of the same subjects were studied under two conditions (Salkind, 2000). In this study, the conditions were before the initiation of the intervention and after the conclusion of the 15-week intervention, consisting of two weeks of intake and individual sessions followed by 13 weeks of EFT couple therapy. This comparative analysis enables the investigation of the effect that EFT has on recovery from addiction (Mertler & Vannatta, 2005). The first research hypothesis was not tested. Inferences cannot be generalized to a larger population (Creswell, 2003; Salkind, 2000).

Using scores from the PPI, this researcher compared differences in percentile rank change from pretest to posttest between participant outcome scales on the PPI given prior to the intervention and at the conclusion of the 15-week treatment. PPI subscale scores were investigated for only one of the participants. Since the missing data exceeded the recommended cutoff, this analysis was exploratory in nature, describing the data rather than offering research that can be generalized to a larger population.

The second and third measures of this study gathered data on a discrete sequence over time for the same four participants. This resulted in data that has serial dependence, in that the data points are related to each other in the series of observations made at equal time intervals (Kazdin, 2011). The participants were asked to complete the assessments at intervals that remained constant throughout the entire observation period of the study in order to assess the scores as they vary over time (Barlow, Nick, & Hersen, 2009). This collection of discrete time-series data was accomplished with the participants completing the ECR and the DAS on Mondays, Wednesdays, and Fridays throughout the study. The nature of research on human subjects lends itself toward imperfection, so while the participants did not complete the assessments precisely as delineated by the study design, the frequency of missed collection

points is minimal and therefore was not disruptive to the analysis of the data (Barlow, Nock, & Hersen).

The same battery of assessments (see Appendix A, B, & C) were given to the participants, either at pretest and posttest (i.e., the PPI) or continuously (i.e., the ECR and the DAS). The participants completed the assessments and submitted them to their clinician prior to their weekly therapy session. The clinician then placed the assessments in the participant's envelope. The data was then analyzed by this researcher who does not have a relationship with the participants. This data was collected and analyzed only for research purposes pertaining to this study.

The recommended method of data evaluation for single-case research is based on visual inspection (Kazdin, 2011). In order to determine whether the intervention was responsible for the change, the experimental criterion consists of the extent to which the data follow the pattern required by the design. The experimental criterion refers to a comparison of the participants' assessment endorsement during the intervention with what the participants' perceptions would be like had the intervention not been implemented. The experimental criterion serves to facilitate the decision of whether a veridical and reliable change has been demonstrated and whether that change can be attributed to the intervention. In this multiple-baseline design, the intervention effect was replicated across the four participants. The experimental criterion is met by determining whether performance shifts similarly for each participant after the introduction of couple therapy sessions. The decision-making process regarding whether the data pattern reflects a systematic intervention effect is enabled with visual inspection, allowing for a judgment about the reliability of intervention effects. The continuous data, collected with the ECR and the DAS,

is displayed graphically to enable visual inspection. In single-case research, graphing extends beyond a descriptive tool since the graph is part of the inferential process (Kazdin, 2011).

The criteria for making judgments by visual inspection were considered deliberately. In order to determine whether the intervention was responsible for the change in assessment scores, the experimental criterion consists of the extent to which the data follow the pattern required by the design (Barlow, Nock, & Hersen, 2009; Boersma, et al., 2004; Kazdin, 2011). Visual inspection primarily depends on four characteristics of the data that are related to the magnitude and the rate of the changes across the baseline and intervention phase. Changes in mean and level are characteristics of the data related to magnitude. The two characteristics related to rate are changes in trend and latency. Changes in mean across the phases refer to shifts in the participant's average score on the measure. Consistent changes in means across phases serve as a basis for deciding whether the data pattern meets the requirements of the design. Changes in level refer to the shift in assessment endorsement from the end of the baseline phase to the beginning of the intervention phase. Mean and level changes are independent of one another. Trend refers to the tendency of the data to show systematic increases or decreases over time. The trend is indicated on the graph as the slope of the line. The latency of the change refers to the period between the onset of therapy after the completion of the baseline phase and the change in assessment scores. The intervention effect is most clear when there is a short time gap between the change in experimental conditions and the change in the participant's assessment endorsement. Visual inspection is conducted by judging the extent of changes in the means, levels, trends, and the latency of change apparent across the phases and whether the changes are consistent with the requirements of the multiple-baseline design. The characteristics of the data act in concert and are thus also evaluated as a whole (Kazdin, 2011).

Research Questions and Null Hypotheses

The first research question asked whether there was a significant difference in quality of recovery from addiction comparing outcome measures prior to and following EFT. The first null hypothesis states that, following the 15-week intervention, PPI subscale scores would show no significant difference prior to and after the implementation of EFT. This was addressed with a comparative analysis of percentile rank scores.

The second research question asked whether a change in and attachment style occurs during the implementation of EFT couple treatment with individuals recovering from substance abuse. The second null hypothesis states that ECR subscale scores remain at predicted baseline trends throughout the 15-week intervention. This was addressed with a visual analysis of the data.

The third research question asked whether an increase in relationship satisfaction occurs during the implementation of EFT couple treatment with individuals recovering from substance abuse. The third null hypothesis states that DAS mean gain composite scores and subscale scores would remain at predicted baseline trends throughout the 15-week intervention. This was addressed with a visual inspection of the data.

Chapter Summary

This naturalistic study, based on a small number of participants, was designed to rigorously evaluate the efficacy of EFT with a population in which one partner is recovering from addiction. This study empirically investigated the efficacy of EFT in quality of recovery from addiction, attachment style, and romantic relationship satisfaction. This is the first known analysis of the efficacy of EFT to contribute to addiction recovery; therefore these findings are

beneficial to the field in providing additional information to the literature of addiction recovery treatment.

CHAPTER FOUR: DATA ANALYSIS AND RESULTS

Restatement of the Purpose

The purpose of this study was to use a pretest-posttest design in combination with a single case non-concurrent multiple-baseline design to empirically investigate the effects of EFT on quality of recovery attachment style, and relational satisfaction with couples in which one of the partners is recovering from substance addiction. Data was collected using three self-report assessments and a demographic questionnaire. The participants consisted of two couples recruited from the Metro Atlanta Recovery Residences (MARR) residential addiction recovery treatment program. The first research question asked whether there was a significant difference between inventory subscale and composite scores prior to and following EFT. This question was considered with a comparative analysis. The second and third research questions asked whether a change in attachment style and relational satisfaction, respectively, occur during the implementation of EFT couples treatment with individuals recovering from substance abuse, together with their partner. These questions were answered by graphing the data, allowing for visual inspection of each assessment subscale and the composite martial satisfaction score.

For the specific purposes of this study, participants were recruited from a population of individuals in recovery from addiction, together with their significant other, at an abstinence-based residential addiction recovery treatment program in the metro Atlanta area during the fall of 2013. A population of six individuals participated in the study. Two participants were eventually excluded because they did not complete the assessments as per the requirements of the study and, ultimately, did not complete the 15 weeks of therapy. The decision to recruit all of the participants from the same program was made to promote internal validity, ensuring that all of the clients experienced the same addiction recovery curriculum prior to the study. Clients

were invited to voluntarily participate by attending the information session, completing the demographic questionnaire, and signing the informed consent paperwork. The participants then began completing the assessments, as delineated by their assigned baseline requirements.

The group (*n*=4) was comprised of two clients in an abstinence-based addiction recovery program and their significant others. All of the clients had completed the first phase of treatment and had transitioned into the second phase of treatment.

Two clients in the second phase of treatment, together with their romantic partner, participated in the study. The participants' ages ranged from 38 to 63 years; the partners of the younger couple (P1 and P2) are both aged 38 and the elder couple (P3 and P4) are aged 61 and 63. All of the participants were Caucasian. P1 and P2 endorsed a relationship status of 'cohabitating'. This couple consists of two women who have been in a romantic relationship together for 20 years. The other couple, P3 and P4, endorsed a relationship status of 'married' and reported being married for 42 years. P1 and P2 endorsed having participated in couple therapy previously; P3 and P4 endorsed no previous participation in couple therapy. Only one participant, P2, reported ever having been diagnosed with a mental health disorder, which she specified as depression, for which she is prescribed Celexa. P2 has also clearly been diagnosed with a substance use disorder since she was a client in MARR's program. P1 endorsed not having received a mental health diagnosis, yet she reported that she was taking Effexor (i.e., most frequently prescribed to treat depression and anxiety) and Trazodone (i.e., also most frequently prescribed to treat depression and anxiety in addition to its sleep-inducing effects). P3 endorsed not having received a mental health diagnosis, yet she reported taking Zoloft (an antidepressant most frequently prescribed to treat depression and anxiety). P4 also endorsed never having received a mental health diagnosis and reports not being prescribed medications to treat mental disorders. Evidence indicated that he

met the criteria to be diagnosed with a substance use related diagnosis since he was a client in the MARR program. One of the couples, P3 and P4, reported being religiously affiliated with Protestant Christianity. P1 was affiliated with the Unitarian Universalist religion (i.e., although historically rooted in Protestant Christianity, Unitarian Universalists do not regard their faith as a Christian denomination), and P2 did not have any religious affiliation. All of the participants denied being a survivor of abuse, except P2 who endorsed being a survivor of sexual abuse. None of the participants endorsed being a survivor of trauma. All of the participants missed their therapy session one week. P1 and P2 had two weeks between sessions five and six, and P3 and P4 had two weeks between session eleven and twelve. See Table 4.1 for a further breakdown of the age, ethnicity, marital status, and religious affiliation demographics. This chapter first delineates the practices in reporting and handling the missing data. Next the research questions, starting with the first null and alternative hypothesis in question one are addressed. Then the second followed by third research questions and their null and alternate hypotheses are evaluated with a visual inspection of the data used to draw inferences about the intervention.

Table 4.1

Demographics on Age, Ethnicity, Marital Status, & Religious Affiliation

Demographic	Type	*n*	Percentage
Age	38	2	50%
	61	1	25%
	63	1	25%
Ethnicity	Caucasian	4	100%
Marital Status	Cohabitating	2	50%
	Married	2	50%
Religious Affiliation	Christianity/Protestant	2	50%
	Unitarian Universalist	1	25%
	None	1	25%

Preanalysis Steps

Data was missing in this study in the form of missed assessments, missed item responses, and invalidated assessments. The implications for not addressing missing values are severe. Threats to internal validity in the form of statistical power and threats to external validity, specifically generalizability of the findings, weaken the study. In an effort to guard against these consequences, this section reports the percentage of missing data, the method for managing data, and the rationale for the chosen procedure.

The participants' PPI response rates created non-ignorable missing values in the data, since it had no random distribution pattern across the set. The missing data is problematic, because it is related to values that are not observable. The PPI was administered in a pretest and posttest format. P2 did not complete the pretest, creating a 75% completing rate of the pretest. The posttest administration was invalidated by P3 and P4's extreme number of deviant Truthfulness Scale responses, creating additional missing data. Both participants' Truthfulness

Scale scores were at or above the 90th percentile, which is within the invalid threshold. Such extreme Truthfulness Scale scores suggest that all of the PPI scale scores are void, invalid, and inaccurate. The Truthfulness Scale measures the accuracy of the assessment as defined by test results that are essentially free from error and in which client was cooperative and truthful. When not consciously deceptive, participants' with elevated Truthfulness Scale scores are often overly guarded, defensive, and uncooperative. The elevated Truthfulness Scale scores are an indication that all scale scores are invalid, distorted, and not accurate. This leaves only P1's data classified as viable for interpretation. A missing comparison data rate of 75% exceeds the recommended cutoff; hence the PPI outcome data is likely biased. Since incorporating the data collected with the PPI into this study feasibly introduces bias, the preliminary analysis of the PPI is intended only for the purpose of beginning to formulate a possible interpretation to be investigated by future research.

The extent of the missing data derived from the ECR did not exceed the 20% cutoff recommended as indicative of problematic data. P1 and P2 each completed the ECR 63 times, responding to 2268 items. P1 missed three assessments and no items otherwise. P2 completed all of the assessments and all of the items on the assessments. P3 and P4 completed the ECR 51 times, responding to 1836 items. These participants completed 12 fewer assessments as compared with P1 and P2 due to their shortened baseline phase. P3 failed to complete three assessments and skipped two items on additional assessments. P4 did not complete two assessments and missed no items otherwise. The ECR missing data was not problematic for this study. See Table 4.2 for a further breakdown of the type, amount, and percentage of missing data by participant and total associated with the ECR data collection.

Table 4.2

Missing Data: Experiences in Close Relationships

Participant	Type	Amount	Percentage
P1	Item	0	0%
	Assessment	3	4.76%
P2	Item	0	0%
	Assessment	0	0%
P3	Item	2	0.16%
	Assessment	3	5.88%
P4	Item	0	0%
	Assessment	2	3.92%
Total	Item	2	0.02%
	Assessment	8	3.51%

The extent of the missing data derived from the DAS also did not exceed the 20% cutoff amount of response rates identified in the research as unacceptable. P1 and P2 each completed the DAS 63 times, responding to 2016 items. P1 missed three assessments and no items otherwise. P2 missed one assessment and skipped four items on other assessments. P3 and P4 completed the DAS 51 times, responding to 1362 items. P3 failed to complete three assessments and skipped 29 items on additional assessments. Of the 29 items that P3 skipped, 26 of the missed items were non-responses to item number 31 which asks the participants to rate his degree of relational happiness on a 7-point Likert scale from “Extremely Unhappy” to “Perfect”. P4 did not complete five assessments and missed one additional item. The DAS missing data did not introduce bias to this study. See Table 4.3 for a further breakdown of the type, amount, and percentage of missing data by participant and total associated with the DAS data collection.

Table 4.3

Missing Data: Dyadic Adjustment Scale

Participant	Type	Amount	Percentage
P1	Item	0	0%
	Assessment	3	4.76%
P2	Item	4	0.20%
	Assessment	1	1.59%
P3	Item	29	1.78%
	Assessment	3	5.89%
P4	Item	1	0.06 %
	Assessment	6	11.76%
Total	Item	34	0.47%
	Assessment	13	5.70%

Data Imputation

This study used the data imputation approach to rectify the missing data, whereby missing values were replaced by a plausible value predicted from that participant's available data (Altman & Bland, 2007; Schlomer, Bauman, & Card, 2010; Sterner, 2011). The rationale for a data imputation method to manage the missing data was based on the pattern of the missing data. Most of the omitted data fits the pattern of missing at random (MAR) in that the absent data are related to the observed data. Missing data categorized as MAR is not a function of the missing values but rather more a function of the characteristics of the participant (Schlomer, Bauman, & Card, 2010; Sterner, 2011). Values that are MAR are not randomly distributed across the data set but have random patterns within each participant's data set (Sterner, 2011). Item number 31, skipped by P3 26 times, is the only data that is not missing at random (NMAR). This missing data established a pattern indicating that the omission was likely related to the score the same subscale, which is dyadic satisfaction. Speculation related to factors that may have caused the

NMAR data are offered in the next chapter. The deletion method is generally not recommended as a strategy for handling missing data (Schlomer, Bauman, & Card, 2010), therefore, this study used an imputation method, specifically mean substitution, to impute missing values with the mean value of the variable on the basis of the non-missing values for that variable (Schlomer, Bauman, & Card, 2010; Sterner, 2011).

Mean imputation was selected as the remediation procedure that best accommodates the missing data. Mean imputation calculates the mean on the basis of available cases for the variable where the missing data exist (Sterner, 2011). This study focused on the observation of assessment scores over time, therefore, mean values were calculated for missing variables from available variables during the same time period. Four available scores were averaged, two prior to the missing score and two after the missing score to create the mean score imputed for the missing score. This is beneficial in that imputed values gravitate toward the values observed at a specific time (Altman & Bland, 2007).

Results

All of the participants completed the intervention phase, which consisted of 15 weeks of treatment including an intake session, an individual session for each partner, and 13 weeks of EFT. As a population, the participants did not complete the PPI at a response rate necessary for an unbiased analysis. An exploratory comparison of the PPI data was completed followed by preliminary interpretations. The participants completed the three times weekly assessments at acceptable response rates. Therefore, only the second and third research questions were analyzed.

First Research Question

The first research question asked whether, following two weeks of intake and individual sessions and then 13 weeks of EFT couple therapy, PPI subscale scores would decrease, indicating decreased substance use symptom severity. The null hypothesis stated that following 15 weeks treatment, PPI subscale scores would show no change in substance use problem severity as compared with scores prior to the intervention. Alternate Hypothesis One stated that following 15 weeks of treatment, PPI subscale scores would show a significant decrease in substance use problem severity after the implementation of EFT as compared with scores prior to the intervention. Only a preliminary comparison was considered since the participant response rate was well above the problematic cutoff.

Quality of Recovery. PPI scores were analyzed for only P1, since P2 did not complete the instrument at the beginning of this study and P3 and P4 obtained invalid scores on the posttest. This analysis is exploratory in nature, describing the data rather than offering research that can be generalized to a larger population.

Pre-Post Inventory. The first research question remains unanswered. An exploratory data comparison was employed to discern what the data reveals rather than completing the planned formal hypothesis testing. Risk range percentile ranks were calculated by the inventory's authors, using scoring equations based on the participant's responses to scale items combined with Truth-Corrections. These ranks were then converted to percentile scores to compare the participant's scores with scores from the scale's normative sample. Four categories of risk were assigned: Low Risk (zero – 39th percentile), Medium Risk (40 to 69th percentile), Problem Risk (70 to 89th percentile), and Max Risk (90 to 100th percentile). These percentile ranks were compared to the normative sample and to each other to deduce change from pretest to posttest.

All three participants who completed the inventory at both testing times demonstrated negative change from pretest to posttest on the Truthfulness Scale. P3 and P4 obtained results in the Max Risk category on their posttest Truthfulness Scale. P3's score increased at a startling rate from being classified as low risk (28th percentile) at pretest to a designation of at or above the 90th percentile at posttest. P4s results were less dramatic with a negative change from the 85th percentile at pretest to the max risk rank at posttest. This scale overrides all the other scales, thus the invalid results rendered the entire inventory to be inaccurate for P3 and P4. P1's posttest Truthfulness Scale score indicated inventory accuracy, yet reflected her attempt to present herself in an overly favorable light. Her results demonstrated a negative change from the medium risk range (44th percentile) at pretest to the problem risk range (80th percentile) at posttest. Elevated Truthfulness Scale scores do not occur by chance (Davignon, 1998). A pattern of deviant Truthfulness Scale item responding emerged for these participants following therapy.

P1's PPI percentile rank scores offered evidence toward an improvement in quality of recovery from addiction on most of the scales. P1's Anxiety Scale score decreased from the problem category (90th percentile) to the medium category (58th percentile). This noticeable improvement suggests that she was less affected by symptoms of apprehension and worry after treatment. While P1's Depression Scale result remained classified as medium, she did score 15 percent lower after EFT (44th percentile) as compared to her prior score (59th percentile). This positive change reflects a lifted mood following therapy. Her Distress Scale remained in the low risk range at both test administrations, increasing slightly from the 20th percentile to the 28th percentile. This comparison indicates that P1 was slightly more upset after couple counseling as compared with her level of emotional discomfort prior to counseling. P1's Self-Esteem Scale reveals scores in the medium risk range both at pretest (64th percentile) and at posttest (51st

percentile). This positive change suggests movement toward acknowledging herself as worthwhile and lovable.

P1 was the partner of a substance-abusing individual. She did not have substance use problems herself and, therefore, was classified as low risk (seventh percentile) at both test times for the Alcohol Scale and Drug Scale. P1's Stress Management Scale shows positive change. Her results remained at the medium risk level at both test times but dropped in severity from the 61st percentile at pretest to 45th percentile at posttest. Overall, P1's PPI comparative results indicate an increased quality of recovery following EFT couple therapy. Although this analysis does not accept or reject the null hypothesis, the exploratory data comparison may generate hypotheses leading to new data collection and further study. See Table 4.4 for a report of P1's PPI subscale percentile rank scores as compared with the normative sample scores and the comparison change in P1's scores from the pretest to the posttest administration.

Table 4.4

Comparison Report: Pre-Post Inventory Scores for P1

Subscale	Test Time	Percentile	Risk Range	Comparison
Truthfulness				
	Pretest	44	Medium	
	Posttest	80	High	-36
Anxiety				
	Pretest	90	Max	
	Posttest	58	Medium	32
Depression				
	Pretest	59	Medium	
	Posttest	44	Medium	15
Distress				
	Pretest	20	Low	
	Posttest	28	Low	-8
Self-Esteem				
	Pretest	64	Medium	
	Posttest	51	Medium	13
Alcohol				
	Pretest	7	Low	

	Posttest	7	Low	0
Drug				
	Pretest	7	Low	
	Posttest	7	Low	0
Stress Management				
	Pretest	61	Medium	
	Posttest	45	Medium	16

Second Research Question

The second question asked whether a change in attachment style would occur during the implementation of EFT couple treatment with individuals recovering from substance abuse. The second null hypothesis stated that ECR mean subscale scores would remain at predicted baseline trends throughout the 15-week intervention, which consisted of two weeks of intake and an individual session followed by 13 weeks of EFT. Hypothesis Two stated that ECR mean subscale scores would decrease from predicted baseline trends throughout the 15-week intervention. This question was considered using visual inspection to judge the extent of changes in means, levels, and trends, the latency of change evident across the baseline and treatment phases, and whether the changes were consistent with the requirements of the design of this study.

Characteristics of visual inspection. There are four characteristics of visual inspection, considered in evaluating data from single-case experiments (Kazdin, 2011). Changes in means across phases refer to shifts in the average level of the score on the assessment. Consistent changes in means across phases can serve as a basis for deciding whether the data pattern meets the requirements of the design. Changes in level are the shift in the magnitude of the scores from the end of the baseline phase to the beginning of the treatment phase. This characteristic identifies change that happens immediately after the intervention was implemented. When a large change in level occurs immediately following the initiation of therapy, the level change is

considered abrupt which is indicative of an effective intervention. Changes in trend are demonstrated in the slope of the line and they show a tendency for the data to increase or decrease over time. A marked change in slope at the onset of therapy conveys that the intervention facilitated change that is reliable and that the intervention altered the predicted pattern of performance on the assessments. The latency of change is the period of time between the onset of the treatment phase and changes in scores. The sooner the change occurs after treatment has been initiated, the clearer the intervention effect (Kazdin, 2011). These four criteria are considered individually and as a unified whole. Visual analysis allowed for the determination of whether EFT altered the participant's pre-intervention pattern of scores related to attachment style.

Attachment style. The ECR Subscales were graphically displayed for visual inspection. The graphic depictions of the subscale scores were described as related to the four characteristics of the data: changes in mean, changes in level, changes in trend, and the latency of change. Low scores on the Avoidance and Anxiety Subscales indicated a tendency toward a secure attachment style. The criteria for making judgments about the efficacy of the intervention are considered deliberately in the section below.

Experiences in close relationships scale. The following section will provide a description of the four criteria that can be seen in a visual inspection of each graph. See Figures 4.1 through 4.8 as a function of the visual inspection of changes in mean, changes in level, changes in trend, and the latency of the change of the ECR scores.

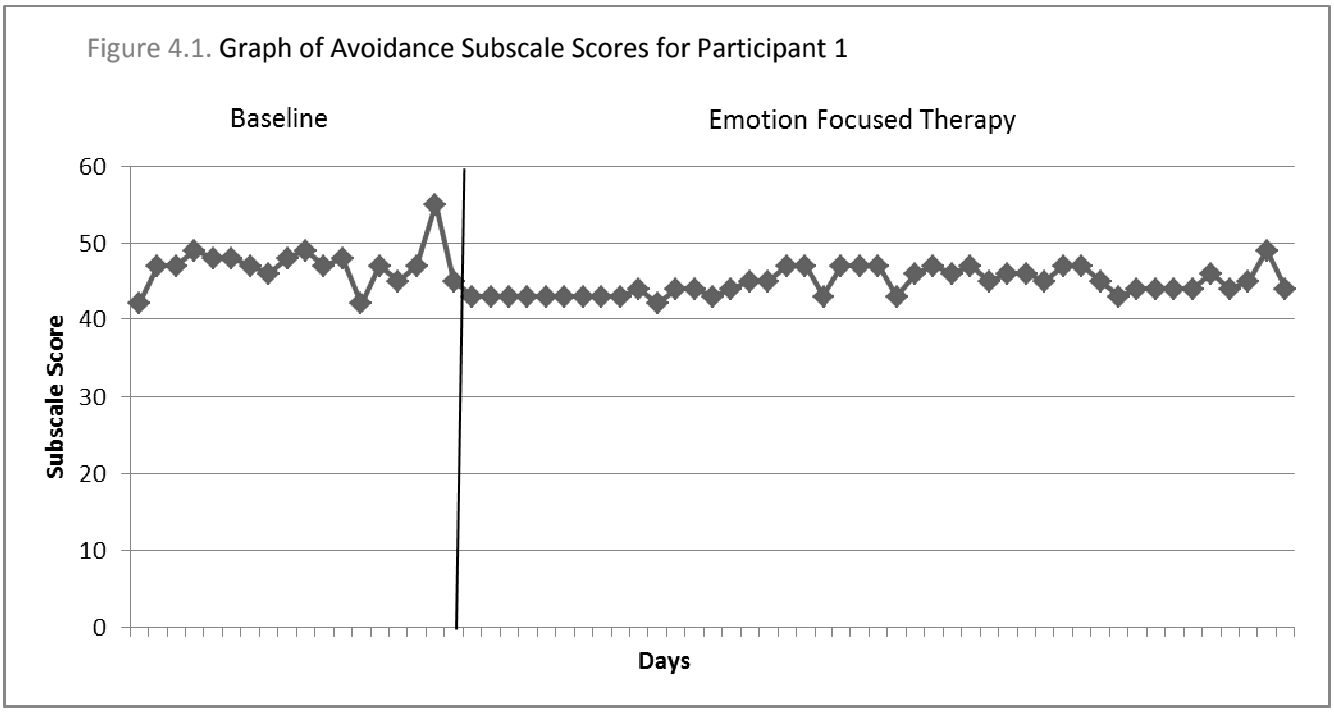

Figure 4.1. P1's Avoidance Subscale scores from baseline, including two weeks of the intake and individual sessions, and extending through 13 weeks of EFT treatment.

