A Two-Year Longitudinal Study of Emotionally Focused Therapy for Couples: Maintenance and Predictors of Relationship Change

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General Abstract

Emotionally Focused Therapy for Couples (EFT) is an evidence-based couple therapy with excellent outcomes (Johnson, Hunsley, Greenberg & Schindler, 1999) and strong results in follow-up (Cloutier, Manion, Walker & Johnson, 2002). Although EFT strives to create lasting change for couples through the creation of secure attachment bonds, research has had yet to clarify how couples maintain changes across time. According to EFT, relationship satisfaction improvements are associated with and arise from the creation of secure attachment bonds that allow couples to turn to each other in times of stress, fostering resilience in the relationship across time (Johnson & Whiffen, 1999). One goal of this study was to test this assumption by modeling the trajectory of how relationship satisfaction and self-reported and behaviourally measured attachment security progress during the course of two years after finishing therapy. The trajectory of relationship satisfaction, and relationship specific self-reported and behaviourally measured attachment were modeled across pre-therapy, post-therapy and 6, 12, 18 and 24 months follow-up in a sample of 32 couples who received an average of 21 sessions of EFT. Results demonstrated a significant growth pattern using Hierarchical Linear Modeling (HLM: Raudenbush & Bryk, 2002) demonstrating increases in relationship satisfaction and secure base behaviour, and decreases in attachment anxiety from pre to post therapy that levelled off during the follow-up period. Although these results demonstrated strong EFT outcomes across follow-up, there was variability in outcomes. A second goal of this study was to investigate predictors of relationship satisfaction across follow-up. Results indicated that decreases in relationship specific attachment anxiety and avoidance, and increases in trust as well as depth of experiencing during therapy predicted higher relationship satisfaction across follow-up.

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Statement of Co-Authorship

The two manuscripts of this dissertation were prepared in collaboration with my thesis supervisor. I am the primary author and Dr. Sue Johnson is the second author. As the primary author on the two manuscripts in this dissertation I was responsible for the conceptualization of the project, formulation of the research questions and the development of the methods. I was responsible for the statistical analyses, interpretation of the results and preparation of the manuscripts. Dr. Johnson provided guidance throughout the various stages of the project and Dr. George Tasca provided guidance on the statistical analyses. Dr. Marie-France Lafontaine provided guidance and facilitated training in coding the behavioural interaction task used in the first manuscript. These co-authors are listed on the article title pages.

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General Introduction

Developing relationships with close others is a universal part of our human experience maintained throughout the lifespan. Many adults fulfill the need for an attachment within the context of a committed romantic relationship. With the development of a committed romantic bond comes the hope and expectation that the love, affection, and security found in this relationship will last a lifetime. Unfortunately, we know that many of these relationships ultimately succumb to distress and eventual dissolution in a matter of years, with a myriad of negative effects on individual health and wellbeing (Halford & Snyder, 2012). Emotionally Focused Therapy for Couples (EFT) is an evidence based treatment designed to help romantic partners attain a more secure attachment bond in the relationship, thus promoting stability in relationship satisfaction over the long term (Johnson, 2004). EFT aims to help couples foster attachment security by changing the negative cycles of interaction that underlie insecure attachment patterns, and by creating a more secure emotional connection between partners. EFT is based in a social-cognitive view of attachment theory, and conceptualizes the negative cycles, intense negative affect and lack of emotional connection of distressed couples as an insecure attachment bond (Johnson, 2004; Johnson & Greenman, 2006; Johnson & Whiffen, 1999). In the attachment literature, an insecure attachment bond has been associated with lower relationship satisfaction, and an impaired ability to provide responsive care-giving and articulate needs for support in romantic relationships (Collins & Ford, 2011; Davila & Bradbury, 2001; Simpson, Rholes, Orina & Grich, 2002). The goal of EFT is to help couples de-escalate self-sustaining negative interaction cycles that maintain distress, and help them re-connect with their primary, underlying attachment needs and longings in order to create a new self-sustaining

cycle of reciprocal care and responsiveness (Johnson, 2004). According to attachment theory in the context of EFT (Johnson & Whiffen, 1999), this new cycle should be resilient to the passage of time and the stress of everyday life as the couple engages in patterns of secure responsiveness and turns *to* each other, rather than *away* from each other to cope in the midst of stress, thus building rather than eroding the bond.

Research has demonstrated that EFT yields excellent relationship satisfaction outcomes for couples and good maintenance of these outcomes (Johnson, Hunsley, Greenberg & Schindler, 1999; Halchuk, Makinen & Johnson, 2010). EFT has also demonstrated further improvements for couples in terms of relationship satisfaction at follow-up, even for couples experiencing a stressful life event, such as the illness of a child (Cloutier, Manion, Walker & Johnson, 2002). According to EFT theory, it is because of the development of a more secure bond that improvements in relationship satisfaction are achieved and maintained (Johnson & Whiffen, 1999). New research has also provided evidence that couples who engage in EFT demonstrate session-by-session decreases in self-reported relationship specific attachment avoidance and attachment anxiety for those who completed key change events. Furthermore, these decreases were associated with increases in relationship satisfaction across EFT therapy sessions. These researchers also reported increases in attachment secure base behaviour from pre to post therapy (Burgess-Moser, Johnson, Dalgleish, Tasca, Lafontaine, & Wiebe, 2014).

The primary purpose of the present research was to investigate the long-term trajectories of relationship functioning in terms of relationship satisfaction, relationship-specific attachment anxiety and avoidance and secure base behaviour across two years following completion of Emotionally Focused Therapy for couples (Article 1). Predictors of

long-term relationship satisfaction outcomes will also be investigated, including couples' characteristics before beginning therapy, such as age, relationship length, and initial level of trust. Changes in therapy will also be investigated as predictors of relationship satisfaction across time, including changes in attachment anxiety and avoidance, emotional control, trust, depth of experiencing, and the achievement of a significant change event in therapy, the blamer-softening event (Article 2).

Attachment Theory

Attachment theory, the foundational theory of EFT, conjectures that every person has an innate need to develop a close attachment bond with at least one significant person (Simpson & Belsky, 2008); for many adults, the primary attachment bond occurs within a significant romantic relationship. John Bowlby initially formulated attachment theory throughout three seminal volumes entitled "Attachment and Loss", relating to his own and others' observations of the adverse effects on young children when they are separated from their main attachment figure for long periods of time or indefinitely (Bowlby, 1969, 1973 and 1980).

Bowlby (1969) noted that infants express attachment needs through maintaining proximity, signalling distress at separation, and using the attachment figure as a safe haven of comfort and as a secure base from which to confidently explore the environment. He emphasized that these functions promote survival by maintaining close proximity to someone who is able to offer care (Bowlby, 1979). Bowlby (1988) theorized that every individual develops a dynamic mental model of attachment, which includes the expectations the individual has of their own self as worthy of care, and expectations for the level of care they

might receive from the other person within an attachment bond, which leads to individual differences in patterns of attachment behaviour and affect. He emphasized that the adaptive benefit for attachment bonds and the formulation of working models extends throughout the lifespan.

Attachment behaviour in Infants. Drawing on observations of infant behaviour when separated from their caregivers, Bowlby (1969) summarized his ideas about attachment in infants and how early experiences in relationships can shape the way infants and children react in the presence and absence of attachment figures. Mary Ainsworth and her colleagues were the first to classify infants' behaviours according to observed attachment patterns (Ainsworth, Blehar, Waters & Wall, 1978). This work resulted in the ability to distinguish between different types of attachment patterns in infants based on how they reacted to being reunified with their mother after being left in a room with a stranger for a short period of time. Ainsworth and her colleagues found that the way infants responded to this "strange situation" could be classified in one of four different ways.

The majority of the infants demonstrated a style of attachment indicative of security. Specifically, these infants signalled distress when their mother left, were easily comforted when she returned, and subsequently were able to leave her side confidently to explore the unfamiliar environment, occasionally checking for her presence. A second group of the infants signalled intense distress at their mother's departure, were not easily comforted upon her return, and did not return to exploring the environment – indicating an "anxious-ambivalent" style of attachment. A third group of infants appeared undisturbed by their mother's absence, and did not acknowledge her presence upon her return, indicating an "avoidant" attachment style. Later observers noted that not all infants were easily

"classifiable" into the patterns noted in the original sample in the first strange situation study, noting that these infants did not respond to their mother upon reunion in any organized way, often using a combination of approach and withdraw behaviours (Main & Solomon, 1990). These infants were classified as "disorganized" in addition to their primary attachment classification. It was theorized that these "disorganized" ways of responding on reunion were related to frightening parenting behaviours (Hesse & Main, 2000). Preliminary research has found links between caregiver behaviour and infant attachment (Belsky & Pasco Fearon, 2008). Maternal sensitivity has been associated with secure attachment (Pederson & Moran, 1996; Braungart-Reiker et al., 2001). In contrast, insecure-avoidant attachment is associated with intrusive controlling interactions with the caregiver, and insecure-anxious attachment is associated with unresponsiveness on the part of the attachment figure (Behrens, Parker & Haltigan, 2011; Belsky et al., 1984; Vondra, Shaw & Kevinides, 1995). Infants classified as disorganized have often been found to have been raised in environments characterized by abuse, where the caregiver is simultaneously a source of distress and the only source of care (Lyons-Ruth & Jacobvitz, 2008).

Internal working models. According to attachment theorists, we develop working models of attachment according to the responsiveness of attachment figures (Bowlby, 1988; Bretherton & Munholland, 2008; Mikulincer & Shaver, 2007). These working models represent expectations of self and other in a close attachment bond, and provide a procedural map for how to engage with others to regulate emotion (Mikulincer & Shaver, 2008). If a working model is relatively secure, the individual trusts that a supportive attachment figure will be emotionally available and responsive (Bretherton & Munholland, 2008). A person with a secure internal working model has a sense of self as lovable and competent. He or she

is confidently able to seek out the attachment figure in times of need, expecting that their attachment signals will be responded to. The attachment figure becomes a safe haven the person can turn to when distressed in order to regulate emotion, and offers a secure base from which the person can explore the world and pursue their own goals (Feeney, 2004). If a person's working model is insecure, they will feel a sense of insecurity about the relationship, and lack confidence that their attachment figure will be available and able to help them when they are in need, thus leading to a pervasive sense of distress (Mikulincer & Shaver, 2008). Bowlby proposed that children develop internal working models based on day-to-day experiences with attachment figures and that these internal working models inform beliefs about self as lovable and expectations of being responded to with love and care (Bowlby 1969/1973). In this way, the child's internal working model is specific to the relationship and continually reinforced within the relationship (Bretherton & Munholland, 2008). However, he also noted that over time, the internal working models of the child within specific attachment relationships become generalized: "the pattern becomes increasingly a property of the child himself" (Bowlby, 1988, p. 127). Research on internal working models in adults began with the development of the Adult Attachment Interview (AAI), which is designed to capture 'state of mind with respect to attachment' in adults (George, Kaplan & Main, 1984, 1996). Although the AAI involves the coding of an interview in which the interviewee is asked to provide a narrative of their relationship with their childhood attachment figures, it was developed to capture general attachment representations rather than attachment in specific relationships past or present (Bretherton & Munholland, 2008). Internal working models are continually informed by experiences in the context of specific attachment relationships whereby new experiences in the relationship

inform the development of new expectations of responsiveness (Bretherton & Munholland, 2008).

Attachment Through the Lifespan. Bowlby (1988) and Ainsworth (1989) expanded attachment theory in terms of how attachment is expressed across the lifespan. Bowlby (1988) proposed the idea of a "secure base" in the context of attachment in relationships throughout the lifespan, noting that "from the cradle to the grave" (p. 62), we are happiest when we have an attachment figure who provides a secure base from whose side we can leave temporarily to pursue our own interests. Ainsworth (1989) discussed the function of attachment throughout the lifespan in terms of romantic relationships, family ties and friendships. Specifically, she held that attachment bonds are not specific to parent-child relationships, but that these initial attachment bonds are the foundational attachment experiences that feed into enduring working models of attachment, which in turn affect the way in which individuals approach attachment bonds throughout the lifespan, regulate affect and cope with stress. Bowlby (1988) noted that often attachment representations persist, becoming a cycle whereby behaviours elicited by attachment insecurity (i.e., clinging, keeping distance) continue to elicit responses from caregivers that confirm the negative expectations of attachment relationships held in the child's internal working model. Initially, patterns of attachment are the product of the relationship, but as the child grows older, these representations may become part of the child's "personality" (Bowlby, 1988). Bowlby (1973) proposed the "prototype hypothesis", which is that attachment representations formed in childhood serve as the basis of understanding about attachment that would be brought into relationships throughout the lifespan. Consistent with this hypothesis, general attachment representations have been found to be associated with relationship functioning in adult

romantic relationships (Treboux, Crowell & Waters, 2004). However, both Bowlby and Ainsworth emphasized that these patterns are not written in stone. Ainsworth theorized that affectional bonds formed in adulthood could create a new climate for attachment experiences, which would in turn impact the person's internal working model (Ainsworth, 1989).

Although there is debate as to whether attachment representations are relatively stable or flexible throughout the lifespan, attachment theorists agree that internal working models are shaped by experiences in close relationships whether they are in infancy, childhood, or in adult relationships (Bretherton & Munholland, 2008; Zeifman & Hazan, 2008; Feeney, 2008). If a person feels safe, loved and responded to in their primary attachment relationship, they are likely to develop a secure internal working model, which allows the person to flexibly and adaptively regulate affect, cope with stress and approach the world with confidence, even in the temporary absence of their partner (Mikulincer & Shaver, 2007; Davila & Kashy, 2009). Internal working models inform a person's attachment style, which refers to habitual ways of being in attachment relationships, including expectations of the attachment figure to be available and responsive in times of need, and expectations of one's own ability to elicit a response from the attachment figure accompanied by related patterns of affect and habitual attachment signaling behaviours (Mikulincer & Shaver, 2007).

Attachment in Adults

The concept of adult attachment originated independently from two distinct schools of thought in the mid to late 1980's, the developmental and social-cognitive perspectives. Although, these separate approaches both agree on the basic tenets of attachment theory, they

differ to the extent that attachment represents a stable trait-like construct developed in infancy (the developmental perspective; Main, Kaplan & Cassidy, 1985) versus a state-like construct that may fluctuate depending on the relational context (the social-cognitive perspective; Hazan & Shaver, 1987).

From a developmental perspective, researchers were interested in how attachment working models developed in childhood impact adult attachment functioning in relation to parents and their own children (Main, Kaplan & Cassidy, 1985). The focus here was on state of mind in regard to attachment, which was thought to be largely unconscious. The Adult Attachment Interview (AAI; George, Kaplan & Main, 1984/1996) was developed from this perspective to classify adults in terms of their state of mind regarding attachment in relation to the original categories found by Ainsworth and colleagues (1978) by asking individuals to talk about their relationships with their parents and rating their responses. According to the AAI classification system, those whose narrative is coherent with a non-defensive, balanced view of parents represents a secure state of mind in regards to attachment, those with a narrative that lacks specific relationship memories and idealizes parents represents a dismissive classification, and a narrative that lacks coherence and includes unresolved anger or ambivalence represents a preoccupied classification (Main, Hesse & Goldwyn, 2008). Disorganized attachment as rated on the AAI in mothers tends to predict a disorganized attachment classification in infants (Hesse & Main, 2000).

From the social-cognitive perspective, Hazan & Shaver (1987) were the first to investigate romantic love as an attachment process, drawing parallels between previous work regarding attachment between infants and mothers in the realm of couple relationship functioning, which began as an investigation into adult loneliness. They were the first to

describe adult attachment styles, secure, anxious and avoidant, in relationships as arising from internal working models described by Bowlby (1988). This work set into motion a new field of study, that of adult romantic attachment. Adult attachment has been conceptualized as a system analogous to infant-mother attachment involving proximity maintenance, safe haven and secure base and consists of cognitive, affective and behavioural components (Hazan & Shaver, 1987). Furthermore, adult attachment has been conceptualized in terms of expectations of self (worthiness of care) and other (likelihood of responsiveness).

Bartholomew & Horowitz (1991) investigated the interrelatedness between attachment working models and models of self and other, proposing that the level of confidence in both the partner and the self that is found in secure attachment relationships is possible because of a relatively stable cognitive representation, or working model, of the attachment bond as secure (Bartholomew & Horowitz, 1991). They found that views of self and other were associated with attachment working models in a four-category model. Specifically, a preoccupied attachment style involves negative representations of self and positive representations of others, leading to the tendency to cling to one's partner out of fear of abandonment. In contrast a dismissing avoidant attachment style involves negative representations of others, and positive representations of self. This leads to views of the self as independent and self-sufficient and others as untrustworthy. Bartholomew and Horowitz (1991) also proposed a new fourth attachment style, namely fearful avoidance. This style of attachment is characterized by negative representation of the self as well as negative representation of one's attachment figure such that there is a fear of abandonment due to a sense of the unworthiness of self in combination with a view that their partner may be untrustworthy.

Later, these categorical attachment styles were refined by the dimensional view of attachment involving the dimensions of attachment anxiety relating to views of self and attachment avoidance relating to views of other. Specifically, these dimensions map on to the four-category model such that high levels of attachment anxiety characterize the preoccupied style, high levels of attachment avoidance characterize the dismissing style, and the fearful style involves high levels of attachment anxiety and attachment avoidance (Griffin & Bartholomew, 1994).

Attachment and Affect. Affective functioning in relationships is intricately tied to patterns of attachment. Bowlby (1969) proposed that attachment related affect is central aspect of the appraisal process whereby the situation is assessed and deemed to be either threatening or safe and whether proximity seeking is necessary. Similarly, researchers have argued that adult attachment theory at its core is about the intense, complex emotions of love relationships, and how one responds to their partner with these feelings (Pietromonaco & Feldman-Barrett, 2000; Schore, 2000). These authors argue that affect is not simply impacted by working models but is rather a core part of the attachment process and plays a significant role in the organization of attachment working models (Pietromonaco & Feldman-Barrett, 2000).

Indeed, a prominent feature of the attachment system is the intensity of emotion that is involved depending on the conditions of the relationship between the individual and their attachment figure. Bowlby stated, “No form of behaviour is accompanied by stronger feeling than is attachment behaviour” (Bowlby, 1969, p. 209). If the relationship serves as a safe haven and secure base, there is joyfulness and feelings of security, whereas if the relationship is threatened feelings of insecurity are likely to be present such as anger, jealousy and fear,

which drive protest behaviour. In children protesting behaviour exhibits as clinging, crying, and calling. In adults protesting behaviour may involve criticizing, blaming, or compulsive reassurance seeking. Relationship loss is accompanied by sorrow and detachment (Bowlby, 1969). These emotional experiences and expressions are triggered by different kinds of experiences and expressed differently depending on stage of development, but the role of intense affect in the attachment system remains central across the lifespan. In adults, distressing emotions and protesting behaviours often occur due to perceived emotional separation, and may involve blaming the partner for the separation as a plea for reconnection.

Researchers have found particular patterns of experiencing and expressing emotion to be closely associated with attachment styles in adults. Searle and Meara, (1999) studied emotional experience in relation to attachment styles (using the classification system by Bartholomew & Horowitz, 1991), evaluating self-reported emotional attention, expressiveness and intensity. They found that those categorized as secure endorsed high emotional expressiveness and low intensity and attention to emotion, those categorized as preoccupied indicated high attention to emotion, greater emotional intensity and a great deal of expressiveness. Those categorized as dismissive scored low on all three aspects of emotional experience, and those who were categorized as fearful scored high in attention to emotion and intensity of emotion but low in expressiveness. These results suggest that people with a secure attachment style are able to regulate and express emotions without the need to be hypervigilant to or avoid emotional experiencing. Those who are preoccupied express emotion readily with high intensity and also demonstrate hypervigilance to their emotional experience. Avoidantly attached individuals, on the other hand, tend to dismiss

their emotional experience and fearfully attached individuals tend to be hypervigilant to their emotional experience without the ability to express their emotional needs.

Alford, Lyddon and Schreiber (2006) used the Self Confrontation Method (SCM; Hermans and Hermans-Jansen, 1995) to examine a classification of latent emotional organization in relation to attachment styles. In the SCM, participants are asked to recall significant life events, and construct a valuation statement that they feel best represents each of the identified life events. They are then asked to rate each valuation statement according to a list of 16 affective terms. The affective terms are categorized as follows: positive affect, negative affect, affect directed toward self-enhancement, or affect directed toward social connectedness. They found that those classified as securely attached endorsed significantly more positive affective terms, whereas those classified as fearful reported significantly less. Those classified as secure or dismissing endorsed a higher number of terms related to self-enhancement as compared to those classified as fearful. In terms of social connectedness, those classified as dismissing endorsed significantly fewer affect terms related to social-connectedness in comparison with the other attachment classifications. Taken together, these results seem to suggest that a secure attachment style fosters socially connected emotional experiences that are positive and maintain a positive sense of self. In contrast, a dissmissing attachment style is associated with a limited sense of socially connected emotion, but a maintained emotionally positive sense of self. Those with a fearful attachment style did not seem to experience as much of a positive sense of self emotionally in comparison with the other attachment styles and experienced less positive emotion overall.

Emotional control is also an important component of affective functioning in couple relationships. Feeny (1995) found that couples in which both partners were categorized as

insecurely attached on a self-report attachment measure endorsed the highest level of self-reported emotional control. Specifically, these couples tended to control anger more than sadness and sadness to a greater extent than anxiety, even when the researchers controlled for frequency of negative emotion. The same pattern was found regarding partners' ratings of the other's emotional control. Furthermore, comfort with closeness was related to lower emotional control of all three negative emotions for female partners and lower control of anxiety and sadness for male partners. These results suggest that feeling comfortable with closeness in relationships is associated with comfort in expressing emotions in those relationships, particularly softer distressing emotions in men and across all forms of distressing emotion in women.

In a study of attachment, emotion and relational memories, Mikulincer & Orbach (1995) asked participants to identify and recall as vividly as possible and describe memories from childhood associated with four particular emotions (anger, sadness, anxiety, happiness) and were then asked to rate the extent to which they felt each of the following emotions as they recalled the memory: angry, sad, embarrassed, fearful, anxious, disgusted, ashamed, depressed, surprised, happy. They also tracked latency time of memory recall in order to measure accessibility of memories for each memory type. They found a signficant interaction between emotion type, attachment style and latency time. Those classified as avoidant had the highest latency times for anxiety and sadness and those classified as ambivelant had the lowest. Those classified as avoidant did not show any difference in latency time across the different memory types, but secure people took longer to recall memories of anger and sadness than happiness and anxiety, and ambivalent people took longer to recall happy memories than negative ones. They found that generally, those classified as ambivalent rated

the memories as more emotionally intense, followed by secure people, with avoidant people rating memories as less emotionally intense. Secure and ambivalant people tended to give higher ratings to emotions consistent with the evoked memories compared to avoidant people. However, those classified as ambivalent rated unrelated negative emotions significantly more intensely as well.

Taken together, these results are informative in that they outline differences of emotional experience relating to patterns of attachment security and insecurity. It appears that those who endorse greater security are able to be emotionally expressive without being consumed by their affect. Also those with greater attachment security tend to experience higher levels of positive emotion, experience emotion that is socially-directed to a greater extent, and report minimal levels of emotional control, with experienced emotions being closely targeted to the situation.

Attachment Behaviour. Attachment styles guide specific behavioural sequelea within romantic couple relationships. According to Bowlby (1988), the attachment behavioural system of proximity seeking to a close attachment figure in times of stress is a characteristic aspect of attachment throughout the lifespan. Unlike the attachment between infants and children with their caregivers, the attachment relationship between adults is a mutual relationship where the attachment system is engaged in both partners and both partners play a supportive/caregiving role. Research has demonstrated that care-seeking attachment behaviours and caregiving supportive behaviours show theoretically consistent associations with attachment styles (Feeney, 2008; Davila & Kashy, 2009; Mikulincer & Shaver, 2007).