Changes in mean. A consistent downward shift in the average score across the phases did not occur on this continuous measure. P1's Avoidance Subscale mean score during the baseline was 47.06. P1's mean score did decrease to 44.73 during the treatment phase, but the change did not create a consistent level indicative of predictable pattern. This graph did not indicate that P1's Avoidance Subscale scores decreased in response to the intervention during treatment phase of the study. Visual inspection did not suggest that the intervention was associated with the changes as reflected on this particular criterion.

Changes in level. A shift in scores from the end of the baseline phase to the beginning of the treatment phase did occur. Scores during the last week of the baseline phase averaged 49.00 with a range of 10. P1 obtained an outlier score of 55 during the last week of her baseline phase, but as indicated by this graph, her scores did assume a new rate and quickly shifted downward, even when the score of 55 is considered to be less valid that the other scores. Scores remained

steady during the intake, individual sessions, and first week of treatment with a score of 43 at every observation. The Avoidance Subscale scores for P1 decreased from the last week of the baseline phase through the first three weeks of the treatment phase. As the treatment was introduced, subscale scores did assume a lower rate and did not create a quick downward shift.

Changes in trend. The data for P1's Avoidance Subscale did not show systematic decrease in trend over the time period of the study. The initial score for P1 at the first day of baseline was 42. Her final score at the last day of the treatment phase was 44. Her scores ranged from 42 to 55 on the subscale without creating a tendency toward a decelerating slope. The data does not show a change in direction that would create a predictable downward slope over the course of the treatment phase. P1's Avoidance Subscale data did not create the predictable downward slope during this study that is necessary for this characteristic to meet the requirements of the design.

Latency of the change. The period of time between the termination of the baseline phase and the onset of the treatment condition did not coincide with a change in scores for P1 on the Avoidance Subscale. P1's scores on this subscale remained stable, thus the data did not offer evidence of a consistent decrease during this study. Examination of the latency of change characteristic did not invoke a clear intervention effect.

Overall pattern. Visual inspection of the graph for P1's ECR Avoidance Subscale scores did not offer evidence of the efficacy of EFT with this participant on this subscale. The individual characteristics of the subscale considered above contributed to the judgment of whether the changes in the data were consistent with the requirements of the design. The overall pattern of the subscale data indicated overlapping scores across the phases since numerical data points on the graph in the baseline phase do overlap with the data during the treatment phase.

Upon inspection of all of P1's subscale characteristics, none of the criteria for visual inspection were fulfilled. The extent of changes in the means, levels, and trends, and the latency of changes did not offer evidence of an overall decrease in scores from the baseline phase to the treatment phase. This graph did not offer evidence that changes in the data that are consistent with the requirements of the design. Visual inspection of the graphic display of ECR Avoidance Subscale scores for P1 did not demonstrate that the intervention had been effective.

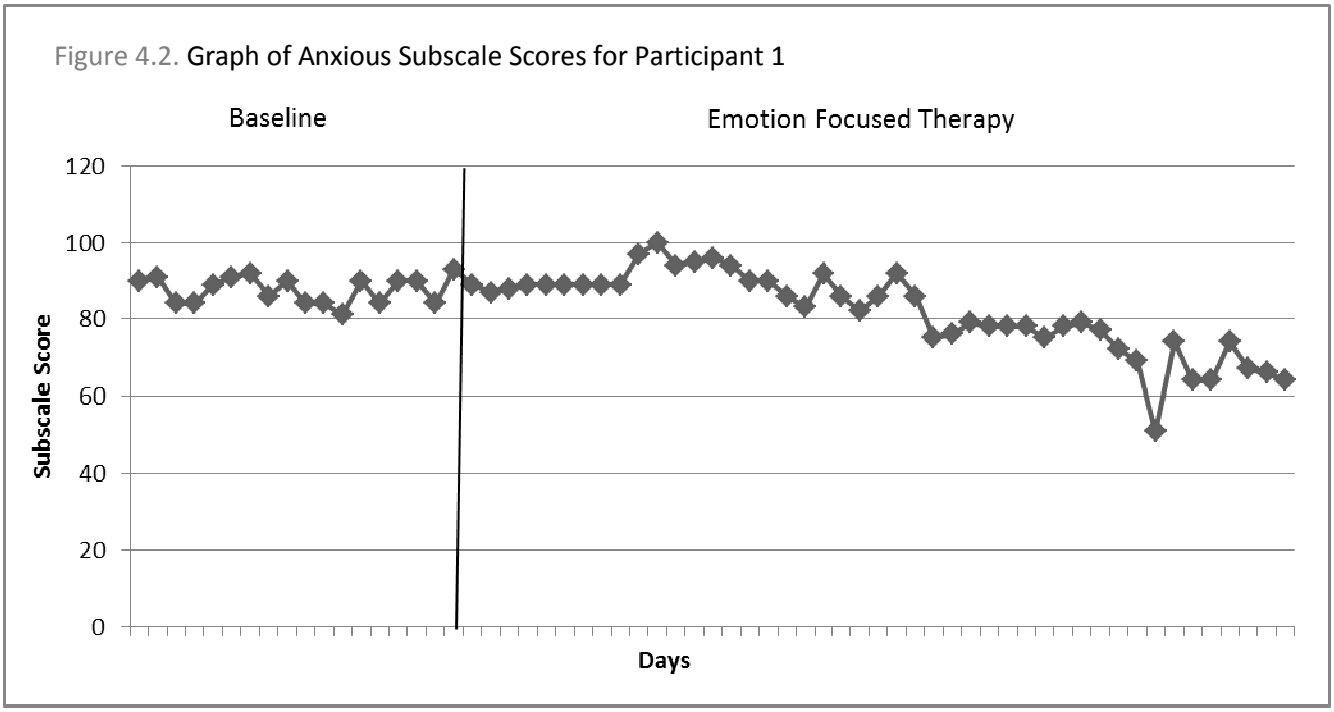

Figure 4.2. P1's Anxious Subscale scores from baseline, including two weeks of the intake and individual sessions, and extending through 13 weeks of EFT treatment.

Changes in mean. A consistent downward shift in the average score across the phases did occur on this continuous measure. P1's Anxious Subscale mean score during the baseline phase was 87.61 and the mean score decreased to 81.89 during the treatment phase. The graph indicates that P1's Anxious Subscale scores did decrease in response to the treatment phase of the study. Visual inspection of this pattern suggests that the intervention was associated with changes that met the requirements of the design as reflected on this criterion.

Changes in level. A shift in scores from the end of the baseline phase to the beginning of the treatment phase did not occur. Scores during the last week of the baseline phase averaged 89.00 with a range of 9. Scores remained steady during the intake, individual sessions, and first week of treatment with an average score 88.67 of and a range of 2. The Anxiety Subscale scores for P1 remained at a stable rate from that last week of the baseline phase through the first three weeks of the treatment phase. As the treatment was introduced, subscale scores did not assume a lower rate and did not create a quick downward shift.

Changes in trend. The data for P1's Anxious Subscale did show systematic decrease in trend over the time period of the study. The initial score for P1 at the first day of baseline was 90. Her final score at the last day of the treatment phase was 64. Her scores ranged from 92 to 51 on the subscale, creating a tendency toward a decelerating slope. The data does show a change in direction that created a predictable downward slope over the course of the treatment phase. P1's Anxiety Subscale data did create the predictable downward slope during this study that is necessary for this characteristic to meet the requirements of the design.

Latency of the change. The period of time between the termination of the baseline phase and the onset of the treatment condition did not coincide with a change in scores for P1 on the Anxious Subscale. P1's scores on this subscale decreased during week nine of the treatment phase. It is difficult to infer that the intervention led to the change with the lengthy time period between the onset of the treatment phase and the change in scores. This delay in change is, however, consistent with literature that states that the process of creating initial change in EFT requires time (Johnson, 2004). Examination of the latency of change characteristic did not invoke a clear intervention effect for this subscale.

Overall pattern. Visual inspection of the graph for P1's ECR Anxious Subscale scores did offer evidence of the efficacy of EFT with this participant on this subscale. The individual characteristics of the subscale considered above contributed to the judgment of whether the changes in the data were consistent with the requirements of the design. The overall pattern of the subscale data indicated the emergence of nonoverlapping data since numerical data points on the graph in the baseline phase do not overlap with the data during the final weeks of the treatment phase. Upon inspection of all of P1's subscale characteristics, some of the criteria for visual inspection were fulfilled. Specifically, the extent of changes in the means and changes in the trends did offer evidence of an overall decrease in scores from the baseline phase to the treatment phase. This graph did offer evidence that changes in the data are consistent with the requirements of the design. Visual inspection of the graphic display of ECR, Anxious Subscale scores for P1 did demonstrate that the intervention had been effective.

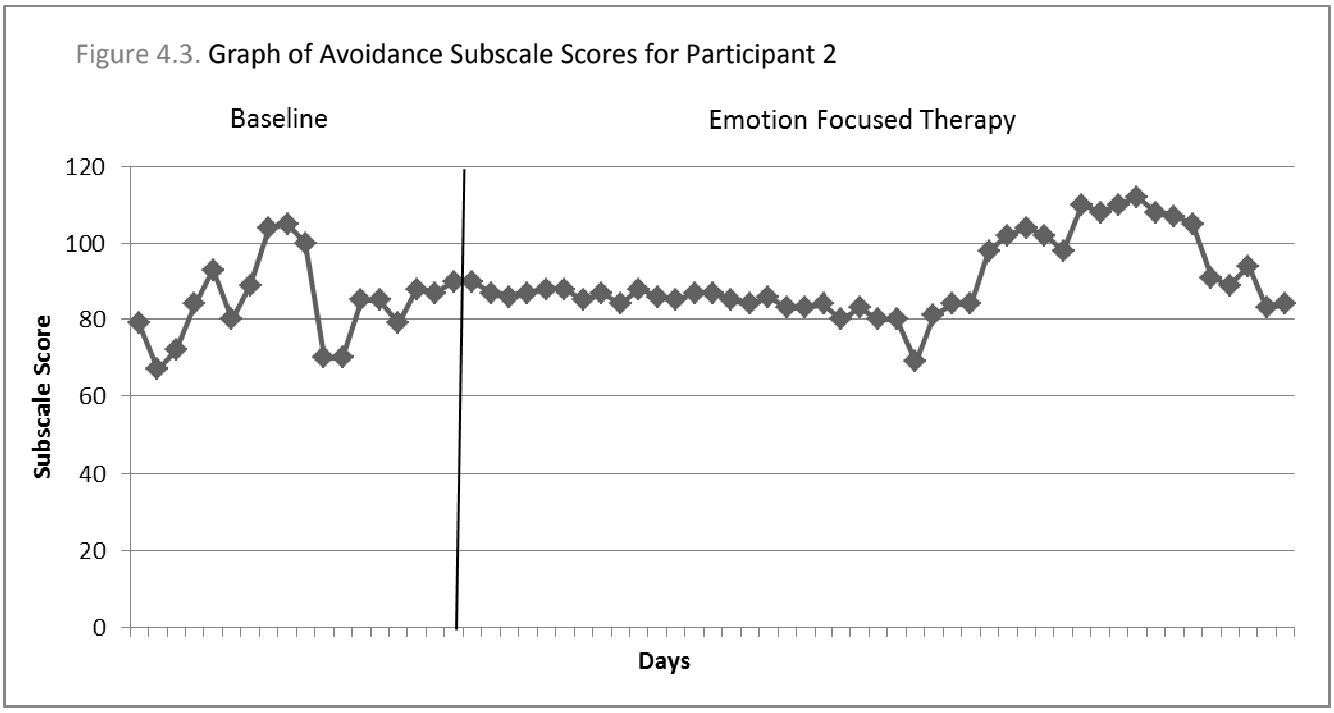

Figure 4.3. P2's Avoidance Subscale scores from baseline, including two weeks of the intake and individual sessions, and extending through 13 weeks of EFT treatment.

Changes in mean. A consistent downward shift in the average score across the phases did not occur on this continuous measure. P2's Avoidance Subscale mean score during the baseline phase was 84.83 and her mean score increased to 90.36 during the treatment phase. This graph indicates that P2's Avoidance Subscale scores did not decrease in response to the treatment phase of the study. Visual inspection of this pattern suggests that the intervention was not associated with changes that met the requirements of the design as reflected on this criterion.

Changes in level. A shift in scores from the end of the baseline phase to the beginning of the treatment phase did not occur. Scores during the last week of the baseline phase averaged 88.33 with a range of 3. Scores remained steady during the intake, individual sessions, and first week of treatment with an average score of 86.89 and a range of 5. The Avoidance Subscale scores for P2 remained at a stable rate from the last week of the baseline phase through the first three weeks of the treatment phase. As the treatment was introduced, subscale scores did not assume a lower rate and did not create a quick downward shift.

Changes in trend. The data for P2's Avoidance Subscale did not show systematic decrease in trend over the time period of the study. The initial score for P2 at the first day of baseline was 79. Her final score at the last day of the treatment phase was 84. Her scores ranged from 67 to 112 on the subscale without creating a tendency toward a decelerating slope. The data does not show a change in direction that would create a predictable downward slope over the course of the treatment phase. P2's Avoidance Subscale data did not create the predictable downward slope during this study that is necessary for this characteristic to meet the requirements of the design.

Latency of the change. The period of time between the termination of the baseline phase and the onset of the treatment condition did not coincide with a change in scores for P2 on the

Avoidance Subscale. P2's scores on this subscale remained stable during the first several weeks of the treatment phase and then ultimately increased toward the end of the treatment phase. The data did not offer evidence of a consistent decrease during this study. Examination of the latency of change characteristic did not invoke a clear intervention effect.

Overall pattern. Visual inspection of the graph for P2's ECR Avoidance Subscale scores did not offer evidence of the efficacy of EFT with this participant on this subscale. The individual characteristics of the subscale considered above contributed to the judgment of whether the changes in the data were consistent with the requirements of the design. The overall pattern of the subscale data indicated overlapping scores across the phases since numerical data points on the graph in the baseline phase do overlap with the data during the treatment phase. Upon inspection of all of P2's subscale characteristics, none of the criteria for visual inspection were fulfilled. The extent of changes in the means, levels, and trends, and the latency of changes did not offer evidence of an overall decrease in scores from the baseline phase to the treatment phase. This graph did not offer evidence that changes in the data are consistent with the requirements of the design. Visual inspection of the graphic display of ECR, Avoidance Subscale scores for P2 did not demonstrate that the intervention had been effective.

Figure 4.4. Graph of Anxious Subscale Scores for Participant 2

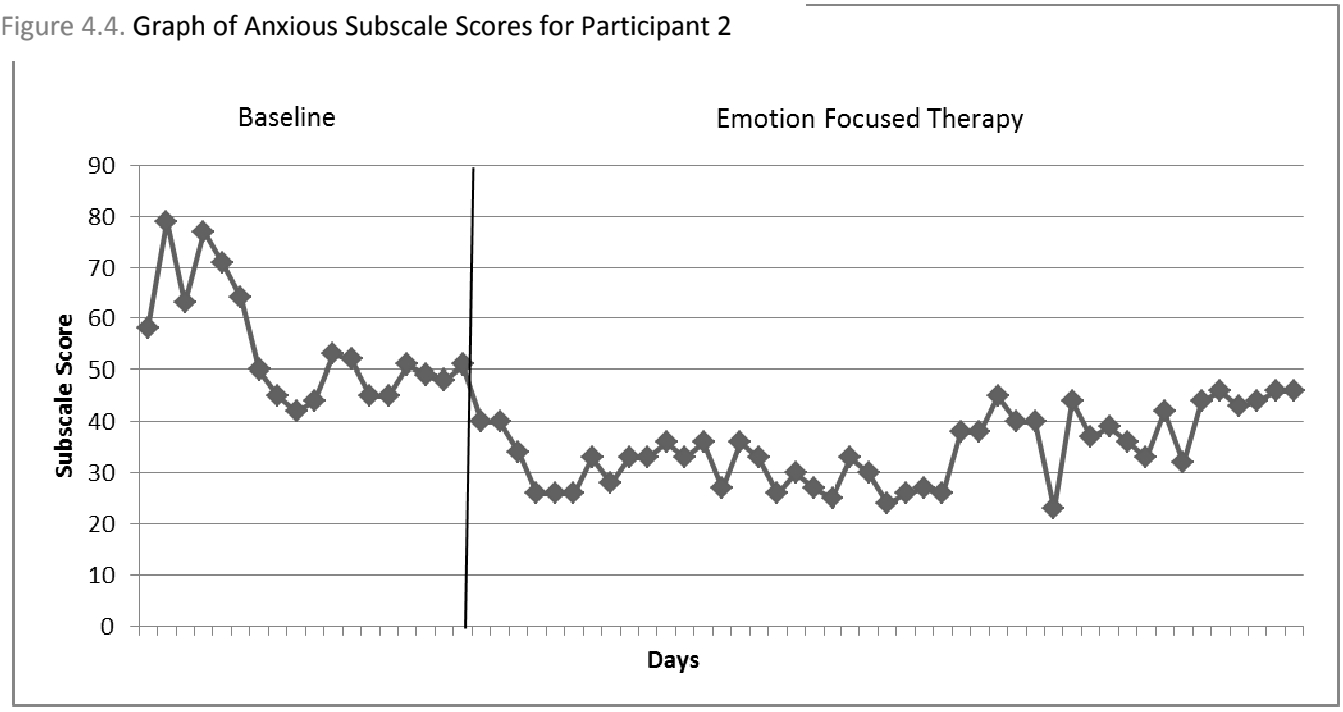

Figure 4.4. P2's Anxious Subscale scores from baseline, including two weeks of the intake and individual sessions, and extending through 13 weeks of EFT treatment.

Changes in mean. A consistent downward shift in the average score across the phases did occur on this continuous measure. P2's Anxious Subscale mean score during the baseline phase was 54.83 and the mean score decreased to 34.44 during the treatment phase. The graph indicates that P2's Anxious Subscale scores did decrease in response to the treatment phase of the study. Visual inspection of this pattern suggests that the intervention was associated with changes that met the requirements of the design as reflected on this criterion.

Changes in level. A shift in scores from the end of the baseline phase to the beginning of the treatment phase did occur. Scores during the last week of the baseline phase averaged 49.33 with a range of 3. Scores steadily decreased during the intake, individual sessions, and first week of treatment with an average score of 31.78 and a range of 14. The Anxious Subscale scores for P2 decreased from the last week of the baseline phase through the first three weeks of the

treatment phase. As the treatment was introduced, subscale scores did assume a lower rate and did create a quick downward shift.

Changes in trend. The data for P2's Anxious Subscale did not show systematic decrease in trend over the time period of the study. The initial score for P2 at the first day of baseline was 58. Her final score at the last day of the treatment phase was 46. Her scores ranged from 23 to 79 on the subscale without creating a tendency toward a decelerating slope. P2's scores during the treatment phase initially decreased and then began to accelerate back upward toward the end of the study. The data does not show a change in direction that would create a predictable downward slope over the course of the treatment phase. P2's Anxious Subscale data did not create the predictable downward slope during this study that is necessary for this characteristic to meet the requirements of the design.

Latency of the change. The period of time between the termination of the baseline phase and the onset of the treatment condition did coincide with a change in scores for P2 on the Anxious Subscale. P2's scores on this subscale decreased at the onset of the treatment phase, thus the data did offer evidence of a consistent decrease during this study. Examination of the latency of change characteristic did invoke a clear intervention effect.

Overall pattern. Visual inspection of the graph for P2's ECR Anxious Subscale scores did offer evidence of the efficacy of EFT with this participant on this subscale. The individual characteristics of the subscale considered above contributed to the judgment of whether the changes in the data were consistent with the requirements of the design. The overall pattern of the subscale data offered evidence of nonoverlapping data since numerical data points on the graph in the baseline phase did not overlap with most of the data during the treatment phase. Upon inspection of all of P2's subscale characteristics, most of the criteria for visual inspection

were fulfilled. Specifically, the extent of changes in the means, changes in level, and latency of change did offer evidence of an overall decrease in scores from the baseline phase to the treatment phase. The only characteristic that did not meet the requirements of the design was changes in trend since the slope accelerated upward during the last several weeks of treatment. Considering the characteristics together, and the whole image that these characteristics provided, this graph did offer evidence that changes in the data are consistent with the requirements of the design. Visual inspection of the graphic display of ECR, Anxious Subscale scores for P2 did demonstrate that the intervention had been effective.

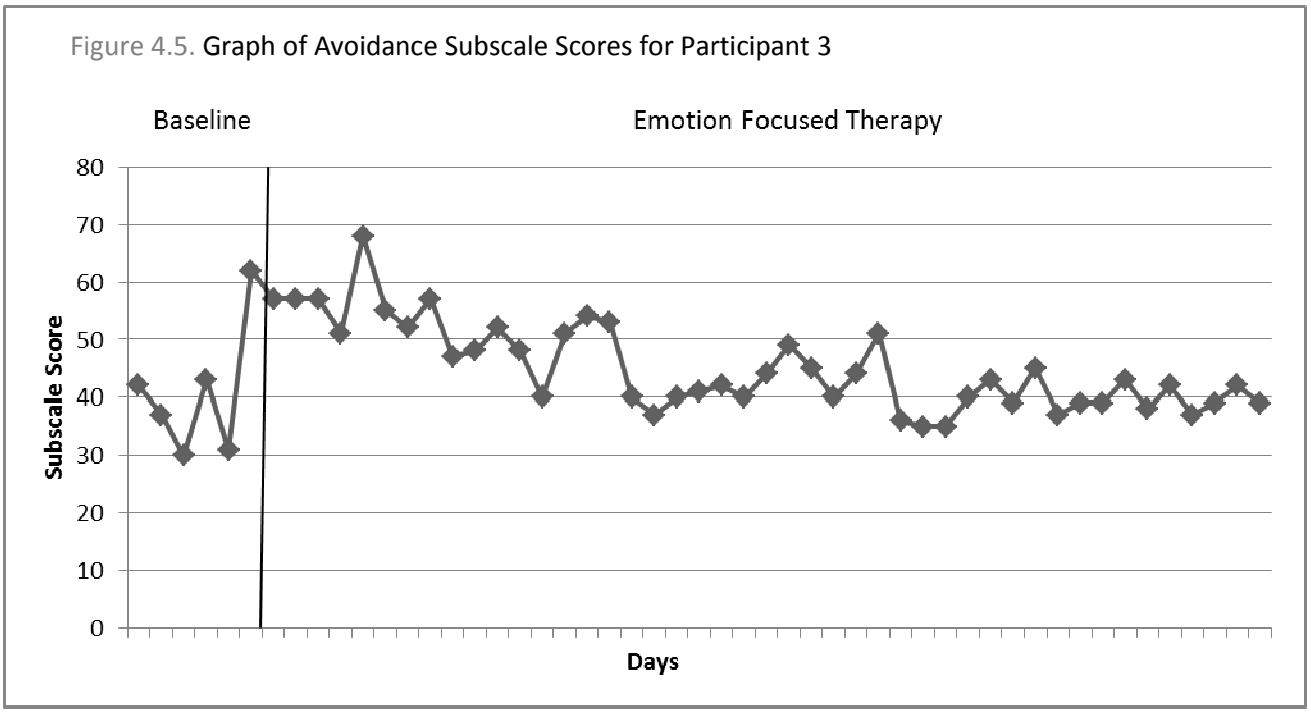

Figure 4.5. P3's Avoidance Subscale scores from baseline, including two weeks of the intake and individual sessions, and extending through 13 weeks of EFT treatment.

Changes in mean. A consistent downward shift in the average score across the phases did not occur on this continuous measure. P3's Avoidance Subscale mean score during the baseline phase was 40.83 and the mean score increased to 45.07 during the treatment phase. The graph indicates that P3's Avoidance Subscale scores increased, rather than the predicted

decrease, in response to the treatment phase of the study. Visual inspection of this pattern suggests that the intervention was not associated with changes that met the requirements of the design as reflected on this criterion.

Changes in level. A shift in scores from the end of the baseline phase to the beginning of the treatment phase did not occur. Scores during the last week of the baseline phase were extremely variable with an average of 45.33 and a range of 31. Scores continued at an unpredictable rate during the intake, individual sessions, and first week of treatment with an average score of 55.67 and a range of 21. The Avoidance Subscale scores for P3 did not assume a rapid change in level from that last week of the baseline phase through the first three weeks of the treatment phase. As the treatment was introduced, subscale scores did not assume a lower rate and did not create a quick downward shift.

Changes in trend. The data for P3's Avoidance Subscale did show a systematic decrease in trend over the time period of the study. The initial score for P3 at the first day of baseline was 42. His final score at the last day of the treatment phase was 39. His scores ranged from 30 to 68 on the subscale. His scores during the treatment phase did create a tendency toward a decelerating slope, but that was after an increased level beyond baseline. In review of the entire graph, the data does show a change in direction that would create a predictable downward slope over the course of the treatment phase, although the downward trend begins after an increase in scores at the very end of the baseline phase and continuing into the beginning of the treatment phase. P3's Avoidance Subscale data did ultimately create the predictable downward slope during the treatment phase of this study that is necessary for this characteristic to meet the requirements of the design.

Latency of the change. The period of time between the termination of the baseline phase and the onset of the treatment condition did not coincide with a change in scores for P3 on the Avoidance Subscale. In fact, P3's scores increased at the end of the baseline phase, and while his scores did decrease during the treatment phase, they did not return to the low rate of baseline scores during the intervention phase. P3's scores on this subscale did not decrease from baseline. Examination of the latency of change characteristic did not invoke a clear intervention effect.

Overall pattern. Visual inspection of the graph for P3's ECR Avoidance Subscale scores did not offer evidence of the efficacy of EFT with this participant on this subscale. The individual characteristics of the subscale considered above contributed to the judgment of whether the changes in the data were consistent with the requirements of the design. The overall pattern of the subscale data indicated overlapping scores across the phases since numerical data points on the graph in the baseline phase do overlap with the data during the treatment phase. Upon inspection of all of P3's subscale characteristics, only one of the criteria for visual inspection was fulfilled. The slope did create a downward trend during the treatment phase of the study, but the predictable slope began after the initiation of treatment rather than being consistent throughout the phases. The extent of changes in the means, levels, and the latency of changes did not offer evidence of an overall decrease in scores from the baseline phase to the treatment phase. While inspection of the graph during the treatment phase offers a hopeful perspective, consideration of the treatment data in light of the baseline data is inconsistent with the requirements of the design. Visual inspection of the graphic display of ECR, Avoidance Subscale scores for P3 did not demonstrate that the intervention had been effective.

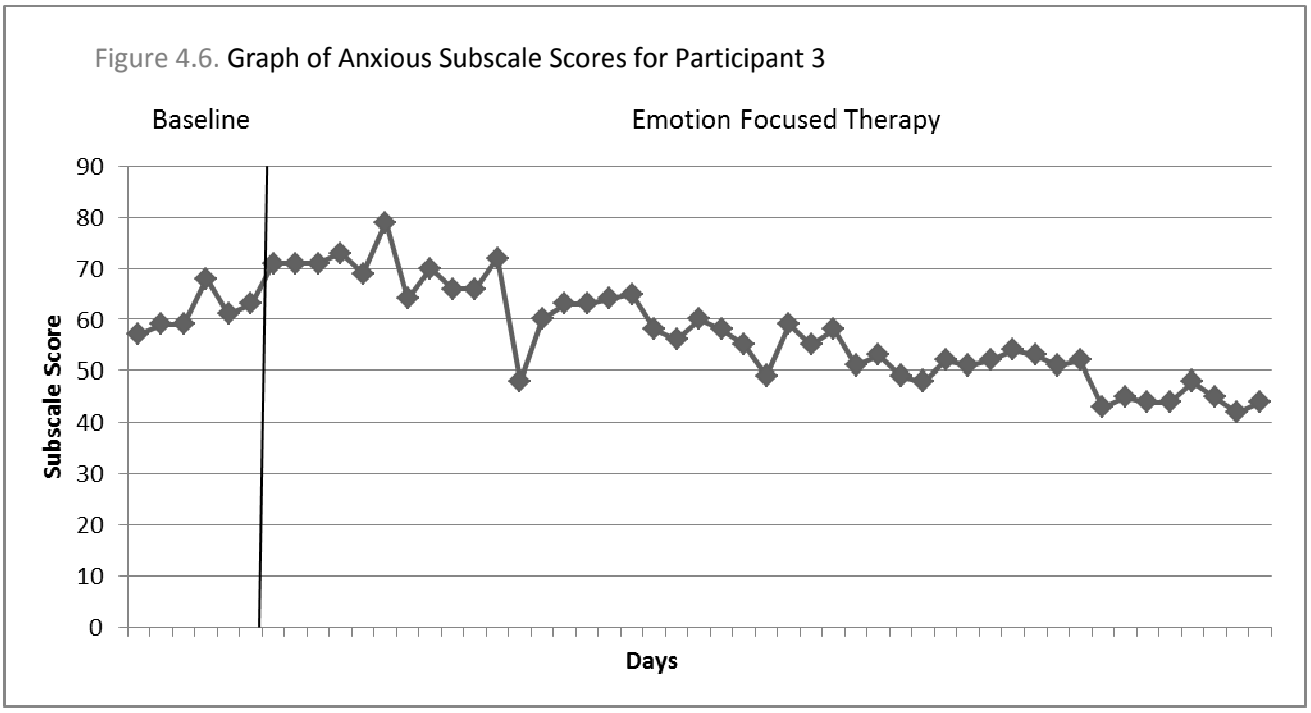

Figure 4.6. P3's Anxious Subscale scores from baseline, including two weeks of the intake and individual sessions, and extending through 13 weeks of EFT treatment.

Changes in mean. A consistent downward shift in the average score across the phases did occur on this continuous measure. P3's Anxious Subscale mean score during the baseline phase was 61.17 and the mean score decreased to 56.97 during the treatment phase. The graph indicates that P3's Anxious Subscale scores did decrease in response to the treatment phase of the study. Visual inspection of this pattern suggests that the intervention was associated with changes that met the requirements of the design as reflected on this criterion.

Changes in level. A shift in scores from the end of the baseline phase to the beginning of the treatment phase did not occur. Scores during the last week of the baseline phase averaged 64 with a range of 7. Scores slightly increased during the intake, individual sessions, and first week of treatment with an average score of 70.44 and a range of 15. The Anxious Subscale scores for P3 did not decrease in rate from that last week of the baseline phase through the first three weeks

of the treatment phase. As the treatment was introduced, subscale scores did not assume a lower rate and did not create a quick downward shift.

Changes in trend. The data for P3's Anxious Subscale did show systematic decrease in trend over the time period of the study. The initial score for P3 at the first day of baseline was 57. His final score at the last day of the treatment phase was 44. His scores ranged from 42 to 71 on the subscale, creating a tendency toward a decelerating slope. Although his scores increased initially at the start of the treatment phase, overall, P3's scores created a decelerating trend throughout the treatment phase. The data does show a change in direction that created a predictable downward slope over the course of the treatment phase. P3's Anxious Subscale data did create the predictable downward slope during this study that is necessary for this characteristic to meet the requirements of the design.

Latency of the change. The period of time between the termination of the baseline phase and the onset of the treatment condition did not coincide with a change in scores for P3 on the Anxious Subscale. P3's scores on this subscale reflect gradual changes after the intervention began. Examination of the latency of change characteristic did not invoke a clear intervention effect.

Overall pattern. Visual inspection of the graph for P3's ECR Anxious Subscale scores did offer evidence of the efficacy of EFT with this participant on this subscale. The individual characteristics of the subscale considered above contributed to the judgment of whether the changes in the data were consistent with the requirements of the design. The overall pattern of the subscale data indicated nonoverlapping scores beginning during week nine of the treatment phase, since numerical data points on the graph in the baseline phase do overlap with these data points during the treatment phase. Upon inspection of all of P3's subscale characteristics, some

of the criteria for visual inspection were fulfilled. The extent of changes in the means and changes in trends offered evidence of overall decrease in scores during the treatment phase. This graph did offer evidence that changes in the data that are consistent with the requirements of the design. Visual inspection of the graphic display of ECR, Anxious Subscale scores for P3 did demonstrate that the intervention had been effective.

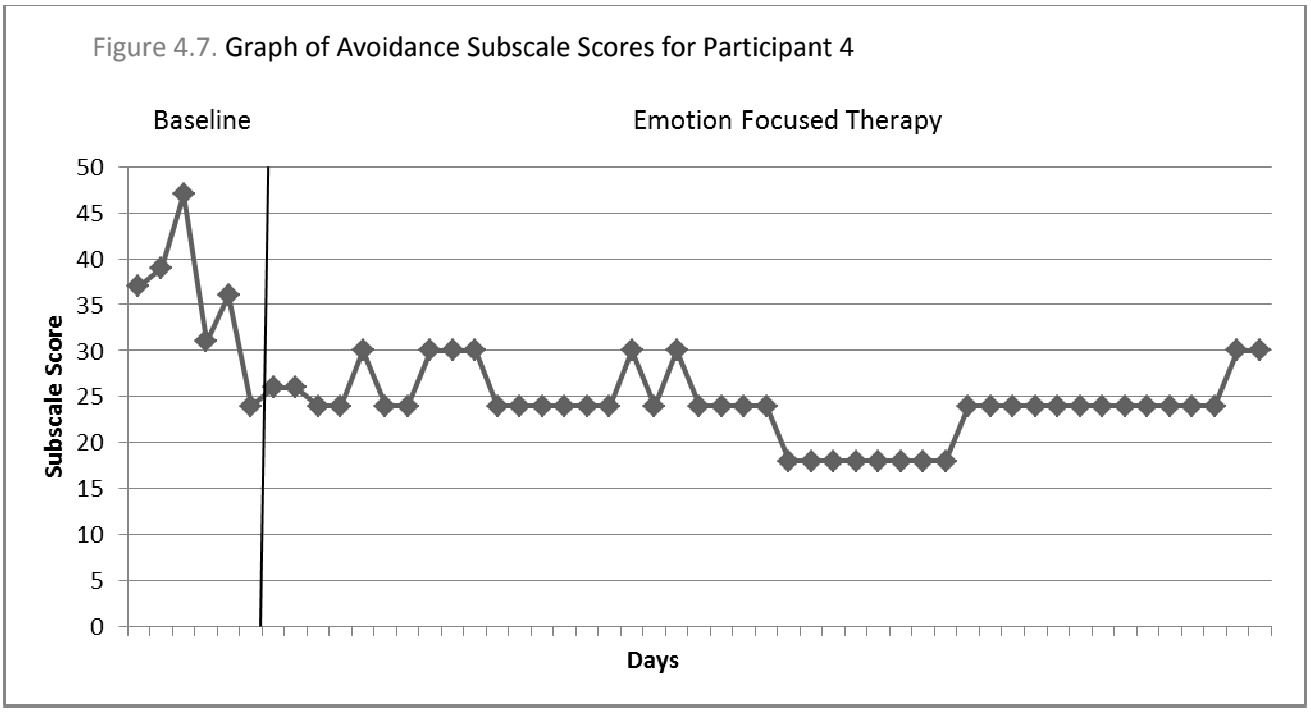

Figure 4.7. P4's Avoidance Subscale scores from baseline, including two weeks of the intake and individual sessions, and extending through 13 weeks of EFT treatment.

Changes in mean. A consistent downward shift in the average score across the phases did occur on this continuous measure. P4's Avoidance Subscale mean score during the baseline phase was 35.67 and the mean score decreased to 24.09 during the treatment phase. The graph indicates that P4's Avoidance Subscale scores did decrease in response to the treatment phase of the study. Visual inspection of this pattern suggests that the intervention was associated with changes that met the requirements of the design as reflected on this criterion.

Changes in level. A shift in scores from the end of the baseline phase to the beginning of the treatment phase did occur. Scores during the last week of the baseline phase averaged 30.33 with a range of 8. Scores varied yet continued at a decreased rate during the intake, individual sessions, and first week of treatment with an average score of 26.44 and a range of 6. The Avoidance Subscale scores for P4 decreased in rate from the last week of the baseline phase through the first three weeks of the treatment phase. As the treatment was introduced, subscale scores did assume a lower rate and did not create a quick downward shift.

Changes in trend. The data for P4's Avoidance Subscale did not show systematic decrease in trend over the time period of the study. The initial score for P4 at the first day of baseline was 37. Her final score at the last day of the treatment phase was 30. Her scores ranged from 18 to 47 on the subscale without creating a tendency toward a decelerating slope. P4's data did not create a predictable trend since her scores created a decelerating slope during the first few weeks of the treatment phase, and then her scores created an accelerating trend during the last few weeks of the treatment phase. The data does not show a change in direction that would create a predictable downward slope over the course of the treatment phase. P4's Avoidance Subscale data did not create the predictable downward slope during this study that is necessary for this characteristic to meet the requirements of the design.

Latency of the change. The period of time between the termination of the baseline phase and the onset of the treatment condition did coincide with a change in scores for P4 on the Avoidance Subscale. P4's scores on this subscale decreased at the end of the baseline phase, but then remained at the decreased rate consistently (as compared with the variable baseline rate) during the beginning of the treatment phase. Examination of the latency of change characteristic did invoke a clear intervention effect.

Overall pattern. Visual inspection of the graph for P4's ECR Avoidance Subscale scores did offer evidence of the efficacy of EFT with this participant on this subscale. The individual characteristics of the subscale considered above contributed to the judgment of whether the changes in the data were consistent with the requirements of the design. The overall pattern of the subscale data indicated a general decrease in scores from the baseline phase to the treatment phase. Upon inspection of all of P4's subscale characteristics, some of the criteria for visual inspection were fulfilled. The extent of changes in the means, levels, and the latency of changes offered evidence of an overall decrease in scores from the baseline phase to the treatment phase. This graph did offer evidence that changes in the data are consistent with the requirements of the design. Visual inspection of the graphic display of ECR Avoidance Subscale scores for P4 did demonstrate that the intervention had been effective.

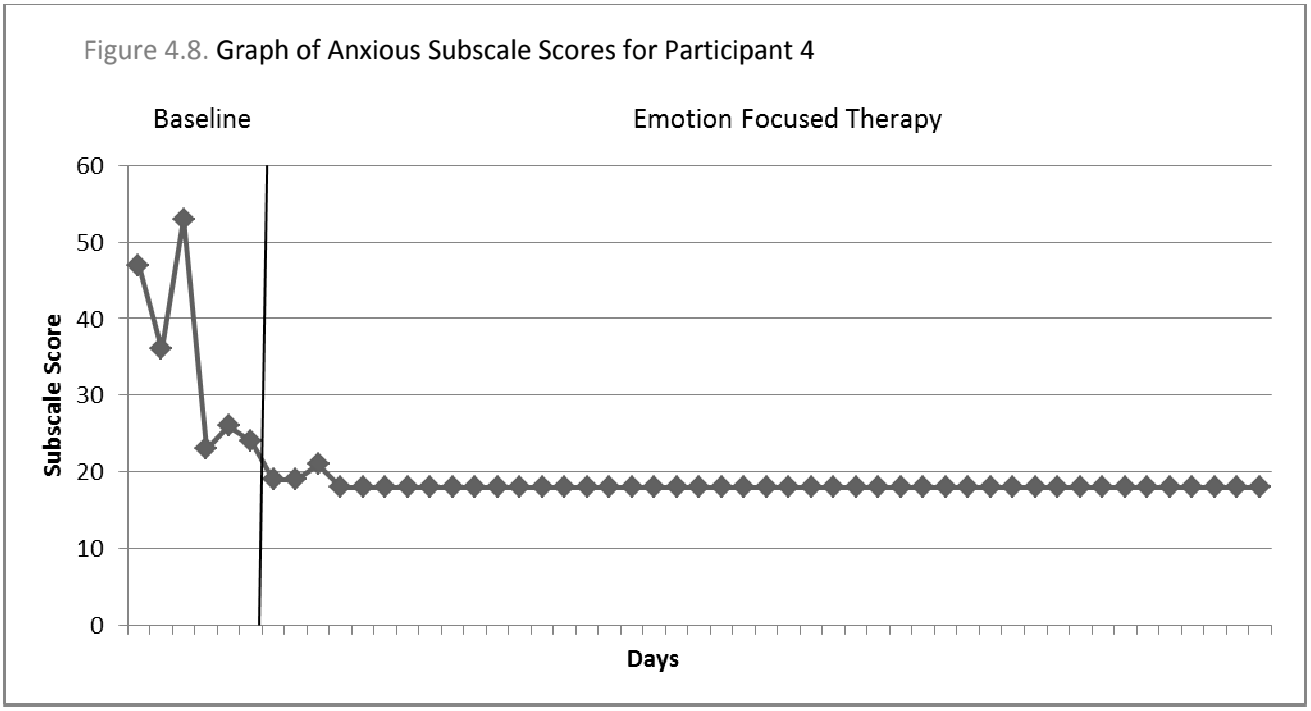

Figure 4.8. P4's Anxious Subscale scores from baseline, including two weeks of the intake and individual sessions, and extending through 13 weeks of EFT treatment.

Changes in mean. A consistent downward shift in the average score across the phases did occur on this continuous measure. P4's Anxious Subscale mean score during the baseline phase was 34.83 and the mean score decreased to 18.11 during the treatment phase. The graph indicates that P4's Anxious Subscale scores did decrease in response to the treatment phase of the study. Visual inspection of this pattern suggests that the intervention was associated with changes that met the requirements of the design as reflected on this criterion.

Changes in level. A shift in scores from the end of the baseline phase to the beginning of the treatment phase did occur. Scores during the last week of the baseline phase averaged 24.33 with a range of 3. Scores remained steady during the intake, individual sessions, and first week of treatment with an average score of 18.56 and a range of 3, ultimately assuming a new decreased score that remained consistent for the remained for the study. The Anxious Subscale scores for P4 decreased from that last week of the baseline phase through the first three weeks of the treatment phase. As the treatment was introduced, subscale scores did not assume a lower rate and did not create a quick downward shift.

Changes in trend. The data for P4's Anxious Subscale did show systematic decrease in trend over the time period of the study. The initial score for P4 at the first day of baseline was 47. Her final score at the last day of the treatment phase was 18. Her scores ranged from 18 to 47 on the subscale with a tendency toward a decelerating slope. During the second week of the treatment phase, P4 stabilized at a score of 18 and continued at the same rate for the remainder of the treatment phase. The data does show a change in direction that created a predictable downward slope over the course of the treatment phase. P4's Anxious Subscale data did create the predictable downward slope during this study that is necessary for this characteristic to meet the requirements of the design.

Latency of the change. The period of time between the termination of the baseline phase and the onset of the treatment condition did coincide with a change in scores for P4 on the Anxious Subscale. P4's scores on this subscale decreased with the onset of the treatment phase, and then remained stable at a decrease rate for the remainder of the study. This data did offer evidence of a consistent decrease during this study. Examination of the latency of change characteristic did invoke a clear intervention effect.

Overall pattern. Visual inspection of the graph for P4's ECR Anxious Subscale scores did offer evidence of the efficacy of EFT with this participant on this subscale. The individual characteristics of the subscale considered above contributed to the judgment of whether the changes in the data were consistent with the requirements of the design. The overall pattern of the subscale data indicated nonoverlapping scores across the phases since numerical data points on the graph in the baseline phase do overlap with the data during the treatment phase. Upon inspection of all of P4's subscale characteristics, all of the criteria for visual inspection were fulfilled. The extent of changes in the means, levels, and trends, and the latency of changes did offer evidence of an overall decrease in scores from the baseline phase to the treatment phase. This graph did offer evidence that changes in the data are consistent with the requirements of the design. Of note, her scores are a bit suspect since there was no variation in scores during treatment. Visual inspection of the graphic display of ECR, Anxious Subscale scores for P4 did demonstrate that the intervention had been effective.

See Table 4.5 for a succinct review of each participant's subscale mean score during the baseline phase and the treatment phase. The subscale mean score net change between the baseline phase and the treatment phase is also included on this table.

Table 4.5

Subscale Means: Experiences in Close Relationships

Participant	Subscale	$\bar{x}$ Baseline	$\bar{x}$ Treatment	$\bar{x}$ Net Change
P1	Avoidance	47.06	44.73	2.33
	Anxious	87.61	81.89	5.72
P2	Avoidance	84.83	90.36	-5.53
	Anxious	54.83	34.44	20.39
P3	Avoidance	40.83	45.07	-4.24
	Anxious	61.17	56.98	4.19
P4	Avoidance	35.67	24.09	11.58
	Anxious	34.83	18.11	16.72

Section Summary

Visual inspection of the ECR Subscale graphs provided evidence that the 15-week treatment phase, consisting of two weeks of intake and individual sessions followed by 13 weeks of EFT, created a more secure attachment style within all of these four participants on some of the subscales. Hypothesis Two stated that even though the four baselines varied in length, with two participants assigned to a two week baseline phase and two participants assigned to a six week baseline phase, the scores would remain stable over the baseline phase and the pattern would show a systematic decrease in subscale scores only after the treatment was introduced and then scores would continue at the predicted pattern throughout the 15-week intervention. Visual inspection confirmed that these graphs offered evidence of decreased tendencies toward an anxious attachment style in all four participants. The graphs also indicated that one of the participants, P4, decreased in attributes associated with an avoidant attachment style. All four participants migrated toward a more secure attachment style. Criteria were consistent with the

requirements of the design, which provided evidence that the EFT treatment was effective in establishing more secure attachment styles for the four participants in this study.

Third Research Question

The third research question asked whether a change in dyadic satisfaction would occur during the implementation of EFT couples treatment with individuals recovering from substance abuse. The third null hypothesis stated that DAS Subscale Scores and Composite Scores would remain at predicted baseline trends throughout the 15-week intervention. Alternate Hypothesis Three stated that DAS Subscale Scores and Composite Scores would decrease from predicted baseline trends throughout the 15-week intervention. This question was considered using visual inspection to judge the extent of changes in means, levels, and trends, and the latency of change evident across the baseline and treatment phases and whether the changes were consistent with the requirements of the design of this study. Visual analysis allowed for the determination of whether EFT altered the participant's preintervention pattern of scores related to relational satisfaction.

Romantic relationship satisfaction. The DAS Subscale and Composite Scores were graphically displayed for visual inspection. The graphic depictions of the subscale scores were described as related to the four characteristics of the data: changes in mean, changes in level, changes in trend, and the latency of change. The decision of whether the Composite Score data met the requirements of the design is reflected by the individual characteristics of the subscale graphs in addition to the gestalt of the Composite Score graph. A DAS Composite Score of below 101 is classified as relationally distressed, while a score of 102 or above is classified as relationally nondistressed (Spanier, 1976). The criteria for making judgments about the efficacy of the intervention are considered deliberately in the section below.

Dyadic adjustment scale. The following section provides a description of the four criteria that can be seen in a visual inspection of the graphs. See Figures 4.9 through 4.28 as a function of the visual inspection of changes in mean, changes in level, changes in trend, and the latency of the change of the DAS scores.

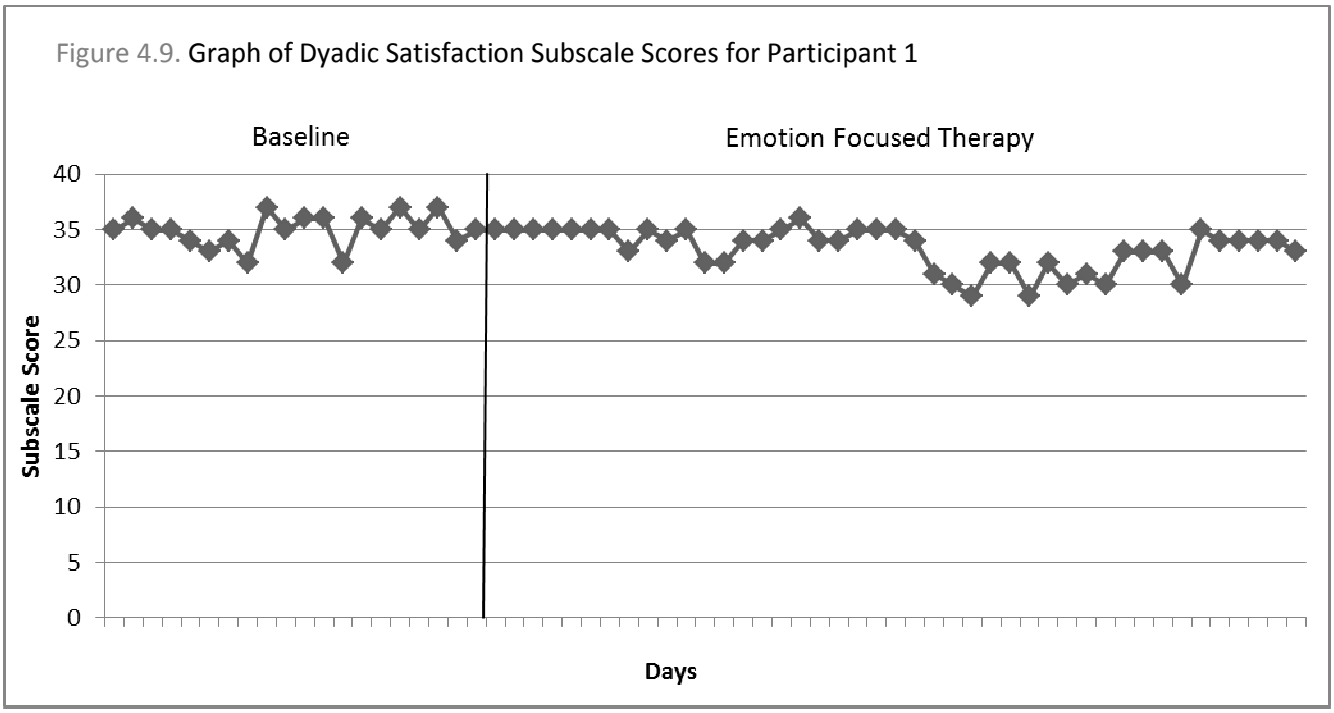

Figure 4.9. P1's Dyadic Satisfaction Subscale scores from baseline, including two weeks of the intake and individual sessions, and extending through 13 weeks of EFT treatment.

Changes in mean. Consistent upward shifts in the average score across the phases did not occur on this continuous measure. P1's Dyadic Satisfaction Subscale mean score during the baseline phase was 35.00 and the mean score decreased to 33.33 during the treatment phase. The graph indicates that P1's perception of Dyadic Satisfaction did not increase in response to the treatment phase of the study. Visual inspection of this pattern suggests that the intervention was not associated with changes that met the requirements of the design as reflected on this criterion.