Research has shown that the care seeking and care giving function of the attachment relationship tends to be compromised in individuals who have relatively high levels of attachment anxiety and attachment avoidance. Specifically, Collins and Feeney (2004) observed couples interacting in the minutes before one partner was about to give a speech (a primed stressful situation). People with high levels of attachment anxiety tended to be rated relatively poor at giving support while those who were high in attachment avoidance tended to be poor at seeking support from their attachment figure. Furthermore, individuals with high attachment anxiety were less likely to be satisfied with the support they receive from their attachment figure (Collins & Feeney, 2004). Simpson, Rholes and Nelligan (1992) studied the careseeking behaviours of women and the caregiving behaviours of their male partners in relation to a threatening situation in order to prime attachment behaviours related to threat – as, in attachment theory, the attachment system is understood as being activated by felt threat. They found that for women classified as securely attached, greater anxiety was related to more care seeking behaviour, whereas for avoidant women, greater anxiety about the task predicted less care seeking behaviour. That is, when the attachment system was activated in a stressful situation, secure women were better able to turn to their partner as a safe haven, whereas highly avoidant women were less likely to do so. Likewise, men with high attachment avoidance did not tend to increase the amount of support given to their partners when they expressed anxiety about the task, whereas securely attached men were able to adjust their support giving to act as a safe haven when their partners expressed anxiety. Additionally, secure women were better able to reciprocate their partner's physical affection. This study accounts for the effect of attachment on a person's ability to give and seek support in a close relationship when the attachment system is activated by threat. Secure

attachment has been related to more attuned and responsive support behaviours as well as an increased sense of feeling supported by one's partner (Davila & Kashy, 2009).

In order to further understand the behavioural basis of attachment, Crowell, Pan, Gao, Treboux and Waters (1998) developed a behavioural coding system based in attachment theory, of careseeking and caregiving in couple interactions called the Secure Base Scoring System. The SBSS was developed to be analogous to the infant-parent attachment rating developed by Ainsworth, Blehar, Waters and Wall (1978) and views secure base use and support, or careseeking and caregiving as attachment behaviours. Specifically, couples are asked to participate in a 15-minute discussion about a disagreement in the relationship. Couples are rated on four subscales of secure base use including strength of the initial distress/concern signal, signal maintenance, approach, and the ability to be comforted, and four subscales of secure base support including interest, recognition of the partner's distress, interpretation of the distress, and responsiveness. This measure of attachment behaviour has been found to be related closely with attachment representations as measured by the AAI, as well as quality of relationship functioning (Crowell, Treboux, Gao, Fyffe, Pan & Watters, 2002).

Conceptualizing Relationship Distress in Couple Relationships

Varying perspectives on the conceptualization of distress within couple relationships has led to varying approaches to treatment in couple therapy. Throughout his work, Gottman (1993; Cartensen, Gottman & Levenson, 1995; Gottman & Levenson, 1999) has emphasized that high levels of the expression of negative emotion is a primary characteristic of relationship distress, and that an imbalance of negative to positive emotion coupled with greater criticism, defensiveness, contempt and stonewalling were the main predictors of

divorce (Gottman & Levenson, 2002). Cartensen, Gottman and Levenson (1995) found that during an interaction task, couples from unhappy relationships expressed lower levels of positive emotion and higher levels of negative emotion than those in happy relationships.

Gottman (1993) conceptualized relationship distress as an escalation from an initial imbalance between positive and negative communications such that the negative outweighs the positive. This then leads to a flooding of negative emotion. Over time, the instances of flooding emotion become paired with a pattern of cognitions and emotions that become entrenched and difficult to disconfirm due to confirmation biases. Gottman (1993) described the pattern of negative emotions consistently observed in distressed couples: one partner takes the position of righteous indignation (including sadness, anger and contempt) and the other feels hurt and attacked (victimhood, fear, worry). Specifically, as the couple interacts, each partner will be on guard for cues that would confirm their position, and any positive cues to the contrary would be attributed to external situational based factors. This sets in motion a distance and isolation cascade such that the tendency is to escape the overwhelming negative emotion of the relationship, and thus withdraw from the relationship.

Research has also shown that distressed relationships are typically characterized by a demand/withdraw pattern of interaction in which one partner pursues with criticisms and demands and the other partner withdraws to avoid these demands (Gottman & Levenson, 1999; Caughlin, 2002). The most common pattern, in which the female partner demands and the male partner withdraws, tends to be more strongly associated with relationship distress than the inverse pattern. Gottman and Levenson (1999) found that lower levels of observed positive affect during a neutral interaction and “unrequited” bids for interest, significantly predicted the demand/withdraw pattern during a conflict interaction.

The emotional expressions in negative interaction patterns identified by Gottman and colleagues can be understood from an attachment perspective. Emotions triggered when the attachment system is activated (during times of stress or perceived distance in the relationship, analogous to infant and child attachment) seem to map on to the patterns observed by Gottman and colleagues (i.e., Gottman, 1993; Cartensen, Gottman & Levenson, 1995; Gottman & Levenson, 1999). The pursuer in the pattern typically expresses intense levels of distress and anger characterized by blame, criticism and contempt, thereby hyperactivating their attachment signals and protesting the distance in the relationship. In response, the withdrawing partner expresses less intense affect and withdraws emotionally, consistent with de-activation strategies of attachment (Mikulincer & Shaver, 2005).

From an emotionally focused perspective distress is viewed as the consequence of a negative pattern of interaction between the couple that has been sparked by unmet attachment needs for love, acceptance and care (Burgess Moser & Johnson, 2007). In response to unmet attachment needs, one partner often tends to pursue in order to strive to have their needs met and becomes demanding and critical, whereas the other partner often tends to withdraw out of defensiveness and hopelessness, thus setting in motion the pursue/withdraw pattern of relationship conflict outlined by Gottman and Levenson (1999).

Previous research has supported the centrality of a secure attachment bond to the quality of the relationship. Secure attachment within a romantic relationship is associated with higher levels of commitment, trust, interdependence, the ability to give and receive support effectively as well as overall relationship satisfaction (Simpson, 1990), and has been found to relate significantly with evaluation of the quality of the relationship by both partners (Collins & Reed, 1990; Brassard, Lussier & Shaver, 2009).

Another relationship factor found to be associated with relationship satisfaction is levels of trust (Simpson, 1990). Couple attachment researchers have understood relationship trust as a prerequisite for attachment security (Mikulincer, 1998), and insecurity is seen as a source of vulnerability for mistrust in the relationship. Indeed, insecure attachment strategies foster mistrust by diminishing opportunities for open communication (Jang, Smith & Levine, 2002). In EFT literature, a breach in relationship trust, called an "attachment injury" has been considered a factor that makes EFT more challenging, and a specific model, the Attachment Injury Resolution Model, for working with these couples have been delineated (Zuccarini, Johnson, Dalgleish & Makinen, 2013). Pre-therapy levels of trust have also been found to predict outcomes in EFT (Johnson & Talitman, 1997). Overall, the literature seems to point to relationship trust as an integral part of secure attachment relationships and lack of trust as a factor in attachment insecurity and relationship distress.

Attachment Working Models: Stability and Change

Bowlby (1988) argued that experiences in early relationships form the foundation of working models with which individuals approach new relationships. However, he also argued that working models of attachment are formed in response to current relationship events, which suggests flexibility depending on the climate of the relationship. In forming a new relationship with a significant other, new attachment experiences may impact the person's working model. The relationship is also simultaneously impacted by the attachment style the person brings to the relationship (Brumbaugh & Fraley, 2006). That is, attachment experiences, and working models are mutually influencing. Attachment research has demonstrated complex findings regarding attachment stability and change.

Although attachment researchers agree that attachment orientations develop in the context of relationships, there are differences of emphasis in terms of the relative impact of early relationships on stable representations of attachment versus current the impact of current relationships on felt security in those relationships. Research has demonstrated that relatively stable, general attachment representations can be measured in addition to current relationship specific attachment, and that these are distinct constructs (Crowell, Fraley, & Shaver, 2008). Interestingly, these specific constructs appear to impact relationships in different ways. For example, using attachment interviews to measure state of mind with respect to generalized attachment AAI and current relationship attachment using the Current Relationship Inventory (CRI; Crowell & Owens, 1996), Treboux, Crowell and Waters (2004) found that different combinations of general and specific attachment appear to impact romantic relationships in different ways. Not surprisingly, those with general and specific attachment security demonstrated the highest level of relationship functioning, and those with insecure general and specific attachment demonstrated vulnerabilities in the relationship. Interestingly, those with insecure generalized attachment and secure specific attachment reported positive feelings in the relationship and relatively low levels of conflict, but their secure base behaviour did not significantly differ from those with an insecure generalized representation, and reported a drop in positive feelings when enduring a stressful event. Those with a secure general representation and insecure specific representation demonstrated the highest level of distress and were the most likely to divorce, though they reported relatively low conflict behaviours. These results support the prototype hypothesis that general representations, learned early in development, impact relationships throughout adulthood, especially during times of stress.

Generalized attachment representations have demonstrated relatively high levels of stability. Infants from Ainsworth's original strange situation sample were tested for attachment representations as adults using the AAI (George, Kaplan & Main, 1984). Waters, Merrick, Treboux, Crowell and Albersheim (2000) found that of Ainsworth's original sample, 72% maintained the original secure vs. insecure classification. A significant negative stressful event in the mother's life was related to greater likelihood of change from secure to insecure.

Researchers have investigated stability vs. change with respect to the extent of change in attachment orientations across time. With respect to self-reported general attachment, a longitudinal study Scharfe & Bartholomew (1994) found that over the course of 8 months, 40% of participants shifted between attachment styles, self-reported and categorically defined, whereas 60% remained stable. Kirkpatrick & Hazan (1994) found that after 4 years 70% of participants endorsed the same attachment style on a self-reported measure of attachment. In a meta-analysis of self-reported attachment styles, Baldwin & Fehr (1995) found that approximately 30% of people tend to change their attachment styles across varying time lengths. These results are notably categorical in nature, and may not be sensitive to subtle dimensional changes. These statistics have been interpreted in different ways. Some theorists have taken these statistics to mean that self-reported attachment is largely stable, whereas others have emphasized the considerable percentage of individuals whose attachment styles change. In a meta-analysis of longitudinal studies of attachment stability, Fraley (2002) found a correlation of .39 between childhood and adult general attachment styles.

Fraley, Vicary, Brumbaugh and Roisman (2011) argued that descriptive estimates of attachment change are limited as this does not allow us to understand the nature of change across time, and only gives a cross-sectional account of variability from one time-point to another. Therefore, in order to gain a greater understanding of the nature of attachment change, they investigated the pattern of stability and change in greater depth using empirical continuity functions. Based on their analysis of test-retest correlations across multiple time-points varying from 30 days to a year, they argued for a prototype hypothesis, stating that although there is some variation in general attachment across time, there is also an underlying prototype that was found to be relatively stable.

Social cognitive theorists have argued that working models of attachment may operate in complex ways that may not be captured by studies that measure attachment outside of a social-cognitive context. These theorists argue that we evaluate new relationships and approach emerging attachment bonds in different ways depending on our current working models of attachment (Baldwin, 1999; Baldwin, Keelan, Fehr, Enns & Koh-Rangarajoo, 1996; Mikulincer, Shaver, Sapir-Lavid & Avihou-Kanza, 2009). These researchers hold that attachment orientations are cognitive-affective schemas that may be more or less accessible based on previous as well as current experiences. Specifically, Baldwin, Keelan, Fehr, Enns and Koh-Rangarajoo (1996) found that participants showed a greater ease of recall for relational events that matched their attachment related expectations. These researchers also primed different attachment styles in participants regardless of their attachment style and found that once primed for a particular attachment style, participants rated individuals who corresponded with that attachment style as more attractive potential dating partners. The authors concluded that individual experiences of relationship events of

various levels of security or insecurity may be more or less accessible at different times, and that one's general attachment style is representative of the pattern of relative accessibility of a particular attachment style. This supports the view that attachment styles may correspond with environmental and relational contexts, and also implies that the most accessible attachment style at any given time will impact the attachment related responses of others. In line with this research, Mikulincer et al. (2009) found that people with relatively secure attachment orientations tended to process secure base oriented information more quickly, easily and with greater depth.

The relationship context has been related to change in general self-reported attachment orientations that do occur. When research has taken into account the context of interpersonal life events, change in attachment security has often been found to relate to these life transitions. In a review of the literature, Davila and Cobb (2004) found that in adulthood, and even in childhood, attachment styles may fluctuate; however, they have noted that this is normally related to changes in the social environment. More specifically, Davila, Burge & Hammen (1997), in a two-year longitudinal study, found that fluctuation in attachment was related to current symptoms or stressors, with individual differences found in terms of tendency for fluctuation. In this study, most of the change in attachment was toward the direction of insecurity. Furthermore, the tendency for instability of attachment was related to history of relationship dysfunction and psychopathology. Davila, Burge & Hammen (1997) concluded that instability of attachment is part of the process of insecure attachment. The concept of instability of attachment as an attachment pattern in and of itself seems to come close to descriptions of the fearful-avoidant attachment style, or disorganized attachment where individuals may oscillate between attachment strategies or have no pattern

or strategy for ways of being in relationships (Bartholomew & Horowitz, 1991; Lyons-Ruth & Jacobvitz, 2008).

Other research has shown that individuals with relatively insecure self-reported attachment styles were more likely to increase in attachment security if they began a new relationship with a partner during this 4-year longitudinal study, implying that the context of the relationship may be responsible for attachment change (Kirkpatrick & Hazan, 1994). In more recent work, Davila & Sargent (2003) investigated attachment change in relation to subjectively meaningful life events during an 8-week daily diary study, finding that events involving subjective ratings of greater interpersonal loss were related to change toward insecurity.

Therefore, there is evidence in the literature to support both the relative stability of general attachment representations throughout the lifespan as well as flexibility in the context of experiences within close relationships. Stability in attachment orientations seems to operate to some degree as an effect of early childhood relationships with caregivers as well as within current relational contexts.

Attachment Change in Therapy. Bowlby wrote about the possibility for increasing attachment security through psychotherapy (Bowlby, 1988). He proposed that the therapist can act as a safe haven and secure base for the client to explore difficult affect, thoughts and patterns in their behaviours that have typically been met with disapproval, criticism, disinterest, unpredictability or abandonment. The therapist serves as a surrogate secure attachment figure through their sensitivity and responsiveness to the client as they explore current relationship experiences both with the therapist and others in the client's life, as well

as past relationship experiences that have shaped their current functioning. This secure base exploration opens the client to corrective emotional experiences, thus allowing the client to move toward greater attachment security and more adaptive functioning. Research has provided evidence for attachment change in therapy, and has related this to positive outcomes for clients (Mikulincer & Shaver, 2007).

Using the AAI, Fonagy et al. (1995) measured attachment classifications in 35 non-psychotic inpatients on intake and discharge from the program. All patients received group psychoanalytic psychotherapy and no psychotropic medications. All patients were categorized as insecurely attached prior to therapy and 40% were classified as secure at post-therapy. Diamond, Stovall-McClough, Clarkin & Levy (2003) measured attachment using the AAI to classify 10 patients who received one year of Transference-Focused Psychotherapy (TFP) at 4 months into treatment at one year. They found that on the AAI, 4 out of the 6 patients who scored as unresolved with respect to attachment at 4 months into therapy moved into either the secure or insecure classifications after one year of therapy. Travis, Binder, Bliwise and Horne-Moyer (2001) studied attachment change in time limited psychodynamic psychotherapy, and found significant changes toward increased attachment security. Measured categorically by coding attachment narratives, 24% of individuals moved from an insecure to a secure attachment style. Furthermore, the 24% of individuals who changed to a secure attachment style experienced significantly lower symptoms of psychological distress than those who did not move to the secure attachment category. Tasca, Balfour, Ritchie and Bissada (2007) evaluated attachment change in women with binge eating disorder in group therapy using self-reports and found that attachment anxiety and avoidance significantly decreased from pre to post therapy. Makinen & Johnson (2006)

investigated self-reported attachment change in couples receiving EFT. They did not find significant changes in attachment from pre to post-therapy, and did not find any difference in attachment post-therapy between couples that had resolved attachment injuries compared with those who did not. However, the attachment measure used was designed to capture general attachment styles, not specific to the current relationship, and therefore may not have been able to identify relationship specific attachment changes. A more recent study addressed this issue by using an attachment self-report measure adjusted to apply specifically to the couples' current relationship and found significant improvements in attachment security over the course of EFT indicating that relationship specific attachment can change over the course of EFT, especially in relation to specific change events, and that change toward attachment security was associated with increased relationship satisfaction (Burgess Moser, et al., 2014).

Taken together these results suggest that attachment change can occur in therapy, and that this has a positive association with better functioning. Furthermore, attachment change appears to occur across different methods and conceptualizations of measurement. Measures designed to capture unconscious trait attachment orientations such as the AAI and narrative measures (Fonagy et al., 1995; Diamond et al., 2003; Travis, Binder, Bliwise & Horne-Moyer, 2001) demonstrated change as well as conscious state attachment as measured using self-report scales and classifications (Tasca, Balfour, Ritchie & Bissada, 2007; Burgess Moser, et al., 2014).

Emotionally Focused Therapy for Couples

The goal of EFT is to reshape the core emotional bond between partners (Johnson 2007a). EFT strives to help couples develop a more secure attachment bond by attending to attachment signals, emotions and unmet attachment needs (Johnson, 2007b). Based on the foundation of our current understanding of the centrality of the attachment bond to relationship functioning, EFT relies on attachment as a map to help guide couples into greater security by addressing and reshaping recurring negative cycles of insecure interactions. Working with relationship distress in EFT involves working with partners to facilitate the expression of emotions surrounding unmet attachment needs. Emotionally Focused Therapy (EFT) is a humanistic therapy with a strong focus on the processing of emotions in the current dynamic between partners, within a strong therapeutic bond characterized by safety (Burgess-Moser & Johnson, 2007). EFT maintains that the negative, rigid interaction cycles of demand/withdraw are due to the couples' inability to recognize, value and express their attachment needs within the relationship, due to difficulty interpreting and responding to emotional cues from their partner (Johnson, 2004). Interventions in EFT include validation, evocative responding, empathic attunement, heightening, and restructuring interactions within a process that involves 9 steps and 3 stages (Johnson, 2007a).

The process of EFT for couples is fully documented by Johnson (2004). The first stage involves the de-escalation of negative cycles. Initially, the therapist creates an alliance with each partner, and focuses on assessing the way in which unmet attachment needs spark the positions each partner takes in the cycle of conflict. Once the cycle is identified, the therapist focuses on helping each partner access and express the attachment needs underlying their position in the cycle. Throughout this process, each partner is able to observe the other

explore the deeper attachment related emotions underlying the pattern of distress, thus recognizing the deeper reasons for the conflict. The therapist encourages the couple to view the negative cycle as the enemy in the relationship rather than the other partner.

The second stage of EFT involves restructuring attachment interactions in order to help each partner become more emotionally accessible and responsive – this is accomplished by accepting and expressing attachment emotions directly to their partner through structured enactments. During this stage, changes in the interaction patterns between partners become evident as each partner expresses understanding, validation and attempts to respond to the other's attachment needs. Specifically, as the withdrawing partner is able to understand their partner's underlying attachment emotions, they are able to express their fear and ask for their attachment needs to be responded to, and become more responsive and engaged (withdrawer re-engagement). In turn, as the pursuing partner is able to clearly express their attachment needs, their partner is better able to respond empathically (blamer softening). As the withdrawing partner re-engages, and as the blaming partner softens, new positive bonding interactional patterns are formed in bonding moments.

The third stage of EFT involves consolidation and integration. During this stage, partners practice their new interactional patterns to solve relationship concerns and sources of conflict. In this way, new interactional patterns are consolidated and new attachment behaviours become more and more frequent in the couple's daily interactions.

The Process of Change in EFT. EFT process studies have outlined key characteristics and events in the therapeutic process. A recent study by Zuccarini, Johnson, Dalgleish & Makinen (in press) demonstrated that depth of experiencing and levels of

perceptual processing differed between couples able to resolve their attachment injury versus those who did not. Two aspects of the couple process, depth of experiencing and interdependent/affiliative responding, have been identified as key elements of change in the therapeutic process (Johnson & Greenberg, 1988; Greenberg, Ford, Alden & Johnson, 1993). Furthermore, Johnson & Greenberg (1988) related a key event in therapy, the blamer softening change event, to successful outcomes. Specifically, couples that completed the softening event were more likely to demonstrate shifts in negative interaction cycles. Research has shown that couples who are able to complete the blamer softening event are more likely to move out of relationship distress by the end of therapy (Johnson & Greenberg, 1988), and experience decreases in relationship specific attachment anxiety over the course of therapy (Burgess-Moser et al., 2014). Thus the completion of a blamer-softening change event is a key aspect of successful therapy in EFT.

Outcome Research in Couple Therapy

Emotionally Focused Therapy Outcomes. The effectiveness of EFT for couples to increase relationship satisfaction has been consistently well established (Johnson, Hunsley, Greenberg & Schindler, 1999; Johnson & Greenberg, 1985a; Johnson & Greenberg, 1985b; James, 1991; Walker, Johnson, Manion & Cloutier, 1996; Johnson & Talitman, 1997; Denton, Burleson, Clark, Rodriguez & Hobbs, 2000; Makinen & Johnson, 2006). A meta-analysis by Johnson, Hunsley, Greenberg and Schindler (1999) found that 70-73% were recovered from relationship distress with a Cohen's d effect size of 1.31 using data from four RCT studies of EFT.

Of the EFT studies reported in this meta-analysis, the following notable studies are worth unpacking in more detail. Johnson and Greenberg (1985a) found that couples treated with EFT experienced more gains in terms of relationship satisfaction, intimacy, and target complaint reduction than couples treated with a behavioural approach. Johnson & Greenberg (1985b) found that couples reported significantly higher relationship satisfaction after treatment with EFT than during the 8 weeks prior to receiving treatment. James (1991) compared couples receiving EFT and couples receiving EFT plus communications training with a control group and found that both groups had significantly better relationship satisfaction and improvement in the target problem at post-therapy than the control group; the addition of communications training did not improve outcomes over and above EFT alone. In another study, Johnson and Talitman (1997) found significant improvement in relationship functioning following EFT treatment with an effect size of 1.26. EFT has also been found to be effective for high-risk samples including couples with a chronically ill child (Walker, Johnson, Manion & Cloutier, 1996).

The expansion of EFT research included investigation of the application of EFT within different clinical contexts. With the focus of EFT on security, affect regulation and resulting resilience, it is not surprising that EFT has been found effective in samples of couples experiencing the effects of PTSD (Johnson, 2002). Two studies have found EFT to be effective for women with a history of childhood abuse (Dalton, Johnson, Classen & Greenman, 2013; MacIntosh & Johnson, 2008). In both of these studies women experienced significantly reduced relationship distress as well as reductions in trauma symptoms. An outcome study by Denton, Burleson, Clark, Rodriguez & Hobbs (2000) expanded the research to include women with depression. They found that women receiving EFT plus

medication reported significant improvements in relationship functioning compared with those in the medication only group. These findings are significant given the links between depression and relationship distress (Kung, 2000).