Changes in level. A shift in scores from the end of the baseline phase to the beginning of the treatment phase did not occur. Scores during the last week of the baseline phase averaged 36.33 with a range of two. Scores remained steady during the intake, individual sessions, and first week of treatment with an average score 34.89 of and a range of one. The Dyadic Satisfaction Subscale scores for P1 remained at a stable rate from that last week of the baseline phase through the first three weeks of the treatment phase. As the treatment was introduced, subscale scores did not assume a higher rate and did not create a quick upward shift.

Changes in trend. The data for P1's Dyadic Satisfaction Subscale did not show systematic increase in trend over the time period of the study. The initial score for P1 at the first day of baseline was 35. Her final score at the last day of the treatment phase was 37. Her scores ranged from 29 to 37 on the subscale without creating a tendency toward an accelerating slope. The data does not show a change in direction that would create a predictable upward slope over the course of the baseline and treatment phases. P1's Dyadic Satisfaction Subscale data created no predictable trend during this study.

Latency of the change. The period of time between the termination of the baseline phase and the onset of the treatment condition did not coincide with a change in scores for P1 on the Dyadic Satisfaction Subscale. P1's scores on this subscale remained fairly stable with some downward shifts, thus the data did not offer evidence of a consistent increase during this study. Examination of the latency of change characteristic did not invoke a clear intervention effect.

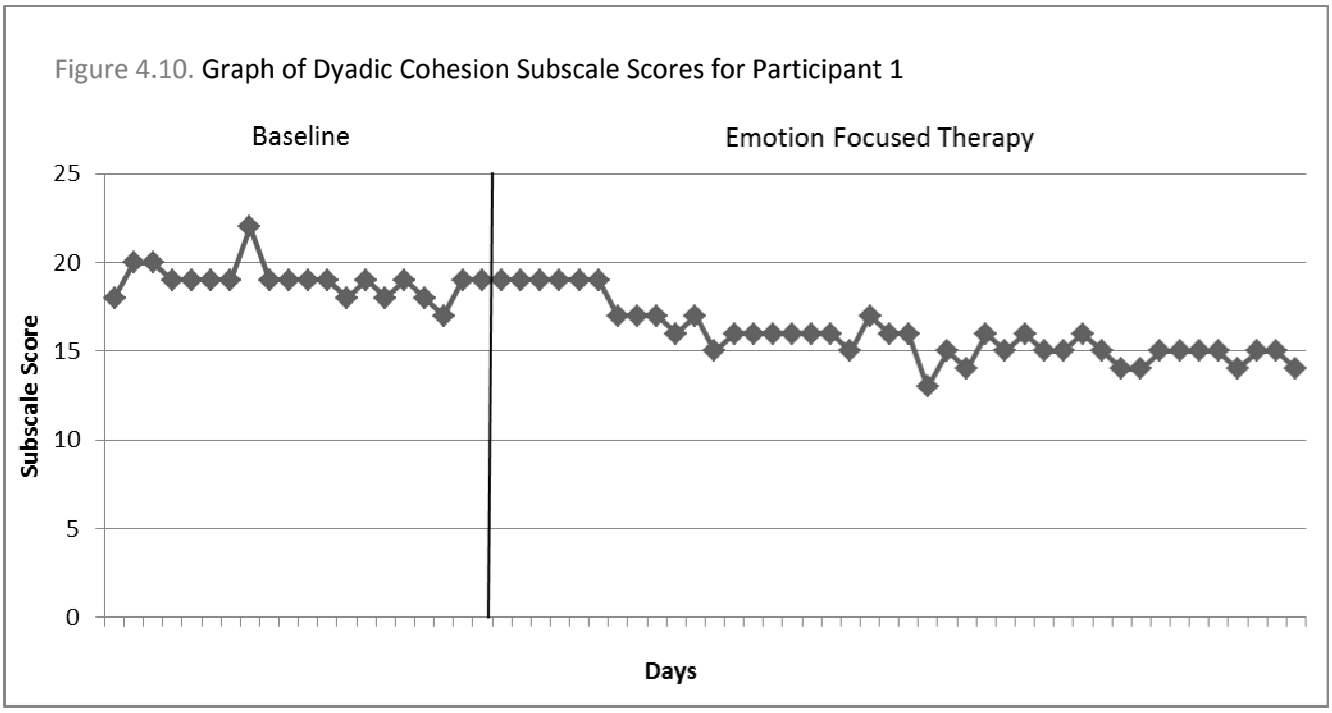

Figure 4.10. P1's Dyadic Cohesion Subscale scores from baseline, including two weeks of the intake and individual sessions, and extending through 13 weeks of EFT treatment.

Changes in mean. Consistent upward shifts in the average score across the phases did not occur on this continuous measure. P1's Dyadic Cohesion Subscale mean score during the baseline phase was 18.94 and the mean score decreased to 16.06 during the treatment phase. The graph indicates that P1's Dyadic Cohesion Subscale scores did not increase in response to the treatment phase of the study. Visual inspection of this pattern suggests that the intervention was not associated with changes that met the requirements of the design as reflected on this criterion.

Changes in level. A shift in scores from the end of the baseline phase to the beginning of the treatment phase did not occur. Scores during the last week of the baseline phase averaged 18.94 with a range of 3. Scores remained steady during the intake, individual sessions, and first week of treatment, since she consistently scored 19 on the subscale during these three weeks. The Dyadic Cohesion Subscale scores for P1 remained at a stable rate from that last week of the

baseline phase through the first three weeks of the treatment phase. As the treatment was introduced, subscale scores did not assume a higher rate and did not create a quick upward shift.

Changes in trend. The data for P1's Dyadic Cohesion Subscale demonstrated scores with a consistent downward trend beginning during week four of the treatment phase (which was the second week of couple therapy) that were consistent throughout the remainder of the treatment phase. This trend was unexpected in that it was the opposite of the hypothesized upward trend and indicated that P1 perceived her cohesion with her partner to decrease during EFT. The initial score for P1 at the first day of baseline was 18. Her final score at the last day of the treatment phase was 14. Her scores ranged from 13 to 20 on the subscale, creating a tendency toward a decelerating slope rather than an accelerating slope that would meet the requirements of the design. P1's Dyadic Cohesion Subscale data created a predictable downward trend during this study.

Latency of the change. The period of time between the termination of the baseline phase and the onset of the treatment condition did not coincide with an increase in scores for P1 on the Dyadic Cohesion Subscale. P1's scores on this subscale decreased over time, thus they did not offer evidence of a consistent increase during this study. Examination of the latency of change characteristic did not invoke a clear intervention effect.

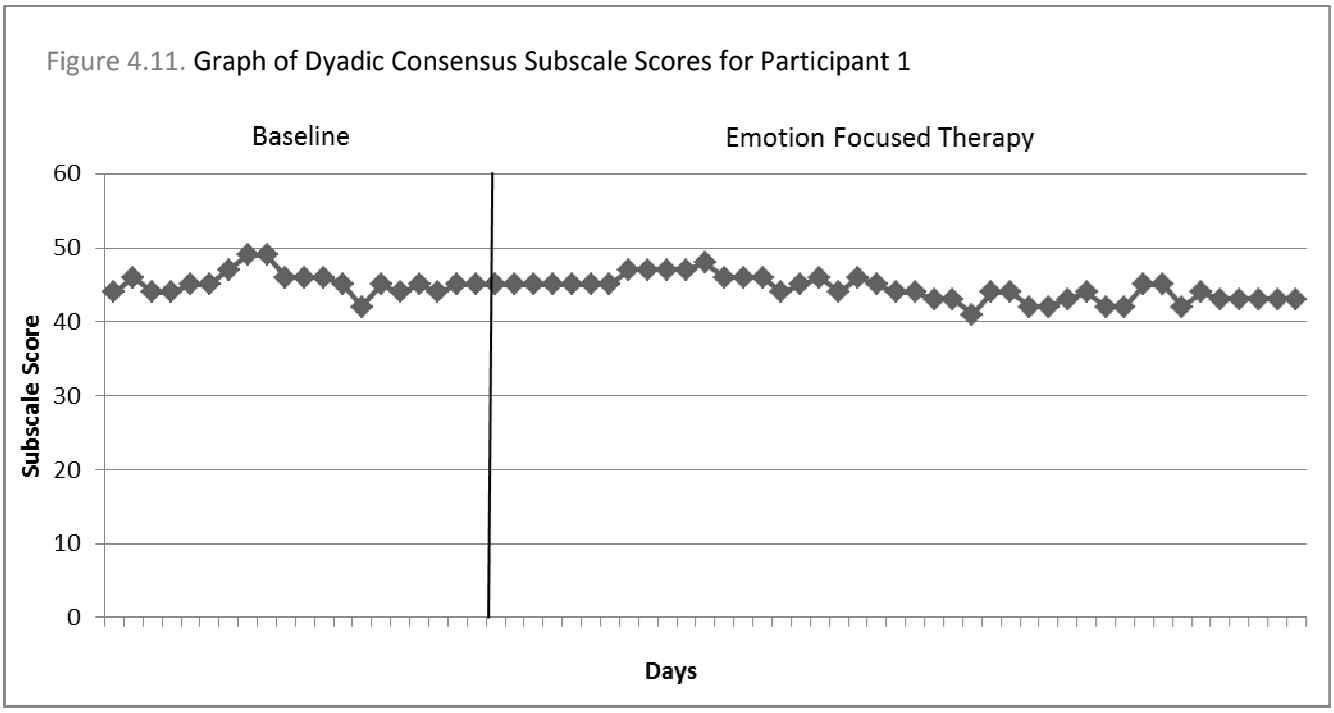

Figure 4.11. P1's Dyadic Consensus Subscale scores from baseline, including two weeks of the intake and individual sessions, and extending through 13 weeks of EFT treatment.

Changes in mean. Consistent upward shifts in the average score across the phases did not occur on this continuous measure. P1's Dyadic Consensus Subscale mean score during the baseline phase was 45.33 and the mean score decreased to 44.40 during the treatment phase. The graph indicates that P1's Dyadic Consensus scores did not increase in response to the treatment phase of the study. Visual inspection of this pattern suggests that the intervention was not associated with changes that met the requirements of the design as reflected on this criterion.

Changes in level. A shift in scores from the end of the baseline phase to the beginning of the treatment phase did not occur. Scores during the last week of the baseline phase averaged 44.33 with a range of 5. Scores remained steady during the intake, individual sessions, and first week of treatment since she obtained a score of 45 at every observation during the three week time period. The Dyadic Consensus Subscale scores for P1 remained at a stable rate from that last week of the baseline phase through the first three weeks of the treatment phase. As the

treatment was introduced, subscale scores did not assume a higher rate and did not create a quick upward shift.

Changes in trend. The data for P1's Dyadic Consensus Subscale did not show systematic increase in trend over the time period of the study. The initial score for P1 at the first day of baseline was 44. Her final score at the last day of the treatment phase was 43. Her scores ranged from 41 to 49 on the subscale without creating a tendency toward an accelerating slope. The data does not show a change in direction that would create a predictable upward slope over the course of the baseline and treatment phases. P1's Dyadic Consensus Subscale data created no predictable trend during this study.

Latency of the change. The period of time between the termination of the baseline phase and the onset of the treatment condition did not coincide with a change in scores for P1 on the Dyadic Consensus Subscale. P1's scores on this subscale did not offer evidence of a consistent increase during this study. Examination of the latency of change characteristic did not invoke a clear intervention effect.

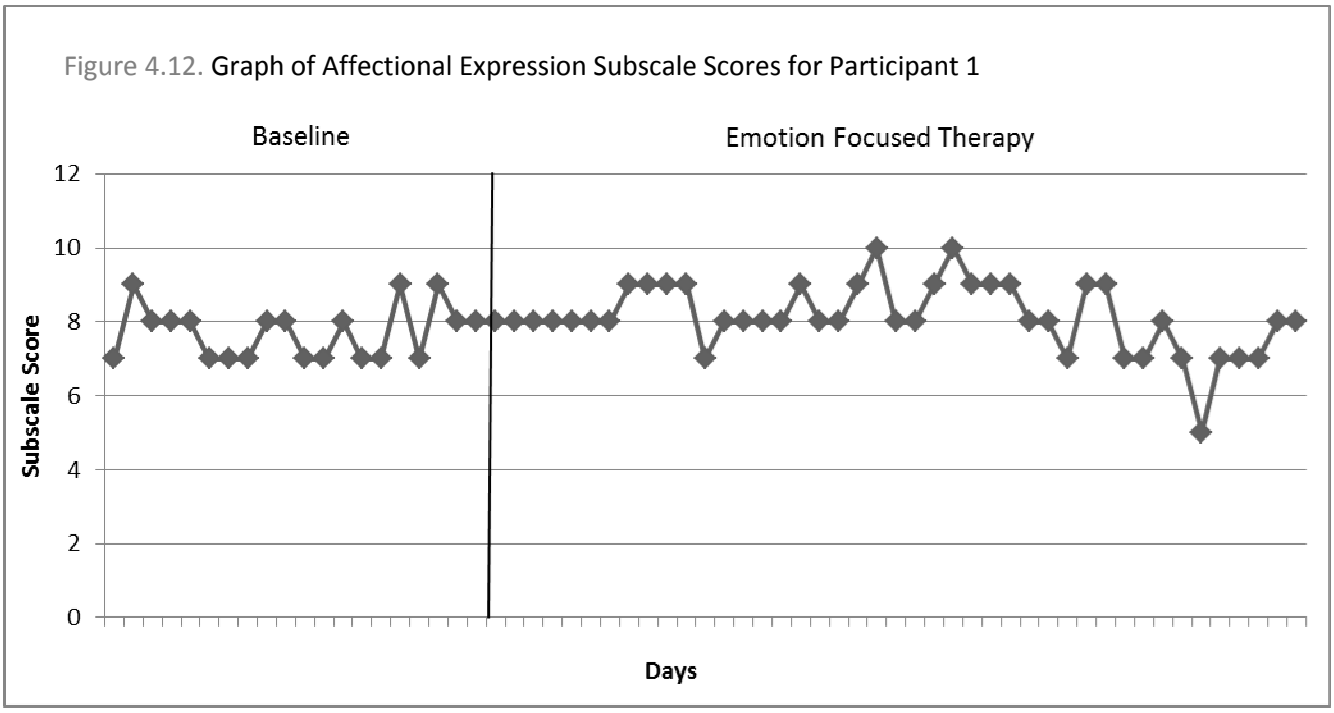

Figure 4.12. P1's Affectional Expression Subscale scores from baseline, including two weeks of the intake and individual sessions, and extending through 13 weeks of EFT treatment.

Changes in mean. Consistent upward shifts in the average score across the phases did not occur on this continuous measure. While P1's Affectional Expression Subscale mean score during the baseline phase was 7.66 and the mean score did increase to 8.11 during the treatment phase, the changes do not appear to be consistent across the means. The graph indicates that P1's scores on the Affectional Expression Subscale did not increase in response to the treatment phase of the study. Visual inspection of this pattern suggests that the intervention was not associated with changes that met the requirements of the design as reflected on this criterion.

Changes in level. A shift in scores from the end of the baseline phase to the beginning of the treatment phase did not occur. Scores during the last week of the baseline phase averaged 8.33 with a range of 2. Scores remained steady during the intake, individual sessions, and first week of treatment with P1 obtaining a score of 8 at every observation during the time period. The Affectional Expression Subscale scores for P1 remained at a stable rate from that last week

of the baseline phase through the first three weeks of the treatment phase. As the treatment was introduced, subscale scores did not assume a higher rate and did not create a quick upward shift.

Changes in trend. The data for P1's Affectional Expression Subscale did not show a systematic increase in trend over the time period of the study. The initial score for P1 at the first day of baseline was 7. Her final score at the last day of the treatment phase was 8. Her scores ranged from 7 to 10 on the subscale without creating a tendency toward an accelerating slope. The data does not show a change in direction that would create a predictable upward slope over the course of the baseline and treatment phases, rather her scores became more erratic during the treatment phase. P1's Affectional Expression Subscale data created no predictable trend during this study.

Latency of the change. The period of time between the termination of the baseline phase and the onset of the treatment condition did not coincide with a change in scores for P1 on the Affectional Expression Subscale. P1's scores on this subscale remained stable during most of the intervention phase with a slight downward shift during the last few weeks of the treatment phase, thus her scores did not offer evidence of a consistent increase during this study. Examination of the latency of change characteristic did not invoke a clear intervention effect.

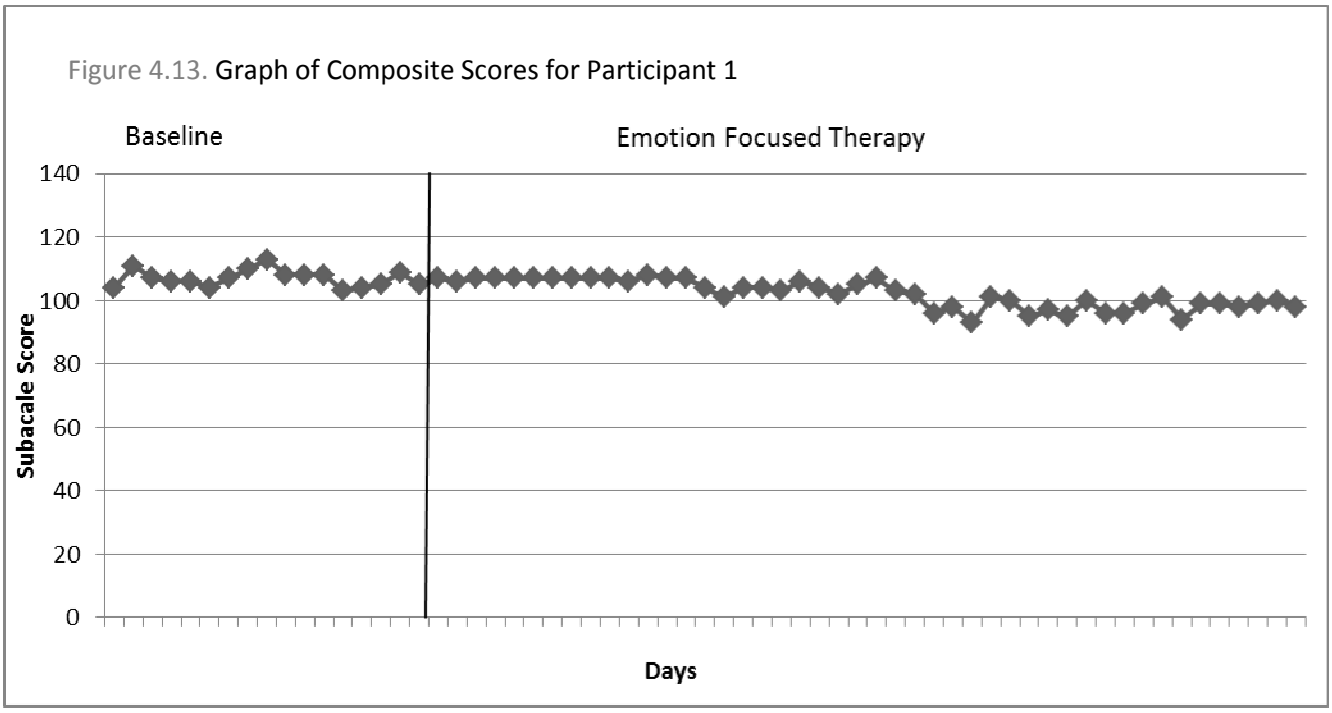

Figure 4.13. P1's Composite Scores on the Dyadic Adjustment Scale from baseline, including two weeks of the intake and individual sessions, and extending through 13 weeks of EFT treatment.

Overall pattern. The DAS Composite Score is the sum of the scale's subscale scores. The individual characteristics of the subscales considered above contributed to the judgment of whether the changes in the data were consistent with the requirements of the design. The overall pattern of the Composite Score data indicated overlapping scores across the phases since numerical data points on the graph in the baseline phase do overlap with the data during the treatment phase. Upon inspection of all of P1's DAS subscale characteristics, none of the criteria for visual inspection were fulfilled. The extent of changes in the means, levels, and trends, and the latency of changes did not offer evidence of an overall increase in scores from the baseline phase to the treatment phase. While this graph did offer evidence of a slight decrease in scores, it did not offer evidence that changes in the data are consistent with the requirements of the design based on the comprehensive survey of the results of the subscales. Visual inspection of the

graphic display of DAS scores for P1 did not demonstrate that the intervention had been effective.

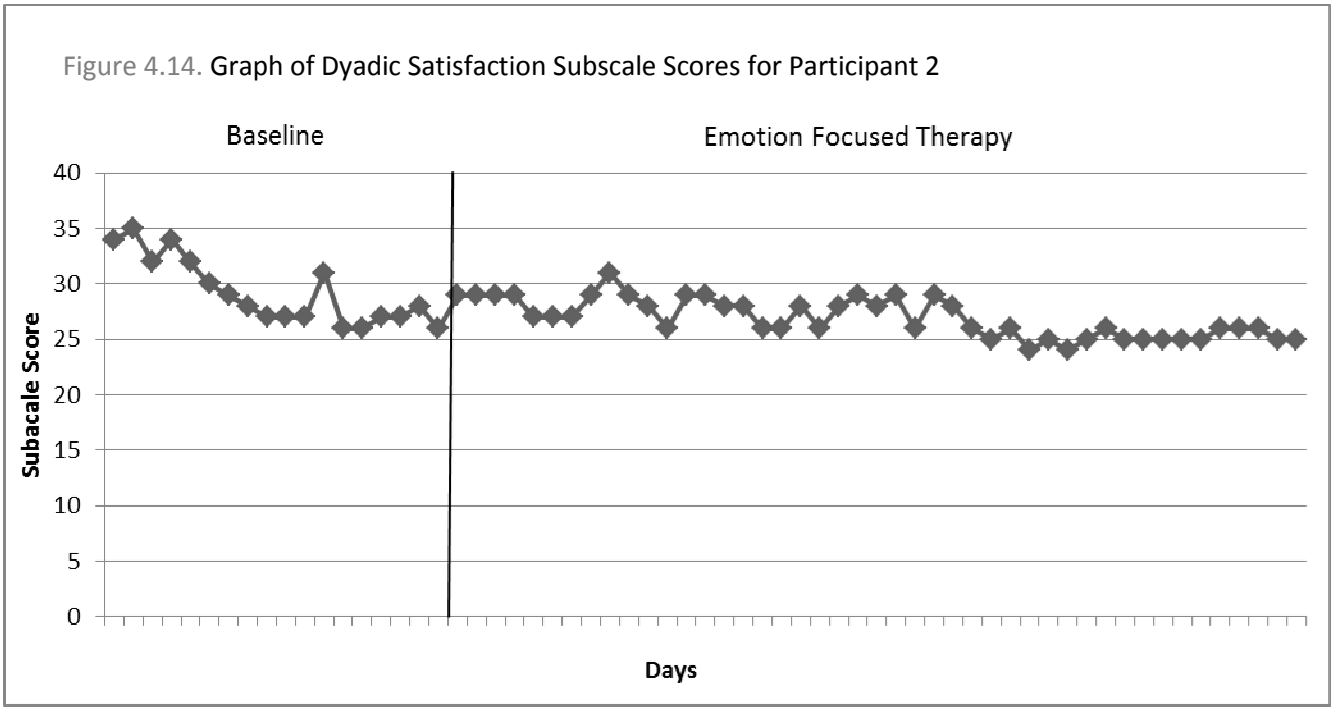

Figure 4.14. P2's Dyadic Satisfaction Subscale scores from baseline, including two weeks of the intake and individual sessions, and extending through 13 weeks of EFT treatment.

Changes in mean. Consistent upward shifts in the average score across the phases did not occur on this continuous measure, rather the mean decreased from the baseline phase to the intervention phase. P2's Dyadic Satisfaction Subscale mean score during the baseline phase was 29.22 and the mean score decreased to 26.91 during the treatment phase. Visual inspection of the graph indicates that P2's scores on the Dyadic Satisfaction Subscale did not increase in response to the treatment phase of the study. Visual inspection of this pattern suggests that the intervention was not associated with changes that met the requirements of the design as reflected on this criterion.

Changes in level. An upward shift in scores from the end of the baseline phase to the beginning of the treatment phase did not occur. Scores during the last week of the baseline phase averaged 36.33 with a range of 2. Scores remained steady during the intake, individual sessions, and first week of treatment with an average score of 34.89 and a range of 1. The Dyadic Satisfaction Subscale scores for P2 remained at a stable rate from that last week of the baseline phase through the first three weeks of the treatment phase. As the treatment was introduced, subscale scores did not assume a higher rate and did not create a quick upward shift.

Changes in trend. The data for P2's Dyadic Satisfaction Subscale did not show systematic increase in trend over the time period of the study. The initial score for P1 at the first day of baseline was 35. Her final score at the last day of the treatment phase was 33. Her scores ranged from 29 to 37 on the subscale without creating a tendency toward an accelerating slope. The data does not show a change in direction that would create a predictable upward slope over the course of the baseline and treatment phases. P2's Dyadic Satisfaction Subscale data did not create a predictable accelerating trend during this study.

Latency of the change. The period of time between the termination of the baseline phase and the onset of the treatment condition did not coincide with a change in scores for P2 on the Dyadic Satisfaction Subscale. P2's scores on this subscale remained fairly stable during most of the intervention phase with a slight downward shift during the last few weeks of the treatment phase, thus her scores did not offer evidence of a consistent increase during this study. Examination of the latency of change characteristic did not invoke a clear intervention effect.

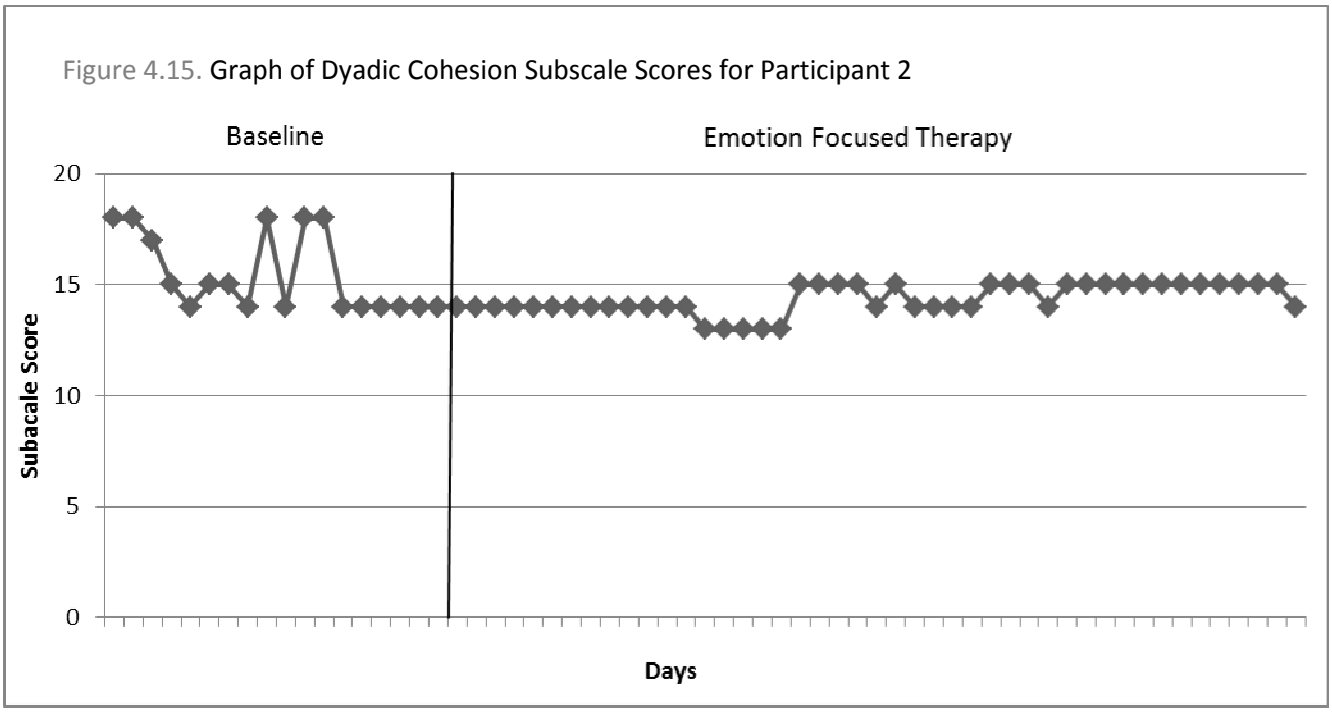

Figure 4.15. P2's Dyadic Cohesion Subscale scores from baseline, including two weeks of the intake and individual sessions, and extending through 13 weeks of EFT treatment.

Changes in mean. Consistent upward shifts in the average score across the phases did not occur on this continuous measure. P2's Dyadic Cohesion Subscale mean score during the baseline phase was 15.44 and the mean score decreased to 14.34 during the treatment phase. The graph indicates that P2's scores on the Dyadic Cohesion Subscale did not increase in response to the treatment phase of the study. Visual inspection of this pattern suggests that the intervention was not associated with changes that met the requirements of the design as reflected on this criterion.

Changes in level. A shift in scores from the end of the baseline phase to the beginning of the treatment phase did not occur. P2 obtained a score of 14 on every observation during the last week of the baseline phase. Her scores remained steady during the intake, individual sessions, and first week of treatment since P2 obtained a score of 14 on every observation during this time

period as well. The Dyadic Cohesion Subscale scores for P2 remained at a stable rate from that last week of the baseline phase through the first three weeks of the treatment phase. As the treatment was introduced, subscale scores did not assume a higher rate and did not create a quick upward shift.

Changes in trend. The data for P2's Dyadic Cohesion Subscale did not show systematic increase in trend over the time period of the study. The initial score for P1 at the first day of baseline was 18. Her final score at the last day of the treatment phase was 14. Her scores ranged from 13 to 18 on the subscale without creating a tendency toward an accelerating slope. The data does not show a change in direction that would create a predictable upward slope over the course of the baseline and treatment phases. This graph of P2's Dyadic Cohesion Subscale data did not offer evidence of an accelerating trend during this study.

Latency of the change. The period of time between the termination of the baseline phase and the onset of the treatment condition did not coincide with a change in scores for P2 on the Dyadic Cohesion Subscale. P2's scores on this subscale increased initially during week seven, the fifth week of EFT, and remained fairly consistent with the new mode of 15. Examination of the latency of change characteristic did not invoke a clear intervention effect due to the long time period between the onset of the intervention and the increase in the scores.

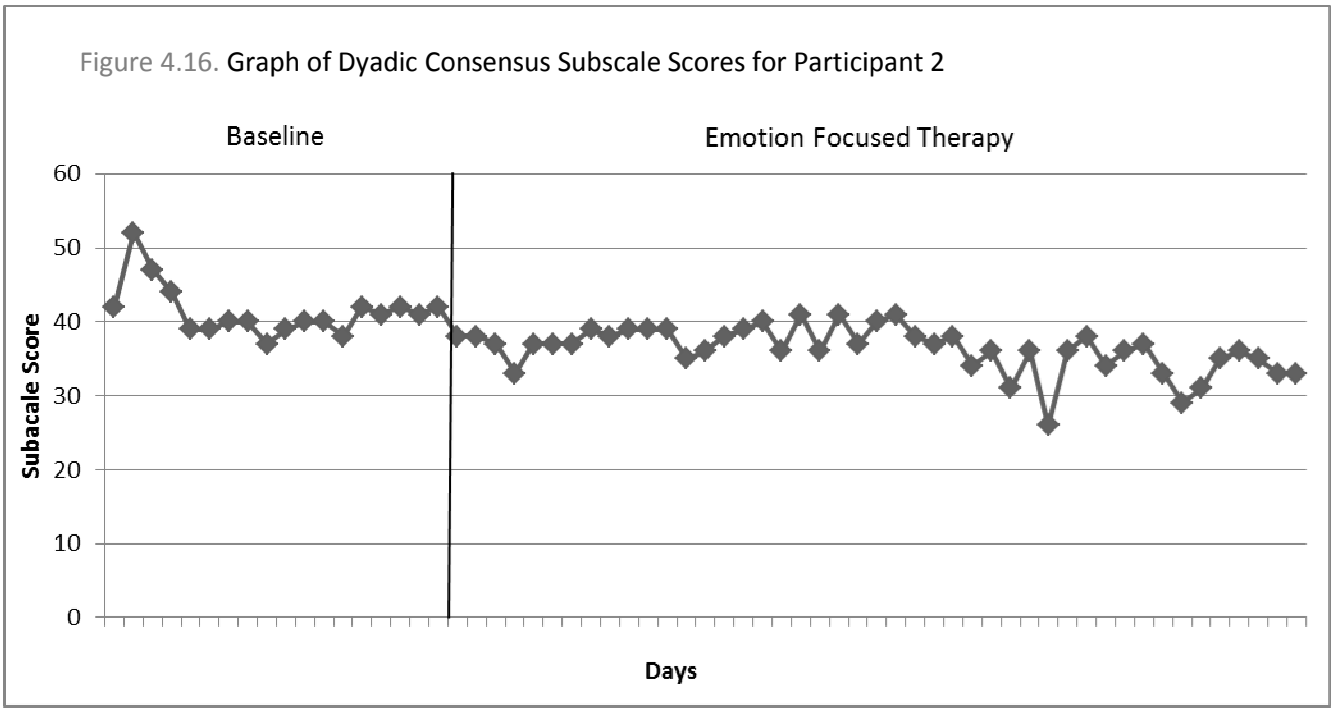

Figure 4.16. P2's Dyadic Consensus Subscale scores from baseline, including two weeks of the intake and individual sessions, and extending through 13 weeks of EFT treatment.

Changes in mean. Consistent upward shifts in the average score across the phases did not occur on this continuous measure. P2's Dyadic Consensus Subscale mean score during the baseline phase was 41.38 and the mean score decreased to 36.29 during the treatment phase. The graph indicates that P2's Dyadic Consensus Subscale scores did not increase in response to the treatment phase of the study. Visual inspection of this pattern suggests that the intervention was not associated with changes that met the requirements of the design as reflected on this criterion.

Changes in level. A shift in scores from the end of the baseline phase to the beginning of the treatment phase did not occur. Scores during the last week of the baseline phase averaged 41.67 with a range of 1. Scores remained steady during the intake, individual sessions, and first week of treatment with an average score 37.11 of and a range of 2. The Dyadic Consensus Subscale scores for P2 decreased from that last week of the baseline phase through the first three

weeks of the treatment phase. As the treatment was introduced, subscale scores did not assume a higher rate and did not create a quick upward shift.

Changes in trend. The data for P2's Dyadic Consensus Subscale offered evidence of a descending slope, rather than showing the predicted systematic increase in trend over the time period of the study. The initial score for P2 at the first day of baseline was 42. Her final score at the last day of the treatment phase was 33. Her scores ranged from 26 to 52 on the subscale, creating a tendency toward a decelerating slope during this study. This trend is the opposite of the expected trend during EFT. This graph of P2's Dyadic Cohesion Subscale data did not offer evidence of an accelerating slope during this study.

Latency of the change. The period of time between the termination of the baseline phase and the onset of the treatment condition did not coincide with a change in scores for P2 on the Dyadic Consensus Subscale. P2's scores on this subscale decreased over the course of this study. Examination of the latency of change characteristic did not invoke a clear intervention effect.

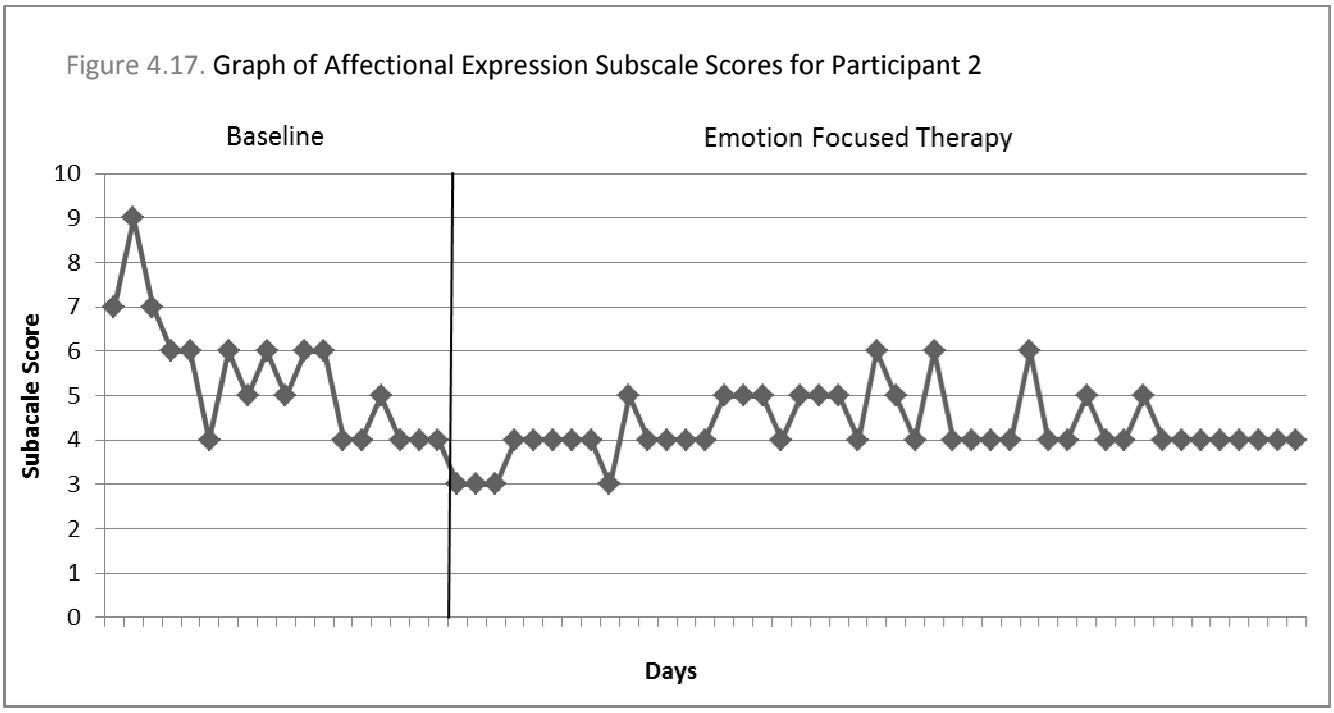

Figure 4.17. P2's Affectional Expression Subscale scores from baseline, including two weeks of the intake and individual sessions, and extending through 13 weeks of EFT treatment.

Changes in mean. Consistent upward shifts in the average score across the phases did not occur on this continuous measure. P2's Affectional Expression Subscale mean score during the baseline phase was 5.44 and the mean score decreased to 4.26 during the treatment phase. The graph indicates that P2's Affectional Expression Subscale scores did not increase in response to the treatment phase of the study. Visual inspection of this pattern suggests that the intervention was not associated with changes that met the requirements of the design as reflected on this criterion.

Changes in level. A slight downward shift in scores appeared from the end of the baseline phase to the beginning of the treatment phase did not occur. P2 obtained a score of 4 at every observation during the last week of the baseline phase. Her scores decreased slightly with the beginning of the treatment phase and then remained steady during the intake, individual sessions,

and first week of treatment with an average score of 3.55 and a range of one. The Affectional Expression Subscale scores for P2 decreased slightly in rate from that last week of the baseline phase through the first three weeks of the treatment phase. As the treatment was introduced, subscale scores did not assume a higher rate and did not create a quick upward shift.

Changes in trend. The data for P2's Affectional Expression Subscale did not show systematic increase in trend over the time period of the study. The initial score for P1 at the first day of baseline was 7. Her final score at the last day of the treatment phase was 4. Her scores ranged from 3 to 9 on the subscale without creating a tendency toward an accelerating slope. The data does not show a change in direction that would create a predictable upward slope over the course of the baseline and treatment phases. This graph of P2's Affectional Expression Subscale data did not offer evidence of an accelerating slope during this study.

Latency of the change. The period of time between the termination of the baseline phase and the onset of the treatment condition concurred with a slight decrease in scores for P2 on the Affectional Expression Subscale. P2's scores on this subscale decreased over the course of this study Examination of the latency of change characteristic did not invoke a clear intervention effect.

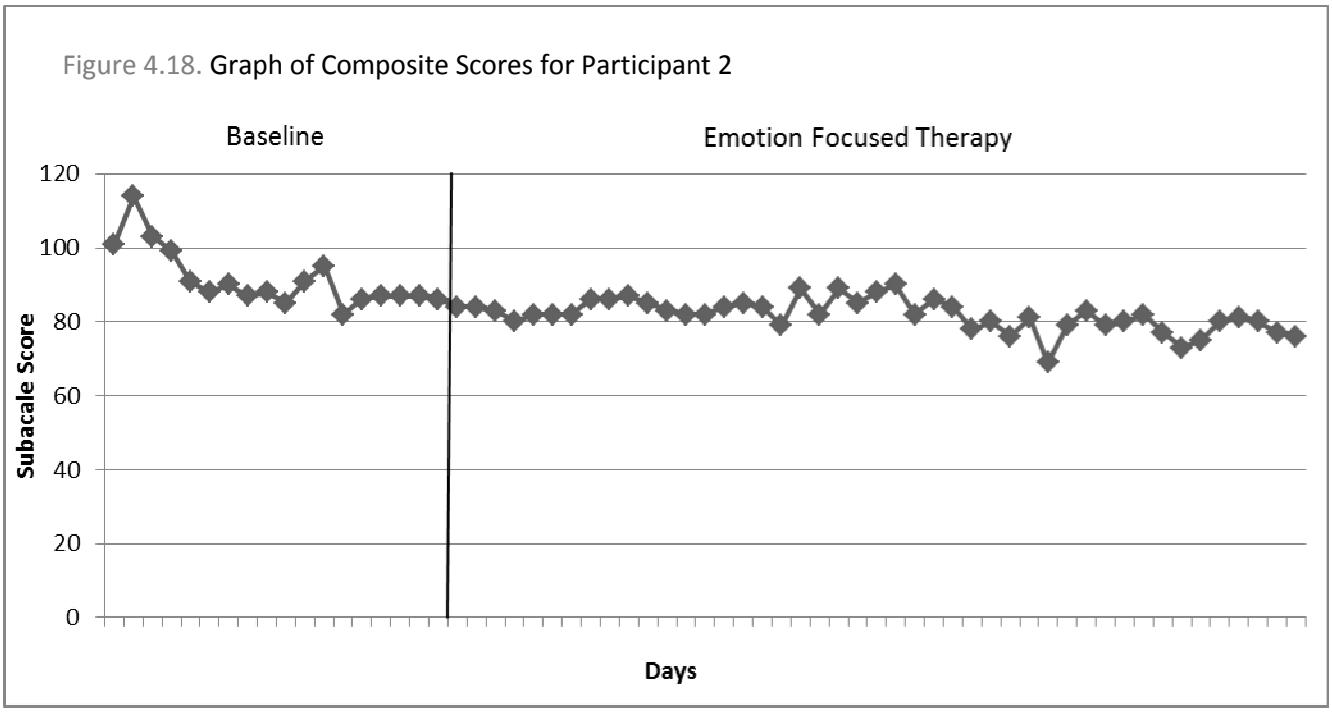

Figure 4.18. P2's Dyadic Adjustment Scale, Composite Scores from baseline, including two weeks of the intake and individual sessions, and extending through 13 weeks of EFT treatment.

Overall pattern. The DAS Composite Score is the sum of the scale's subscale scores. The individual characteristics of the subscales considered above contributed to the judgment of whether the changes in the data were consistent with the requirements of the design. The overall pattern of the Composite Score data indicated overlapping scores across the phases since numerical data points on the graph in the baseline phase do overlap with the data during the treatment phase. Upon inspection of all of P2's DAS subscale characteristics, none of the criteria for visual inspection were fulfilled. The extent of changes in the means, levels, and trends, and the latency of changes did not offer evidence of an overall increase in scores from the baseline phase to the treatment phase. This graph did not offer evidence that changes in the data are consistent with the requirements of the design. Visual inspection of the graphic display of DAS scores for P2 did not demonstrate that the intervention had been effective.

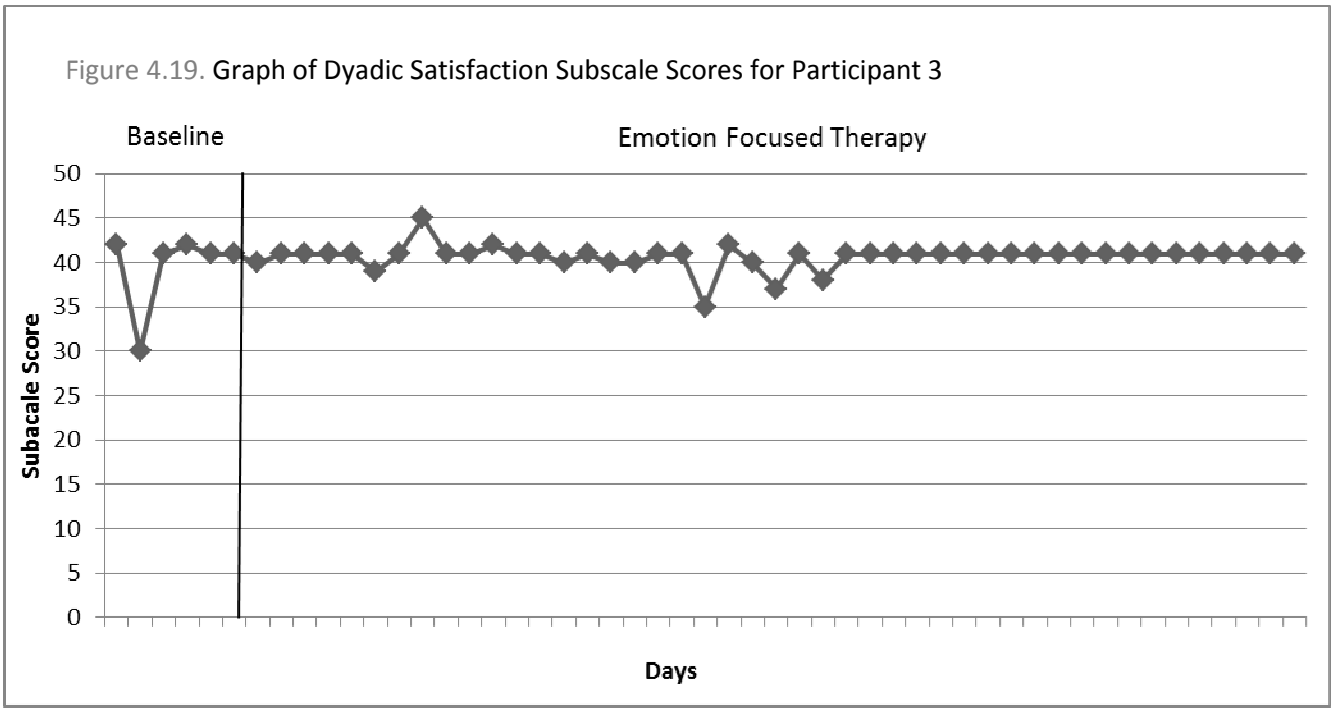

Figure 4.19. P3's Dyadic Satisfaction Subscale scores from baseline, including two weeks of the intake and individual sessions, and extending through 13 weeks of EFT treatment.

Changes in mean. Consistent upward shifts in the average score across the phases did not occur on this continuous measure. P3's Dyadic Satisfaction Subscale mean score during the baseline phase was 39.50. His mean score did increase to 40.69 during the treatment phase. P3 had an outlier score on the second day of baseline that was 9.5 points below the mean. This outlier score decreased the mean decreased the baseline mean since there were only a total of six baseline scores. The graph indicates that P3's perception of Dyadic Satisfaction did not consistently increase in response to the treatment phase of the study. Visual inspection of this pattern suggests that the intervention was not associated with changes that met the requirements of the design as reflected on this criterion.

Changes in level. A shift in scores from the end of the baseline phase to the beginning of the treatment phase did not occur. Scores during the last week of the baseline phase averaged

41.33 with a range of one. Scores remained consistent during the intake, individual sessions, and first week of treatment, with the exception of an outlier score of 45 during the middle of third week of the treatment phase which is the first week of EFT couple therapy. This gave P3 an average score 41.11 of and a range of 6 during the first three weeks of the treatment phase. Overall, the Dyadic Satisfaction Subscale scores for P3 remained at a stable rate from that last week of the baseline phase through the first three weeks of the treatment phase. As the treatment was introduced, subscale scores did not assume a higher rate and did not create a quick upward shift.

Changes in trend. The data for P3's Dyadic Satisfaction Subscale did not show systematic increase in trend over the time period of the study. The initial score for P3 at the first day of baseline was 42. His final score at the last day of the treatment phase was 41. His scores ranged from 30 to 45 on the subscale without creating a tendency toward an accelerating slope. The data does not show a change in direction that would create a predictable upward slope over the course of the baseline and treatment phases. This graph of P3's Dyadic Satisfaction Subscale data did not offer evidence of an accelerating slope during this study.

Latency of the change. The period of time between the termination of the baseline phase and the onset of the treatment condition did not coincide with a change in scores for P3 on the Dyadic Satisfaction Subscale. P3's scores on this subscale remained stable during most of the intervention phase, thus his scores did not offer evidence of a consistent increase during this study. Examination of the latency of change characteristic did not invoke a clear intervention effect.

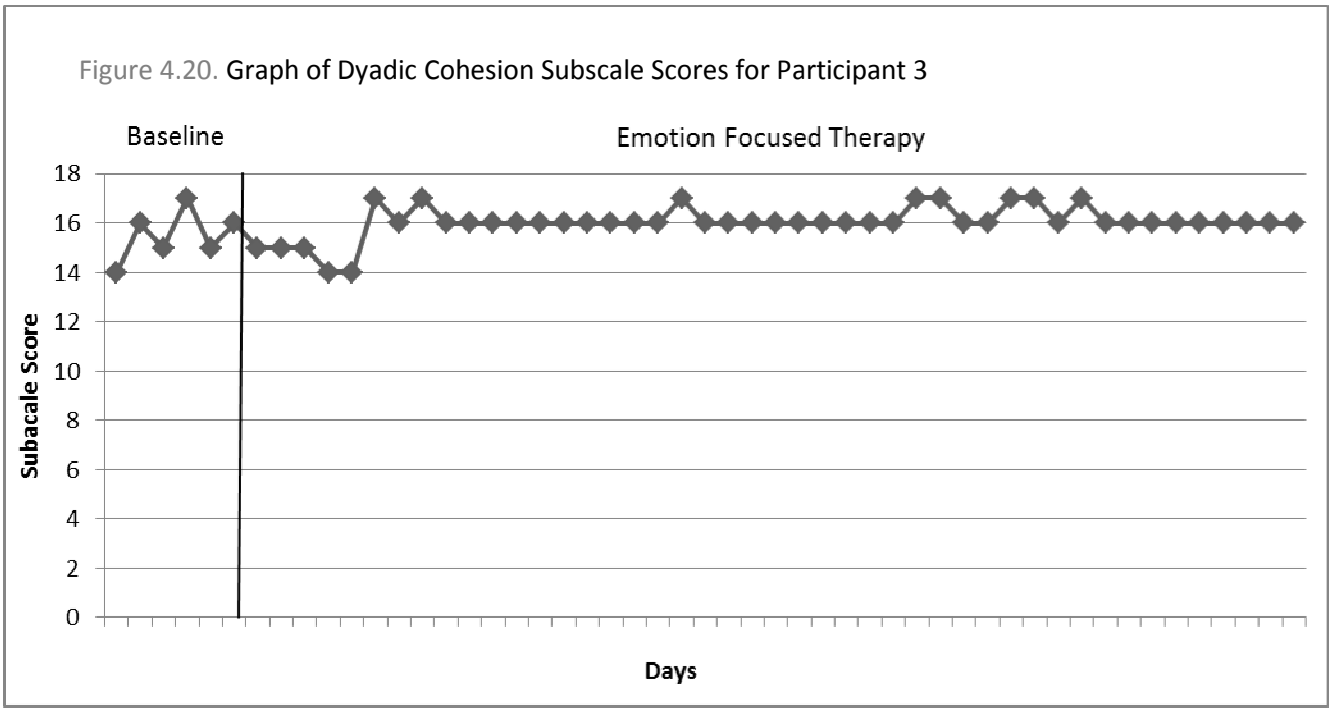

Figure 4.20. P3's Dyadic Cohesion Subscale scores from baseline, including two weeks of the intake and individual sessions, and extending through 13 weeks of EFT treatment.