EFT literature has also explored a specific impasse that sometimes occurs in therapy – a past betrayal of trust where one partner felt abandoned by their partner at a key moment of need, an attachment injury impedes progress in therapy. Steps towards fostering forgiveness for attachment injuries in therapy were outlined and tested by Makinen and Johnson (2006). They found that 63% of the injured partners were able to resolve the injury, forgive their partner and continue the therapeutic process including key bonding moments, and these results were found to be maintained in a 3 year follow-up assessment of these same couples (Halchuk, Makinen & Johnson, 2010). Couples who were unable to resolve the attachment injury were those who reported lower trust at pre-therapy and tended to have multiple attachment injuries throughout the course of the relationship (Makinen & Johnson, 2006).

Outcomes in Behavioural and Insight Oriented Approaches. Behavioural Marital Therapy was one of the first approaches to conduct outcome research in couples therapy (Jacobson, 1978). These initial studies demonstrated strong outcomes measured immediately following the completion of therapy. An early meta-analysis of 17 BMT control trials found an effect size of .95 (Hahlweg & Markman, 1988). A later meta-analysis comparing BMT, a cognitive approach, Cognitive Behaviour Couple Therapy (CBCT), and Insight Oriented Marital Therapy (IOMT) found all approaches to yield good outcomes for couples, with weighted mean effect sizes of .79, .54, and .87 for BMT, CBCT and IOMT respectively. IOMT demonstrated superior outcomes in terms of relationship satisfaction (Dunn &

Schwebel, 1995). Overall, BMT has been found to be more effective than no treatment, but not more effective than other forms of couples therapy (Shadish & Baldwin, 2005).

Follow-up Research in Couple Therapy

Ideally, couples therapy should not only help the couple cope with current stressors, but more importantly should help the couple make lasting changes to the relationship itself so that the they can face future challenges with resilience together (Johnson, 2007a). Although couple therapy research generally has demonstrated good results, there has been a dearth of attention paid to relapse-prevention and follow-up results (Snyder & Halford, 2012). The most well validated approaches to couples therapy, Behavioural Marital Therapy (BMT), Emotionally Focused Therapy (EFT) and Insight Oriented Marital Therapy (IOMT), have conducted follow-up studies ranging from a number of months to years (Cloutier, Manion, Walker & Johnson, 2002; Halchuk, Makinen & Johnson, 2010; Christensen, Atkins, Yi, Baucom & George, 2006; Christensen, Atkins, Baucom & Yi, 2010; Snyder, Wills & Grady-Fletcher, 1991).

Behavioural Couple Therapy Follow-up. Jacobson, Schmaling and Holtzworth-Munroe (1987) conducted the first longer-term follow-up of Behavioural Couples Therapy, assessing couples outcomes at 2 years following completion of therapy in a sample of 34 couples. They randomly assigned couples to one of three treatment groups, the complete BMT treatment, or treatment involving only one of the two components that make up BMT, the behavioural exchange (BE) component and the communication and problem solving training (CPT). Results indicated that two years after therapy 50% were considered happily married, 8% were considered unchanged, and 25% had deteriorated. Furthermore, 30%

percent of the couples that had been considered recovered after therapy relapsed within two years. Although results did not indicate any significant differences between the treatment conditions in terms of relationship satisfaction, those in the complete BMT condition were less likely at 2 years follow-up to be divorced. Negative life events in the follow-up period predicted higher relationship distress. The authors considered that therapy may not be able to help couples make lasting change as life events may impact the couple much more powerfully than a previous experience in therapy and may overwhelm the couples' ability to draw on skills learned in therapy. In follow-up phone interviews, they found that approximately half of the couples stated that they did not use the skills regularly with their partner. Reasons included that the skills were too time consuming to practice, too stilted, or that the other partner had stopped using them. Most of the participants described finding the therapy helpful, even those who relapsed, in that it provided them a safe place and set aside time to for them to address their issues. However, identified complaints about therapy included that it was too structured, too superficial or an insufficient number of sessions to cover all of their issues. The authors suggested implementing follow-up and booster sessions with all couples to help them maintain their gains.

However, more recently, research has demonstrated that it is possible to help couples make lasting change in a short-term therapeutic context. In a study comparing BMT with another approach, Insight Oriented Marital Therapy (IOMT), couples that received IOMT fared much better in the 4 years following therapy (Snyder, Wills & Grady-Fletcher, 1991). IOMT is an approach that focuses on interpersonal and intrapersonal dynamics that may be unconscious to each partner. Couples are thought to improve through a process of uncovering and understanding feelings, beliefs and expectations unconsciously contributing

to the couples' difficulties. Couples (N = 59) were randomly assigned to receive either IOMT (n = 30) or BMT (n =29). Fifty five percent of the original couples participated in the follow-up time-point, approximately 4 years after therapy had ended. Findings indicated that although there were no significant differences between the two conditions at post-therapy, these differences emerged at the follow-up assessment. Specifically, 39% of the couples receiving BMT had deteriorated and 38% had divorced; in contrast 10% of the couples receiving IOMT had deteriorated and 3% had divorced. Couples in the BMT condition had significantly higher rates of deterioration than the IOMT condition. The difference between these two approaches is striking, not in terms of how well couples fared immediately following therapy, but over the long term. This study explicates the importance of follow-up research in couples therapy.

Due to the significant deterioration in follow-up studies of BMT, a new form of BMT was developed called Integrative Behavioural Couples Therapy (IBCT) incorporating interventions to help the couple help couples gain emotional acceptance, and alter the emotional context of the relationship in order to help the couple increase emotional intimacy in the relationship as a foundation for making behavioural changes. A randomized clinical trial compared IBCT with traditional Behavioural Couples Therapy (TBCT), and a 2-year follow-up study was conducted comparing the long-term results of these two therapeutic approaches. Results indicated that couples tended to initially decrease in relationship satisfaction at approximately 20 weeks post-therapy, but subsequently improved during the two-year follow-up period, with TBCT yielding higher scores across time. In terms of clinical significance, 66.67% of the IBCT were classified as recovered at follow-up, compared with 60% of TBCT couples were considered recovered, and this difference was

not found to be statistically significant (Christensen, Atkins, Yi, Baucom & George, 2006). In a study following this same sample 5 years after therapy, couples the slight differences between approaches washed out with 33% IBCT compared with 31% TBCT classified as recovered, and 36% and 39% considered deteriorated for IBCT and TBCT respectively from treatment to 5 year follow-up (Christensen, Atkins, Baucom & Yi, 2010).

Follow-up in Emotionally Focused Therapy. EFT has demonstrated excellent results in follow-up (Johnson & Greenberg, 1985; James, 1991; Walker, Johnson, Manion & Cloutier, 1996; Johnson & Talitman, 1997; Cloutier, Manion, Walker & Johnson, 2002; Halchuk, Makinen & Johnson, 2010).

In early studies of EFT, good shorter-term follow-up results were found. Johnson and Greenberg (1985a) randomly assigned couples to one of three conditions; a problem solving focused treatment (PS), experiential therapy (EFT) or a control group. The found that at 2 months following treatment couples that had received EFT maintained significantly higher relationship satisfaction than the PS or control group. This study employed experienced therapists and professed congruence with the therapeutic orientation applied. Johnson and Greenberg (1985b) carried out a second outcome study, in part to replicate the results of the previous outcome study, and to assess the ability for EFT to be applied by novice therapists with no previous training in working with couples prior to a 12 hour training session using the manualized EFT approach. Results indicated that significant improvements in terms of target complaints and progress on identified goals were maintained at post-therapy. Johnson and Talitman (1997) found that couples maintained improvements in relationship satisfaction at three months post-therapy. In an analysis of clinically significant outcomes, they found that 79% of couples demonstrated clinically significant improvement after treatment, and

82% exhibited clinically significant improvement after three months follow-up. This means that some couples continued to improve even after therapy had ended. Results of a 4-month follow-up by James (1991) indicated that the group who received only EFT reported significantly higher relationship satisfaction at follow-up than the couples that received EFT plus communications training, and the control group.

Longer-term follow-up results have demonstrated that couples who receive EFT are able to maintain or further increase relationship improvements in the years after therapy has ended. Cloutier, Manion, Walker and Johnson (2002) evaluated the relationship functioning of 13 couples 2 years after completion of therapy, and discovered that improvements made in therapy were maintained. Some couples also reported continued improvement over the follow-up period. Specifically, at 2-year follow-up 23.1% had maintained gains made in therapy and 38.5% made further gains. Also, 30.8% had not changed from their pre-therapy score or had returned to their pre-therapy score and 7.7% (one couple) had deteriorated from their pre-therapy score. These results were very impressive given that the study was limited to a small high-risk sample, parents of chronically ill children, demonstrating that EFT is effective for couples in chronic stress. This is not surprising because EFT facilitates emotional attunement that allows the couple to be a safe haven for each other in the face of stressful events (Cloutier, Manion, Walker & Johnson, 2002).

A follow-up study to assess the long-term results of a study that employed the Attachment Injury Resolution Model (AIRM) in working with couples with an attachment injury, found that at 3 years follow-up, the couples who had resolved the attachment injury maintained gains in relationship satisfaction at 3-year follow-up. Specifically, at follow-up

these couples remained stable in terms of relationship satisfaction, trust and forgiveness (Halchuk, Makinen & Johnson, 2010).

Although there is substantial evidence to support the efficacy of EFT in follow-up, further research is needed to investigate the course of maintenance across time. It is also useful to examine post-therapy stability in variables such as increased attachment security that are part of the stated goal of EFT. Furthermore, it will be useful to investigate possible predictor variables at pre-therapy, post-therapy and process variables such as blamer softening in order to gain a clearer understanding of factors that impact long-term outcomes prior to beginning therapy and during the therapy process.

Predictors of Long-Term Outcomes in Couples Therapy

The investigation of predictors of long-term outcomes are also important as these provide insight into the characteristics couples bring to therapy or achieve through the therapy process that allow them to benefit optimally from treatment and maintain these gains over the long term. Research has assessed whether variables at intake would predict outcome two years after completion of therapy with experiential and behavioural approaches.

Studies of predictors of follow-up outcomes in Behavioral Couples Therapy (BCT) and Integrative Behavioral Couples Therapy (IBCT) Baucom, Atkins, Simpson and Christensen (2009) found that expressed emotional arousal from the female partner was a significant predictor of response to treatment at two years post-therapy. Arousal was assessed by measuring vocal frequencies during a problem-solving interaction. Furthermore, Snyder, Mangrum and Wills (1993) found that couples were more likely to be distressed or separated at 4 years following therapy if baseline measures were high in negative marital affect, poor

problem-solving skills, low psychological resilience, higher levels of depression, low emotional responsiveness and low employment, as well as post-therapy measures of negative marital affect and low problem-solving skills.

Predictors of Long-Term Outcomes in EFT. Research investigating predictors of success in EFT specifically has also been conducted. Johnson and Talitman (1997) found that greater age of male partners, female partners' higher levels of faith in their partner (a dimension of trust) and male partners' lower levels of emotional expression at pre-therapy predicted greater improvements in relationship satisfaction at three months follow-up. These results suggest that a basic level of trust facilitates greater stability in outcomes, and that even couples who are less emotionally responsive can benefit in the long-term from a therapeutic approach that focuses on emotion and attachment.

A particularly important variable within the therapy process itself that is thought of as a pivotal moment required for sustained change is the blamer softening event (Bradley & Furrow, 2007). A softening event occurs when the partner that has taken a critical pursue stance in the pattern of interactions is able to acknowledge underlying attachment needs and from a place of genuine vulnerability, to ask for these needs to be met by the other partner (Bradley & Furrow, 2004). The ability to achieve a blamer-softening event in session has been considered highly important in the processes of change in EFT and has been theorized as an important predictor of lasting improvements in relationship satisfaction. Halchuk, Makinen and Johnson (2010) found that the resolution of an attachment injury was associated with maintenance of gains in terms of relationship satisfaction, trust and forgiveness as found by Makinen and Johnson (2006) at post-therapy. The resolution of an attachment injury is a similar therapeutic process to blamer softening as it requires a

softening around the attachment injury. Furthermore, Burgess-Moser, Johnson, Dalgleish, Tasca, and Wiebe (2014) found that in a sample of 16 couples who achieved blamer softening, the softening event was associated with immediate decreases in attachment avoidance and increases in relationship satisfaction. The blamer-softening event was also associated with an immediate increase in attachment anxiety that significantly decreased across post-softening sessions. The present study will investigate whether blamer softening will significantly predict maintenance of relationship satisfaction and attachment security.

Attachment and trust at pre-therapy has also been found to be a significant predictor of outcome post-therapy and at 3 months follow-up (Johnson & Talitman, 1997). Specifically, Johnson and Talitman (1997) found female partners with greater faith in their partner's caring at pre-therapy (a dimension of trust) demonstrated more positive relationship satisfaction outcomes at 3-months follow-up. One reason for this result may be that greater trust at pre-therapy fosters greater emotional engagement throughout the therapy process. If partners trust one another, they may be more open to and curious about their partner's emotional experiences and attachment needs, and be better able to disclose their own attachment needs and fears. On the other hand, if there is a lack of trust in the relationship, partners may demonstrate less openness due to negative expectations of their partner's responsiveness and difficulty being emotionally vulnerable. Given that the mechanism of change in EFT is through a greater ability to express and respond to attachment needs in emotionally attuned ways that foster secure attachment, it would be expected that a strong predictor of outcome over the course of follow-up would be the achievement of a secure attachment bond in therapy as evidenced by decreased attachment insecurity and decreased emotional control at post-therapy.

In summary, EFT research has found strong results for not only improvement in relationship functioning as a result of therapy but also for maintenance and continued improvement at long-term follow-up and is developing an emerging understanding of important factors that contribute to lasting change.

Rationale for the Current Study

Although good outcome results in EFT have been established, less is known about the trajectory of change, as new ways of assessing this statistically such as HLM have emerged fairly recently in the field of couples therapy (Atkins, 2005). Assessing the pattern of change across various time points during the follow-up period would help to clarify the trajectory of relationship functioning in the years after therapy has ended. This is the first study to assess the trajectory of relationship functioning in the years after couples receive EFT. It is also the first study to investigate change over time in relationship-specific attachment security across follow-up, a central concept in the EFT literature. This will constitute a significant contribution to the field of couple therapy by expanding our understanding of the long-term effects of therapy in relation to key variables thought to be involved in the process of lasting change. Furthermore, the investigation of relationship-specific attachment longitudinally in a clinical sample will contribute to the attachment literature more generally by providing a more nuanced understanding of attachment change within the context of close relationships over time.

There is also a need for studies investigating predictors of longer-term follow-up outcome. To date, the investigation of predictors of follow-up outcome in EFT has been limited to a time frame of only a few months (i.e., Johnson & Talitman, 1997). Long-term

research is needed to investigate factors impacting couples' ability to maintain change over the years following completion of EFT. This is the first study to investigate predictors of follow-up outcome in EFT. Furthermore, because the current study will investigate the trajectory of change, we will be able to investigate how well variables predict the trajectory as opposed to cross-sectional outcomes. The significant predictors from the above studies (i.e., age, and relationship trust) will be assessed as predictors in the current study, in addition to variables thought to foster stable relationship improvement in EFT theory (i.e., blamer softening, levels of emotional awareness/control and change in relationship-specific attachment and trust).

Hypotheses

1. Maintenance of Improved Relationship Outcomes

Hypothesis 1, It is predicted that self-reported relationship satisfaction will show significant increases from pre to post therapy that will remain stable across 6, 12, 18 and 24 months follow-up.

Hypothesis 2a, It is predicted that self-reported relationship specific attachment anxiety will show significant decreases from pre to post therapy that will remain stable across 6, 12, 18 and 24 months follow-up.

Hypothesis 2b, It is predicted that self-reported relationship specific attachment anxiety will be significantly associated with relationship satisfaction on average across time points.

Hypothesis 3a, It is predicted that self-reported relationship specific attachment avoidance will show significant decreases from pre to post therapy that will remain stable across 6, 12, 18 and 24 months follow-up.

Hypothesis 3b, It is predicted that self-reported relationship specific attachment avoidance will be significantly associated with relationship satisfaction on average across time points.

Hypothesis 4, It is predicted that secure base use and secure base support in the interaction task as measured using the SBSS (Secure Base Scoring System) will show an increase from pre-therapy to post-therapy scores and will be stable at 24 months follow-up.

2. Pre-therapy predictors of follow-up relationship satisfaction

Hypothesis 5a, age: Higher age of partners reported at pre-therapy will be associated with increases in relationship satisfaction from pre to post therapy that level off across 6, 12, 18 and 24 months follow-up.

Hypothesis 5b, relationship length: Longer relationship length of partners reported at pre-therapy will be associated with increases in relationship satisfaction from pre to post therapy that level off across 6, 12, 18, and 24 months follow-up, and will account for a higher proportion of the variance than age alone.

Hypothesis 5c, trust: Higher levels of trust reported at pre-therapy will be associated with increases in relationship satisfaction from pre to post therapy that level off across 6, 12, 18 and 24 months follow-up.

3. Therapeutic change predictors of follow-up relationship satisfaction

Hypothesis 6a, Decreases in attachment anxiety from pre-therapy to post-therapy will be associated with increases in relationship satisfaction from pre-therapy to post-therapy that are maintained across 6, 12, 18 and 24 months follow-up.

Hypothesis 6b, Decreases in attachment avoidance from pre-therapy to post-therapy will be associated with increases in relationship satisfaction from pre-therapy to post-therapy that are maintained across 6, 12, 18 and 24 months follow-up.

Hypothesis 6c, Decreases in emotional control from pre-therapy to post-therapy will be associated with increases in relationship satisfaction from pre-therapy to post-therapy that are maintained across 6, 12, 18 and 24 months follow-up.

Hypothesis 6d, The inability of a couple to achieve blamer softening during the therapy process will predict decreases in relationship satisfaction across 6, 12, 18, and 24 months follow-up relative to those who achieved blamer softening.

4. Reliable Change Index

Hypothesis 7, It is predicted that the percentage of couples demonstrating clinically significant change on relationship satisfaction scores from pre-therapy to follow-up will be at least as great as the percentage clinically significantly changed from pre to post therapy.

Running head: Two-year Follow-up Outcomes

Article 1

Two-Year Follow-up Outcomes in Emotionally Focused Therapy: An Investigation of Relationship Satisfaction and Attachment Trajectories

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Abstract

Emotionally Focused Therapy for Couples (EFT), an evidence-based couples therapy with excellent outcomes (Johnson, Hunsley, Greenberg & Schindler, 1999), strives to create lasting change for couples through the creation of secure attachment bonds. Although studies have demonstrated strong results in follow-up (Cloutier, Manion, Walker & Johnson, 2002), research is needed to better understand how couples continue in terms of relationship satisfaction and attachment security across the long-term after the completion of therapy. The goal of this study was to investigate the trajectory of relationship satisfaction and relationship specific attachment over the course of two years following the completion of therapy. The trajectory of relationship satisfaction, and relationship specific attachment anxiety and avoidance, were modeled across pre-therapy, post-therapy and 6, 12, 18 and 24 months follow-up in a sample of 32 couples that received an average of 21 sessions of EFT. Results confirmed a significant growth pattern demonstrating increases in relationship satisfaction and secure base behaviour and decreases in attachment anxiety over the course of therapy that leveled off during the follow-up period. These findings support the theoretical assumption that EFT helps couples create long lasting change in relationship functioning including satisfaction and attachment security.

Two-year Follow-up Outcomes in Emotionally Focused Couples Therapy

It is clear that being in a happy, mutually satisfying romantic couple relationship holds a multiplicity of benefits for our health and well being (Proulx, Helms & Buehler, 2007). However, distress in couple relationships is common (Halford, 2011), and increasingly results in relationship dissolution and divorce (Statistics Canada, 2011). Although certain modalities of couples therapy has demonstrated effectiveness and we now know some of the mechanisms involved in the process of change (Snyder & Halford, 2012; Lebow, Chambers, Christensen & Johnson, 2012), relatively less is known about couples' functioning in the years once therapy has ended (Shadish & Baldwin, 2003).

Emotionally focused therapy for couples (EFT) is one of the most well validated approaches for treating couples in distress (Johnson, Hunsley, Greenberg & Schindler, 1999; Shadish & Baldwin, 2003; Snyder & Halford, 2012). EFT has shown promising results in follow-up, demonstrating stability or continued improvement even for couples in stressful circumstances (Cloutier, Manion, Walker & Johnson, 2002), and where there has been a significant past betrayal in the relationship (Halchuk, Makinen & Johnson, 2010). These initial long-term EFT follow-up studies assessed couples at a specific time-point in follow-up, yielding a snapshot of the couples' functioning. There is, however, no research to date that can offer a picture of how variables related to couples' functioning continue across the passage of time after the completion of EFT.

Other couples therapy approaches have assessed trajectories of change in follow-up. Behavioural Couples Therapy (BCT), and its offshoot, Integrative Behavioural Couples Therapy (IBCT), an approach that fosters emotional acceptance in addition to traditional

behavioural interventions, demonstrated that across multiple time points over 2 years post-therapy, couples demonstrated an initial drop in relationship satisfaction in the first year that increased again over the next several months, but did not reach post-therapy levels (Christensen, Atkins, Yi, Baucom & George, 2006). Interestingly, client satisfaction with therapy moderated this trajectory – higher satisfaction was associated with a steeper drop after therapy followed by a steeper increase.

Emotionally Focused Therapy and Attachment

Attachment theory is the guiding map and foundation of EFT (Johnson, 2004). According to attachment theory, seeking and maintaining close attachment bonds is a universal human need throughout the lifespan (Bowlby, 1988). The attachment system organizes the ways in which we think, feel, and behave in close attachment relationships (Mikulincer & Shaver, 2007). These mental organizations of attachment are known as working models of attachment. Attachment working models operate both on a general level, impacting our general views of ourselves and others, and on a relationship specific level, impacting our view of self and other in the specific relationship and our experience of attachment related affects (Barry, Lakey & Orehek, 2007). Moreover, the attachment system operates in both conscious and unconscious ways – conscious aspects of the attachment system can be acknowledged and reported, and unconscious aspects are not accessible to the person but may be observed in affect and behaviour (Bartholomew & Moretti, 2002; Shaver & Mikulincer, 2002). Attachment security in adults is conceptualized as an interdependent relationship in which partners seek proximity to one another, especially in times of stress, and also feel secure to leave each other temporarily for independent interests and activities (Mikulincer & Shaver, 2007). Those who are insecurely attached, however, are not able to

modulate the expression of attachment needs in an adaptive way such that they hyper-activate attachment signals out of fear of not having consistent emotional support as seen in attachment anxiety, or they de-activate attachment signals due to not expecting a response from the partner (Mikulincer & Shaver, 2007). These patterns of feeling and behaving in relationships often feed into the demand/withdraw pattern often found in distressed relationships where one partner hyper-activates attachment signals while the other partner copes by withdrawing. Not surprisingly, insecure attachment in relationships has been associated with lower relationship satisfaction (Simpson, 1990; Mondor, McDuff, Lussier & Wright, 2011).

EFT views the negative interaction cycles of demand/withdraw and associated absorbing negative affect as representing a struggle for attachment security through heightened proximity seeking and withdrawal as a way to minimize distress in the relationship (Johnson & Whiffen, 1999). Change is thought to occur through the creation of secure attachment bonds as couples explore and express underlying attachment needs and longings beneath secondary protective emotions that maintain distance and distress in the relationship. New interaction patterns are encouraged where partners can reach for each other with attachment needs and longings rather than push each other away with self protective anger, blame and withdrawal (Johnson & Whiffen, 1999). The secure attachment patterns fostered in EFT are thought to be self-sustaining in the couple system, contributing to lasting change and resilience in the relationship across time (Burgess-Moser & Johnson, 2007). According to attachment theory, secure bonds are formed in adult relationships when partners are able to be mutually responsive to each other's deepest emotional needs and longings. In this way, attachment based emotions serve as the fuel that sets patterns of

interaction in the relationship into motion (Burgess-Moser & Johnson, 2007). Research has shown that couples in distress demonstrate specific patterns of negative emotion in interactions characterized by criticism, defensiveness, contempt and stonewalling that creates distance and resentment in the relationship (Gottman, 1993). Furthermore, when these patterns persist, they are highly predictive of divorce (Gottman & Levensen, 2002). EFT views these negative patterns through the lens of attachment theory, understanding them as the result of an insecure attachment bond where both partners signal attachment distress in a way that inadvertently keeps their partner at a distance. EFT aims to help couples break these negative cycles by fostering secure patterns of interaction in the relationship (Johnson, 2004).