Changes in mean. Consistent upward shifts in the average score across the phases did not occur on this continuous measure. P3's Dyadic Cohesion Subscale mean score during the baseline phase was 15.5. His mean score did increase to 16.02 during the treatment phase, ultimately creating a fairly consistent mean, but the slight change in mean does not meet the requirement of the design for this characteristic. The graph indicates that P3's Dyadic Cohesion Subscale scores did not increase with a significant magnitude shift in response to the treatment phase of the study. Visual inspection of this pattern suggests that the intervention was not associated with changes that met the requirements of the design as reflected on this criterion.

Changes in level. A swift upward shift in scores from the end of the baseline phase to the beginning of the treatment phase did not occur. Scores during the last week of the baseline phase averaged 16 with a range of 2. P3's scores decreased during the intake, individual sessions, and

then balanced back out at the end of the week of his individual session and during the first week of treatment. His score average during the three-week time period was 15.44 with a range of 3. The Dyadic Cohesion Subscale scores for P3 did not assume a new increased rate from that last week of the baseline phase through the first three weeks of the treatment phase. As the treatment was introduced, subscale scores did not assume a higher rate and did not create a quick upward shift.

Changes in trend. The data for P3's Dyadic Cohesion Subscale did not show systematic increase in trend over the time period of the study. The initial score for P3 at the first day of baseline was 14. His final score at the last day of the treatment phase was 16. His scores ranged from 14 to 17 on the subscale without creating a tendency toward an accelerating slope. P3's data created no trend during the third week of the intervention phase at which time he developed a zero slope with only a few higher scores. The data does not show a change in direction that would create a predictable upward slope over the course of the baseline and treatment phases. This graph of P3's Dyadic Cohesion Subscale data did not offer evidence of an accelerating slope during this study.

Latency of the change. The period of time between the termination of the baseline phase and the onset of the treatment condition did not coincide with a change in scores for P3 on the Dyadic Cohesion Subscale. P3's scores on this subscale decreased during the first two weeks of the intervention phase and then returned to baseline levels during the third week, which was the first week of EFT. His scores did not offer evidence of a consistent increase, above baseline levels, during this study. Examination of the latency of change characteristic did not invoke a clear intervention effect.

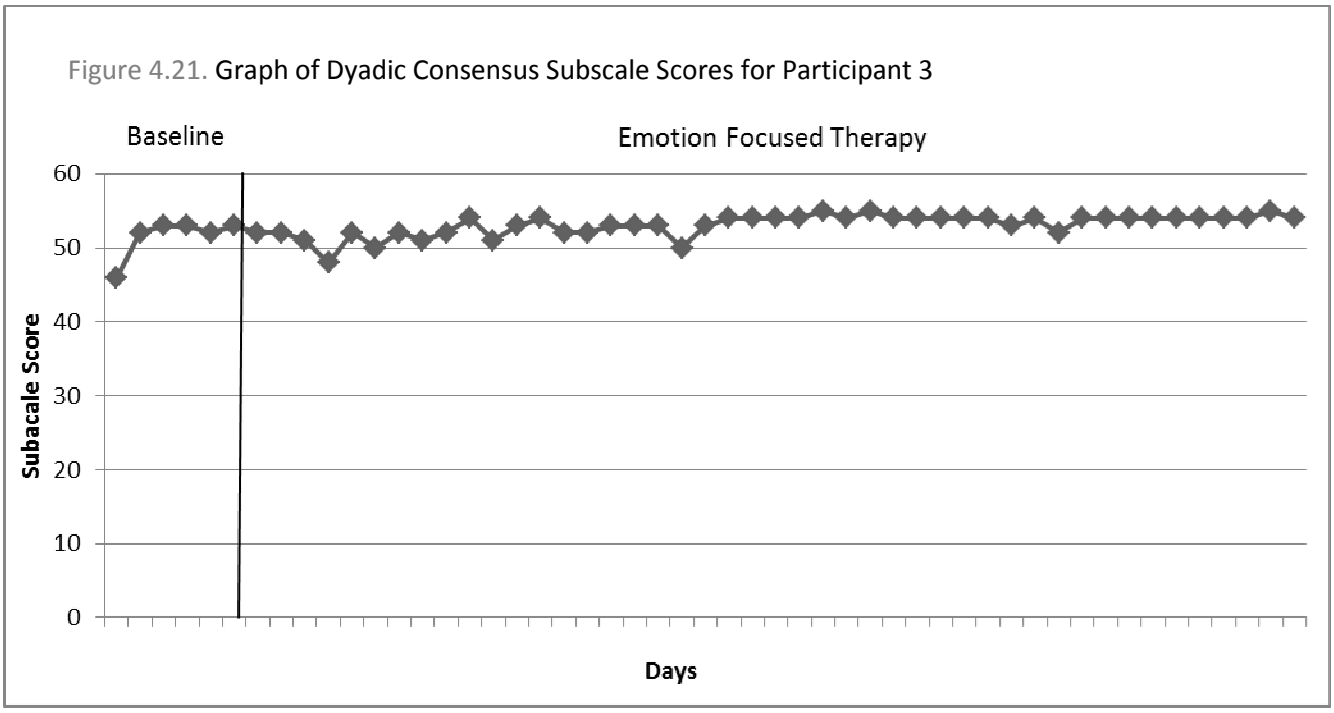

Figure 4.21. P3's Dyadic Consensus Subscale scores from baseline, including two weeks of the intake and individual sessions, and extending through 13 weeks of EFT treatment.

Changes in mean. Consistent upward shifts in the average score across the phases did not occur on this continuous measure. P3's Dyadic Consensus Subscale mean score during the baseline phase was 51.50 and his mean score increased to 53.07 during the treatment phase. The graph indicates that P3's scores on the Dyadic Consensus Subscale did not increase in response to the treatment phase of the study. Visual inspection of this pattern suggests that the intervention was not associated with changes that met the requirements of the design as reflected on this criterion.

Changes in level. A shift in scores from the end of the baseline phase to the beginning of the treatment phase did not occur. Scores during the last week of the baseline phase averaged 52.67 with a range of 1. Scores remained steady during the intake, individual sessions, and first week of treatment with an average score of 51.11 and a range of 4. The Dyadic Consensus

Subscale scores for P3 remained at a stable rate from that last week of the baseline phase through the first three weeks of the treatment phase. As the treatment was introduced, subscale scores did not assume a higher rate and did not create a quick upward shift.

Changes in trend. The data for P3's Dyadic Consensus Subscale did not show a systematic increase in trend over the time period of the study. The initial score for P3 at the first day of baseline was 46. His final score at the last day of the treatment phase was 54. His scores ranged from 46 to 55 on the subscale without creating a tendency toward an accelerating slope. The data does not show a change in direction that would create a predictable upward slope over the course of the baseline and treatment phases. This graph of P3's Dyadic Consensus Subscale data did not offer evidence of an accelerating slope during this study.

Latency of the change. The period of time between the termination of the baseline phase and the onset of the treatment condition did not coincide with a change in scores for P3 on the Dyadic Consensus Subscale. P3's scores on this subscale remained stable during most of the intervention phase. P3's scores slightly increased during the seventh week of the intervention phase, but the change was not dramatic enough to signify a change in performance on this subscale. Examination of the latency of change characteristic did not invoke a clear intervention effect.

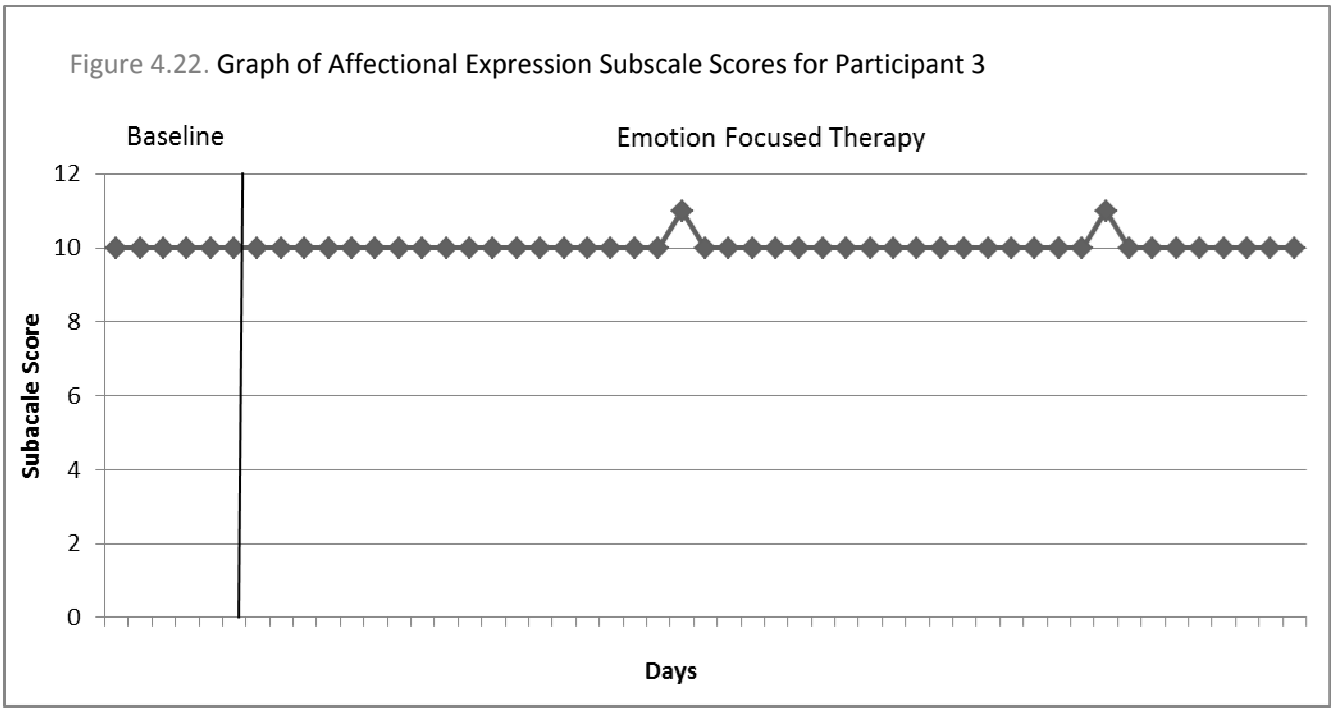

Figure 4.22. P3's Affectional Expression Subscale scores from baseline, including two weeks of the intake and individual sessions, and extending through 13 weeks of EFT treatment.

Changes in mean. Consistent upward shifts in the average score across the phases did not occur on this continuous measure. P3's Affectional Expression Subscale mean score during the baseline phase was 10 and the mean score increased only slightly to 10.04 during the treatment phase. The graph indicates that P3's Affectional Expression Subscale scores did not consistently significantly increase in magnitude in response to the treatment phase of the study. Visual inspection of this pattern suggests that the intervention was not associated with changes that met the requirements of the design as reflected on this criterion.

Changes in level. A shift in scores from the end of the baseline phase to the beginning of the treatment phase did not occur. P3 obtained a score of 10 at every observation during the last week of the baseline phase. His scores remained steady during the intake, individual sessions, and first week of treatment since he obtained a score of 10 at all of the observations during the

three week time period as well. The Affectional Expression Subscale scores for P3 remained at a stable rate from that last week of the baseline phase through the first three weeks of the treatment phase. As the treatment was introduced, subscale scores did not assume a higher rate and did not create a quick upward shift.

Changes in trend. The data for P3's Affectional Expression Subscale did not show systematic increase in trend over the time period of the study. P3 obtained a score of 10 on every data point except two (on which he scored 11) during the entire study from the baseline phase through the treatment phase. This data was suspect since data with little or no fluctuation may indicate that the participant lacked engagement with the assessment process. The data does not show a change in direction that would create a predictable upward slope over the course of the baseline and treatment phases. This graph of P3's Affectional Expression Subscale data did not offer evidence of an accelerating slope during this study.

Latency of the change. The period of time between the termination of the baseline phase and the onset of the treatment condition did not coincide with a change in scores for P3 on the Affectional Expression Subscale. P3's scores on this subscale remained stable during the intervention phase, thus his scores did not offer evidence of a consistent increase during this study. Examination of the latency of change characteristic did not invoke a clear intervention effect.

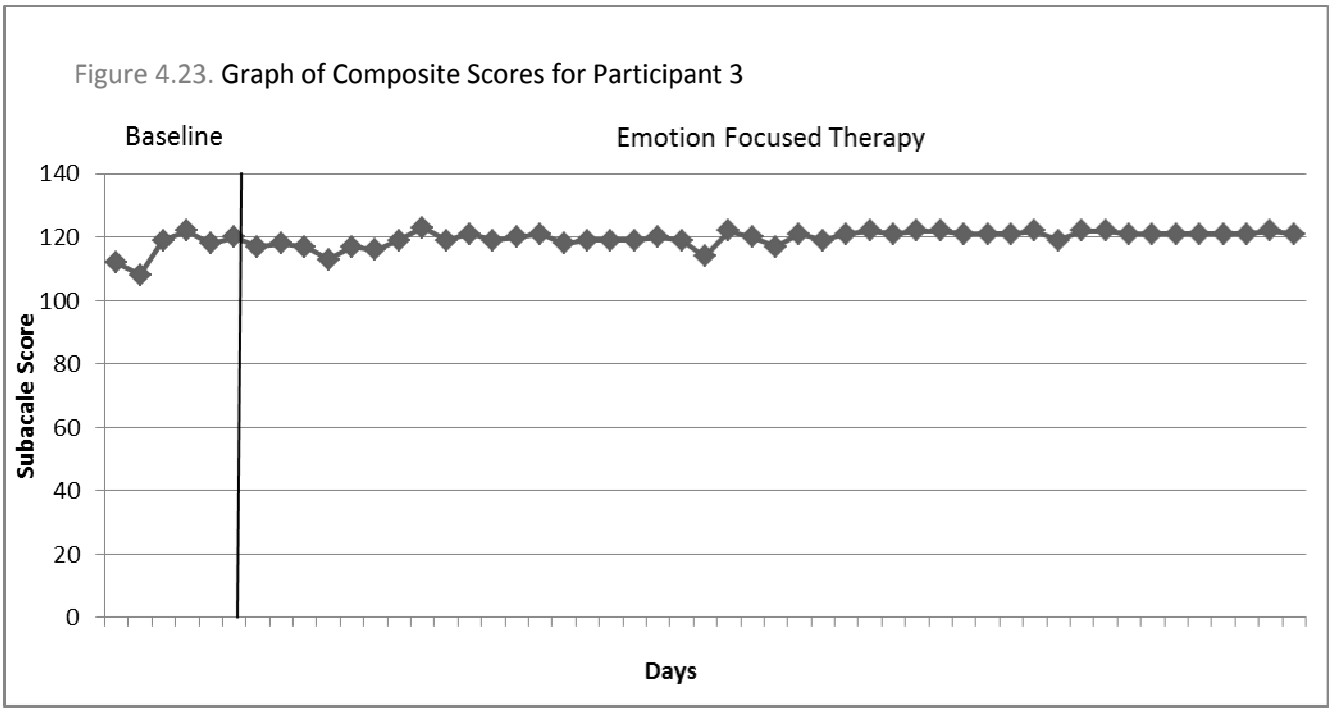

Figure 4.23. P3's Dyadic Adjustment Scale, Composite Scores from baseline, including two weeks of the intake and individual sessions, and extending through 13 weeks of EFT treatment.

Overall pattern. The DAS Composite Score is the sum of the scale's subscale scores. The individual characteristics of the subscales considered above contributed to the judgment of whether the changes in the data were consistent with the requirements of the design. The overall pattern of the Composite Score data indicated overlapping scores across the phases since numerical data points on the graph in the baseline phase do overlap with the data during the treatment phase. Upon inspection of all of P3's DAS subscale characteristics, none of the criteria for visual inspection were fulfilled. The extent of changes in the means, levels, and trends, and the latency of changes did not offer evidence of an overall increase in scores from the baseline phase to the treatment phase. This graph did not offer evidence that changes in the data are consistent with the requirements of the design. Visual inspection of the graphic display of DAS scores for P3 did not demonstrate that the intervention had been effective.

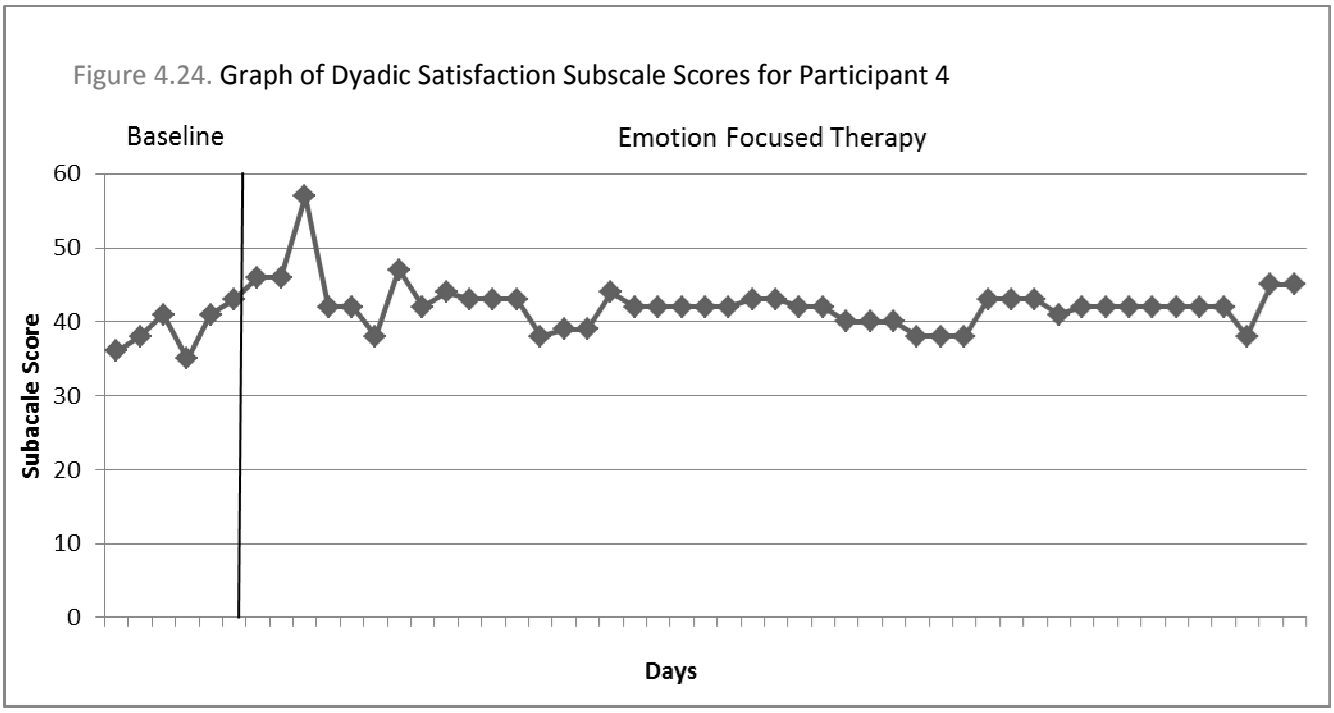

Figure 4.24. P4's Dyadic Satisfaction Subscale scores from baseline, including two weeks of the intake and individual sessions, and extending through 13 weeks of EFT treatment.

Changes in mean. Consistent upward shifts in the average score across the phases did not occur on this continuous measure. P4's Dyadic Satisfaction Subscale mean score during the baseline phase was 39. Her mean score did increase to 42.20 during the treatment phase, but her scores did not create a consistent change in magnitude necessary to meet the requirements of the design for this characteristic. The graph indicates that P4's Dyadic Satisfaction Subscale scores did not significantly increase in response to the treatment phase of the study. Visual inspection of this pattern suggests that the intervention was not associated with changes that met the requirements of the design as reflected on this criterion.

Changes in level. A shift in scores from the end of the baseline phase to the beginning of the treatment phase did not occur. P4's scores fluctuated during the last week of the baseline phase. Her scores during the baseline phase averaged 39.67 with a range of six. Her scores

continued to vary during the intake, individual sessions, and first week of treatment. Her average score during the three-week time period was 44.89. She obtained a high score of 57 on the last day of the first week of the treatment phase which consisted of the intake session, and a low score of 38 on the last day of the second week of the treatment phase which was consisted of the individual session. Her score range during the three-week time period was 19. The Dyadic Satisfaction Subscale scores for P4 did not assume a consistently higher rate when she entered the treatment phase of this study. As the treatment was introduced, subscale scores did not create a quick upward shift.

Changes in trend. The data for P4's Dyadic Satisfaction Subscale did not show systematic increase in trend over the time period of the study. The initial score for P4 at the first day of baseline was 36. Her final score at the last day of the treatment phase was 45. Her scores ranged from 35 to 57 on the subscale without creating a tendency toward an accelerating slope. Her score of 57 was an outlier score that fell at the end of the first week of the treatment phase, which entails the intake session. This data does not show a change in direction that would create a predictable upward slope over the course of the baseline and treatment phases. This graph of P4's Dyadic Satisfaction Subscale data did not offer evidence of an accelerating slope during this study.

Latency of the change. The period of time between the termination of the baseline phase and the onset of the treatment condition did not coincide with a change in scores for P4 on the Dyadic Satisfaction Subscale. P4's scores on this subscale remained variable, thus her scores did not offer evidence of a consistent increase during this study. Examination of the latency of change characteristic did not invoke a clear intervention effect.

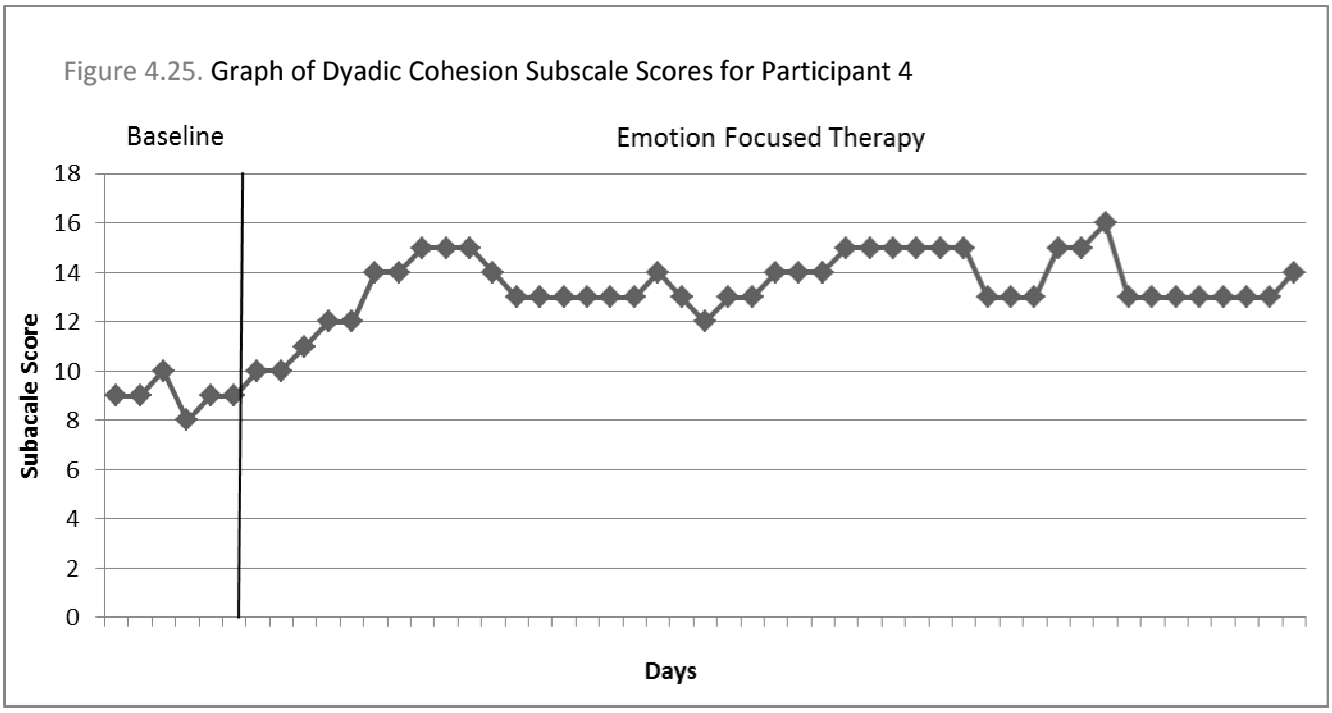

Figure 4.25. P4's Dyadic Cohesion Subscale scores from baseline, including two weeks of the intake and individual sessions, and extending through 13 weeks of EFT treatment.

Changes in mean. Consistent upward shifts in the average score across the phases did occur on this continuous measure. P4's Dyadic Cohesion Subscale mean score during the baseline phase was 9 and the mean score increased to 13.49 during the treatment phase. The graph indicates that P4's Dyadic Cohesion Subscale scores did increase in response to the treatment phase of the study. Visual inspection of this pattern suggests that the intervention was associated with changes that met the requirements of the design as reflected on this criterion.

Changes in level. A shift in scores from the end of the baseline phase to the beginning of the treatment phase did not occur. Scores during the last week of the baseline phase averaged 8.66 with a range of one. P4's scores remained stable during the intake, individual sessions, and first week of treatment with an average score of 12.56 and a range of five, but a swift upward shift in level from the baseline phase to the treatment phase did not occur. The Dyadic Cohesion

Subscale scores for P4 remained at a consistent upward rate from that last week of the baseline phase through the first three weeks of the treatment phase. As the treatment was introduced, subscale scores did not assume a higher rate and did not create a quick upward shift.

Changes in trend. The data for P4's Dyadic Cohesion Subscale did not show systematic increase in trend over the time period of the study. The initial score for P4 at the first day of baseline was 9. Her final score at the last day of the treatment phase was 14. Her scores ranged from 8 to 16 on the subscale and created an ebb and flow in trend that is not associated with a difference between the baseline phase and the introduction of the intervention phase. The data does not show a change in direction that would create a predictable upward slope over the course of the baseline and treatment phases. This graph of P4's Dyadic Cohesion Subscale data did not offer evidence of an accelerating slope during this study.

Latency of the change. The period of time between the termination of the baseline phase and the onset of the treatment condition did not coincide with a change in scores for P4 on the Dyadic Cohesion Subscale. P4's scores on this subscale formed an ebb and flow pattern, with her first peak in performance falling on the third week of the intervention phase which is the first week of EFT. Although the increase in her scores did not offer evidence of a consistent change, and ebb an flow pattern may have been emerging. Examination of the latency of change characteristic did not invoke a clear intervention effect.

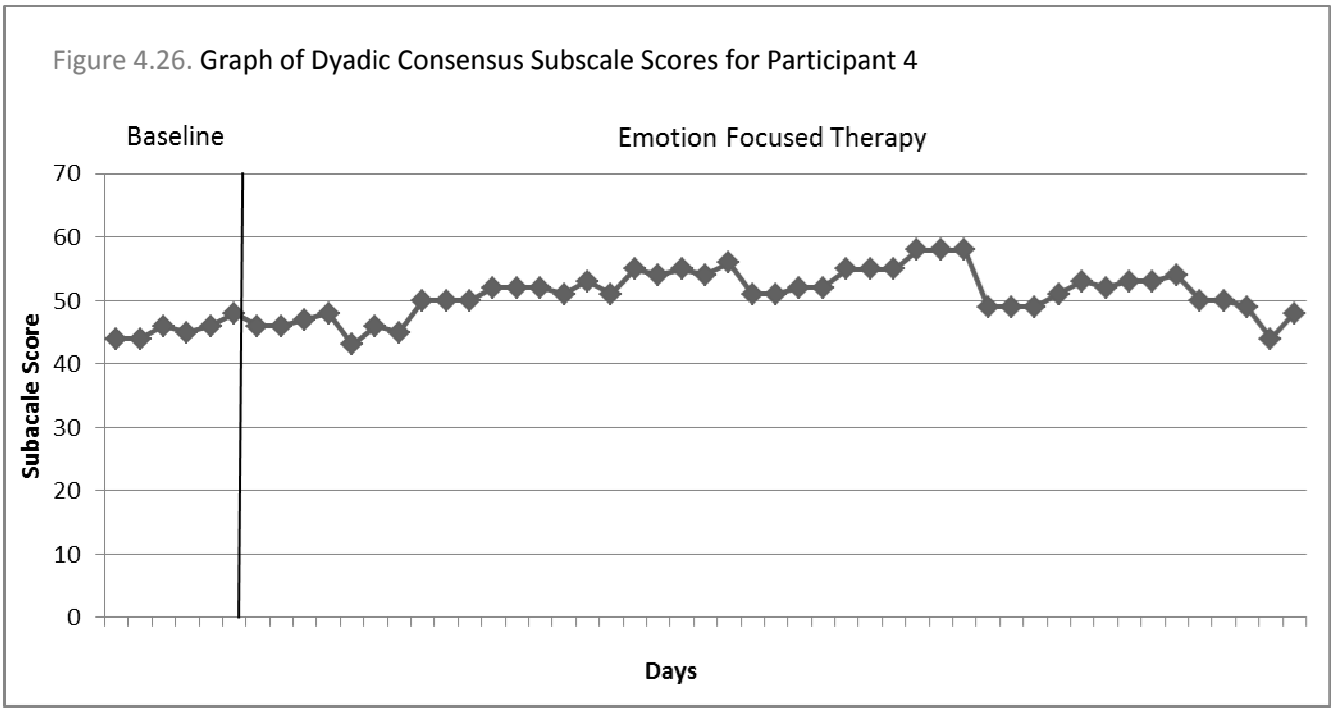

Figure 4.26. P4's Dyadic Consensus Subscale scores from baseline, including two weeks of the intake and individual sessions, and extending through 13 weeks of EFT treatment.

Changes in mean. Consistent upward shifts in the average score across the phases did not occur on this continuous measure. P4's Dyadic Consensus Subscale mean score during the baseline phase was 45.50 and the mean score increased to 50.56 during the treatment phase, but her scores failed to create a consistent upward change in magnitude. P4 obtained an outlier score of 20 during the middle of week 14 of the intervention phase. P4's scores on this subscale may have been establishing a pattern of an increased mean over the treatment phase, but the pattern was not yet well enough established at the end of the 13 weeks of therapy to assume that the graph indicated that P4's Dyadic Consensus Subscale scores increased in response to the treatment phase of the study. Visual inspection of this pattern did not necessarily suggest that the intervention was associated with changes that met the requirements of the design as reflected on this criterion.

Changes in level. A shift in scores from the end of the baseline phase to the beginning of the treatment phase did not occur. Scores during the last week of the baseline phase averaged 46.33 with a range of 3. P4's change in score level steadily increased during the intake and individual sessions and then decreased during her first week of treatment. Her average score during the three-week time period was 46.78 with a range of 7. The Dyadic Consensus Subscale scores for P4 did not assume a new higher rate from that last week of the baseline phase through the first three weeks of the treatment phase. At the onset of treatment, subscale scores did not provide evidence of a quick upward shift when compared with scores during the baseline phase.

Changes in trend. The data for P4's Dyadic Consensus Subscale did not show systematic increase in trend over the time period of the study. The initial score for P4 at the first day of baseline was 44. Her final score at the last day of the treatment phase was 48. Her scores ranged from 20 to 58 on the subscale without creating a tendency toward an accelerating slope. Her score of 20 was an outlier score and it fell during the middle of week 14 of the intervention phase, which was week 11 of EFT. P4's data gave evidence of an emerging accelerating trend, which is reversed and then returns to a similar accelerating slope. The data does not show a change in direction that would create a predictable upward slope over the course of the baseline and treatment phases. This graph of P4's Dyadic Consensus Subscale data did not offer evidence of an accelerating slope during this study.

Latency of the change. The period of time between the termination of the baseline phase and the onset of the treatment condition did not coincide with a change in scores for P4 on the Dyadic Consensus Subscale. P4's scores on this subscale formed a very subtle ebb and flow pattern with her initial increase in scores falling on the third week of the intervention phase, the first week of EFT. Although the increase in her scores did not offer evidence of a consistent

change, and ebb and flow pattern may have been emerging. Examination of the latency of change characteristic did not invoke a clear intervention effect.

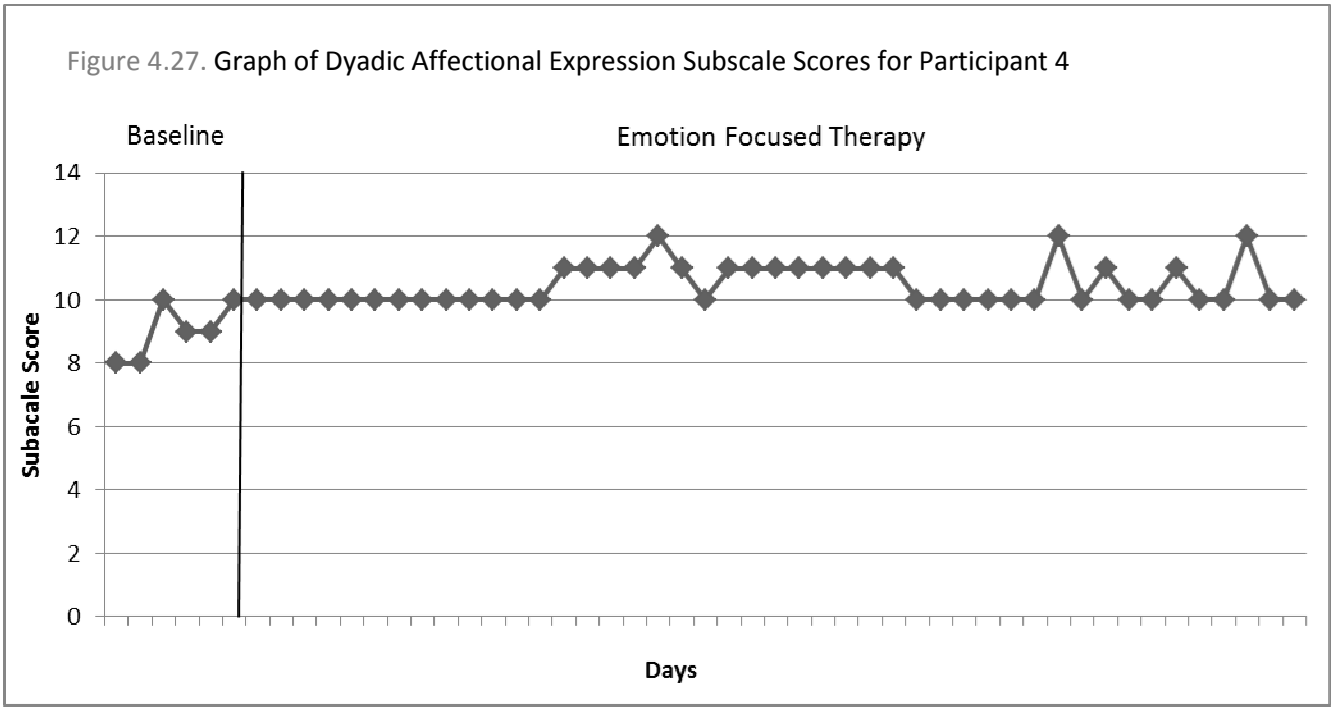

Figure 4.27. P4's Affectional Expression Subscale scores from baseline, including two weeks of the intake and individual sessions, and extending through 13 weeks of EFT treatment.

Changes in mean. Consistent upward shifts in the average score across the phases did not occur on this continuous measure. P4's Affectional Expression Subscale mean score during the baseline phase was 9.00. Her mean score on this subscale did increase to 10.47 during the treatment phase. The magnitude shift in the scores indicated on the graph was not great enough to indicate that P4's Affectional Expression Subscale scores increased in response to the treatment phase of the study. Visual inspection of this pattern suggests that the intervention was not associated with changes that met the requirements of the design as reflected on this criterion.

Changes in level. A shift in scores from the end of the baseline phase to the beginning of the treatment phase did not occur. Scores during the last week of the baseline phase averaged

9.33 with a range of 1. Scores remained steady during the intake, individual sessions, and first week of treatment since P4 obtained a score of 10 at every observation during the three week time period. The Affectional Expression Subscale scores for P4 did not assume a new higher rate from the last week of the baseline phase through the first three weeks of the treatment phase. As the treatment was introduced, subscale scores did not create a quick upward shift.

Changes in trend. The data for P4's Affectional Expression Subscale did not show systematic increase in trend over the time period of the study. The initial score for P4 at the first day of baseline was 8. Her final score at the last day of the treatment phase was 10. Her scores ranged from 8 to 12 on the subscale without creating a tendency toward an accelerating slope. The data does not show a change in direction that would create a predictable upward slope over the course of the baseline and treatment phases. This graph of P4's Affectional Expression Subscale data did not offer evidence of an accelerating slope during this study.

Latency of the change. The period of time between the termination of the baseline phase and the onset of the treatment condition did not coincide with a change in scores for P4 on the Affectional Expression Subscale. P4's scores on this subscale may have been increasing during the last few weeks of the intervention phase, but a pattern of increased change was not well established. Examination of the latency of change characteristic did not invoke a clear intervention effect.

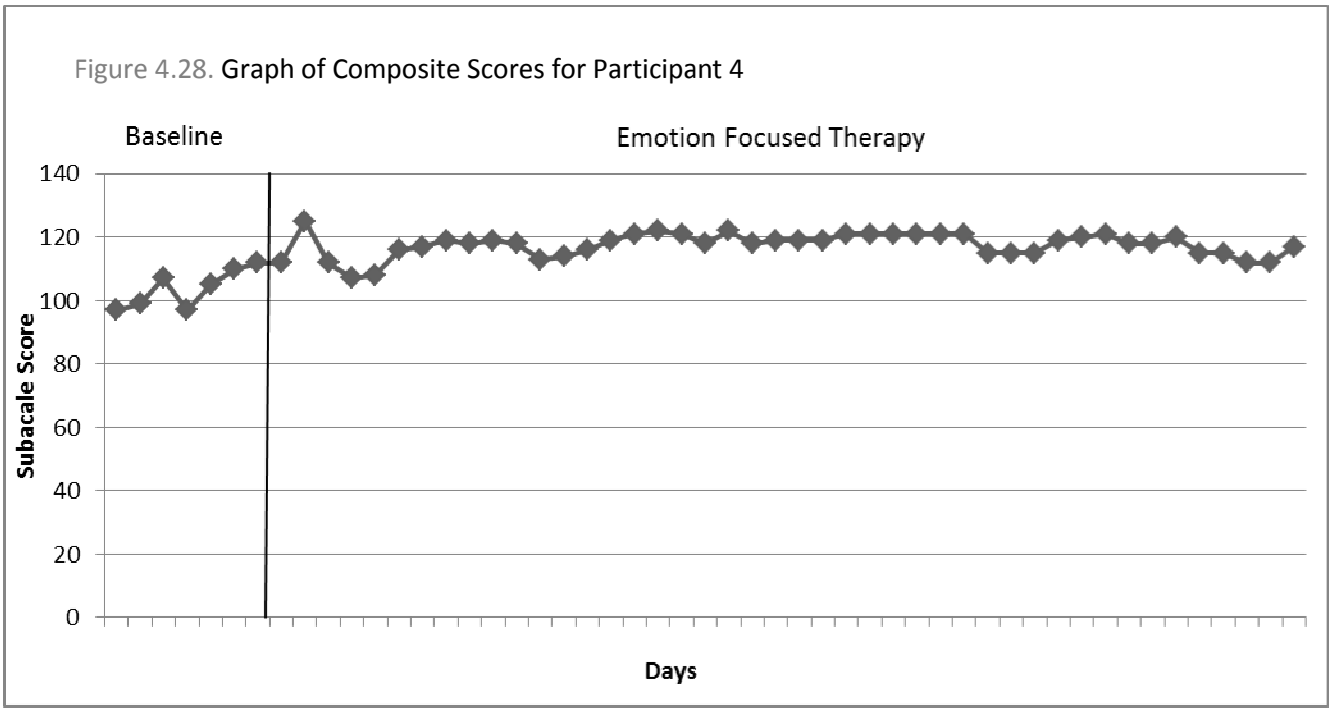

Figure 4.28. P4's Dyadic Adjustment Scale, Composite Scores from baseline, including two weeks of the intake and individual sessions, and extending through 13 weeks of EFT treatment.

Overall pattern. The DAS Composite Score is the sum of the scale's subscale scores. The individual characteristics of the subscales considered above contributed to the judgment of whether the changes in the data were consistent with the requirements of the design. The overall pattern of the Composite Score data indicated overlapping scores across the phases since numerical data points on the graph in the baseline phase do overlap with the data during the treatment phase. Upon inspection of all of P4's DAS subscale characteristics, only one of the criteria for visual inspection was fulfilled. P4's Dyadic Cohesion Subscale mean level increased during the treatment phase over the baseline phase. While this characteristic adds complexity to the overall judgment, the particular effect does not contribute to provide a clear increase in the mean on the Composite Score Graph. The extent of the overall changes in the means, levels, and trends, and the latency of changes did not offer evidence of an overall increase in scores from the

baseline phase to the treatment phase. This graph did not offer evidence that changes in the data are consistent with the requirements of the design. Visual inspection of the graphic display of DAS scores for P4 did not demonstrate that the intervention had been effective.

See Table 4.6 for a succinct review of each participant's subscale and composite mean score during the baseline phase and the treatment phase. The subscale and composite mean score net change between the baseline phase and the treatment phase is also included. The Affectional Expression Subscale is abbreviated Aff. Expression in this table.

Table 4.6

Subscale Means: Dyadic Adjustment Scale

Participant	Subscale	$\bar{x}$ Baseline	$\bar{x}$ Treatment	$\bar{x}$ Net Change
P1	Satisfaction	35.00	33.33	1.67
	Cohesion	18.94	16.07	2.87
	Consensus	45.33	44.40	0.93
	Aff. Expression	7.67	8.11	-0.44
	Composite	26.76	25.48	1.28
P2	Satisfaction	29.22	26.91	2.31
	Cohesion	15.44	14.34	1.10
	Consensus	41.39	36.29	5.10
	Aff. Expression	5.44	4.27	1.17
	Composite	22.87	20.45	2.42
P3	Satisfaction	39.50	40.69	-1.19
	Cohesion	15.50	16.02	-0.52
	Consensus	51.50	53.07	-1.57
	Aff. Expression	10.00	10.04	-0.04
	Composite	29.13	29.96	-0.83
P4	Satisfaction	39.00	42.20	-3.20
	Cohesion	9.00	13.49	-4.49
	Consensus	45.50	51.22	-5.72
	Aff. Expression	9.00	10.47	-1.47
	Composite	25.63	29.35	-3.72

Section Summary

Visual inspection of the DAS Subscale and Composite Score Graphs did not provide evidence that the 15-week EFT treatment increased relational satisfaction within these four participants. Hypothesis 3 stated that even though the baselines for the four participants varied in length with two participants assigned to a two week baseline phase and two participants assigned to a six week baseline phase, the scores would remain stable over the baseline phase, and the four characteristics related to the magnitude and rate of change would increase only after the treatment was introduced, continuing at the predicted pattern throughout the 15-week intervention phase of this study. Visual inspection of the data did not confirm this pattern. Based on the criteria of visual inspection, the changes in data were not consistent with the requirements of the design for all of the participants on all of the DAS Subscales and the Composite Scores.

Chapter Summary

The first research question remains unanswered. Due to the low response rate for the PPI, an exploratory investigation generated preliminary inferences. PPI percentile rank comparisons offered evidence of progress toward an improved quality of recovery from addition following EFT. Positive change was demonstrated since overall substance use related problem severity decreased. Future research aimed to answer this question remains necessary.

Visual inspection was conducted to answer the second and third research questions in this study. The four characteristics of data that are related to the magnitude and to the rate of change across the phases are changes in mean, changes in level, changes in trend, and the latency of the change (Kazdin, 2011). Each of these criterion were examined separately to establish an understanding of how they act in concert in the data set.

The alternate hypothesis for the second research question was confirmed. Attachment insecurity decreased, creating more secure attachment style behavior following EFT. All of the participants reduced in their tendency toward an anxious attachment style and one of the participants also decreased avoidant attachment behavior. EFT demonstrated efficacy in shifting styles toward increased attachment security.

The null hypothesis for the third research question was accepted. The participants did not report increased relationship satisfaction following EFT. Rather, they became more labile in their perceptions of their relationship with their partner. Perhaps additional time in the treatment phase is necessary to evaluate participant perceptions following the creation of stable dyadic patterns.

The next chapter summarizes these findings and describes how these results impact each research hypothesis. A discussion of how the results fit within relevant literature reviewed in chapter two is offered, concluding with implications for future research.

CHAPTER FIVE: SUMMARY, CONCLUSIONS, & RECOMMENDATIONS

This final chapter summarizes the goals, methods, and findings of the current research. Conclusions are described in regard to research hypotheses, along with implications for clinical practice and future research. Limitations of these conclusions and research design are also addressed.

Summary

This study investigated the efficacy of Emotion Focused Therapy (EFT) in enhancing recovery when working with couples in which one of the partners was recovering from substance addiction. The design entailed a two-time data collection method in which the Pre-Post Inventory (PPI) was administered prior to treatment and at the completion of the 15-week treatment. The effect of EFT was reflected in the amount of change in addiction recovery from pretest to posttest intervention assessment. Additionally, a single-case multiple baseline design was used to analyze outcome changes in the participant's attachment style and relational satisfaction prior to treatment and over the duration of the intervention. This method enabled careful monitoring of participant variability and was used to rigorously evaluate the efficacy of EFT with a small number of cases. The purpose of this study was to determine the efficacy of EFT in augmenting recovery from addiction as facilitated through decreasing the participant's insecure attachment styles and increasing their relational satisfaction.

Participant Selection

Participants were recruited from an abstinence-based residential addiction recovery program in the metro Atlanta area. All of the participants had completed the residential phase of treatment program and had transitioned to living back at home while continuing in treatment. Two clients, along with their significant other, participated in the study.

The participants' ages ranged from 38-63 years; both partners of the younger couple (P1 and P2) were aged 38 and the elder couple (P3 and P4) was aged 61 and 63, respectively. All of the participants were Caucasian. P1 and P2 were two women who have been in a romantic cohabitating relationship together for 20 years. The other couple, P3 and P4, had been married to each other for 42 years. P1 was affiliated with the Unitarian Universalist religion, and P2 did not have any religious affiliation. P3 and P4, were both religiously affiliated with Protestant Christianity. See Table 4.1 in Chapter Four for a further breakdown of the age, ethnicity, marital status, and religious affiliation demographics.

Analysis

An exploratory analysis was conducted offering a description of the PPI risk range percentile scores for P1 as compared with the percentile scores from the normative sample, and comparing her pretest and posttest administration results. Since the participant response rate fell above the problematic cutoff, this analysis does not accept or reject the null hypothesis.

Analysis was also conducted with visual inspection by judging the extent of changes in the means, levels, trends, and the latency of change apparent across the phases and determining whether the changes were consistent with the requirements of the multiple-baseline design. The second hypothesis was confirmed. All of the participants decreased their tendency toward attachment insecurity. These participants moved away from experiences of high attachment anxiety distress, such as heightened negative emotion and negative thought processes, and toward a more secure attachment style characterized by a sense of trust in their partner, and an awareness of the self as worthy of love. Contrary to the second hypothesis, only one of the four participants also decreased in a tendency toward an avoidant attachment style. P4 was more able to engage in a meaningful way in her relationship with her husband, while the other three

participants continued to withdraw from interactions with their partner during attempts to regulate negative emotion. These results suggest that an anxious attachment style is more influenced by treatment, specifically EFT, and an avoidant attachment style is more resistant to change. Visual analysis did not support the third hypothesis, since EFT was not shown to increase relational satisfaction. Relationship satisfaction is either not affected by EFT or a time period longer than 15 weeks of therapy is necessary for an indication of positive change. Seriously distressed couples may need to extend EFT over a longer time period, perhaps up to 30 sessions, to facilitate the process of change (Johnson, 2002).

Conclusions

This research produced interesting results that add to a more in-depth understanding of the role that EFT plays in quality of recovery from addition, attachment style, and relational satisfaction. The efficacy of EFT, previously established in the literature (Baucom et al., 1998; Byrne, Carr, & Clark, 2004; Denton, Burleson, Clark, Rodriguez, & Hobbs, 2000; Heatherington, Friedlander & Greenberg, 2005; Snyder & Halford, 2012) was partially supported in this study. This study's demonstration of the effect of EFT on quality of recovery from addiction remains incomplete. The initial offerings indicate movement toward improved quality of recovery with EFT, but this is based on only one participant's data. The literature was supported as evidenced by shifts in attachment style away from insecure attachments and toward secure attachments (Bradley & Furrow, 2004; Johnson, 2002, 2004, 2005, 2007; Johnson, Hunsley, Greenberg, & Schindler, 1999, Johnson & Talitman, 1996). The capricious degree of relationship satisfaction during the final several weeks of EFT may be indicative of movement toward increased relationship satisfaction. The participant's labile scores are consistent with findings in previous literature that improvements followed by regression are inevitable in EFT,

since each partner is challenged to take daunting emotional risks (Johnson, 2002). This creates a pattern of increased vulnerability followed by withdrawal into a more self-protective stance. Following, an in-depth discussion of each research hypothesis and other relevant research provides an interpretation of these findings.

Research Question One

The first research question asks how EFT affects quality of recovery from substance addiction, which remains unanswered. The following section details the preliminary inferences drawn from this exploratory data.

Quality of recovery from addiction. The first alternate research hypothesis states that problems associated with substance use lessen following EFT, which was neither confirmed nor rejected. The Truthfulness Scale demonstrated negative change for all of the participants who completed the inventory at both testing times. The invalid test results for P3 and P4 might indicate that these participants were beginning to become aware of internal and relational turmoil and they were working very hard to remain as kind and polite with each other as they have always been. This pattern of guarded behavior may have then flowed into their distorted test-taking mentality. Interestingly, while P1's score did not fall at or above cutoff score to invalidate her results, her Truthfulness Scale did increase from a status of low risk at pretest to a problematic status at posttest. This reveals P1's increased propensity to deny symptoms and minimize problems following EFT. Perhaps the newly initiated relational intimacy, facilitated by EFT, prompted these participants to retreat to a more guarded presentation in situations outside of the safety fostered in session with their partner. Progress toward increased authenticity may at times give way to insincerity.