The Process of Change in EFT

EFT maintains that the negative, rigid interaction cycles of demand/withdraw are due to the couples' inability to recognize, value and express their attachment needs within the relationship, and difficulty interpreting and responding to emotional cues from their partner (Johnson, 2004). EFT helps couples create more secure attachment in the relationship by reshaping the core emotional interaction between partners. EFT therapists attend to attachment signals, and unmet attachment needs, and work with partners to facilitate the acknowledgement, exploration and expression of these emotions in the relationship. The therapist uses interventions such as validation, evocative responding, empathic attunement, heightening, and restructuring interactions – that is, helping partners to turn to each other with primary attachment emotions and facilitating authentic, empathic responses to one another (Johnson, 2004).

The first stage involves the de-escalation of negative cycles through exploration and expression of the unmet attachment needs that fuel the positions each partner takes in the cycle of conflict. As the couple gains an understanding of their cycle, they are able to understand the cycle as the destructive force in the relationship rather than the other partner. The second stage of EFT involves restructuring attachment interactions whereby partners express and respond to one another's attachment emotions directly through structured enactments, thereby fostering new interaction patterns. Partners who previously withdrew in the relationship begin to express their fear and ask for their attachment needs to be responded to, and become more responsive and engaged. In turn, partners who previously were blaming and critical begin to clearly express their attachment needs beneath reactive anger in a way that allows the other partner to understand and respond. As the withdrawing partner re-engages, and as the blaming partner softens, new positive interactional patterns are formed in bonding moments. The third stage of EFT involves consolidation and integration. During this stage, partners practice their new interactional patterns to address relationship concerns and sources of conflict. In this way, new interactional patterns are consolidated and adaptive attachment behaviours become increasingly frequent in the couple's daily interactions.

The Present Study

Initial studies have found excellent EFT follow-up results (Cloutier, Manion, Walker & Johnson, 2002; Halchuk, Makinen & Johnson, 2010), providing a snapshot of couple functioning at a point in time after finishing therapy. Statistical methodology that allows researchers to investigate not only change at a specific point in time (amount of change), but also how this change evolves across time (rate of change) has emerged fairly recently in the field of couples therapy research, and holds a number of advantages (Atkins, 2005). In the

current study, couples' relationship satisfaction and relationship specific attachment will be modeled from pre-therapy through four follow-up time points (6, 12, 18 and 24 months after therapy has ended) using HLM; attachment will be investigated through self-report and a behavioural interaction task in order to capture both implicit and explicit aspects. The Reliable Change Index (Jacobson & Truax, 1991) will be used as a measure of clinically significant change.

Hypotheses

The following hypotheses were proposed: 1) The percentage of couples demonstrating clinically significant change on relationship satisfaction scores from pre-therapy to 2 years follow-up will be at least as great as the percentage clinically significantly changed from pre to post therapy. 2) Relationship satisfaction will show significant increases from pre to post therapy that will remain stable across 6, 12, 18 and 24 months follow-up. 3) Self-reported relationship specific attachment anxiety and avoidance will show significant decreases from pre to post therapy that will remain stable across 6, 12, 18 and 24 months follow-up. 4) Self-reported relationship specific attachment anxiety and avoidance will each demonstrate a significant association with relationship satisfaction on average across time points 5) Secure base use and secure base support in the interaction task as measured using the SBSS (Secure Base Scoring System) will show an increase from pre-therapy to post-therapy scores and will be stable at 24 months follow-up.

Method

Participants

Distressed couples were recruited through advertisements in local newspapers, online and in the community for a study on love and stress. The initial sample consisted of 32 distressed heterosexual couples living together for at least 1 year. For information on missing data at each time point, see Figure 1. Missing data from those who agreed to participate in the follow-up phase of the study amounted to 28% at the 2-year time point – similar to attrition rates of other couple therapy follow-up studies (Christensen, Atkins, Yi, Baucom & George, 2006). Most couples in the sample were married (94%), and four couples reported living common-law (6%). Couples reported being together in their current relationship on average for 17.67 years. Most couples had children together (87%), and 6 people indicated having children from a previous relationship. Nine participants (14%) indicated that they had been married to a previous partner before their current relationship.

Participants ranged from 28 to 64 years of age. The mean age of participants was 44.97 (SD = 1.52) and 44.30 (SD =1.18) for men and women respectively. Most of the sample identified as Caucasian (93.8%), 1 identified as African American, and 2 identified as Hispanic. The majority of the sample reported English as their mother tongue (76.6%). An additional 5 participants reported French as their first language, and 8 individuals reported another language as their mother tongue (i.e., Hebrew, Spanish, Dutch and German). In terms of education, 93.4% of the sample had attained post-secondary education. The individual income of participants varied widely with a median individual income of $64 000 (M = 75 886, SD = 60, 103.41).

Procedures

Eligibility Criteria and Screening. Eligibility criteria were outlined in order to obtain a relatively homogeneous sample of couples who would also be good candidates for couple therapy. Determining eligibility for the study was a two-step process. Interested couples were initially screened over the phone in order to determine whether the couple met the inclusion criteria regarding age, relationship length and status, relationship distress, as well as self-reported mental health and health history. If the couple met the eligibility criteria obtained over the phone, they were invited for an initial research session to confirm their final eligibility and interest in participation, and to obtain their consent to participate. In this first research session, participants completed a series of questionnaires and a videotaped interaction task that would be used to capture their baseline functioning. For an account of the number of couples screened and for dropout rates at each time point, see Figure 1.

Inclusion Criteria. Both partners had to be between the ages of 25 and 65, and living together in a long-term, committed, heterosexual romantic relationship. All couples had been living together for at least one year in order to ensure that the relationship has been long enough and close enough for an attachment bond to form. The couples' relationship satisfaction needed to be classified as mildly to moderately distressed as measured using the Dyadic Adjustment Scale (Spanier, 1976). Additionally, both partners had to score as insecurely attached on the modified Experiences in Close Relationships, Revised for Specific Relationships scale (ECR; Brennan, Clark, & Shaver, 1998). This inclusion criterion was chosen in order to recruit a relatively insecurely attached sample, in order to be able to investigate and detect decreases in attachment anxiety and attachment avoidance over the course of the study. Scores were considered to be in the insecurely attached range if they fell

above the 95% confidence interval of the attachment avoidance and/or anxiety subscale means from previous research (Shaver et al., 2005).

Exclusion Criteria. Couples were considered ineligible if either partner had been diagnosed in the past with any psychotic disorder, or if either partner was receiving any kind of psychotherapeutic treatment including psychotropic medication or psychotherapy. Furthermore, participants with risk of alcohol addiction (more than 14 drinks per week according to the Centre for Mental Health and Addictions low risk guidelines), or recreational drug abuse (including marijuana, cocaine, etc.) were excluded as these behaviours may have impacted the results of the study. Additionally, history of abuse (physical or sexual) would influence the way in which therapy is carried out and possibly influence the results of the study. Therefore, a history of abuse was considered an exclusion criterion for the study. Furthermore, because this study was part of a larger study investigating fMRI results with the female partner, any factor that would make the fMRI testing impossible for the female partner would have made the couple ineligible. These factors included significant back problems, weighing over 200 lbs or a history of claustrophobia that would make being in the fMRI machine uncomfortable, being currently pregnant or nursing, currently trying to become pregnant (the effects of the fMRI machine on fetuses and breast milk is unknown), or a range of health problems including previous seizures, diabetes requiring insulin treatment, previous heart attack, stroke, blood clots, high blood pressure, or chronic pain. Furthermore, the fMRI machine is not safe for anyone with electronic or metallic implants such as a pacemaker, prostheses and some dental work including permanent retainers. Therefore any potential participant with an electronic or

metallic implant was excluded from the study. Additionally, the age range of eligible participants (25-65) was restricted as a requirement of this larger study.

Treatment Procedure. Participants were assigned to one of 14 psychologists and social workers registered in the province of Ontario, and trained in the practice of EFT for couples. All therapists had at least 5 years experience working with couples using EFT. Couples received an average of 21 sessions of therapy. Couples were not denied continued couples therapy after they finished their participation in the first phase of the study. Although 26% of couples continued therapy in the first 6 months after completing the first phase of the study, whether or not the couple continued did not significantly predict their relationship satisfaction, attachment or SBSS scores across the follow-up period ($p > .05$). Therapists were tested as predictors of relationship satisfaction across follow-up, controlling for pre-therapy scores in order to ensure that results were not impacted by differences between therapists, and to determine whether therapists should be controlled for in further analyses. Only one therapist was a marginally significant predictor of relationship satisfaction across follow-up ($p = .031$); however this therapist only treated 2 of the study couples. Therefore, therapists were not controlled for in the analyses.

Assessment Procedure. Couples were assessed in person at pre-therapy and post-therapy. Each of these assessment sessions lasted approximately 2 hours and involved a questionnaire package and the SBSS videotaped interaction task. Couples who agreed to participate in the follow-up phase completed questionnaires online through a secure server for the first three time-points, at 6 months, 12 months, and 18 months follow-up. At the 2-year time-point, couples participated in the final follow-up session in person, again lasting approximately 2 hours and involving questionnaires and the videotaped interaction task.

Couples were compensated for their participation in the research sessions, which amounted to $200 for the first phase of the study, and $50 for each time point during the follow-up phase. Additionally, couples were offered copies of EFT materials including a book and DVD, as well as a workshop with Dr. Johnson, the originator of EFT, and entrance into a draw for a weekend stay at a local vintage hotel.

Measures

The Dyadic Adjustment Scale (DAS). The Dyadic Adjustment Scale (Spanier, 1976) consists of 32 items to measure relationship satisfaction. Partners are asked to rate the frequency of specific relationship disagreements and positive occurrences in the relationship on likert scales of varying lengths. Higher scores indicate higher relationship satisfaction. The DAS yields a total score ranging from 0-150 and scores on four subscales: (1) Dyadic Consensus, (2) Affectional Expression, (2) Dyadic Satisfaction and (4) Dyadic Cohesion. Based the means from the standardization sample, the norm for married couples is 114.8 (SD = 17.8) and the norm for divorcing couples is 70.7 (SD = 23.8; Spanier, 1976). High reliability has been found in recent samples. South, Krueger and Iacono (2009) found an internal reliability coefficient of α = .93 on the total scale score in a sample of 900 married couples. Christensen, Atkins, Yi, Baucom and George (2006) found an internal consistency reliability of α = .89 for men and α = .87 for women in a sample of 134 distressed couples on the DAS total score. Spanier (1976) reported high internal consistency on all four subscales in the original study conducted on the development of the measure (Cronbach's alphas ranged from .73 - .94), and high internal consistency on all 32 items (Cronbach's alpha = .96). In this same study, scores on the DAS were compared to scores on the Locke Wallace Marital Adjustment Scale, and were found to correlate highly (r = .88 for married

participants; r = .86 for divorcing participants), demonstrating the convergent validity of the DAS. Furthermore, a significant difference between married and divorcing couples was found (Spanier, 1976). The DAS was found to correlate highly with the Satisfaction with Married Life Scale, indicating convergent validity (r = .78; Ward, Lundberg, Zabriskie & Berret, 2009). Test-retest reliability over a 2-week period was found to be α = .87 for the total scale score (Carey, Spector, Lantinga & Krause, 1993). In the current study the internal consistency reliability across time-points varied between α = .85-.95. The DAS remains the most commonly used measure of relationship satisfaction, though there are criticisms in the literature **(**Sabatelli, 1988; Graham, Liu, & Jeziorski, 2006). Using this measure would allow the results to be compared with other couples therapy treatment studies.

The Experiences in Close Relationships Questionnaire - Revised for Specific Relationships. The Experiences in Close Relationships Questionnaire (ECR; Brennan, Clark, & Shaver, 1998) contains 36 items to yield a mean score of adult attachment on two dimensions: anxiety and avoidance. Dr. Shaver (2006, personal communication) was contacted with the request to adapt the measure slightly for use in the current study. The original version instructs couples to respond keeping in mind how they feel generally in romantic relationships. The modified version asks participants to respond with their current relationship in mind. Because the modification was very minor, it is not expected to affect the reliability or validity of the measure. However, reliability statistics will be conducted using this measure in the current study. The measure yields scores on two dimensions: attachment anxiety and attachment avoidance. In the standardization sample, internal reliability was α = 94 for the avoidance scale and α = .91 for the anxiety scale. Test-retest reliability was found to be stable for both anxiety and avoidance subscales with r = .82 and r

= .86 for each scale respectively across a one month period (Wei, Russell, Mallinckrodt & Vogel, 2007). The ECR was found to correlate highly with another measure of attachment styles, the Relationship Questionnaire, demonstrating convergent validity (Griffin & Bartholomew, 1994). The internal consistency of each subscale in the current study was good with a range across time points of α = .86 - .92 and α = .89 - .95 for the anxiety and avoidance subscales respectively.

Secure Base Scoring System. The Secure Base Scoring System will be used in this study to assess partner attachment behaviourally (SBSS; Crowell, Pan, Gao, Treboux, & Waters, 1998). Higher scores indicate more secure attachment in the relationship, and are determined by rating attachment related secure base use and support during a 15 minute conflict resolution task.

Attachment security is defined by this measure in two ways. First, it is defined as the ability to seek partner support as a secure base by expressing their need for support, expecting that their partner will be responsive to their needs and allowing themselves to be comforted by the support that their partner provides. The second way in which attachment security is defined is by the ability to be responsive and provide appropriate care giving for to their partner during conflict resolution (Crowell et al., 2002).

Couples are asked to choose a recurring conflict in their relationship that they are able to discuss during a 15-minute video taped session. The video is then rated on two broad categories; secure base use and secure base support. Each subscale and summary score is rated on a 7-point Likert-type scale. Within the secure base use category, each partner is rated on (a) clarity of the initial distress signal; (b) maintenance of the distress signal; (c) approach to their partner for support with the expectation that they will respond and (d)

ability to be comforted by their partner. Within the secure base support category, each partner is rated on (a) interest in their partner's concern (b) recognition of their partner's distress (c) interpretation of the meaning of their distress and (d) responsiveness to their partner's distress. Raters are also required to provide a summary score for each category, secure base use and support, which is based on but not determined by the subscale scores. If a particular subscale is more relevant or poignant in a particular couple interaction, freedom is given to the rater to give that subscale greater importance when determining the summary score.

Crowell et al., (2002) reported the inter-rater reliability using a portion of the original validation sample (31%, n = 89). The mean inter-rater reliability was r = .73 for the secure base use subscales and r = .75 for the secure base support subscales. They assessed convergent validity by comparing SBSS scores with attachment classifications on the Adult Attachment Interview (AAI; Hesse, 1999). Participants who were classified as secure using the AAI were found to have significantly higher scores on the SBSS.

In the current study, four graduate students trained in the use of the SBSS by Dr. Judith Crowell coded all videos. Previous research using the SBSS has calculated inter-rater reliability on double coded videos with 33-57% of the sample (Crowell et al., 2002; Crowell, Treboux & Brockmeyer, 2009). In the current study, the first two (pre-post) waves of data, the coders were divided into two coding groups. Pre and post-therapy videos were randomly assigned to coders, and coders were blind to the condition. In the final wave of data, at the 2-year time-point, one coder served as the primary coder, and two of the others also coded a total of 67% of the videos. The inter-rater reliability among coders for each assessment wave was calculated using intraclass correlations with two-way mixed and consistency agreement

classification (Shrout & Fleiss, 1979). Intraclass correlations (ICC's) calculated using all the tapes coded for the first two assessment waves ranged between .65-.87. The ICCs calculated for the last assessment wave using all videos coded by secondary coders (67%) ranged between .69-.86, demonstrating good to excellent agreement among coders across assessment time-points.

Statistical Analyses

Follow-up Outcomes. Couples scores during the follow-up period were compared with pre-therapy scores in order to determine couples' improvements in relationship functioning classification during follow-up. Couples' relationship satisfaction and self-reported attachment anxiety and avoidance in follow-up were compared to pre-therapy functioning using norms derived from the literature (Spanier, 1976; Shaver et al., 2005).

The Reliable Change Index (RCI). The reliable change index (RCI) was used to describe outcomes at each of the follow-up time points. Jacobson & Truax (1991) recommended two ways of investigating clinically significant change in treatment studies. The first is by using normative data to calculate a cutoff score to differentiate between distressed versus non-distressed couples. In the present study, Spanier's (1976) norms were used to this end. The second criterion for evaluating reliable change proposed by Jacobson & Truax (1991) involves use of the reliable change index (RCI), which is a calculation of the difference between pre-therapy and post-therapy scores (in this case follow-up scores), divided by the standard error of the difference in order to account for natural shifts in the normal distribution due to measurement error. Couples who demonstrated an increase of at least two standard deviations toward the non-distressed population, which equals 1.96 on the

normal distribution, were considered to have demonstrated clinically significant change in follow-up as compared to pre-therapy scores. The reliable change index in combination with norms developed by Spanier (1976) was used to determine couples classified as reliably recovered in the follow-up period.

Hierarchical Linear Modeling (HLM). Hierarchical Linear Modeling (HLM) was the method used to examine rate of change from pre-therapy over the course of two years follow-up. HLM is a statistical method used to examine nested data on multiple levels (Raudenbush & Bryk, 2002; Tasca & Gallop, 2009). The current study examined repeated measures across time (level 1) nested within individuals (level 2), and individuals nested within couples (level 3). See Appendix A for HLM models.

There are a number of advantages to using HLM as opposed to regression analyses or repeated measures ANOVA. Hierarchical Linear Modeling (HLM; Raudenbush & Bryk, 2002) allows for the investigation of change across various time points in flexible ways, making HLM an ideal form of analysis for couples therapy follow-up studies. First, HLM accounts well for missing data, which is often a problem in psychotherapy and longitudinal research due to drop out. HLM is able to use all available data from each participant allowing for optimal retention of participants when there is data missing at random, whereas traditional approaches require complete data for each participant (Gueorguieva & Krystal, 2004). Second, HLM gives a more accurate estimation of regression coefficients and error variances and is able to flexibly estimate complex models such as nested data across time (Atkins, 2005). HLM allows for data to be modeled flexibly across time in that waves of assessments at varying points in time can be accounted for. That is, rather than grouping all participants according to specific time points, the researcher can account for variation in

these time points such that, for example, if one participant is assessed 5 weeks after therapy while another is assessed 10 weeks after therapy, this can be accounted for in the analyses rather than classifying both as being assessed at the same time point. Third, HLM allows for the investigation of non-linear change. This is particularly important for follow-up research where it is unlikely that clients will continue to increase in a strictly linear way once therapy has ended (Atkins, 2005).

As the data examined here is couple data, there is no residual included for the slope at the level of individuals following the procedure described by Atkins (2005). This is because slopes across individuals are expected to be similar within couples. With respect to effect sizes, these were calculated and reported as pseudo R^2, a measure of effect size that takes into account the structure of multilevel analyses, following the formula outlined by Singer & Willett (2003).

As recommended in the literature (Raudenbush & Bryk, 2002; Singer & Willett, 2003), higher-level models are built from lower level models. Parameters are added in a step-wise process and deviance statistics are compared to determine whether additional parameters contribute to a better fit with the data. A more complex model is determined to be a significantly better fit than a simpler model if the deviance statistic is found to be significantly lower using a chi-square significance test, indicating a better fit to the data.

Missing data was investigated using pattern-mixture models (Hedeker & Gibbons, 1997) to assess whether DAS, ECR and SBSS scores are dependant on missing data by modeling for the pattern of missing data in the second level of the models. Non-significance

of missingness in these models is indicative that the data on these dependant variables is missing at random (MAR).

In order to model time more accurately in the analyses, time was calculated as weeks for each couple rather than specifically set time points. Time was calculated for each couple across all time points. Mean weeks at each time point as measured from the pre-therapy assessment were as follows: post-therapy = 63.27 (2.79), 6 months = 95.72 (2.91), 12 months = 122.06 (2.97), 18 months = 146.36 (3.10), 24 months =175.05 (3.52).

Results

Treatment Fidelity

In order to determine whether the therapeutic procedure, EFT for Couples, was implemented according to the treatment manual by study therapists, the EFT-Therapy-Therapist Fidelity Scale was implemented (EFT-TFS; Bradley & Furrow, 2009). Two graduate students, trained in the use of the scale, independently coded a third of each couple's therapy recordings, approximately 33% of each therapists' sessions. Ten-minute segments at 30 minutes into each session were coded. The coding procedure involved rating therapist statements on the scale, which included 8 EFT and 8 non-EFT interventions. These coders rated 93.5% of therapist statements as reflecting EFT-specific interventions, indicating a high level of adherence to the model. A Cohen's Kappa statistic of 0.71 was calculated based on all 4143 statements coded, reflecting a high agreement between coders. Comparing the amount of EFT and non-EFT statements for couples that did versus those that did not resolve on the DAS demonstrated no significant difference, χ^2 (1, N =4136) = .035, p = .851. The number of EFT statements also was not a significant predictor of relationship

satisfaction across follow-up, γ_{102} = -0.00, t (29) = -0.98, p = .34. Taken together, this provides evidence that any differences between therapists in terms of adherence to the model did not significantly impact results.

Data Screening and Cleaning

The data was examined for errors, outliers and deviations from normality. The very few outliers in the data (3 data points on two separate variables) were corrected to within 2.5 standard deviations of the mean. The data were normally distributed. One of the dependant variables, relationship satisfaction, was calculated using a sum score, and therefore any missing items would significantly impact the scores. Missing items on this measure fell below 5%. The missing items were imputed using the expectation maximization (EM) method. Regarding dropout rates, two couples dropped out of the study during therapy and therefore did not provide post-therapy data. An additional 2 couples provided questionnaire data at post-therapy but did not participate in the SBSS task. For a description of couples' status in the study during follow-up, see Figure 1. A pattern mixture model was used to test whether missing test scores due to drop out were missing at random (MAR; Gallop & Tasca, 2009). Results indicated that drop out status at post-therapy and follow-up did not significantly predict the trajectories of relationship satisfaction, attachment anxiety, attachment avoidance or secure base use and secure base support ($p > .05$).

Follow-up Outcomes

Means and standard deviations for dependant variables are provided in Table 1. Couples' DAS scores before beginning therapy fell in the range of mild-moderate distress, with an average score of 87.96 (SD = 8.34). At the final assessment wave, two-years

following completion of therapy, couples demonstrated, on average, levels of relationship satisfaction approaching the cut-off for recovery of 97 on the DAS, (M = 96.24) with a large standard deviation of 21.52. Results from a paired samples t-test comparing scores from pre-treatment to 2-years follow-up indicated statistically significant change in relationship satisfaction was maintained, with a small to medium effect size (Cohen, 1992), d = .46, t (20) = 2.12, p = .046.

In terms of self-reported attachment scores, couples' mean attachment anxiety scores moved from above the 95% confidence interval of the mean norms reported by Shaver et al., (2005) to within the 95% confidence interval of the normative sample at post-therapy. At 2 years follow-up, couples' mean attachment anxiety (M = 3.23, SD = .90) decreased further and fell below the confidence interval for the normative sample, indicating lower scores than the norm. Couples' mean attachment avoidance (M = 3.13, SD = 1.14) did not decrease to be within the 95% confidence interval of the normative sample at post-therapy, and did not fall within this range at 2-year follow-up. Results from paired samples t-tests comparing mean couple attachment scores from pre-treatment to 2-years follow-up indicated that statistically significant change in attachment anxiety was maintained, with a large effect size, d = 1.03, t (20) = 4.72, p < .001. Attachment avoidance neared significance with a small effect size, d = .39, t (20) = 1.78, p = .09.

Clinical Change

The Reliable Change Index (RCI) recommended by Jacobson & Truax (1991) was used to measure clinical change from pre-therapy scores across assessment waves for those couples who participated in the follow-up component of the study (N = 28). For these results, see Table 2. Overall, the number couples indicating reliably increased relationship

satisfaction from pre-therapy decreased by 25% at two years follow-up. A total of 46.4% of couples demonstrated clinically significant improvements from their pre-therapy scores at two years follow-up. In terms of change from post-therapy, at 2 years follow-up, 18% (n = 5) demonstrated reliable improvement from their scores at termination, 29% demonstrated reliable deterioration, and 36% were unclassifiable. At the two-year follow-up time point, 5 out of the original 28 couples who agreed to participate in follow-up had divorced during the follow-up period (18%).

Hierarchical Linear Modeling (HLM)

This is the first study to use HLM to investigate the trajectory of couples' outcomes during follow-up in EFT. Therefore, although we hypothesized that couples' scores would follow a logarithmic slope, linear and quadratic slopes for all dependant variables were also tested. The deviance statistics indicated that the logarithmic time parameter was a better fit to the data than the linear or quadratic slopes across dependant variables. The logarithmic slope indicates an initial linear increase that gradually levels off from post-therapy to through follow-up. As such, the logarithmic slope was used to model scores across time in the analyses reported here.

As there was no difference in findings between models that controlled for pre-therapy scores versus those that did not control for pre-scores, pre-therapy scores were not controlled for in the analyses reported here. Furthermore, given that differences between therapists were not significantly related to any outcome, therapists also were not controlled in the analyses.

Relationship satisfaction. The unconditional growth model demonstrated a significant logarithmic slope across weeks for relationship satisfaction, $\gamma_{100} = 1.47$, $t\ (31) =$

2.40, $p = .02$, suggesting that couples demonstrated gains in therapy from pre to post treatment that leveled off to a slower rate of change during the follow-up period (See Figure 2). This translated into increases of 1.47 points increase on the DAS per exponential increment of weeks – that is, as weeks from pre-therapy doubled, couples increased on average by 1.47 points. The pseudo R^2 statistic indicated that the logarithmic parameter explained 34.67 % of the variance within couples' scores across time, representing a large effect size (Cohen, 1992). The difference in deviance statistics indicated that the addition of the logarithmic transformation of the time parameter as a predictor in the model resulted in a significantly better fit to the data than the intercepts only model, χ^2 (3) = 94.33, $p < .001$.

Attachment Anxiety. The unconditional growth model for attachment anxiety demonstrated a significant logarithmic slope across weeks, $\gamma_{100} = -0.12$, t (31) = -4.75, $p <$ .001, suggesting that couples decreased in attachment anxiety that leveled off to a slower rate of decrease across follow-ups (See Figure 3). This translates into decreases of .12 points per exponential increase of weeks from pre-therapy on the ECR-RSR. The pseudo R^2 statistic indicated that the logarithmic parameter explained 17.45 % of the variance within couples' scores across time, representing a medium effect size (Cohen, 1992). The difference in deviance statistics indicated that the addition of the logarithmic transformation of the time parameter resulted in a significantly better fit to the data than the intercepts only model, χ^2 (3) = 38.51, $p < .001$.

Attachment Anxiety and Relationship Satisfaction. The relationship between attachment anxiety and relationship satisfaction across time was found to be significant such that lower attachment anxiety was associated with relationship satisfaction, $\gamma_{200} = -2.84$, t (31) = -2.10, $p = .005$.

Attachment Avoidance. The unconditional model did not demonstrate a significant logarithmic slope across weeks γ_{100} = -0.05, t (31) = -1.43, p = .16. Neither the linear nor quadratic time parameters were significant predictors of attachment avoidance scores across time. The pseudo R^2 statistic indicated that the logarithmic parameter explained 13.49% of the variance within individual scores across time, representing a small effect size (Cohen, 1992). The difference between deviance statistics indicated that the addition of the logarithmic transformation of the time parameter resulted in a significantly better fit to the data than the intercepts only model, χ^2 (3) = 22.96, p < .001.

Attachment Avoidance and Relationship Satisfaction. The average relationship between attachment avoidance and relationship satisfaction was found to be significant with higher relationship satisfaction associated with lower attachment avoidance across time, γ_{200} = -7.05, t (31) = -7.47, p < .001.

Secure Base Use. The unconditional growth model for Secure Base Use demonstrated a significant logarithmic slope across weeks, γ_{100} = .10, t (31) = 3.91, p < .001. That is, couples demonstrated increases in secure base use behaviour from pre to post treatment that leveled off to a slower rate of change across follow-up, translating to increases of 0.1 points per exponential increase of weeks from pre-therapy (See Figure 3). The pseudo R^2 statistic indicated that the logarithmic parameter explained 34.61% of the variance within couples scores across time, representing a large effect size (Cohen, 1992). The difference in deviance statistics indicated that the addition of the logarithmic transformation of the time parameter resulted in a significantly better fit to the data than the intercepts only model, χ^2 (3) = 45.05, p < .001.

Secure Base Support. The unconditional growth model for Secure Base Support demonstrated a significant logarithmic slope across weeks $\gamma_{100} = .24$, $t\ (30) = 3.87$, $p < .001$. That is, couples demonstrated increases in secure base support that leveled off to a slower rate across follow-up, translating to increases of .24 per exponential increase of weeks from pre-therapy (See Figure 3). The pseudo R^2 statistic indicated that the logarithmic parameter explained 48.63% of the variance within couples scores across time, representing a large effect size (Cohen, 1992). The difference in deviance statistics indicated that the addition of the logarithmic transformation of the time parameter resulted in a significantly better fit to the data than the intercepts only model, $\chi^2\ (3) = 43.11$, $p < .001$.

Discussion

This was the first study to investigate the trajectory of relationship functioning over the course of follow-up after the completion of EFT for couples. The results indicated statistically significant stability in relationship functioning across follow-up in terms of relationship satisfaction, relationship-specific self-reported attachment anxiety, and behaviourally measured attachment in terms of secure base use and secure base support behaviours.

Although attachment anxiety decreased during EFT, levelling off in follow-up, attachment avoidance did not demonstrate a significant logarithmic slope. However, self-reported attachment avoidance scores were lower across follow-up than at pre-therapy, and this result neared significance in a paired samples t-test. Both attachment anxiety and avoidance were found to be significantly associated with relationship satisfaction on average across time. Therefore, although attachment avoidance did not significantly decrease and

remain stable across time, generally attachment avoidance was associated with relationship satisfaction, as found in previous non-clinical research (Simpson, 1990). One possible reason that the attachment avoidance slope was not significant may be that initial levels of attachment avoidance were lower than initial levels of attachment anxiety, leaving less room for change. However, in a study examining session-by-session change with the same sample of couples, significant linear change in attachment avoidance, but not attachment anxiety was found across therapy sessions (Burgess Moser et al., 2014). Another possibility may be that changes in attachment avoidance in therapy tend to be less stable than changes in attachment anxiety. Mean attachment avoidance scores were higher across follow-up time points than pre-therapy levels. It is possible that a larger sample would have been necessary to have the power to detect a significant effect in this variable.

Attachment was also measured through observations of interactions using the Secure Base Scoring System (SBSS; Crowell, Pan, Gao, Treboux, & Waters, 1998). HLM analyses demonstrated significant increases in both secure base use and secure base support behaviours from pre-therapy to post-therapy that leveled off at 2 years follow-up. That is, secure attachment behaviours continued to increase slightly in follow-up.

The clinical change results as measured using the Reliable Change Index (RCI) were not as high as previous EFT follow-up studies (i.e., Cloutier, Manion & Walker, 2002), though it is comparable to other couple therapy follow-up studies generally. Reliable change in TBCT was recently reported at 60% at 2 years follow-up and 45.9 at 5 years follow-up. Reliable change in IBCT was reported as 69% after 2 years and 50% after 5 years (Christensen et al., 2006). The lower RCI statistic in this study may have been due to factors such as the variability in number of therapy sessions received, or length of time receiving

therapy. In our study, although couples on average demonstrated improvements across time as shown in the HLM analyses, some of the couples in the study did not demonstrate change large enough to be considered clinically significant. Furthermore, relationship satisfaction scores at the follow-up time points demonstrated greater variability in follow-up (SD = 8.34 at pre-therapy and 21.52 at 2 years follow-up). Therefore, it is important to investigate predictive factors to help explain the variability in outcomes.

EFT Follow-up Outcomes in the Context of Couple Therapy Research

EFT has demonstrated excellent long-term follow-up results in two relatively recent studies (Cloutier, Manion & Walker, 2002; Halchuk, Makinen & Johnson, 2010). Clinical findings of the current study were relatively consistent with this previous research. Specifically, although the percentage of couples demonstrating clinically significant change did not increase in follow-up as found by Cloutier et al., (2002), some couples demonstrated continued reliable improvement from termination to 2 years follow-up (18%).

This was the first study to have demonstrated a significant trajectory of better relationship satisfaction – both in terms of relationship satisfaction and attachment – across multiple time points in the years following completion of EFT. Furthermore, increased attachment security was demonstrated behaviourally, suggesting that EFT creates long-term change for couples not only in terms of self-reported explicit measures of attachment anxiety but also in terms of observational methods that measure implicit aspects of attachment in the relationship.

Behavioural Couples Therapy approaches – Traditional (TBCT) and Integrative (IBCT) Behavioural Couples Therapy – have also used HLM to measure trajectories of

couple functioning across a long-term follow-up period. These trajectories were not consistent with linear, or linear transformations of time (i.e., linear, logarithmic or quadratic patterns). Rather, their findings indicated decreases in relationship satisfaction in the first year after therapy ended, followed by subsequent increases in the course of 2 years (Christensen, Atkins, Yi & Baucom, 2006). In a later study investigating these same couples 5 years after completion of therapy, trajectories were consistent with a sixth order polynomial, demonstrating a wave-like pattern (Christensen, Atkins, Baucom & Yi, 2010). The findings from the current study demonstrated, in contrast, that the logarithmic slope was a significant fit to relationship satisfaction scores across time for couples that had completed EFT, indicating that relationship satisfaction demonstrated increases from pre to post therapy that continued along this trajectory more gradually across 2 years follow-up.

Attachment and the Process of EFT

The current study's results provide empirical support for the assumption in EFT that relationship gains made in therapy last, and are related to lasting changes in the attachment bond. EFT is based on the assumption that couple relationships form a system in which patterns become cyclical, as evidenced in the common demand/withdraw pattern underlying relationship distress and dissolution (Gottman, 1993). In this pattern, couples are caught in a cycle where one partner elevates attachment signaling in the form of blame and criticism, while the other withdraws. This pattern is self-sustaining as partners express their position in the cycle as a response to the position of the other partner, where one partner expresses the urge to criticize a withdrawing partner for not being emotionally engaged, while the other partner withdraws to avoid this criticism, thus sustaining the cycle. EFT seeks to identify and de-escalate this cycle while fostering new kinds of interactions based on the expression of

more vulnerable attachment fears and longings. As the withdrawing partner becomes more engaged and responsive, the blaming partner is able to soften harsh critical attachment signals and instead express the more vulnerable attachment longings underneath. EFT theory suggests that as couples develop more secure patterns of engagement, these too become self-sustaining (Johnson & Whiffen, 1999; Johnson, 2004). The current study provided evidence for this assumption both in terms of self-reported attachment anxiety, and also in terms of observed secure base behaviours.

Attachment Change in Therapy

The findings of this study also hold broader implications for attachment-based therapies. Previous research has demonstrated changes in attachment through psychotherapy (Tasca, Balfour, Ritchie and Bissada, 2007; Travis, Binder, Bliwise and Horne-Moyer, 2001; Burgess-Moser et al., 2014). However, this is the first study, to the authors' knowledge, to have found that changes in attachment, measured behaviourally and through self-report, lasted across time and are associated with positive relationship satisfaction. Bowlby (1988) initially proposed that attachment can change in therapy, and offered his views on the durability of security in relationships, as the secure attachment relationship serves as a safe haven and secure base throughout the changing seasons and any periods of significant stress. According to attachment theory, stressful events are not destructive to secure relationships, but rather are a time when secure attachment partners are able to turn to each other for emotional support (Bowlby, 1988). Couples in our study demonstrated this through interactions in the Secure Base Scoring System task (Crowell et al., 1998) where we asked couples to discuss a disagreement in the relationship. Even two years after therapy ended,

couples were significantly better able to seek emotional support, expect a response from their partner, and offer emotionally attuned support in return.

Implications for Therapists

The results of the current study suggest that once couples have completed therapy in EFT – an attachment based couples therapy – relationship satisfaction and attachment anxiety on average maintain their gains. That is, EFT is effective in its goal to help couples improve relationship satisfaction and attachment security, and more broadly that attachment-based interventions can be effective in improving attachment security. The results also suggest that attachment avoidance is a factor that therapists may need to pay particular attention to over the course of therapy, as decreases in attachment avoidance do not seem as durable across time and lower attachment avoidance scores are significantly associated with higher relationship satisfaction. Assessment of relationship specific attachment styles at multiple time-points throughout the therapy process may help therapists gauge whether attachment avoidance is substantially decreasing in the couple. Therapists may spend more time in the consolidation phase with more avoidant couples in order to help ensure that they integrate exploring and expressing attachment emotions with each other more readily into their daily interactions.

Limitations and Future Directions

This study was not without limitations. While this study did not include a traditional control group it is very unlikely that the pattern of results, that is the growth curves related to specific variables found here, would occur by chance alone. The relatively homogenous and small sample size limits the generalizability of findings. Our sample was mainly Caucasian

and also fairly advantaged in a socio-economic sense though individual income varied widely. Future EFT research should aim to recruit couples of various backgrounds and socio-economic status. The level of attrition in this study, though comparable to other couple therapy studies, was another limitation. Although the data was found to be missing at random relative to the dependant variables studied, some couples who left the study may have done so due to high levels of distress, or in some cases relationship dissolution. The results of this study do not generalize to couples who end their relationship after therapy; however, future research with a larger sample size could study the trajectory of couples who end the relationship after therapy. In our sample, this subsample of couples who ended the relationship was too small to study this question specifically.

Conclusions

This study provides evidence for the theoretical assumption of EFT that changes in attachment and relationship functioning in therapy occur and are long-lasting after couples have completed therapy. A previous study found that these changes occur linearly across therapy sessions (Burgess Moser et al., 2014), and the current research has shown that generally these changes continue and level off across the years following treatment. Moreover, this study measured attachment change both in terms of explicit self-reported attachment, and implicit, observed relationship specific attachment interactions, demonstrating that these aspects of the attachment system are amenable to change in therapy and generally last across time. As the first study to demonstrate the lasting effects of EFT across multiple time points, and the only study to measure both conscious and unconscious aspects of attachment change from pre-therapy through follow-up, this study represents a significant contribution to the couples therapy literature, and EFT research more specifically,

as well as the attachment literature more broadly in terms of the stability of attachment self-report and behavioural measures across time following changes in therapy (Mikulincer & Shaver, 2007). The findings from this study also support the idea that changes in relationship satisfaction and attachment security occur in concert, and provides evidence for the use of attachment-based interventions in couples therapy.

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Table 1. Means and standard deviations of dependant variables

	Pre-therapy	Post-therapy	6 months	12 months	18 months	2 years
Relationship Satisfaction	87.96 (8.34)	99.67 (14.93)	94.44 (20.22)	96.10 (21.98)	96.93 (22.11)	96.24 (21.52)
Attachment anxiety	3.92 (.61)	3.49 (.87)	3.47 (.73)	3.33 (.74)	3.22 (.91)	3.23 (.90)
Attachment avoidance	3.48 (.77)	3.09 (.86)	3.21 (1.05)	3.13 (1.08)	3.22 (1.16)	3.13 (1.14)
Secure base use	3.34 (.66)	3.96 (.81)	_	_	_	4.03 (1.18)
Secure base support	3.64 (.86)	4.25 (.96)	_	_	_	4.31 (1.22)

Table 2. Percentage of couples demonstrating clinically significant change, recovery or deterioration compared to their scores at pre-therapy.

	Post-therapy	6 months	12 months	18 months	2 years
Reliable recovery	60.7 (n = 17)	42.9 (n = 12)	42.9 (n = 12)	39.3 (n = 11)	39.3 (n = 11)
Reliable change	71.4 (n = 20)	46.5 (n = 13)	50 (n =14)	53.6 (n =15)	46.4 (n = 13)
No reliable change	25.0 (n = 7)	28.6 (n =8)	21.4 (6)	25.0 (n = 7)	21.4 (n =6)
Reliable deterioration	3.6 (n = 1)	21.4 (n = 6)	17.0 (n =5)	7.1 (n = 2)	14.3 (n = 4)
Dissolution	-	3.6 (n = 1)	10.7 (n = 3)	14.3 (n = 4)	17.9 (n = 5)

Note. These results are calculated for the couples who participated in the follow-up phase of the study (N = 28)

Figure 1. Assessment flowchart: Reasons for dropout

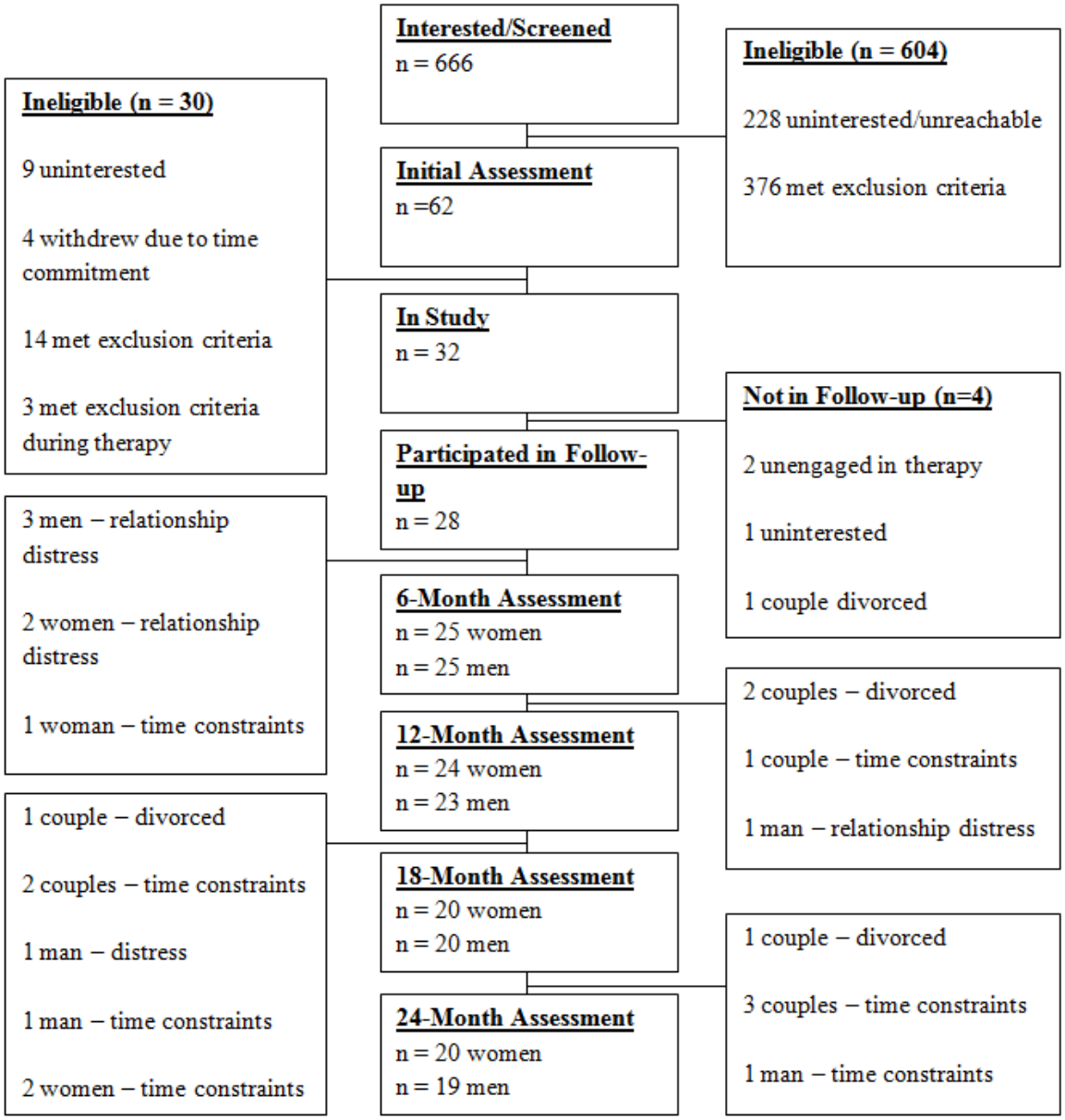


Figure 2. Relationship satisfaction modeled across follow-up

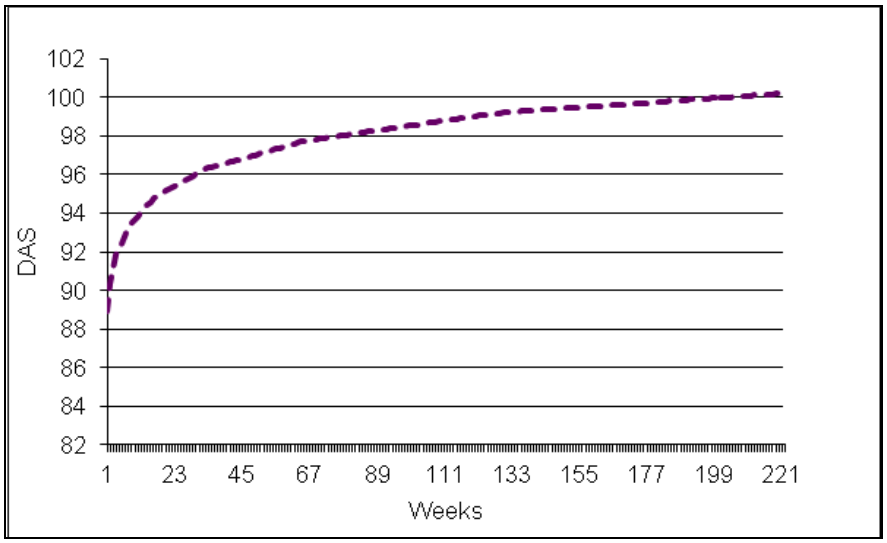
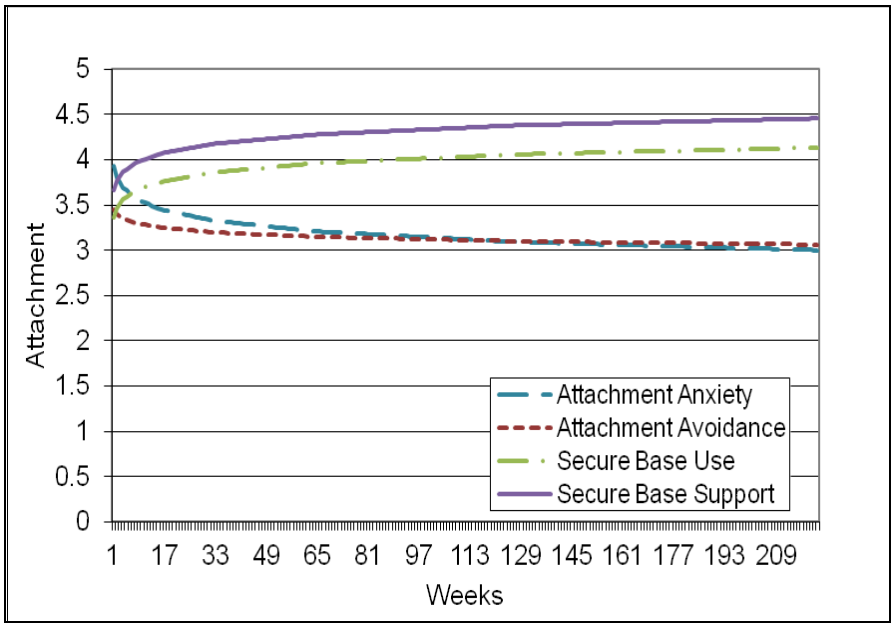


Figure 3. Attachment modeled across follow-up



Appendix A – HLM Models

Unconditional Logarithmic Model for Outcome Variables

Level 1 (repeated measures):

$$Y_{tij} = \pi_{0ij} + \pi_{1ij}(\log time_{tij}) + e_{tij}$$

Level 2 (individuals):

$$\pi_{0ij} = \beta_{00j} + r_{0ij}$$

$$\pi_{1ij} = \beta_{10j}$$

Level 3 (couples):

$$\beta_{00j} = \gamma_{000} + u_{00j}$$

$$\beta_{10j} = \gamma_{100} + u_{10j}$$

Covariate Model with Relationship Satisfaction as the Outcome Variable

Level 1 (repeated measures):

$$Y_{tij} = \pi_{0ij} + \pi_{1ij}(\log time_{tij}) + \pi_{2ij}(Covariate_{tij}) + e_{tij}$$

Level 2 (individuals):

$$\pi_{0ij} = \beta_{00j} + r_{0ij}$$

$$\pi_{1ij} = \beta_{10j}$$

$$\pi_{2ij} = \beta_{20j}$$

Level 3 (couples):

$$\beta_{00j} = \gamma_{000} + u_{00j}$$

$$\beta_{10j} = \gamma_{100} + u_{10j}$$

$$\beta_{20j} = \gamma_{200} + u_{20j}$$

Running head: Predictors of Follow-up

Article 2

Predictors of Follow-up Outcomes in Emotionally Focused Therapy

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Abstract

Emotionally Focused Therapy for Couples (EFT), an evidence-based couples therapy with excellent outcomes (Johnson, Hunsley, Greenberg & Schindler, 1999), strives to create lasting change for couples through the creation of secure attachment bonds. Although studies have demonstrated strong results in follow-up (Cloutier, Manion, Walker & Johnson, 2002), research is needed to investigate predictors of long-term follow-up outcomes. The goal of this study was to investigate the predictors of the trajectory of relationship satisfaction and relationship specific self-reported attachment over the course of two years following the completion of therapy. The trajectory of relationship satisfaction was modeled across pre-therapy, post-therapy and 6, 12, 18 and 24 months follow-up in a sample of 32 couples that received an average of 21 sessions of EFT. Change in self-reported attachment anxiety and avoidance, trust and emotional control in therapy were investigated as predictors of relationship satisfaction across time. Results indicated a significant growth pattern demonstrating increases in relationship satisfaction over the course of therapy that leveled off during the follow-up period. Decreases in relationship specific attachment anxiety and avoidance, and increases in trust during therapy predicted higher relationship satisfaction scores over and above pre-therapy scores across the follow-up period. These findings support the conjecture that EFT helps couples create lasting change in relationship satisfaction through the facilitation of secure attachment bonds.

Predictors of Follow-up Outcomes in Emotionally Focused Therapy

With a growing awareness of the significant impact of intimate relationships on health and well being (Proulx, Helms & Buehler, 2007), and a growing recognition of the efficacy of couples therapy (Snyder & Halford, 2012), more couples are seeking treatment for relationship distress. The effectiveness of couple therapy has been demonstrated consistently, with good results in follow-up (Shadish & Baldwin, 2003). However, in spite of these positive results, a significant number of couples experience relapse and decreases in relationship satisfaction during the months after therapy has ended (Shadish & Baldwin, 2003). Recent research has found that for some approaches, these initial decreases may be temporary in the first months after therapy, only to increase again across the ensuing years, though often not reaching post-therapy levels (Christensen, Atkins, Baucom & Yi, 2010).

Emotionally Focused Therapy for couples (EFT) has demonstrated some of the strongest follow-up results. In particular, two long-term follow-up studies found that couples demonstrated maintenance or continued gains in the 2-3 years following treatment (Cloutier, Manion & Walker, 2002; Halchuk, Makinen & Johnson, 2010). In these studies, predictors of outcome were not measured. However, in the case where there was an attachment injury in the relationship, those who resolved the injury during therapy were more likely to have higher relationship satisfaction at follow-up. A short-term follow-up study examined predictors of couple outcomes 3 months after EFT therapy had ended (Johnson & Talitman, 1997). This study found that female partners' faith (a dimension of trust) in her partner's caring at intake predicted the couples' satisfaction at follow-up. Males whose partners had greater faith in them were less likely to be distressed. Additionally, older males demonstrated lower distress at follow-up. Higher relationship satisfaction at post-therapy was also

associated with lower satisfaction at intake and less proximity seeking (on a measure of attachment) on the part of the male partner at intake. These results suggest that basic trust on the part of the female partner, and older age of the male partner are predictive of better follow-up outcomes.

Other therapeutic approaches for couples have investigated predictors of follow-up outcomes. Snyder, Mangrum and Wills (1993) investigated predictors of outcome following four years after the completion of either Insight Oriented Couples Therapy or Behavioral Couples Therapy. They found that higher initial levels of distress were highly predictive of relationship satisfaction outcomes at post-therapy, and remained predictive of follow-up outcomes. They found that higher levels of self-reported depressive symptomatology, lower psychological resilience and emotional responsiveness, and greater deficits in problem solving communication measured at pre-therapy were predictive of follow-up results. They also found that higher levels of negative affect and conflict, a greater tendency towards problem-solving and information exchange and fewer positive listening statements in observed interactions were predictive of lower relationship satisfaction and higher rates of divorce at follow-up.

The above-mentioned studies, however, were limited to one time point in follow-up. Hierarchical Linear Modeling (HLM; Raudenbush & Bryk, 2002) is a method that has been recently applied to couples therapy research, allowing researchers to investigate outcomes across multiple time points, and allowing time to be modeled flexibly (Atkins, 2005). It also allows for growth trajectories to be modeled in ways that represent various patterns of change, including non-linear trajectories. The current study sought to investigate predictors of couples' growth trajectories across two years after EFT. One more recent study

investigated pre-treatment predictors of long-term response to treatment in Traditional Behavioural Couples Therapy (TBCT) or Integrative Behavioural Couples Therapy (IBCT) using HLM (Baucom, Atkins, Simpson & Christensen, 2009). They found that pre-treatment levels of two communication variables relevant to these approaches, the wife's observed emotional arousal and greater use of softer influence tactics in an interaction task, predicted better relationship satisfaction across four time points up to two years after completion of therapy (Baucom, Atkins, Simpson & Christensen, 2009).

A recent study using the current sample of couples found that after completion of therapy, couples with higher attachment anxiety and emotional control demonstrated greater improvements in relationship satisfaction across sessions (Dalgleish, Johnson, Burgess Moser, Lafontaine, Wiebe & Tasca, in press).

Taken together these results offer conflicting findings on the variables that predict response to treatment (relationship satisfaction) in couples therapy. Theoretically relevant predictors in BMT and IOMT (i.e., communication behaviours) at pre-therapy tended to be predictive of response to these approaches. Emotional expression/control measured at pre-therapy is also a notable predictor across therapeutic orientations. In general, it seems that higher emotional expression or responsiveness is predictive of higher relationship satisfaction after therapy, but that a high level of negative affect is predictive of poorer outcomes. In one EFT study, higher trust was a significant predictor, which is not surprising as greater trust likely allows partners to be more engaged in therapy. The result that older age of male partners predicts higher relationship satisfaction in follow-up is puzzling, as there does not seem to be any reason that older age would predict response to couple therapy. However, it is possible that this can be accounted for greater relationship length and,

perhaps, strong commitment. Overall, theoretically relevant variables seem to be the most promising predictors of outcome. Previous research has not examined changes in theoretically relevant variables in therapy as predictors of long-term outcomes in EFT. However, this is surprising given the theoretical relevance of therapeutic change with respect to maintenance of relationship satisfaction after therapy.

Emotionally Focused Therapy and the Process of Change

EFT views relationship distress from an attachment theory perspective, integrating both systems and humanistic principles (Burgess Moser & Johnson, 2007). The attachment bond between partners is seen as an organizing system of powerful emotional experiences and reactions. EFT holds that the negative, rigid interaction cycles of demand/withdraw associated with relationship distress and dissolution (Gottman, 1993) are characterized as an insecure attachment bond. Partners with insecure attachment in the relationship will have difficulty acknowledging and expressing their own attachment needs, and difficulty recognizing, acknowledging or responding to attachment emotions and needs in their partner (Crowell et al., 2002; Johnson, 2003). Rather, partners become caught up in maladaptive protective responses to vulnerable attachment emotions such as blaming the other partner angrily in protest, or withdrawing from the interaction in an attempt to minimize distress (Gottman, 1993; Johnson, 2003). In EFT, therapists strive to help couples create greater security in the relationship by helping couples gain an awareness of these negative patterns, and helping them explore more vulnerable attachment emotions beneath secondary reactive responses (Johnson, 2004). Therapists help couples attend to attachment signals, emotions and unmet attachment needs, and help couples reach for each other from these softer

underlying primary emotions in ways that facilitate a response from the other partner, thereby reshaping the core attachment bond between partners (Johnson, 2004).

EFT is a manualized therapy carried out in three stages. In the first stage, therapists help couples de-escalate the negative interaction cycle through exploration and expression of primary attachment emotions underlying negative reactive responses. This gives the couple a meta-perspective on their interaction and allows them to see the cycle as the difficulty in the relationship rather than their partner. This stage also helps partners understand that seemingly hostile responses from their partner are their best attempts to maintain the bond. This is inherently validating for both partners and provides a foundation of safety to take emotional risks (Johnson, 2004). The second stage of EFT involves restructuring attachment interactions. Partners express and respond to one another's attachment emotions directly through enactments structured by the therapist. Partners who previously withdrew in the relationship begin to express their fear and ask for their attachment needs to be responded to, and become more responsive and engaged. In turn, partners who previously were blaming and critical begin to clearly express their attachment needs beneath reactive anger in a way that allows the other partner to understand and respond. As the withdrawing partner re-engages, and as the blaming partner softens, new positive bonding interactional patterns are formed in key bonding moments called a blamer softening change event (Johnson, 2004). The third stage of EFT involves consolidation and integration where couples engaged in new interactional patterns to address ongoing relationship concerns and sources of conflict. In this way, new interactional patterns are consolidated and new attachment behaviours become increasingly frequent in the couple's daily interactions, thus contributing to maintenance of change.

Attachment, Emotion and Trust in EFT

According to attachment theory, seeking and maintaining close attachment bonds is a universal human need that continues throughout the lifespan (Bowlby, 1988). Responsiveness in relationships facilitates feelings of security, and positive expectations, beliefs and feelings about self and other, whereas a lack of responsiveness or variable responsiveness creates insecurity in the relationship (Mikulincer & Shaver, 2007). This set of beliefs, feelings and expectations – known as attachment working models – organize emotion regulation and behaviours in relation to close others (Pietromonaco & Feldman Barrett, 2000). EFT views problems in the relationship as maintained by the dominant organizing emotional experiences of each partner where attachment related affect plays out in the relationship in a self-sustaining cycle of interactions (Johnson & Whiffen, 1999). Change is understood to occur as couples experience new interactions where primary emotions are explored, expressed and responded to by the partner (Johnson & Whiffen, 1999). Indeed, attachment insecurity in relationships has been consistently found to be associated with lower relationship satisfaction (Simpson, 1990; Mondor, McDuff, Lussier & Wright, 2011).

Attachment emotions are at the core of the attachment system, organizing thoughts and behaviours in close relationships (Pietromonaco & Feldman Barrett, 2000). Expression of underlying attachment emotions is central to a secure relationship. Insecure couples tend to control attachment emotions such as anger, sadness and anxiety (Feeny, 1995). Comfort with closeness – so core to a secure attachment bond – is related to lower emotional control of anger, sadness and anxiety for female partners and lower control of anxiety and sadness for male partners. It has been found that as partners control negative emotions in an insecure attachment bond, positive attachment emotions are also experienced less (Alford, Lyddon

and Schreiber, 2006). Insecure attachment emotion regulation strategies such as "talking around" the issue or avoidance of communication when there has been a breach of trust in the relationship is associated with detrimental relationship outcomes (Jang, Smith & Levine, 2002). Similarly, higher trust in couple relationships has been found to be associated with lower self-reported attachment insecurity (Simpson, 1990). In EFT, trust has been viewed as an important aspect of the relationship that is necessary in order to repair the insecure attachment bond. Furthermore, breaches in trust in the relationship are seen as an "attachment injury", a barrier to repairing the bond that must be addressed through specific steps in stage 2 of EFT (Zuccarini, Johnson, Dalgleish & Makinen, 2013). In a three-year follow-up study, Halchuk, Makinen and Johnson (2010) found that couples who were classified as having resolved their attachment injury in therapy demonstrated better long-term outcomes in relationship satisfaction and trust than those who did not. Also, in the same study, unresolved injured partners reported higher attachment avoidance at follow-up. Furthermore, in an initial study, lower pre-therapy levels of trust in EFT were found to predict 3-month follow-up outcomes EFT (Johnson & Talitman, 1997). Overall there appears to be close relationship between trust and attachment in EFT, however the role of these factors in predicting long-term outcomes is not clear.

The Current Study

The goal of this study was to investigate predictors of the trajectory of relationship satisfaction across two years following completion of therapy. Predictors were selected based on their relevance to couple therapy generally (i.e., relationship length, age), and to EFT more specifically such as pre-therapy levels and therapeutic change in relationship specific attachment, trust, and emotional control. Furthermore, relevant in-session variables including

emotional experiencing and the achievement of a blamer softening event in therapy will be examined. Age was investigated as a predictor as previous research demonstrated that greater age of male partners predicted higher relationship satisfaction at 3 months follow-up (Johnson & Talitman, 1997). Relationship length was also investigated in order to determine whether longer relationship length might account for previous findings related to age because older couples may be more likely to have been together for a longer period of time than younger couples. In addition, negative and positive life events will be assessed in order to determine whether the trajectory of relationship satisfaction might be impacted by events in the couples' life. If life events are a significant predictor they will be controlled for in analyses.

The following hypotheses were tested:

It was hypothesized that greater age of partners, greater relationship length and greater trust reported at pre-therapy will be associated with increases in relationship satisfaction from pre to post therapy that will remain stable across 6, 12, 18 and 24 months follow-up. However, greater relationship length will account for the variance predicted by age. It was hypothesized that decreases in attachment anxiety and avoidance, and emotional control from pre-therapy to post-therapy will predict increases in relationship satisfaction from pre-therapy to post-therapy that are maintained across 6, 12, 18 and 24 months follow-up. The achievement of blamer softening during the therapy process was hypothesized to predict increases in relationship satisfaction across 6, 12, 18, and 24 months follow-up relative to those who did not achieve blamer softening.

Method

Participants

Thirty-two distressed couples were recruited through advertisements in local newspapers, online and in the community for a study on love and stress. The sample consisted of distressed heterosexual couples living together for at least 1 year. Most couples in the sample were married (94%), and four couples reported living common-law (6%). Couples reported being together in their current relationship on average for 17.67 years. Most couples had children together (87%), and 6 people indicated having children from a previous relationship.

Participants ranged from 28 to 64 years of age. The mean age of participants was 44.97 (1.52) and 44.30 (1.18) for men and women respectively. Most of the sample identified as Caucasian (93.8%), 1 identified as African American, and 2 identified as Hispanic. The majority of the sample reported English as their mother tongue (76.6%). An additional 5 participants reported French as their first language, and 8 individuals reported another language as their mother tongue (i.e., Hebrew, Spanish, Dutch and German). In terms of education, 93.4% of the sample had attained post-secondary education. The individual income of participants varied widely with an average individual income of $75, 886.76 (SD = 60, 103.41).

Measures

The Dyadic Adjustment Scale (DAS). The Dyadic Adjustment Scale (Spanier, 1976) is a 32-item measure of relationship satisfaction. Partners are asked to rate the frequency of specific relationship disagreements and positive occurrences in the relationship on varying likert scales. The DAS yields a total score ranging from 0-150, with higher scores

indicating better relationship satisfaction. A significant difference between married and divorcing couples was found (Spanier, 1976). Based the means from the standardization sample, the norm for married couples is 114.8 and the norm for divorcing couples is 70, with a cut-off score of 97 (Spanier, 1976). Scores between 80-97 are classified as mild to moderate relationship distress. Spanier (1976) reported high internal consistency on all 32 items (Cronbach's alpha = .96). High reliability has also been found in more recent samples. Christensen, Atkins, Yi, Baucom and George (2006) found reliabilities of α = .89 for men and α = .87 for women in a sample of 134 distressed couples on the DAS total score. South, Krueger and Iacono (2009) found an internal reliability coefficient of α = .93 on the total scale score in a sample of 900 married couples. The DAS demonstrated high convergent validity with the Locke Wallace Marital Adjustment Scale, with high correlations between the measures (r = .88 for married participants; r = .86 for divorcing participants). It also correlated highly with the Satisfaction with Married Life Scale (r = .78; Ward, Lundberg, Zabriskie & Berret, 2009). Test-retest reliability over a 2-week period was found to be .87 for the total scale score (Carey, Spector, Lantinga & Krause, 1993). In the current study the internal consistency at the follow-up time-points varied between α = .85-.95. The DAS remains the most commonly used measure of relationship adjustment **(**Sabatelli, 1988; Graham, Liu, & Jeziorski, 2006). Therefore use of this measure will allow the results to be compared with other couples treatment studies.

The Experiences in Close Relationships Questionnaire – Revised for Specific Relationships. The Experiences in Close Relationships Questionnaire (ECR; Brennan, Clark, & Shaver, 1998) is a 36-item questionnaire that assesses adult attachment styles. The original version of this questionnaire assesses general attachment styles; however, in

consultation with Dr. Shaver (2006, personal communication), this scale was adapted to refer specifically to the couple's current relationship for use in the current study. Because the modification was very minor, it was not expected to affect the reliability or validity of the measure. The measure yields scores on two dimensions: attachment anxiety and attachment avoidance. In the standardization sample, internal consistency reliability was α = .94 for the avoidance scale and α = .91 for the anxiety scale (Brennan, Clark, & Shaver, 1998). Test-retest reliability was found to be stable for both anxiety and avoidance subscales with r = .82 and r = .86 for each scale respectively across a one month period (Wei, Russell, Mallinckrodt & Vogel, 2007). The ECR was found to correlate highly with another measure of attachment styles, the Relationship Questionnaire, demonstrating convergent validity (Griffin & Bartholomew, 1994). The internal consistency of each subscale in the current study was acceptable with a range across time points of α = .86 - .92 and α = .89 - .95 for the anxiety and avoidance subscales respectively.

The Relationship Trust Scale. The Relationship Trust Scale (RTS; Holmes, Boon & Adams, 1990) is a 30-item scale that yields a total score and 5 subscale scores: (1) Responsiveness (2) Dependability (3) Faith (4) Conflict Efficacy and (5) Dependency Concerns. In the development of the measure, high internal consistency Cronbach's alphas were found across subscales ranging from α = .83 - .89, and α = .89 for the total scale. Test-retest reliability was r = .71 across a three year period (Holmes et al., 1990). In the current study, the total score will be used in analyses. The total score yielded high reliability ranging from α = .88 - .97 across time points in the current sample.

The Courtauld Emotional Control Scale Revised. The Courtauld Emotional Control Scale Revised (CECS-R; Feeney, 1995) consists of three sections with seven

questions each. Each section asks the respondent to consider a particular emotion they may experience in their relationship (angry, sad, anxious) and indicate how often they react to their partner in particular ways when they feel that emotion within their relationship (e.g., keep quiet). Feeny (1995) found the reliability of the measure to be acceptable at $\alpha = .84$. Furthermore, Watson and Greer (1983) found that test-retest reliability scores were between $\alpha = .86$-$.89$ for the subscales over a period of 3 weeks. In the current study, reliability coefficients for the total score were high, ranging from $\alpha = .94$ - $.96$ across time points.

Post-Session Resolution Questionnaire (PSRQ). The PSRQ was adapted from Orlinsky and Howard's (1975) guidelines for measuring client satisfaction after therapy sessions and was used to measure each partner's perceived in-session change. It consists of three 5-point likert scales and one 7-point likert scale for a total of four questions. The total score ranging from 3-17 is obtained by summing questions 2-5, with higher scores indicating greater perceived in-session change. The total score was used in the process of identifying blamer-softening sessions.

Process Measures

Two graduate student coders were trained on the use of the Experiencing Scale (ES; Klein et al., 1969) and the Structural Analysis of Social Behavior (SASB; Benjamin, 1974). These measures have been found to be predictive of response to treatment in previous EFT studies, and have been used to classify successful blamer softening change events in session (Johnson & Greenberg, 1988; Bradley & Furrow, 2004). Transcripts of the second and best sessions for each couple were coded on each of these scales. Coding began 20 minutes into the second session for a 10-minute segment. For best sessions, coding began at the first marker of a softening event and extended for 10 minutes. For more detailed information

about the coding results, see Burgess Moser et al. (2014). In the current study, both the ES and SASB scales were used to identify blamer-softening events. First, therapists indentified the session in which a softening event occurred, or the closest approximation to this event. Partners rated their level of felt resolution after the session on the PSRQ. Sessions identified by the therapist as the softening session and the highest resolution score by the couple were transcribed and examined for a blamer-softening event using markers outlined by Bradley & Furrow (2004) according to descriptions of this event in the EFT manual. In most cases the session rated highest by partners in terms of resolution and the session identified by the therapist were the same. In the case of discrepancies, both sessions were coded. A 10-minute segment starting from the beginning of the softening event was transcribed and coded. The event was considered a blamer-softening event if these markers were observed and ratings on the ES reached at least a mode of 4 and a peak of 5, and consisted of more affiliative than hostile statements on the SASB in the coded segment. Burges Moser et al., (2014) found a significant difference between second and best sessions in terms of SASB and ES scores.

Experiencing Scale (ES; Klein et al., 1969). The ES consists of a 7-point rating scale representing the depth of emotional experiencing in therapy sessions, with 1 indicating a low level of experiencing and 7 indicating a high level of experiencing. Levels 1-3 are coded for client statements that are relatively abstract, impersonal and external. In contrast, higher levels involve increasingly personal, elaborated exploration of feelings; high levels of experiencing (6-7) are characterized by explicitly expressed awareness and highly elaborated explorations of internal experiential processes. In past research, inter-rater reliabilities have ranged from .76 to .91 (Klein et al., 1986). Coders used this scale to rate each client statement within 10-minute segments of therapy for each couple. In the current study inter-

rater reliabilities were calculated on all transcripts coded by the two graduate coders and agreement between coders was found to be high, ranging from .71 - .94.

Structural Analysis of Social Behavior (SASB; Benjamin, 1974). The SASB is a coding tool used to classify client statements within a circumplex of interpersonal interactions across two grids: statements focused on the other, and statements focused on the self. Each grid includes orthogonal dimensions of interdependence (autonomy to submissive) and affiliation (friendly to hostile). Partner's statements were classified according to 8 clusters along these two dimensions. Inter-rater reliabilities have ranged from .70 - .85 in previous research (Benjamin et al., 1986). The circumplex model has been validated through factor analysis, and analysis of the circumplex and dimensional ratings (Benjamin, 1977). In the current study, the 'two word cluster model' was used (Benjamin, 1987) using procedures outlined by Benjamin, Giat & Estroff (1981). Partner statements were first coded on two grids, 1) statements focused on or about the self 2) statements focused on or about other. Next, partners were rated on level of affiliation on the horizontal axis and interdependence on the vertical axis. This yielded a classification among 16 different clusters of behaviour. In the current study, a mode score was calculated only for statements falling in the "disclosing and expressing" and "belittling and blaming" clusters in couples' best and second sessions. In the current study, inter-rater reliability of all statements coded was high, ranging from .83 - .81 for quadrants and clusters respectively in ratings of second sessions, and .84 for quadrants and clusters for best sessions.

Procedure

In order to obtain a relatively homogeneous sample and to ensure that couples were appropriate candidates for couple therapy, eligibility criteria were used in the recruitment of the sample. Screening was a two-step process involving a phone session with both partners, followed by a baseline research session for those who were eligible based on the phone screen and interested in participating.

Inclusion Criteria. Both partners had to be between the ages of 25 and 65, and living together in a long-term, committed, heterosexual romantic relationship for at least one year. The couples' mean relationship satisfaction score needed to fall in the range of mildly to moderately distressed (scores of 80-97) as measured using the Dyadic Adjustment Scale (Spanier, 1976). Also, because we sought a sample of relatively insecurely attached couples who would be able to demonstrate attachment change over the course of therapy, at least one partner had to score as insecurely attached on the modified Experiences in Close Relationships, Revised for Specific Relationships scale (ECR; Brennan, Clark, & Shaver, 1998). Scores that feel above the 95% confidence interval of the attachment avoidance and/or anxiety subscale means from previous research were classified as insecurely attached (Shaver et al., 2005).

Exclusion Criteria. Couples were excluded if either partner had been diagnosed in the past with a psychotic disorder, or if either partner was receiving any kind of psychotherapeutic treatment including psychotropic medication or psychotherapy. If couples had been receiving other treatment, any change in the relationship may have been attributable to other treatments. Furthermore, partners with a high risk of alcohol addiction (more than 14 drinks per week according to the Centre for Mental Health and Addictions low risk guidelines), or recreational drug abuse (including marijuana, cocaine, etc.). Additionally,

a history of physical or sexual violence in the relationship was an exclusion criterion as this is a contraindication to EFT. Furthermore, due to this study being a part of a larger project involving fMRI testing with the female partner, any factor that was a contraindication for fMRI testing was an exclusion criterion for the study. These exclusion criteria for the female partner included significant back problems, weighing over 200 lbs or a history of claustrophobia that would make being in the fMRI machine uncomfortable, being currently pregnant or nursing, currently trying to become pregnant (the effects of the fMRI machine on fetuses and breast milk is unknown), or a range of health problems including previous seizures, diabetes requiring insulin treatment, previous heart attack, stroke, blood clots, high blood pressure, or chronic pain. Female partners with electronic or metallic implants such as a pacemaker, prostheses and some dental work including permanent retainers were also excluded as these are contraindications for fMRI testing.

Assessment Procedure. Couples were assessed in person at pre-therapy and post-therapy to complete questionnaire packages. Couples who agreed to participate in the follow-up phase completed questionnaires online through a secure server for the first three time-points, at 6 months, 12 months, and 18 months follow-up. At the 2-year time-point, couples participated in the final follow-up session in person to complete questionnaires. Couples were compensated for their participation in the research sessions. They received $200 for the first phase of the study, and $50 for each time point during the follow-up phase. Couples were also offered copies of EFT materials including a book and DVD, as well as a workshop with Dr. Johnson, the originator of EFT, and entrance into a draw for a weekend stay at a local vintage hotel once all couples had completed their participation.

Treatment Procedure. Participants were assigned to one of 14 EFT therapists. Therapist were psychologists or social workers registered in the province of Ontario, and trained in the practice of EFT for couples with at least 5 years of EFT experience. Couples received an average of 21 sessions of therapy. In order to ensure that results were not impacted by differences between therapists, therapists were tested as predictors of relationship satisfaction across follow-up, controlling for pre-therapy scores. One therapist was a marginally significant predictor of relationship satisfaction across follow-up ($p = .031$); however this therapist only treated 2 of the study couples. Therefore, therapists were not controlled for in the analyses.

Identification of Blamer Softening Events. The identification of the blamer-softening event involved a three-step process. First, therapists identified the session in which they thought a blamer-softening event occurred, or the closest approximation to this event. Second, the session with the highest mean couple PRSQ score was identified. These sessions were classified as the "best session" and were transcribed for identification of a blamer-softening event. Typically the session with the highest PRSQ score was also identified as the therapist as the closest approximation to a blamer-softening event. However, in the case of discrepancies, all sessions with the highest PRSQ scores were transcribed for identification of whether or not a blamer-softening event occurred. Two graduate students trained in EFT independently examined the transcripts for a blamer-softening event. Discrepancies were resolved through discussion. A blamer-softening event was identified when the following components were present in the session: 1) the blaming partner expressed primary attachment related emotions from a position of vulnerability, 2) the previously withdrawn partner expressed their own experience of the blaming partner's expression of vulnerability,

and/or 3) the previously withdrawn partner responded to the blaming partner with support and comfort. These criteria for a softening event outlined in the EFT manual (Johnson, 2004). To be considered a blamer-softening event, partners had to reach a mode score of at least 4 and peak of 5 on the ES, and the session had to contain more statements classified as "disclose and express" than "belittle and blame" on the SASB. Of the 32 couples in the study, 16 were classified as having achieved a blamer-softening event. The session number of the blamer-softening event generally occurred mid-way through the therapy process, with the average blamer-softening occurring at session 15 (SD = 7.38).

Statistical Analyses

Follow-up Outcomes. In order to test couples' improvements in relationship satisfaction from pre to post and follow-up, scores during the follow-up period were compared to pre-therapy and post-therapy scores. Reliable change in terms of relationship satisfaction was determined with Jacobson & Truax's (1991) Reliable Change Index (RCI). The RCI is calculated using two criteria. First a cutoff score from the literature was used to determine whether couples were considered recovered at post-therapy and follow-up. Next, in order to determine whether scores constituted reliable change, the difference between scores divided by the standard error of the difference was calculated. Scores exceeding 1.96 on the normal distribution were considered reliably changed in follow-up as compared to pre-therapy scores or post-therapy scores. In terms of attachment anxiety and avoidance, scores were compared to norms found in the literature (Shaver, Schachner & Mikulincer, 2005).

Hierarchical Linear Modeling (HLM). Hierarchical Linear Modeling (HLM) was used to test predictors of the rate of change in relationship satisfaction scores from pre-therapy through follow-up. HLM is a relatively new statistical method used in the field of couples therapy (Atkins, 2005). There are a number of advantages to this approach. First, HLM is able to use all available data, and does not pose limitations such as the necessity to have a relatively equal n for each time point, as is the case for repeated measures ANOVA (Gueorguieva & Krystal, 2004). Also, HLM gives a more accurate estimation of regression coefficients and error variances in complex datasets (Atkins, 2005), and is able to flexibly estimate complex models such as nested data across time (Raudenbush & Bryk, 2002; Tasca & Gallop, 2009). The current study examined repeated measures across time (level 1) nested within individuals (level 2), and individuals nested within couples (level 3). See HLM models in Appendix A.

It has been recommended that more complex models should be built on simpler models (Raudenbush & Bryk, 2002; Singer & Willett, 2003). In the following analyses, parameters were added incrementally from lower level models. Deviance statistics were compared using a chi-square significance test to determine whether more complex models represent a better fit to the data than simpler models.

As the data is nested by couple, and individual slopes are expected to be similar within couples, there is no residual included for the slope at the level of individuals following the procedure described by Atkins (2005). Effect sizes were calculated as pseudo R^2 as recommended and outlined by Singer & Willett (2003).

Missing data was investigated using pattern-mixture models (Hedeker & Gibbons, 1997) for all dependant variables in the analyses. Non-significance of a variable representing "missingness" in these models is indicative that the missing data on dependant variables is missing at random (MAR).

In order to model time as accurately as possible in the analyses, time was not specified according to particular assessment time-points. Rather, time points were calculated separately for each couple according to the weeks from pre-therapy at which they completed the assessments. Mean weeks at each time point as measured from the pre-therapy assessment were as follows: post-therapy = 63.27 (2.79), 6 months = 95.72 (2.91), 12 months = 122.06 (2.97), 18 months = 146.36 (3.10), 24 months =175.05 (3.52).

Results

Follow-up Outcomes and Clinical Change

The following outcome results were also reported in Wiebe, Johnson, Tasca & Lafontaine (2014). Means and standard deviations for predictor variables are provided in Table 1. For correlations between these variables, see Table 2. Moderately high correlations were found between predictor variables and the dependant variable, DAS, indicating an association between variables of interest. Couples' DAS scores before beginning therapy fell in the range of mild-moderate distress, with an average score of 87.96 (SD = 8.34). At the final assessment wave, two-years following completion of therapy couples demonstrated, on average, levels of relationship satisfaction approaching the cut-off for recovery of 97 on the DAS, (M = 96.24, SD = 21.52).

Attachment anxiety scores moved from above the 95% confidence interval of the mean norms reported by Shaver et al., (2005), and decreased to within the 95% confidence interval at post-therapy. At 2 years follow-up, attachment anxiety (M = 3.23, SD = .90) decreased further and fell below the confidence interval, indicating lower scores than the norm. Attachment avoidance scores (M = 3.13, SD = 1.14) did not decrease to be within the 95% confidence interval at post-therapy, and did not fall within this range at 2-year follow-up.

The Reliable Clinical Change Index (RCI) recommended by Jacobson & Truax (1991) was used to measure clinical change from pre-therapy scores across assessment waves for those couples who participated in the follow-up component of the study (N = 28). At 2 years follow-up a total of 46% of couples demonstrated clinically significant change, with 39% classified as reliably recovered (n=11) and 7% reliably improved but not recovered (n=2). Fourteen percent of couples deteriorated (n=4) and 18% (n=5) ended the relationship. In terms of changes between post-therapy and follow-up, 18% (n = 5) demonstrated reliable improvement from their scores at termination, and 29% demonstrated reliable deterioration. A total of 5 couples dissolved their relationship during the follow-up period. These results are not strong in comparison with previous EFT studies (i.e., Cloutier, Manion, Walker & Johnson, 2002). Possible explanations for this result include the variation among couples in terms of length of time in therapy, and number of sessions. For a full discussion of this issue, see Wiebe et al., 2014. However, it is particularly important to investigate predictors of this variability in outcomes.

Hierarchical Linear Modeling (HLM)

In order to assess predictors of the trajectories of dependant variables, higher order models were built from lower-level models. Although models were tested for linear, logarithmic and quadratic time variables as level one predictors, the deviance statistics indicated that the logarithmic time parameter was a better fit to the data than either linear or quadratic slopes for the relationship satisfaction, self-reported attachment anxiety, attachment avoidance and secure base use and secure base support trajectories. As such, the logarithmic slope was used to assess predictors in higher order models. Each of the dependant variables was modeled using the logarithmic transformation of time in weeks.

Relationship Satisfaction Unconditional Model. The unconditional model for relationship satisfaction, as measured using DAS scores, demonstrated a significant logarithmic slope across weeks $\gamma_{100} = 1.47$, $t\,(31) = 2.40$, $p = .022$, suggesting that couples demonstrated gains in therapy that leveled off to a slower rate during follow-up. The deviance statistics indicated that the addition of the logarithmic transformation of the time parameter as a predictor in the model resulted in a significantly better fit to the data than the intercepts only model ($\chi^2\,(3) = 94.33$, $p < .001$). This result was the primary focus of a previous manuscript (Wiebe, Johnson, Tasca & Lafontaine, 2014), and serves as the foundation of the current analyses.

Life events. Couples reported experiencing an average of 1-2 significant negative and less than 1 significant positive life event in the previous 6 months, at each follow-up time point. Neither negative nor positive life events at any point in time significantly predicted the trajectory of relationship satisfaction across the follow-up period and therefore were not controlled for in any analyses.

Pre-therapy Predictors. Neither relationship length nor age were significant predictors of the relationship satisfaction slope, γ_{101} = .01, *t* (29) = 1.49, *p* = .15, and γ_{102} = -0.00, *t* (29) = -.70, *p* = .49, respectively. Relationship trust measured at pre-therapy was a significant predictor of the relationship satisfaction slope, γ_{101} = 1.82, *t* (30) = 2.31, *p* = *.028.*

Attachment Change. Change in attachment anxiety and avoidance from pre to post therapy was calculated using a residual change score, and each of these change scores were entered into separate models as predictors. The residual change scores indicate the amount of change demonstrated from pre to post therapy, accounting for expected change based on the pre-therapy score, and are therefore a more reliable measure of change between time points. Results indicated that pre to post EFT change in attachment anxiety was significantly associated with variability in DAS scores across follow-up, γ_{102} = -2.66, *t* (29) = -3.84, *p* < .001. That is, reductions in attachment anxiety during EFT predicted higher DAS scores through to follow up. Additionally, change in attachment avoidance during EFT was significantly associated with variability in DAS scores across follow-up, γ_{102} = -3.37, *t* (29) = -6.46, *p* < .001. Each of the models including change in attachment anxiety or change in avoidance as a predictor represented a significantly better fit to the data than the unconditional logarithmic model, as indicated by a comparison of deviance statistics, χ^2 (5) = 15.11, *p* < .01 and χ^2 (5) = 32.20, *p* < .001, respectively. In a follow-up analysis with both predictors entered together, decreased attachment avoidance in therapy, γ_{102} = -2.99, *t* (29) = -3.84, *p* < .001, accounted for variance in relationship satisfaction across time over and above decreased attachment anxiety in therapy, γ_{101} = -0.33, *t* (29) = -0.41, *p* = .68.

Trust. Increases in trust from pre to post therapy predicted higher relationship satisfaction across time, controlling for pre-therapy levels of trust, γ_{102} = 2.65, *t* (29) = 6.01, $p < .001$. Compared with the unconditional model, the model with change in relationship trust as a predictor, controlling for pre-therapy trust was a significantly better fit to the data, χ^2 (4) = 31.91, $p < .001$. As a variable highly related to attachment in this and other studies, a follow-up analysis was carried out to determine whether change in attachment would account for the variability predicted by change in trust. When these three self-report measures were entered together, we found that decreased attachment avoidance, γ_{102} = -2.42, *t* (28) = -3.07, $p = .005$, accounted for variance in the model over and above increased trust in the relationship, γ_{103} = 0.92, *t* (28) = 1.85, $p = .075$, independent of change in attachment anxiety, γ_{101} = -0.11, *t* (28) = -0.15, $p = .88$, γ_{101} = -0.11, *t* (28) = -0.15, $p = .88$ as shown in Table 3, Model 1. Pre to post reduction in attachment anxiety was not associated with improved relationship satisfaction across follow-up independent of change in attachment avoidance.

Emotional Control and Experiencing. Decreases in self-reported emotional control from pre to post therapy was not significant as a predictor of DAS across time, γ_{101} = -1.96, *t* (30) = -1.81, $p = .081$. Compared with the unconditional model, the model with emotional control as a predictor was not a significantly better fit to the data χ^2 (2) = 5.56, *ns.* The couples' peak and mode experiencing scale scores in their best session were each a significant predictor of DAS scores across time, γ_{101} = 1.12, *t* (30) = 2.09, $p = .045$ and γ_{101} = 1.94, *t* (30) = 2.56, $p = .02$, for peak and mode respectively. Entered together, mode was a significant predictor (γ_{102} = 1.30, *t* (29) = 2.13, $p = .04$), whereas peak was not (γ_{101} = 0.54, *t* (29) = .97, $p = .34$) as shown in Table 3, Model 2, suggesting that the ability of a couple to

maintain a higher level of experiencing across the session is a significant predictor of long-term outcome.

Softening. The ability of a couple to complete the blamer-softening event in therapy did not significantly predict their DAS slope across the follow-up period, $\gamma_{101} = 0.40$, $t\ (30) = 0.33$, $p = 74$. That is, couples who did achieve the softening event were not more likely to report higher DAS scores across follow-up.

Discussion

The results of this study found that couples reported relationship satisfaction gains from pre to post therapy that leveled off across two years following the completion of therapy. We measured potential predictor variables at pre-therapy as well as variables representing change in therapy. We found that decreases in attachment anxiety and avoidance in therapy predicted higher relationship satisfaction in follow-up, over and above pre-therapy attachment levels. We found that increases in trust and deeper emotional experiencing in best sessions also predicted higher relationship satisfaction across follow-up. Furthermore, we found that positive and negative life events as well as age and relationship length were not significant predictors of long-term relationship satisfaction. Overall, this study provides support for the theoretical assumptions of EFT that attachment change in therapy is central to fostering lasting gains for couples, and that emotional processes and the development of trust also play a significant role.

Recent EFT research focusing on the therapy process, carried out with the current sample has found that improvements in relationship satisfaction and attachment avoidance across therapy sessions were significant and significantly associated (Burgess Moser et al.,

2014). In a second study with this same sample of couples, Dalgleish et al. (in press) found that higher attachment anxiety and emotional control at pre-therapy predicted greater improvements in relationship satisfaction across sessions. The current study demonstrates that these significant improvements in relationship satisfaction were maintained across follow-up and that even though higher initial levels of attachment anxiety predicted better outcomes across therapy sessions as reported by Dalgleish et al. (2014), those who were best able to maintain their relationship satisfaction improvements in follow-up tended to change the most in terms of attachment in therapy, irrespective of initial levels. Taken together, these results suggest that improvements in therapy in terms of attachment are more important than initial levels in terms of maintenance of gains. This makes sense given that in EFT couples are actively encouraged to express attachment needs and fears in sessions and the attachment bond is seen as the mechanism of change. Therefore, even couples with high levels of attachment insecurity would benefit from interventions, perhaps even more than couples with lower levels of attachment insecurity.

Attachment, Emotion and Trust in EFT

Consistent with our hypotheses, attachment change in therapy was a significant predictor of follow-up relationship satisfaction across time. According to EFT theory

, negative interaction cycles are a result of insecure attachment in the relationship (Johnson, 2003). From a systemic perspective, these negative interaction cycles become ingrained in the couples' daily interactions as it is self-sustaining. The more one partner pursues the other partner for a response, the more withdrawn the other partner becomes in order to avoid what is seen as criticism or blame. In turn, the pursuing partner pursues more, and this cycle can

become quite chronic. As Gottman (1993) has delineated, these patterns are particularly destructive in relationships, characterized by intense negative emotionality and often predictive of divorce. EFT seeks to help couples de-escalate this cycle by attending to attachment needs and emotions that underlie positions in the cycle. Through the lens of attachment theory from an EFT perspective, a blaming partner is fueled by attachment anxiety, a hyperactivating strategy to signal unmet attachment needs for closeness and connection in the relationship. On the other hand, the withdrawn partner is driven to withdraw as a way to de-activate attachment needs and longings so as to avoid distress in the relationship (Johnson, 2003). The more couples are able to acknowledge, explore and express underlying attachment needs and emotions in the relationship, the more these cycles shift into a new cycle of attachment security whereby each partner turns to the other in moments of distress with primary attachment emotions and creates connection, rather than engaging in negative cycles that create distance. These new cycles, then, are also seen as self-sustaining according to systems theory whereby the more one partner reaches for the other the more the other partner feels encouraged to reach back (Burgess Moser & Johnson, 2007).

Interestingly, in the current study, decreases in attachment avoidance predicted relationship satisfaction across follow-up over and above decreases in attachment anxiety. These results suggest that decreases in attachment avoidance are particularly predictive of long-term outcomes in relationship satisfaction. That is, those who maintained their gains better across follow-up experienced more change in terms of attachment avoidance in therapy. Another study using the current sample found that although couples maintained their gains in relationship satisfaction and attachment anxiety, the same was not true of attachment

avoidance (Wiebe, et al., 2013). Taken together, it seems that couples demonstrate reduced attachment anxiety and increased relationship satisfaction across follow-up; however, attachment avoidance is particularly predictive of variability in relationship satisfaction in follow-up. In terms of attachment theory, although higher attachment anxiety is associated with relationship distress, hyperactivating strategies create opportunities for connection, whereas de-activating strategies characteristic of attachment avoidance maintain distance in the relationship in a more direct way. "In attachment terms, any response (even anger) is better than none" (Johnson, 2003, p. 6). This is consistent with previous studies that have shown that "stone-walling" is a particularly destructive pattern in distressed relationships (Gottman, 1993), and that "unrequited" bids for positive attention or interest during casual conversation are predictive of dysfunctional patterns in conflict interactions (Gottman & Levenson, 1999). These results make sense in the context of previous EFT research demonstrating that males who reported less proximity seeking and were rated by their partners as being less emotionally disclosing at intake tended to have higher relationship satisfaction scores at follow-up (Johnson & Talitman, 1997). Furthermore, Dalgleish et al. (in press) found that couples who tended to use de-activating strategies more often as a way to regulate affect improved more in terms of relationship satisfaction in therapy. Taken together, it seems that those who tend to use strategies characteristic of attachment avoidance at the start of therapy, also tend to improve the most and – if they are able to decrease avoidance in therapy – stay improved. In the current study, there also seemed to be greater variability in attachment avoidance as opposed to attachment anxiety between couples, both in terms of change in therapy and scores across time points. Therefore, one reason that attachment avoidance was particularly predictive of follow-up relationship satisfaction may be that there was more variability. This result signals the importance for therapists to be

particularly attuned to evidence of attachment avoidance and de-activating strategies in therapy, as those who shift these patterns tend to maintain gains best. Furthermore, it may be beneficial for therapists to incorporate measures of attachment as a way to gauge outcome, with particular attention to reductions in attachment avoidance in the relationship. Overall, these results confirmed our hypotheses that greater attachment security fostered in EFT would predict better relationship satisfaction across the long-term once therapy has ended. This is consistent with attachment theory and the conceptual foundational structure of EFT (Johnson, 2004). Furthermore, our results are consistent with previous research demonstrating that attachment security is intricately associated with relationship satisfaction (Simpson, 1990).

In terms of emotional processing as related to long-term outcomes, decreases in self-reported emotional control in therapy did not predict relationship satisfaction across follow-up; however, depth of emotional processing in best sessions did. In particular, the level of depth the couple was able to maintain in the session (i.e., mode), as opposed to the highest level they could reach (i.e., peak), was a strong predictor of maintenance of relationship satisfaction gains across follow-up. Therefore, it is the level of emotional processing the couple is able to sustain that is most predictive of their long-term outcome. This makes sense because those who are able to sustain their emotional engagement at deeper level would likely be those who are able to maintain this level of engagement in the long-term, leading to better maintenance of satisfaction. According to attachment theory, emotional experiences organize mental representations, or working models, of attachment and motivate attachment behaviour in relationships (Pietromonaco & Feldman Barrett, 2000). According to EFT theory, it is the ability of the couple to acknowledge, explore and express attachment

related emotions, and to respond to these expressions in each other that maintain cycles of attachment security and as a result high relationship satisfaction (Johnson, 2004). The reason for the lack of significant findings for self-reported emotional control may be due to the small sample size. Notably, this result neared significance ($p = .08$). It may also be that couples were not aware enough of shifts away from emotional down-regulation tendencies (as measured by the emotional control measure) as what could be observed in sessions. It may also be that patterns toward less down-regulation fostered in therapy had not yet generalized to patterns outside of therapy sessions.

Similar to previous EFT research (Johnson & Talitman, 1997), pre-therapy trust was a significant predictor of follow-up relationship satisfaction. However, in the current study, increased trust in therapy predicted stability in relationship satisfaction over follow-up, over and above pre-therapy levels of trust. In a follow-up analysis, it was found that decreases in attachment avoidance in therapy predicted relationship satisfaction over and above increases in trust. This is consistent with previous research that has found insecure attachment strategies related to avoidance (i.e., avoiding the topic, avoiding the partner) was found to be particularly detrimental in relationships where a breach of trust has occurred (Jang, Smith & Levine, 2002). This is consistent with EFT theory that open communication about attachment emotions facilitates trust, whereas avoidance strategies do not provide opportunities for building trust in the relationship (Johnson & Whiffen, 1999). It is also interesting to consider these results in light of the study by Halchuk, Makinen and Johnson (2010) in which injured couples who resolved their attachment injury demonstrated lower attachment avoidance 3 years later (but no difference in attachment anxiety). It may be that higher avoidance is particularly detrimental to trust in the relationship, or that higher trust

facilitates lower avoidance. Furthermore, attachment research has found that greater attachment security in the relationship is associated with higher levels of trust (Mikulincer, 1998). Specifically, more secure people were found to have more accessibility to positive trust-related memories, recounted a greater number of incidents involving trust with their partner in the past three weeks, and were able to use more adaptive strategies for coping with violation of trust than less secure people (Mikulincer, 1998). In our sample of couples, more avoidant partners may gain a sense of trust through re-engaging in the relationship and being responded to positively by their partner (contrary to their fears), and at the same time partners of those who are highly avoidant may gain trust as their partner re-engages.

Contrary to our hypotheses, whether or not the couple was able to achieve a blamer-softening event in therapy did not predict long-term relationship satisfaction. Previous research has found that achieving a blamer softening in EFT is associated with decreases in attachment anxiety and increases in relationship satisfaction (Burgess Moser et al., 2014). Furthermore, the sessions in which the blamer-softening event occurre9d were associated with initial increases followed by a steep decline in attachment anxiety across subsequent sessions (Burgess Moser et al., 2014). It is clear that blamer softening is a significant event in therapy that fosters attachment change and greater satisfaction in the relationship. Blamer softening is defined as the moment in therapy when the more blaming partner expresses deeper, primary attachment needs and longings beneath secondary blame and anger, and is met with empathy and support by the previously withdrawn partner. This bonding moment initially increases attachment anxiety, as it constitutes an emotional risk for the previously blaming partner, followed by decreases in attachment anxiety throughout the course of therapy. In the current study, whether the couple was able to achieve a blamer-softening

event in sessions did not predict long-term relationship satisfaction. There may be a number of reasons for this. In this study we measured whether or not the couple was able to achieve this event in the therapy session. We did not test the frequency of these events in the therapy sessions, or whether the couple was able to experience these bonding moments on their own, outside of therapy. It is possible that couples need to experience these bonding moments more than once for the experience to be sustainable. Alternatively, a significant factor might be whether couples were able to experience these bonding moments outside of therapy. Some couples may have experienced the blamer-softening event in sessions but may not have been able to sustain these experiences on their own, leading to decreases in relationship satisfaction in the long-term. On the other hand, some couples who did not qualify as having experienced a blamer softening event in therapy, may have experienced decreases in attachment avoidance and anxiety through therapy that allowed them to be vulnerable enough with each other to achieve a blamer softening event on their own, outside of therapy and perhaps even once therapy had ended, leading to better relationship satisfaction over the long-term. It is interesting that although achieving a blamer softening in therapy per se was not a predictor of long-term relationship satisfaction, factors closely associated with blamer-softening were (i.e., attachment anxiety and avoidance, depth of emotional experiencing in therapy). This suggests, that it may be that we are simply limited in our ability to capture and measure softening events once therapy has finished. Another limitation is our sample size in this study, and the fact that blamer-softening classification is a dichotomous variable, making it more difficult to find statistical significance.

Implications

The results of this study hold significant implications for therapists practicing EFT. First, the results demonstrate effectiveness of the approach toward achievement of long-term gains for couples. Although relationship satisfaction tended to remain stable across follow-up, there was evidence of significant variability between couples. It may be helpful for therapists to plan follow-up sessions with couples in the months following therapy in order to gauge where the couple may be in terms of their relationship satisfaction and sense of security in the relationship. Furthermore, this study validates the conceptual framework of EFT, and the therapeutic interventions that foster attachment security, particularly the interventions that foster exploration and expression of emotional experience in the relationship as a way of soothing attachment anxiety, and – as is so pertinent to long-term results – decreasing patterns of attachment avoidance.

Limitations and Future Directions

The current study was subject to limitations. These include the fact that the study involved a relatively small sample size, missing data due to participant retention ubiquitous in longitudinal research (though dealt with well using HLM), and the lack of a control group that would allow the comparison of the effects of EFT with couples who did not receive treatment. Future research could ideally address these limitations where resources allow. Furthermore, our sample was fairly homogeneous with most participants being Caucasian and also fairly advantaged socio-economically. Future EFT research should recruit couples of various backgrounds and socio-economic status in order to be able to generalize results to a greater range of couples. The current study relied on self-report and included elements of observational data (in the case of emotional experiencing in best sessions of therapy). Although we have a sense of how couples respond to well-developed measures, we do not

yet have a sense of the qualitative details or intricacies of couple functioning after therapy has finished. Future studies may make use of qualitative methods such as a diary study that may better capture the intricacies of couple functioning after therapy has ended. One reason this study may not have found a significant result regarding the achievement of softening in therapy is that a blamer-softening event is a discrete moment in time, whereas couples continue to interact on a daily basis once therapy has finished and have an infinite number of discrete moments in which softening events may have the opportunity to occur and we have not yet been able to capture and measure them.

Conclusions

Overall, the results of the current study provide support for the conceptual foundation and theoretical assumptions of EFT, namely that attachment and emotion play a crucial role in predicting long-term outcomes. Specifically, changes in attachment, trust and depth of emotional experiencing were predictive of long-term relationship satisfaction across two years following completion of EFT. Furthermore, the results suggest that when it comes to key variables relevant to the process of EFT, change in therapy is significantly more predictive of long-term outcomes than pre-therapy levels. This was the first study to use HLM to examine key therapeutically relevant change variables as predictors of long-term trajectories of relationship satisfaction after EFT. This study provides evidence for the theoretical underpinnings of EFT, and more broadly for the role of attachment, emotion and trust in long-term relationship satisfaction.

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Table 1. Couple means and standard deviations of predictor variables measured at baseline and post-therapy, Experiencing Scale (ES) scores in second and best sessions.

	Pre-therapy	Post-therapy
Age	44.64 (7.46)	-
Relationship Length	17.67 (8.42)	-
Attachment anxiety	3.92 (0.61)	3.49 (0.87)
Attachment avoidance	3.48 (0.77)	3.09 (0.86)
Trust	4.29 (0.60)	4.88 (1.09)
Emotional Control	3.35 (0.70)	3.14 (0.60)
	Second Session	Best Session
Mode Depth of Experiencing	2.47 (0.53)	3.72 (0.74)
Peak Depth of Experiencing	3.35 (0.58)	4.72 (0.68)

Note. N =32 couples

Table 2. Correlations between residual change scores and DAS measured 2 years after completion of therapy.

	DAS 2 year	ECR anxiety change	ECR avoidance change	RTS change	CECSR change	ES mode	ES peak
DAS 2 year	-	-.53**	.70**	.44*	-.22	.11	-.02
ECR anxiety change		-	.58**	-.54**	.48**	.34	-.21
ECR avoidance change			-	-.73**	.58**	-.26	-.18
RTS change				-	-.41*	.52**	.28
CECSR change					-	-.34	-.36*
ES mode						-	.59**
ES peak							-

Note. N =32 couples; change scores are calculated using unstandardized residual change scores; * p<.05, **p<.01

Table 3. Predictors of increases in relationship satisfaction across follow-up.

	Coefficient	SE	*t*	*df*	*p*	deviance
Unconditional Model						
Intercept γ_{000}	88.91	1.35	65.75	31	<.001	
Log slope γ_{100}	1.47	.61	2.40	31	.022	2395.15
Model 1: Attachment and Trust						
Intercept γ_{000}	89.01	1.27	69.81	28	<.001	
Log slope γ_{100}	1.34	0.41	3.29	28	.003	
Attachment Anxiety change, γ_{101}	-0.11	0.75	-0.15	28	.88	
Attachment Avoidance change, γ_{102}	-2.42	.79	-3.07	28	< .005	
Trust change, γ_{103}	.92	.50	1.85	28	< .075	2361.01
Model 2: Experiencing						
Intercept γ_{000}	88.89	1.31	67.79	29	<.001	
Log slope γ_{100}	1.50	.56	2.68	29	.01	
ES peak γ_{101}	0.54	.56	.97	29	.34	
ES mode γ_{102}	1.30	.61	2.13	29	.04	2388.06

Estimated parameters: Unconditional Model = 7, Model 1 = 13, Model 2 = 11

Appendix A – HLM Models

Unconditional Logarithmic Model for Outcome Variables

Level 1 (repeated measures):

$$Y_{tij} = \pi_{0ij} + \pi_{1ij}(\log time_{tij}) + e_{tij}$$

Level 2 (individuals):

$$\pi_{0ij} = \beta_{00j} + r_{0ij}$$

$$\pi_{1ij} = \beta_{10j}$$

Level 3 (couples):

$$\beta_{00j} = \gamma_{000} + u_{00j}$$

$$\beta_{10j} = \gamma_{100} + u_{10j}$$

Predictor Model with Relationship Satisfaction as the Outcome Variable

Level 1 (repeated measures):

$$Y_{tij} = \pi_{0ij} + \pi_{1ij}(\log time_{tij}) + e_{tij}$$

Level 2 (individuals):

$$\pi_{0ij} = \beta_{00j} + r_{0ij}$$

$$\pi_{1ij} = \beta_{10j}$$

Level 3 (couples):

$$\beta_{00j} = \gamma_{000} + \gamma_{001\ (Predictor)} + u_{00j}$$

$$\beta_{10j} = \gamma_{100} + \gamma_{101\ (Predictor)} + u_{10j}$$

General Discussion

The scientific literature investigating the process and outcome of couple therapy has demonstrated the effectiveness of particular modalities, one of the most successful being EFT (Shadish & Baldwin, 2003; Lebow, Chambers, Christensen & Johnson, 2012), and identified key factors in the process of change (Doss, Thum, Sevier, Atkins & Christensen, 2005; Greenman & Johnson, 2013). However, the research on couples' functioning in the long-term after therapy has ended is much less developed (Shadish & Baldwin, 2003). Furthermore, we do not yet have a comprehensive understanding of the factors that predict long term success for couples. In this thesis, I sought to contribute to narrowing these gaps in the research by first examining the trajectory of couples' functioning after receiving Emotionally Focused Therapy for couples (EFT) in terms of relationship satisfaction and relationship specific attachment security (measured by self-report and observational methods), a key variable thought to be the mechanism of change in EFT. In the second study, I sought to examine key predictor variables thought to be central to the change process in EFT, attachment security, emotional control and emotional processing, and trust. Attachment, trust and emotional control were examined as pre-therapy and as therapeutic change variables. This second study was designed to contribute to our understanding of long-term prognostic factors in EFT.

The above studies represent a significant contribution not only to the EFT research literature, but also to couples therapy research and attachment research more generally. The results hold broad implications for researchers and clinicians across these areas.

The results of this thesis turn the focus toward follow-up results in EFT and demonstrate that not only is EFT effective in the short-term, as previous studies have well documented (Johnson, Hunsley, Greenberg & Schindler, 1999; Lebow, Chambers, Christensen & Johnson, 2012), but it is also effective across the years after therapy has ended. Two previous studies had shown that EFT is effective in follow-up, but were limited to a single time point, and could not capture the trajectory of couples' functioning across time. The first study in this dissertation addressed this gap by using HLM (Raudenbush & Bryk, 2002) – a relatively new way of analyzing couples data across time (Atkins, 2005) – to examine trajectories of couples' functioning across follow-up. The findings indicated that relationship satisfaction improvements level off after therapy but generally remain stable. The same was true of attachment anxiety, but not attachment avoidance. Furthermore, attachment anxiety and avoidance were associated with relationship satisfaction across time. While attachment anxiety demonstrated continued decreases across follow-up, attachment avoidance mean scores appeared to increase somewhat (though not quite as high as pre-therapy levels) and then level off. The reason for this pattern of results in attachment avoidance is not certain. It is notable that attachment avoidance scores were lower than attachment anxiety scores at pre-therapy. However, attachment avoidance did demonstrate significant decreases across therapy sessions as noted in a previous study using this same sample (Burgess Moser et al., 2014), so it is unlikely due to a floor effect. Another possibility may be the relatively small sample size. It is possible that greater power would have been necessary to detect a small but significant effect. It does seem that attachment avoidance may be less likely than attachment anxiety to remain stable across time after EFT sessions end. It may be that de-activation of attachment emotions and needs are particularly durable patterns and that change in these patterns is difficult to maintain. This would make

sense given that the de-activation of attachment emotions and needs leads to withdrawal in the relationship and provides fewer opportunities for responsiveness from partners. These results suggest that couples maintained gains in terms of better relationship satisfaction and lower attachment anxiety in the relationship, but that attachment avoidance did not show this trend. Secure base use and support also demonstrated improvements in therapy that remained stable at two years after therapy had ended.

The second study was the first to examine predictors of relationship satisfaction in long-term follow-up in EFT. Although one previous study examined predictors of follow-up, it was limited to 3 months post-therapy (Johnson & Talitman, 1997). The current study found that contrary to previous findings in the couple therapy literature (Snyder, Mangrum & Wills, 1993), therapeutically relevant change variables were predictive of long term follow-up relationship satisfaction over and above pre-therapy levels. Decreases in attachment anxiety and avoidance in therapy were predictive of relationship satisfaction in follow-up over and above pre-therapy levels of these variables. Also, change in attachment avoidance accounted for variance over and above change in attachment anxiety and trust predicting relationship satisfaction across time. Furthermore, depth of emotional experiencing measured in best sessions of therapy (identified by the therapist and the couple) predicted higher relationship satisfaction across follow-up. Couples who gained more trust in the relationship through therapy also maintained better relationship satisfaction across follow-up. These results, taken together provide empirical support for the theoretical assumption of EFT that creating greater attachment security and emotional responsiveness in the relationship fosters lasting change in the relationship.

These results hold important implications for the practice of EFT. This thesis provides validation for the goal of fostering greater attachment security in the relationship through exploration and expression of primary attachment emotions. Couples who improved their attachment security in therapy were functioning better in long-term follow-up, even two years after therapy had ended. This also provides evidence that therapy has a lasting impact on couples, long after leaving the therapists office for the last time. These results also demonstrate that therapists should be able to see changes in relationship satisfaction in concert with changes in attachment security across therapy and across time should they see their couple again in follow-up. The finding that greater change in attachment avoidance predicted long-term relationship satisfaction over and above change in attachment anxiety and change in trust signals this variable as particularly relevant toward the couple's long term functioning. Therapists should be aware that the amount of change on this key factor could predict how well their couple will progress in the years following treatment. It may be helpful for therapists to measure relationship specific attachment at pre and post-therapy. Smaller changes in attachment avoidance for a couple may indicate that the couple would benefit from continued therapy to help them deepen their connection through the exploration and expression of attachment needs and fears of closeness. Therapists can also be assured that attachment change in therapy is more predictive of long-term outcomes than pre-therapy levels of attachment. Couples seem to benefit from EFT regardless of their level of attachment security and trust in the relationship at pre-therapy. This provides evidence that all couples can benefit from EFT, regardless of initial attachment and trust in the relationship. The results also suggest that lower avoidance is a particularly relevant variable predicting long-term success over and above changes in attachment anxiety and trust. Future

research should examine the role of reductions in attachment in relation to trust in the process of therapy to better delineate the association between these processes during therapy.

Previous studies carried out with this same sample found that couples evidenced decreases in attachment anxiety and avoidance across therapy sessions associated with increases in relationship satisfaction (Burgess Moser et al., 2014), and that couples with higher levels of attachment anxiety and emotional control at the start of therapy demonstrated greater increases in relationship satisfaction across the course of treatment (Dalgleish et al., in press). Therefore, it seems that significant change happens in terms of key variables relevant to the practice of EFT, regardless of the couples' pre-therapy functioning, which continue to impact couples functioning long after therapy has finished. This allows therapists to measure changes in these key variables as long-term prognostic factors in EFT.

This thesis also adds to the literature on attachment change in therapy (Burgess Moser, et al., 2014; Tasca, Balfour, Ritchie and Bissada, 2007; Travis, Binder, Bliwise and Horne-Moyer, 2001) by providing evidence that changes in attachment anxiety in therapy can persist across time after the completion of therapy and that these changes in attachment during therapy can also have an impact on long-term functioning. Attachment security was measured through self-report measures of conscious relationship specific attachment and also through an observational method measuring unconscious attachment through secure base behaviour (Crowell, Pan, Gao, Treboux, & Waters, 1998). This combination of methods allowed us to determine that lasting change can be demonstrated in therapy and EFT in particular, through observational and self-reported relationship specific measures.

In the broader context of attachment theory, this thesis provides evidence for the link between relationship satisfaction and relationship specific attachment security across time. Attachment avoidance emerged as a particularly powerful predictor of relationship satisfaction across time, consistent with previous research (Tan, Overall, & Taylor, 2012). Individuals high in attachment avoidance tend to be uncomfortable with emotional closeness and intimacy in the relationship and often create distance in the relationship as a way to avoid distress (Pietromonaco & Feldman Barrett, 1997; Tidwell, Reis & Shaver, 1996; Mikulincer & Shaver, 2005), and tend not to seek emotional support when appropriate (Collins & Feeney, 2000). A recent study by Overall, Simpson and Struthers (2013) investigated avoidance related de-activating strategies in the context of the relationship dynamics in a conflict discussion with partners in which one partner (the agent of influence) sought change in the other partner (the target of influence). The researchers then coded 30-second intervals identified by the participants as where they experienced the most anger for withdrawing behaviours on the part of the target. They also coded this 30-second interval for softening behaviours on the part of the agent (i.e., validating partner, softening expression of the severity of the problem, affiliative humour and inhibiting negative reactions). They found that during these intervals, higher attachment avoidance was related to more withdrawal behaviour and anger on the part of the target partner; however, more softening behaviours on the part of the agent partner attenuated withdrawal and levels of anger on the part of the target partner during these interactions. Furthermore, couples with more softening behaviours rated their conflict discussions as more successful toward resolving the concern. The results of this thesis provide further evidence to our growing understanding that the dynamic interplay between relationship partners is an important factor in attachment change and subsequent relationship satisfaction.

Limitations and Future Directions

Although this research contributed to the literature in the above ways, the results should be interpreted in the context of the limitations of the studies. As the focus of the studies was to gain a better understanding of the trajectories of theoretically relevant variables across time neither studies employed a control group and thus the results for these couples could not be compared to couples who did not receive EFT, or received another treatment. Nevertheless, future studies should strive to determine the trajectory of couples who receive EFT versus those who do not. This would allow researchers to answer questions about the potential relative benefits of couples who receive EFT versus those who do not. Furthermore, the sample size was relatively small, and non-significant findings may have been due to relatively low power. Attrition is often a difficulty in longitudinal research and it is not uncommon for studies of clinically distressed couples to have relatively high attrition rates across the years following therapy (e.g., Christensen, Atkins, Yi, Baucom and George, 2006). The current study also struggled with retention of couples for a variety of reasons common in this type of research (i.e., divorce, too busy, family difficulties). Furthermore, the sample in the above studies consisted of a relatively homogeneous group of advantaged couples thus limiting the generalizability of results to other groups of couples. Future research should test the generalizability of the findings of the current studies in a greater diversity of couples (e.g., homosexual couples, couples of various religious and ethnic backgrounds).

Continued research is needed to develop a more comprehensive understanding of attachment processes in EFT. We are beginning to gain a better understanding of how pre-therapy levels of attachment impact relationship satisfaction across therapy sessions

(Dalgleish et al., in press), and how relationship satisfaction and attachment security increase together across therapy sessions (Burgess Moser et al., 2014). The current thesis demonstrates how relationship satisfaction and attachment evolve across the years following therapy and how attachment changes in therapy impact long-term couple functioning across follow-up.

In the current study, attachment was defined as a relationship specific construct as measured by self-report and behavioural interactions within the specific relationship. Future research could explore whether change in general attachment representations also occurs when couples engage in EFT. Previous research has demonstrated preliminary evidence of general attachment change in therapy using narrative measures (Diamond et al., 2003; Fonagy et al., 1995; Travis et al., 2001). Therefore, it is possible that by changing relationship specific attachment in therapy, partners may experience change in generalized representations as well.

Furthermore, given the long-term predictive value of attachment change in therapy, more research is needed to examine the key therapeutic factors that bring about attachment change, particularly decreased avoidance. A recent study identified reductions in attachment anxiety associated with the blamer-softening event in therapy (Burgess Moser et al., 2014); however, more research is needed to examine factors involved in decreased attachment avoidance in therapy. In EFT, the blamer softening even is typically preceded by withdrawer re-engagement. It may be fruitful to investigate the withdrawer re-engagement event in association with levels of attachment avoidance across therapy sessions. Furthermore, it may be useful to use process research to investigate therapist interventions most associated with reduced attachment avoidance in therapy. If we can identify particularly helpful therapist

interventions that target reductions in attachment anxiety, we can better tailor therapy to create the greatest long-term impact, particularly for highly avoidant partners.

Couples therapy research more generally should continue to use HLM to investigate change over time for couples engaged in therapy. The investigation of therapeutically relevant change variables as predictors of long-term change has proven a useful venture as relating to the process of EFT. Other approaches may benefit from the investigation of therapeutically relevant change variables that fit with the proposed mechanisms of change within the specific approach. This line of research would contribute to furthering our understanding of the factors of change relevant to specific approaches that should be considered in long-term prognosis. Also, given the significance of attachment in relation to long-term outcomes in EFT, it may be useful to investigate attachment change in other approaches, even where attachment is not seen as the mechanism of change per se. This would help to determine whether attachment change is specific to EFT or whether this can occur within the context of other couples therapy approaches.

Conclusions

Although couples therapy research has developed a strong evidence base over the past three decades (Lebow, Chambers, Christensen & Johnson, 2012), follow-up research has been identified as relatively less well developed (Shadish & Baldwin, 2003). The existing research on long-term EFT follow-up outcomes has been limited to the analysis of a single point in time (Cloutier, Manion, Walker & Johnson, 2002; Halchuk, Makinen & Johnson, 2010). Furthermore, although initial studies have demonstrated strong support for follow-up outcomes in couples therapy (i.e., Christensen, Atkins, Baucom & Yi, 2010; Shady, Wills &

Grady-Fletcher, 1991) and EFT in particular (i.e., Cloutier, Manion, Walker & Johnson, 2002; Halchuk, Makinen & Johnson, 2010), a significant amount of couples relapse in follow-up (Shadish & Baldwin, 2003). The current thesis sought to examine predictors of long-term outcomes across 2 years following the completion of EFT.

Overall, this thesis has offered a significant contribution to the field of couples therapy, EFT more specifically and to attachment research. The above studies have contributed to our understanding of relationship satisfaction and attachment change in EFT and beyond. The above studies identified attachment avoidance as a variable that predicts much of the variability in long-term outcomes. Future research should continue to investigate attachment in EFT, with particular attention toward identifying interventions that help couples decrease levels of attachment avoidance in therapy as a way of promoting better long-term outcomes.

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