P1's scale comparisons offer preliminary evidence toward confirming the research hypothesis. Most of the scales, specifically the Anxiety Scale, Depression Scale, Self Esteem Scale, and Stress Management Scale show positive change. P1's Anxiety Scale demonstrated a reduction in symptoms indicating that she became more able to manage life's everyday concerns. The Depression Scale shows a decrease in P1's manifestation of symptoms of sadness, apathy, and poor concentration. P1's Self Esteem Scale demonstrated positive change. The comparative scores showed that she began to value herself more and appraise herself with increased approval after EFT. Problems related to feeling inadequate were diminishing as her self-confidence lifted. Of note, this same construct is paramount to the sense of worthiness necessary to decrease attachment insecurity related to the anxious dimension. The Stress Management Scale also shows positive change. Following therapy, stress became less of a focal issue for P1. This may indicate that interpersonal conflict decreased and that she experienced an increased sense of safety within her romantic relationship. P1's Distress Scale demonstrated negative change. This indicates that distress was affecting her adjustment more after EFT than it was before EFT. This may be revealing an increased awareness of her moods through the process of therapy. Perhaps as the partner of a substance-abusing individual, P1 was unable to experience her own emotions due to her felt urgency to manage the chaos at home. P1 may have gained awareness of and insight into her symptoms of depression and anxiety creating an increased internal congruence. The Alcohol Scale and Drug Scale provided evidence of no change since P1 was classified as low risk at both testing times. These initial findings offer further support to the literature indicating that the establishment of a secure attachment with a partner may free the individual from the need to seek security in the substance (Hofler & Kooyman, 1996). Recovery is a long, slow, painful, and often complicated process. Comorbidity of psychological illness with both

addiction and early recovery is established in the literature (Grant et al., 2006). Although the analysis provided in this study does not accept or reject the null hypothesis, the exploratory data analysis may generate hypotheses leading to new data collection and further study.

Second Research Question

The second research question asks what the effect of EFT on attachment insecurity with partners in recovery from substance abuse is. The following section summarizes the essence of the data considered to generate an answer for this question.

Attachment style. The second research hypothesis states that the participant's attachment style dimensions begin to shift from insecure to secure during EFT treatment, which was confirmed. Visual inspection of the data indicates that all four participants' tendencies toward an anxious attachment style (i.e., the hyperactivation of attachment behaviors when distressed) decreased, indicating movement toward a secure attachment style. This shift allows for a sense of safety, as minor relational challenges are no longer perceived as major threats to the bond. The participants' dimensions of an avoidant attachment style (i.e., the minimization of attachment behaviors when distressed) demonstrated slower movement toward attachment security with only one of the four participants migrating away from an avoidant attachment style toward a secure attachment style. The demonstration of movement away from an anxious attachment style prior to an indication of a decrease in avoidant attachment style dimensions tracks logically with the EFT model. During stage two work, safety is created by de-escalating the cycle prior to the facilitating reengagement in disowned attachment needs (Johnson, 2004).

The couples' interrelatedness was apparent in their attachment behavior during this study. P2 seemed to have become emotionally dysregulated at about the tenth week of therapy, which was the eighth week of couple EFT following the intake and individual sessions. This happened

at about the same time that P1's insecurities related to her fears of rejection began to subside. Perhaps as P1 relaxed in her in preoccupation with the relationship, P2 struggled to find her space in the changing dynamic. Of intrigue, the initiation of EFT was a time that P3 and P4 were out of sync with each other. P4 seemed to be relieved to begin counseling. She became more regulated as the treatment start date approached and then maintained her attachment security during treatment. P3's manifestations of both styles of attachment insecurity became heightened just prior to beginning EFT then steadily decreased in activation over treatment. P4's new state of emotional regulation may have been difficult for P3 to interpret prior to therapy, thus activating his attachment system. Unfortunately, P4's scores on the Anxious Subscale are a bit suspect since there is so little variation. She may have memorized the inventory rather than reading the items at every testing interval, which reduces the accuracy of her responses. As the couples' patterns of interactions changed, their very deep needs for a safe connection together became apparent. Overall, this research is consistent with literature stating that EFT creates more secure attachment bonds (Johnson, Bradley, Furrow, Lee, Palmer, Tilley, & Woolley, 2005).

Third Research Question

The third research question asks how EFT affects relationship satisfaction for partners in recovery from substance addiction. An answer for this question was developed by extracting meaning from the data, which is summarized in the next section.

Relational satisfaction. The third research hypothesis states that the participants become more satisfied in their romantic relationship during EFT treatment. This was not confirmed since visual inspection of the data indicates that none of the participants' relationship satisfaction increased during EFT. Interestingly, however, the participants' scores tended to become more labile during the final several sessions of EFT. This supports the theoretical line of thinking that

improvements followed by regression are inevitable in EFT, since each partner is challenged to increase transparency and thus take emotional risks (Johnson, 2002). The increased variability in relationship adjustment may be indicative of the emotional storms and crises crucial to the disruption of a well-established negative relational cycle. EFT perturbs the individual's internal working model of self and of others. As the disruption in internal homeostasis occurs, openness to the influence of new experiences emerges (Johnson, 2004). The experienced disequilibrium that ensues necessitates flexibility around one's static internal working models. Individuals are compelled to reconstruct their sense of trust, thus reevaluating their sense of assurance that particularly during times of distress; their partner is available and responsive. Additionally, individuals amend their sense of trust in the self as lovable (Haggerty, Hilsenroth, & Vala-Stewart, 2009). From these changes toward positive internal working models, secure attachment styles emerge.

Safety in the session is established, provoking partners to be vulnerable together. Individuals articulate primary emotions while depending on their loved one for comfort and soothing. Repeated experiences of feeling known and understood by one's partner reinforce and foster secure attachment behavior. Attachment behaviors in which the individual routinely engages to regulate negative emotion are appraised with maladaptive patterns updated in light of new interactions (Bradley et al., 2005). The journey toward establishing a secure attachment is inherently volatile both interpersonally and intrapersonally (Johnson, 2002). This conceptualization of relational satisfaction is germane to literature that concludes that the relational connection process is difficult, lengthy, and fought with vacillating perceptions of satisfaction (Makinen & Johnson, 2006). These findings give rise to the question of what might happen if the study was continued long-term.

Section Summary

To synthesize this information, this study demonstrates the importance of additional research around these questions. The first research question offered preliminary evidence that quality of recovery from addiction may improve with EFT. Attachment insecurity, specifically attachment anxiety, began to shift toward security as shown by confirmation of the second research question in this study. These results suggest that dimensions of an avoidant attachment style give way to attachment security slowly, requiring a more lengthy therapeutic process. This finding is consistent with the EFT model (Johnson, 2004). Relationship satisfaction, addressed by the third research question, became increasingly erratic, possibly offering evidence of movement toward improved relationships as obsolete internal working models are updated. This shift cannot be concluded by this study; however, this inference does represent an attempt to make sense of these findings. These questions remain worthy of future research.

Implications for Practice

For treatment purposes, this study gives valuable insight into clinical elements that might be focused on within a population of individuals recovering from substance addiction along with their partners. A critical aspect of recovering from addiction entails maintaining sobriety. The bond of mutual emotional accessibility and responsiveness, identified as movement toward a secure attachment, serves as a stabilizing form of emotion regulation, thus decreasing the need for a substance to regulate negative emotion (Hofler & Kooyman, 1996). Considering how the current study demonstrated the clinical process of creating movement toward a secure attachment style, it seems worthwhile to implement EFT in addiction recovery programs.

This study offers evidence of the importance of incorporating a kind and supportive therapeutic style while working with clients in recovery from addiction. Individuals recovering

from substance addiction, together with their partners, are struggling to find their balance both internally and within their romantic relationship. This challenge comes at the same time that the partners are in the process of building a foundation for a new lifestyle together. Interventions such as validation, empathic attunement, and reflection serve to deepen the therapist-client alliance during the therapeutic process. When the therapist creates a safe haven for the client during the session, the client is able to engage more authentically and begin to experience emotions that have previously been too painful to process (Johnson, 2002). The establishment of a working alliance, fostered through empathic interactions, is paramount to creating the safety necessary to address core issues related to addiction recovery.

Implications for Research

There are many suggestions for future research that stem from the present study. First, since the effect of EFT on substance use problem severity remains unknown, it would be worthwhile to investigate this research question. Due to the problematic nature of the percentage of data missing from this study related to the consequences of substance abuse, this hypothesis was not able to be tested. It would be helpful to investigate the effect of EFT on quality of substance abuse recovery.

Second, it would be helpful to extend the length of this study. The participants moved toward more secure attachments, as evidenced by decreased aspects of attachment insecurity, but attachment avoidant behaviors demonstrated little improvement. Perhaps with a time extension, avoidant attachment behaviors would also yield to attachment security. Interestingly, most of the participant's relationship satisfaction scale scores became a bit more dispersed during the second half of the treatment phase. Changes in the participant's relationship satisfaction seemed to be related to chance fluctuations rather than becoming reliable and predictable. During the final

weeks of the study, participants may have reached the individuation phase of therapy, recreating themselves as partners in a very different relationship dynamic. It remains unknown whether the couples would settle in to a satisfying relationship together if the treatment had been extended. This ambivalence gives rise to the question of what would happen if the measurement continued beyond the extent of this study. Increasing the length of the treatment would likely allow inferences to be made about effect of EFT on relationship satisfaction.

Third, increased insight into the efficacy of EFT with improving quality of recovery from addiction, developing of a secure attachment style, and increasing relationship satisfaction could be gained by exploring these constructs with a larger sample, creating a sample selected from the population in such a way that the sample closely matches the characteristics of the population. At this point in the current study, generalizations to treatment programs would be hasty. Beneficial future research would ask similar research questions and test the hypotheses with a larger sample size.

Finally, employing a mixed design by integrating qualitative data collection into this quantitative design will create a more robust outcome. The interactive aspect of qualitative research allows for involvement of the individuals who are actively creating as well as experiencing the change process (Creswell, 2003). Interviewing both the clinicians and participants may provide insight as to specifically which aspects of EFT are most meaningful and facilitate change. Since qualitative data collection is an emergent process, data collection might change with the development of a greater understanding of the relationship between quality of recovery from addiction, attachment style, and relationship satisfaction. The use of inductive inquiry to supplement the deductive analysis will allow for a more informed interpretation of the study results.

Limitations of the Study

There are several limitations of this study to be taken into account when considering the previous conclusions. This study used a very small clinical population of Caucasian participants at a private treatment center in a southern metropolitan area. Underrepresented and racial/ethnic minority groups were not included in this research. The treatment program, an out-of-network provider, is financially not an option for many people seeking substance abuse rehabilitation. The clients in this study were all involved in a romantic relationship in which one partner was not struggling with a recent addiction, and both were willing to participate in weekly therapy sessions. This study's sample had specific characteristics that are not representative of the larger population of individuals seeking recovery from addiction. These results, therefore, may not generalize to populations of different ethnicities, socio-economic statuses, settings outside the metropolitan area, characteristics of addiction, and circumstances.

Also, the use of self-report assessments makes the accuracy of the data dependent upon constructs that are often difficult for an individual to self-evaluate, such as attachment processes (Fraley, Waller, & Brennan, 2000). Additionally, self-report data is dependent upon the authenticity of each participant. Two of the participants in this study received invalid assessment scores due to not endorsing the items accurately, responding inconsistently, or endorsing response alternatives that are unlikely. This response style raises concern related to the assessments that did not incorporate a truthfulness scale to assess bias and distortion in the responses. While topics addressed were highly personal, participants were encouraged to be sincere since data was gathered anonymously.

Chapter Summary

This research used a pretest-posttest design combined with a multiple-baseline single-case design to investigate the effect of EFT on quality of recovery from addiction, attachment styles, and relationship satisfaction within a population of clients together with their significant other at an addiction treatment center. Preliminary analysis offered evidence toward decreasing substance abuse related symptom severity. The efficacy of EFT was confirmed as increasing security in attachment styles. Relationship satisfaction became increasingly erratic, possibly offering evidence of revisions in stagnant thought processes, creating movement toward the emergence of healthy relationship dynamics. This information adds to the body of research regarding treatment for individuals who are recovering from addiction, and specifically an understanding of the effect that EFT may have in a recovery treatment program.

Study Summary

This study extends current research on addiction recovery. It expands upon the current research on quality of recovery from addiction and initiated research related to including EFT in an addiction recovery program. This study also provides findings that support the efficacy of EFT in fostering attachment security and creating change in dyadic satisfaction for couples recovering from substance abuse.

The current study reveals that including EFT in an addiction recovery program improves the quality of recovery. Preliminary evidence indicates that EFT improves biological, psychological, and social factors that affect the overall well-being of the partner of the recovering addict, which likely extends to the recovering addict as well. Attachment style security is enhanced with EFT, thus establishing a safe haven within the couple and creating a means to regulate negative emotion as an alternative to substance use toward the same end. EFT seems to incite change in static dyadic satisfaction, perhaps leading to increased relationship

satisfaction once the couple settles into a new homeostasis. This study demonstrates the efficacy of EFT in quality of addiction recovery as related to increased attachment security and a change in dyadic satisfaction.

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Appendix A

Pre-Post Inventory

The Pre-Post Inventory (PPI) was created by Donald Davignon, Ph.D. The contact number for Behavior Data Systems is (800) 231-2401. Information to obtain the PPI can be found at this site: http://www.pre-post-inventory.com/. The assessment can be ordered on two difference systems: (1) Windows diskettes or USB flash drives, or (2) online or internet testing.

Appendix B

Experiences in Close Relationships

The following statements concern how you feel in romantic relationships. We are interested in how you generally experience relationships, not just in what is happening in a current relationship. Respond to each statement by indicating how much you agree or disagree with it. Write the number in the space provided, using the following rating scale:

1	2	3	4	5	6	7
Disagree Strongly			Neutral/ Mixed			Agree Strongly

__1. I prefer not to show a partner how I feel deep down.
__2. I worry about being abandoned.
__3. I am very uncomfortable being close to romantic partners.
__4. I worry a lot about relationships.
__5. Just when my partner starts to get close to me I find myself pulling away.
__6. I worry that romantic partners won't care about me as much as I care about them.
__7. I get uncomfortable when a romantic partner wants to be very close.
__8. I worry a fair amount about losing my partner.
__9. I don't feel comfortable opening up to romantic partners.
__10. I often wish that my partner's feelings for me were as strong as my feelings for him/her.
__11. I want to get close to my partner, but I keep pulling back.
__12. I often want to merge completely with romantic partners, and this sometimes scares them away.
__13. I am nervous when partners get too close to me.
__14. I worry about being alone.
__15. I feel comfortable sharing my private thoughts and feelings with my partner.
__16. My desire to be very close sometimes scares people away.
__17. I try to avoid getting close to my partner.
__18. I need a lot of reassurance that I am loved by my partner.
__19. I find it relatively easy to get close to my partner.
__20. Sometimes I feel that I force my partners to show more feeling, more commitment.
__21. If find it difficult to allow myself to depend on romantic partners.
__22. I do not often worry about being abandoned.
__23. I prefer not to be too close to romantic partners.
__24. If I can't get my partner to show interest in me, I get upset or angry.
__25. I tell my partner just about everything.
__26. I find that my partner(s) don't want to get as close as I would like.
__27. I usually discuss my problems and concerns with my partner.
__28. When I'm not involved in a relationship, I feel somewhat anxious and insecure.
__29. I feel comfortable depending on romantic partners.
__30. I get frustrated when my partner is not around as much as I would like.
__31. I don't mind asking romantic partners for comfort, advice, or help.
__32. I get frustrated if romantic partners are not available when I need them.

__33. It helps to turn to my romantic partner in times of need.
__34. When my romantic partners disapprove of me, I feel really bad about myself.
__35. I turn to my partner for many things, including comfort and reassurance.
__36. I resent it when my partner spends time away from me.

Appendix C

Dyadic Adjustment Scale

The Dyadic Adjustment Scale (DAS) was created by Graham Spanier, Ph.D. The mailing address to contact Multi-Health System is MHS Inc., P.O. Box 950, North Tonawanda, NY 14120-0950. Information to obtain the DAS can be found at this site: http://www.mhs.com/product.aspx?gr=cli&prod=das&id=overview. The assessment is available in a hand-score and a software format.

Appendix D

Informed Consent

Overview

The purpose of this study is to compare the efficacy of Behavioral Cognitive Therapy, Emotion Focused Therapy, and no couple treatment in working with couples in which one of the individuals is in recovery from substance addiction. This study is being conducted as part of a doctoral dissertation for Liberty University; Bonnie Bassett is solely responsible for this study. You are encouraged to ask questions, obtain further information or voice concerns during either assessment session or any time in the future. This can be done now or by calling Bonnie Bassett 404.643.3502 or emailing bonnie_bassett@bellsouth.net.

Description of Procedure

All assessment procedures will be conducted during two sessions. There is a background form and three different assessments pertaining to this study. You will be asked to fill out these forms today and again twelve weeks from now. Please read the instructions carefully and fill out each question to the best of your ability. Your participation is greatly appreciated.

Risks and Inconveniences

Because the assessments you will complete are of a personal nature, if you feel uncomfortable or have any distress during this session, it is your right to stop the assessment process. If you are uncomfortable or distressed afterward, you are encouraged to contact your therapist. Another option is to call the state counseling hotline 800.715.4225.

Benefits

By participating in this study you have an opportunity to help further research and advance knowledge in the area of addiction recovery.

Confidentiality

Information gathered from you on the assessment battery is confidential. Your assessment data will be coded with your packet number and birth date for the purpose of keeping participant information separate and to make sure each person only participates in each assessment battery twice, once prior to couple therapy and once after twelve weeks of therapy. Your individual assessment scores may be viewed by others involved directly in this study, such as someone working on the statistical analysis of this project, but your name will not be included in this data and they will be held to the same level of confidentiality. Your anonymous assessments will be stored in a locked filing cabinet and then shredded after this study is complete. Any publication of this study will only include overall data scores and demographic information.

Voluntary Participation

Participation in this study is voluntary. You may choose not to complete this assessment battery or the assessment battery that will be given to you in twelve weeks. There is no penalty for lack of participation in the study. Your participation in the addiction recovery program will not be affected based on your participation in this study. By signing below, you acknowledge that you have read the above information, have addressed any questions or concerns you may have, and voluntarily agree to complete the background form and three assessments in the packet now and again after twelve weeks of therapy:

_____ _____

Signature of Participant Signature of Researcher

Informed Consent (Participant Copy)

Overview

The purpose of this study is to compare the efficacy of Behavioral Cognitive Therapy, Emotion Focused Therapy, and no couple treatment in working with couples in which one of the individuals is in recovery from substance addiction. This study is being conducted as part of a doctoral dissertation for Liberty University; Bonnie Bassett is solely responsible for this study. You are encouraged to ask questions, obtain further information or voice concerns at any time in the future. This can be done by calling Bonnie Bassett at 404.643.3502 or emailing bonnie_bassett@bellsouth.net.

Description of Procedure

All assessment procedures for this study are conducted during two intervals, once prior to couple therapy and once after twelve weeks of couple therapy. There is no right or wrong answer to the questions you will answer, and your participation is greatly appreciated.

Risks and Inconveniences

Because the assessments you will complete are of a personal nature, if you feel uncomfortable or have any distress during either data gathering session, it is your right to stop the assessment process. If you are uncomfortable or distressed afterward, you are encouraged to contact your therapist. Another option is to call the state counseling hotline 800.715.4225.

Benefits

By participating in this study you have an opportunity to help further research and advance knowledge in the area of addiction recovery.

Confidentiality

Information gathered from you during this session is confidential. Your assessment data will be coded with your packet number and birth date for the purpose of keeping participant information separate and to make sure each person only participates in each assessment interval once. Your individual assessment scores may be viewed by others involved directly in this study, such as someone working on the statistical analysis of this project, but your name is not included in this data and they will be held to the same level of confidentiality. Your anonymous assessments will be stored in a locked filing cabinet and then shredded after this study is complete. Any publication of this study will only include overall data scores and demographic information.

Appendix E

Informed Consent Addendum

CONSENT FORM, ADDENDUM

Emotion Focused Therapy for Couples in Addiction Treatment: The Relationship between Relational Satisfaction, Quality of Recovery, and Attachment Style

Bonnie Bassett
Liberty University
Center for Counseling and Family Studies

You are participating in a research study of Emotion Focused Therapy (EFT) for couples in which one partner has been in treatment for addiction. You were selected as a participant because you will be transitioning into EFT couple therapy with your therapist at MARR. I ask that you read this form and ask any questions you may have before agreeing to the addendum.

This study is being conducted by Bonnie Bassett together with the Center for Counseling and Family Studies at Liberty University.

Background Information:

The purpose of this study is to determine whether EFT is helpful in working with couples in which one of the individuals is in recovery from substance addiction.

Procedures:

As a study participant you are doing the following things:

You are completing two paper-and-pencil assessments three times weekly, on Mondays, Wednesdays, and Fridays, and are asked to continue throughout the entire study. The two assessments take about twenty minutes to complete. Together with your partner, you were assigned to a baseline phase. This phase lasted for either 2, 4, or 6 weeks and consisted simply of completing the assessments three times weekly. At the end of the baseline phase you were asked to complete an additional paper-and-pencil assessment. This assessment will took about thirty minutes to complete. You then began EFT couple counseling, once weekly for an hour, with your therapist. **After fifteen weeks of EFT you will be asked to complete the same computerized assessment again, signifying the termination of this study.** The staff at MARR will continue the study with the established procedures.

This addendum asks that you extend your commitment in EFT from 12 weeks to 15 weeks.

Risks and Benefits of being in the Study:

This research is of minimal risk in that the risk is no greater than the risks of psychotherapy that does not include data collection. Psychotherapy does have some inherent risk, specifically the likely emotional discomfort associated with exploring painful emotions and experiences. Additionally, couple therapy may prompt you and/or your spouse to consider and even initiate divorce, thus evoking potential psychological harm for family members in addition to the couple as well as the legal, social, and economic consequences associated with divorce.

Probable risks are mild, transitory, and primarily psychological in nature. Emotions such as stress and guilt may surface as you recount your painful experience of addiction. The therapist will help you to

regulate your affect and create new meaning in your journey together with the ultimate goal being recovery from marital distress and stability of addiction recovery.

The benefits to participation are:

This study will not directly benefit you as a participant. However, there may be a benefit to society and specifically to the addiction recovery community. This study will be the first known analysis of the efficacy of EFT in contributing to addiction recovery; therefore the findings may be beneficial to the field in providing additional information to the literature of addiction recovery treatment.

Compensation:

You will not receive compensation in exchange for your participation in this study. However, fees for EFT couple therapy will be waived.

Confidentiality:

The records of this study will be kept private. In any sort of report we might publish, we will not include any information that will make it possible to identify a subject. Research records will be stored securely and only researchers will have access to the records.

Beyond the Informed Consent Form, your anonymity will be protected. Each assessment will be numbered and denoted with your birth date. This identification will be used to differentiate each participant while protecting each participant's confidentiality.

The staff at MARR will maintain confidentiality of the data collected in this study. The data will be kept in the same location as the client files which is a locked file cabinet within a locked storage room in the facility. This data will be collected and analyzed only for research purposes pertaining to this study and the extended study. Individual assessment scores will not be shared with any outside parties that are not relevant to this research. The staff at MARR will dispose of the data once the three year time period for maintaining data is up.

Voluntary Nature of the Study:

Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University or with MARR. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

Contacts and Questions:

The researcher conducting this study is Bonnie Bassett. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact me by phone at 404.643.3502 or by email at bonnie_bassett@bellsouth.net. You may also contact my university advisor, Dr. David Jenkins by phone at (434) 592-4045 or by email at djenkins@liberty.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher(s), **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd, Suite 1837, Lynchburg, VA 24502 or email at irb@liberty.edu.

You will be given a copy of this information to keep for your records.

Statement of Consent:

I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

Signature: _____ Date: _____

Signature of Investigator: _____ Date: _____

IRB Code Numbers: 1508.020513
IRB Expiration Date: February 5, 2014

Appendix F

Background Information

Today's Date: _____

Age: _____ Date of Birth: ___-___-____ Gender: ____male ____ female

Ethnicity: ___ African-American ___ Asian ___ Caucasian ___ Hispanic ___ Other: _____

Relationship status: ___ single/never married ___ married ___ cohabitating _____separated ___ divorced ___ widowed

Are you currently in a romantic relationship? ___ yes ___ no
If yes, how long have you been in this relationship? ___ several days ___several weeks ___several months ___ years

Have you recently experienced the end of a romantic relationship? ___ yes ___ no
If yes, how long has it been since the end of your last relationship? ___ several days ___several weeks ___several months___ years

Have you participated in couple counseling/therapy in the past? ___ yes ___ no

Have you ever received a mental health diagnosis from a counselor or mental health professional? ___ yes ___ no

If yes, what was the diagnosis(es)?_____

Are you currently taking any medications? ___ yes ___ no

If yes, please list all medications: _____

Do you have a religious affiliation? ____ yes ____ no

If yes, what is your primary religion? ___ Christianity/Protestant ___Christianity/Catholic ___Hinduism ___ Islam ___ Judaism ___ Other: _____

Are you an abuse survivor? ___ yes ___ no

If yes, please indicate which type(s) ___ emotional ___ physical ___ sexual

Are you a trauma survivor? ___ yes ___ no

If yes, please briefly describe the traumatic experience: