EMOTIONALLY FOCUSED THERAPY FOR COUPLES IN TAIWAN

By

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ABSTRACT

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This is the first study to begin to explore the effectiveness and predictors of change of emotionally focused therapy for relationship satisfaction and depressive symptoms among couples in Taiwan. This one-arm pragmatic trial assessed the clinical outcomes of 17 couples using paired-samples t-tests and multilevel modeling. Paired-sample t-tests revealed no statistical differences in relationship satisfaction and depressive symptoms before and after EFT. Additionally, multilevel modeling indicated no change in relationship satisfaction over time. However, there was a quadratic change in depressive symptoms over the course of EFT. While the study results were unexpected, it is important to note that most couples did not receive the recommended treatment "dose" in this pragmatic trial. In addition, the small sample size limited statistical power.

In addition to assessing treatment outcomes, predictors of change were also examined. Findings showed that high traditionalism at intake predicted an increase in relationship satisfaction for women. Attachment was also a significant predictor of change; men with high attachment avoidance at intake demonstrated a significant decrease in depression, and men and women with high attachment anxiety at intake also experienced a significant decrease in depression. Lastly, emotional expressivity at intake was associated with an increase in relationship satisfaction and a decrease in depression for both men and women. Our study suggested that traditionalism, attachment, and emotional expressivity are important predictors of change among couples in Taiwan who receive EFT. While more research is needed, these

findings offer preliminary support for the types of partners who may be more likely to experience change after receiving EFT.

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER I: INTRODUCTION

Statement of the Problem

Approximately 5% of adults around the world suffer from depression (World Health Organization, 2021). Globally, the number of people living with depression increased by 18.4% from 2005–2015, and depression is now the world's leading cause of medical disability (World Health Organization, 2017). Depression has the potential to cause severe symptoms that affect one's cognitions, emotions, relationships, physical health, and daily functioning (National Institute of Mental Health, 2019).

Depression is a debilitating condition, and it is therefore essential to examine its related risk factors. Numerous studies have found a reciprocal relationship between relationship satisfaction and depression (Atkins et al., 2009; Beach et al., 2003; Whisman et al., 2004), and distressed couples are 25 times more likely to suffer from depression than couples who are not distressed (Weissman, 1987). Relationship dissatisfaction or distress has also been found to predict an increase in depression over time (Beach & O'Leary, 1993) and to increase the likelihood of experiencing a major depressive episode in a given year (Whisman & Bruce, 1999). Relationship distress is common and can have a detrimental effect on physical and emotional health. Relationship dissatisfaction has been found to contribute to lowered productivity at work, which in turn increases the risk of economic hardship and chronic stress (Robles et al., 2014). It has also been found to increase the risk of mortality, cardiovascular disease, and negative health outcomes (Liu & Waite, 2014; Robles et al., 2014). Relationship distress is a modifiable mechanism of depression, and improving relationship problems may improve depression (e.g., Wittenborn et al., 2019).

Couple therapy plays an important role in treating couple distress and depression. Research findings have indicated that couple therapy is as effective as individual therapy in treating depression, and it is more effective than individual therapy at improving relationship satisfaction (Barbato et al., 2018). In Asia, mental health problems are seldom recognized by society due to a lack of access to services and social stigma (Kudva et al., 2020; Lauber & Rössler, 2007). There is an urgent need for evidence-based clinical interventions to increase relationship health and decrease depressive symptoms. Without such interventions, couples in Asia will continue to suffer the negative consequences of untreated depression and relationship problems. Leveraging couple therapy as an evidence-based intervention that can increase relationship health and decrease depressive symptoms presents a critical opportunity to improve mental health and relationship health in Asia.

Emotionally Focused Therapy (EFT) is an empirically supported couple therapy approach developed in the early 1980s with the goal of treating relationship distress among couples (Johnson & Greenberg, 1985). Couples who participated in EFT have reported an increase in relationship satisfaction following treatment (e.g., Johnson & Greenberg, 1985). Dalgleish et al. (2015) recruited 32 couples to undergo EFT and reported an overall increase of 0.39 points in relationship satisfaction per weekly EFT session. Furthermore, a meta-analysis of 20 studies that included 332 couples found medium to large effects for pre-test to post-test, EFT versus other couple interventions, and pre-test to follow-up (Spengler, Lee, Wiebe, & Wittenborn, in press).

EFT has also been found to improve depression (Denton et al., 2012; Dessaulles et al., 2003; Wittenborn et al., 2019). Studies have compared the efficacy of EFT in reducing partners' depression to that of pharmacotherapy treatment (Dessaulles et al., 2003) and the efficacy of EFT plus pharmacotherapy to pharmacotherapy alone (Denton et al., 2012). Dessaulles et al. (2003)

found that EFT and pharmacotherapy both reduced depressive symptoms in women at post-treatment, but only those who received EFT showed greater improvement than pharmacotherapy condition at six-month follow-up. Separately, Denton et al. (2012) compared the use of EFT with medication to the use of medication alone and found that women in both conditions reported improved depressive symptoms over six months of treatment, but only women in the antidepressant plus EFT condition reported more improvements in relationship quality compared with women in the antidepressant condition. Finally, a randomized controlled trial compared the effectiveness of EFT with usual care (i.e., other couple therapy approaches) and found that men and women in both groups reported a significant decrease in depressive symptoms over the course of treatment, while couples in the EFT group reported a significantly greater increase in relationship satisfaction compared to usual care (Wittenborn et al., 2019).

The majority of research on EFT has been conducted in Western cultural contexts. Based on the existing findings, EFT is expected to be an effective treatment method for couples in Taiwan because attachment and emotions—two fundamental concepts of EFT—are experienced across cultures (Ekman, 2007; Johnson, 2019). In Iran, EFT has shown to be an efficacious approach to improve depression and marital satisfaction in Iranian couples (Ahmadi et al., 2014; Soleimani et al., 2015; A. Soltani et al., 2013; M. Soltani et al., 2014). However, research on the effectiveness of EFT among Taiwanese couples in Taiwan is limited.

The Purpose of the Study

Most EFT research has been conducted in controlled settings (e.g., Dandeneau & Johnson, 1994; Denton et al., 2000; Denton et al., 2012; Dessaulles et al., 2003; Johnson & Greenberg, 1985; Johnson & Talitman, 1997). To date, few research studies have tested the effectiveness of EFT in common practice settings (e.g., Ahmadi et al., 2014; Wittenborn et al.,

2019). Moreover, most EFT studies have been conducted in Canada and the United States among predominantly Western and non-Asian samples, though a small body of work has tested the efficacy of EFT among Iranian couples. Additional evidence is needed to examine whether findings on EFT with Western couples are similar among non-Western populations in non-Western contexts.

The first research question this study will examine is: Does EFT improve clinical outcomes (i.e. relationship satisfaction and depression) among Taiwanese couples in Taiwan? Based on the assumption of the universality of attachment, EFT is thought to be applicable to couples across cultures. However, previous research studies have indicated that Asian couples might display avoidance and anxious attachment more than Western couples as these attachment styles are assumed to be more culturally acceptable (Wang & Mallinckrodt, 2006). Moreover, traditional values may persist in Chinese culture despite the rapid economic growth and modernization over the past few decades (Inglehart & Baker, 2000; Yang, 1998). The differences between traditional and modern values as well as ideologies of femininity and masculinity may also be important factors in the prediction of change in EFT. Therefore, the second research question aims to explore: Do attachment style, traditional/modern values, femininity/masculinity ideology, and emotional expressivity at baseline predict growth in relationship satisfaction and decrease in depressive symptoms among Taiwanese couples in Taiwan who receive EFT?

CHAPTER II: LITERATURE REVIEW

Theoretical Foundation of Emotionally Focused Therapy

EFT combines systemic and experiential approaches, viewing relationship distress from the lens of Bowlby's (1969) attachment theory (Johnson, 2019). In attachment theory, seeking contact with attachment figures is considered an innate survival mechanism. Individuals' attachment needs for comfort are activated during stressful situations and people seek comfort from important loved ones to soothe their stress and return to normal, autonomous activity (Bowlby, 1988; Johnson, 2019; McFarlane & van der Kolk, 1996).

A two-dimensional framework has been used to understand and categorize patterns of attachment. In this framework, attachment behaviors and responses are organized across the two dimensions of anxiety and avoidance (Fraley et al., 2000). Securely-attached individuals, characterized by holding a sense of worthiness and an expectation that others are responsive, have low attachment anxiety (i.e., they view themselves positively) and low attachment avoidance (i.e., they view their partners positively) (Bartholomew & Horowitz, 1991). Insecure attachment develops when attachment figures are not emotionally accessible and responsive; in these situations, people develop high attachment anxiety or high attachment avoidance. High attachment anxiety includes hyperactivating strategies such as blaming or criticizing, and high attachment avoidance is characterized by withdrawing or distancing from one's partner (Johnson, 2019).

Previous research has explored attachment as a predictor of relationship satisfaction in EFT. In examining predictors of success in EFT, Johnson and Talitman (1997) found that the overall level of attachment security did not predict relationship satisfaction after couples received EFT. However, male partners with higher levels of proximity-seeking behaviors (a subscale of

the attachment security measure) at the beginning of EFT were more likely than female partners to report higher relationship satisfaction at the end of treatment (Johnson & Talitman, 1997). Dalgleish et al. (2015) examined predictors of success in EFT and found that individuals with higher initial levels of attachment anxiety experienced greater changes in marital satisfaction during the course of EFT. However, participants' initial levels of attachment avoidance did not predict changes in EFT (Dalgleish et al., 2015). A similar study found that attachment avoidance decreased over the course of EFT (Burgess Moser et al., 2016). These findings suggest that EFT might be particularly beneficial for people with high attachment anxiety. Pre-therapy attachment avoidance levels may not determine the success of EFT, but attachment avoidance levels could decrease over time.

Emotionally Focused Therapy Process of Change

EFT consists of three stages: cycle de-escalation, changing interactional positions, and consolidation and integration of therapeutic gains (Johnson, 2019). In the first stage, *cycle de-escalation*, therapists conceptualize couples' issues using an attachment framework and assist couples to develop an understanding of their negative interactional cycles. Therapists continue to track and identify the negative interactional cycles and access unrecognized emotions underlying these cycles. During stage one, therapists help couples reframe their problems in terms of unmet attachment needs, unacknowledged underlying emotions, and negative interaction cycles. By the end of stage one, a hostile partner might become less reactive, and the withdrawn partner may be more emotionally engaged (Johnson, 2019).

In the second stage, *changing interactional positions*, partners start to identify and express disowned attachment needs and also support their partners' expression of attachment needs (Johnson, 2019). Therapists' tasks in this stage are to guide couples to respond and support

each other in an emotionally attuned way. For example, after a partner shares attachment vulnerabilities and needs in a session, a therapist might support the other partner in processing their experience of hearing their partner's vulnerable emotions and supporting them in responding to their partner. This process leads to a shift in interactional positions, which creates new emotional engagement and bonding events (Johnson, 2019).

The third stage of EFT, *consolidation and integration*, involves helping couples find new solutions to long-standing issues. The goal of this stage is to have couples leave therapy not only non-distressed, but able to maintain emotional engagement that will allow them to continue to strengthen their bond after therapy concludes (Johnson, 2019). At the termination phase, the relationship becomes a secure base, and relationship issues no longer trigger attachment insecurity and evoke negative interactional cycles (Johnson, 2019).

A Review of Literature on Emotionally Focused Therapy Research

Numerous studies have demonstrated the effectiveness of EFT among couples. In a meta-analysis of four EFT outcome studies conducted prior to 1999, Johnson et al. (1999) found a large effect size of 1.31, suggesting that EFT is an effective approach to couple therapy. Another meta-analysis, including 23 couple intervention studies published between 1963 and 2002, focused on which couple treatment was most effective for different marital distress levels: mild, moderate, and severe (Wood et al., 2005). The meta-analysis showed that EFT demonstrated better effectiveness compared to Behavioral Couple Therapy in treating couples with moderate levels of marital distress (Wood et al., 2005). In an extension of Johnson et al.'s (1999) meta-analysis of EFT outcome studies, Beasley and Ager (2019) conducted a systematic review of EFT outcome research that was published between 1999 and 2017. A total of nine studies were included in this review, including the application of EFT among Iranian couples

(Ahmadi et al., 2014), infertile Iranian couples (Soleimani et al., 2015; Soltani et al., 2014), couples with chronically ill children (Cloutier et al., 2002), couples facing medical conditions such as breast cancer (Naaman, 2009) and end-stage cancer (McLean et al., 2013), couples with psychological difficulties such as depression (Denton et al., 2012; Dessaulles et al., 2003), childhood trauma (Dalton et al., 2013), and somatoform disorders (Walsh, 2002). The systematic review concluded that EFT helped couples increase their marital satisfaction after receiving treatment, with a large effect size of 2.09, and the improvement in marital satisfaction was maintained at follow up (Beasley & Ager, 2019). The most recent meta-analysis included 20 studies totaling 332 couples and found medium to large effects for EFT pre- to post-test, pre-test to follow-up, and in comparison to other couple interventions (Spengler et al., in press).

EFT and Emotional Expressivity

The primary function of emotions is to communicate one's needs and motives (Frijda, 1986). In EFT, emotional experiences and expressions are critical to treatment because they facilitate the process of unfolding key emotions among couples to identify and express attachment needs (Johnson, 2019). In a study of predictors of success in EFT, Johnson and Talitman (1997) found that male partners described by their partners as emotionally inexpressive at intake made the most improvement in relationship satisfaction at treatment termination. A hallmark of EFT is the establishment of a safe environment in which couples can feel safe to reveal their vulnerable emotions and needs, and it is possible that this experience facilitated greater growth for these partners who were less apt to express their emotions and attachment needs prior to initiating therapy. In another study, Motaharinasab et al. (2016) examined the effect of EFT on emotional expressivity among married women in Iran. They found that women showed a significant increase in emotional expressivity after completing ten EFT sessions.

However, as previously discussed, restricted expression of emotions is considered culturally appropriate in Asian cultures (Lim, 2016; Ryder et al., 2008). In Chinese culture, holding back emotional expression is encouraged and preferred in interpersonal relationships (Tsai & Levenson, 1997). Li (2006) found that tolerance (i.e. suppressing one's emotions) may be seen as a passive and indirect way to handle conflicts in the Western culture, but it is considered an appropriate emotion regulation strategy in Chinese marriage. In Li and Hsiao's (2016) recent study to investigate the effect of tolerance on marital satisfaction among 1,173 individuals in Taiwan, they found that tolerance in marriage is related to increased marital satisfaction among men. They concluded that tolerance is an implicit method of emotional expressivity that plays an important role in the maintenance of marital satisfaction among Chinese couples (Li & Hsiao, 2016). In EFT, it is assumed that couples will increase their emotional expressivity toward each other throughout the course of treatment to help them access unrecognized emotions and to restructure interaction patterns.

EFT Among Diverse Populations

In a review of EFT research studies from 1985 to 2016, Wiebe and Johnson (2016) found a lack of empirical research of EFT among couples across different cultures. EFT empirical studies on non-Western populations are scarce. In a small body of outcome studies among Iranian couples in Iran, EFT has been found to reduce depression and anxiety (Soltani et al., 2014), increase marital satisfaction (Soleimani et al., 2015b), increase intimacy (Soltani et al., 2013), and decrease marital conflicts (Ahmadi et al., 2014). These studies confirmed the effectiveness of EFT in treating couples in Iran.

However, EFT research in Taiwan is still in its infancy. Liu and Hung (2019) conducted a case study of a Taiwanese couple in Taiwan who completed 14 sessions of EFT. In this case

study, the clinical process of the application of EFT skills and case conceptualization were analyzed (Liu & Hung, 2019). In another study to explore the experiences of Taiwanese couples who received EFT in Taiwan, Sun (2019) interviewed six unmarried couples who completed six EFT sessions with certified EFT therapists in Taiwan to understand their experiences of EFT. Couples shared that EFT helped them to understand and reframe partners' behaviors from the perspective of attachment needs, recognize negative interactional cycles, increase acceptance when handling conflicts, and increase an understanding of partners' attachment needs through an understanding of their family of origin (Sun, 2019). Thus, EFT research in Taiwan has been limited to case study (Liu & Hung, 2019), qualitative interviews of couples' experiences of receiving EFT (Sun, 2019), clinical application (Wang & Wang, 2015), and the effectiveness of EFT in the form of the psychoeducational "Hold me Tight" group (Sun & Liu, 2015). While there is limited research on the efficacy of EFT in Taiwan, therapists are increasingly seeking training in EFT and couples are receiving EFT treatment (Asia EFT, n.d.). Therefore, it is important to carefully examine the effectiveness of EFT for couples in Taiwan.

Application of EFT to Taiwanese Couples in Taiwan

The divorce rate in Taiwan has continued to rise in the last four decades; in 2020, the divorce rate was 10%, the second highest in Asia (Ministry of the Interior Taiwan Department of Statistics, 2021). The prevalence of depression is also high. In 2002, approximately 8.9% of Taiwanese individuals aged 15 and over had mild depression and 5.2% had major depressive disorder (Ministry of Health and Welfare, 2004). More recent data shows that an estimate of 5.9% of Taiwanese individuals were prescribed antidepressants in 2019 (Ministry of Health and Welfare, 2020). However, only 20% of adults with depression reported seeking any kind of treatment for their depression in the previous year (Liao et al., 2012). Given the reciprocal

relationship between relationship distress and depression, it is imperative to provide an evidence-based treatment to increase relationship health and decrease depressive symptoms.

EFT was developed by Sue Johnson in Canada, and it is important to examine whether EFT is appropriate for couples in Taiwan. Clinical interventions developed in a Euro-American cultural context are grounded in Euro-American cultural norms. It is potentially problematic to apply such interventions to populations outside of North America without thorough examination of the theoretical foundation and rationale of the intervention (Bernal et al., 2009). Attachment and emotions, the two central concepts of EFT, are universally experienced across cultures (Ekman, 2007; Johnson, 2019). Given this assumed universality, the following sections will discuss considerations for applying EFT to Taiwanese couples in Taiwan.

Attachment

In 1967, Mary Ainsworth first proposed the existence of different attachment patterns, and she supported this theory with the universality of infant-mother attachment relationships observed in her study in Uganda. In a 2008 review of 21 studies conducted in Africa, China, Israel, Japan, and Indonesia, van IJzendoorn and Sagi-Schwartz found that the attachment phenomenon between infants and mothers and different types of attachment existed in every culture. In addition to the universality of infant-mother attachment, numerous studies also supported that attachment in adulthood is universal. In a meta-analysis of 33 studies—including samples of adolescents, fathers, and mothers from different countries who completed more than 2,000 Adult Attachment Interviews—van IJzendoorn and Bakermans-Kranenburg (1996) found that the classifications of autonomous, dismissing, and preoccupied attachment were applicable across cultures.

Attachment theory is considered applicable to individuals around the world; however, several researchers have argued against its universality because the assumptions of attachment constructs are derived from Western cultures (Rothbaum et al., 2000; Wang & Mallinckrodt, 2006). In a large-scale study of more than 17,000 participants from 62 cultures to examine how adult romantic attachment varied across cultures, Schmitt et al. (2004) reported that secure adult attachment was normative in 79% of the 62 cultures examined, and preoccupied attachment was more prevalent in East Asian cultures than in other regions. Similarly, Ditommaso et al. (2005) found that Chinese college students had significantly lower attachment security than Canadian college students. In another study, 280 Taiwanese college students and 268 U.S. college students were asked to complete the Experiences in Close Relationship Scale, a self-report measure of adult attachment that asks participants to respond to each item according to their belief of "how an ideally emotionally and psychologically healthy person of your own gender in your culture would answer" (Wang & Mallinckrodt, 2006, p. 195). The results indicated that Taiwanese men and women idealized more avoidant behaviors than U.S. men and women, and Taiwanese men idealized more anxiety behaviors than U.S. men, though not U.S. women (Wang & Mallinckrodt, 2006).

In countries with high cultural acceptance of avoidant and anxious attachment, couples may cultivate these patterns of attachment because they are part of the social norm. Attachment is considered a universal experience; however, expression of preferred attachment patterns may differ across cultures. It is expected that EFT will be an effective intervention with Asian couples given that its development is based on attachment theory. However, EFT therapists need to be sensitive to how Asian couples display attachment needs and express love and connection.

Emotions

The word *emotion* is derived from the Latin *emovere*, which means to "move out, remove, or agitate" (Online Etymology Dictionary, n.d.). Emotion is viewed as adaptive, and its functions are to communicate one's needs, and to process and organize experiences and perceptions about self and others (Bowlby, 1991; Johnson, 2019). Emotion occurs in the form of automatic appraisal, meaning that it happens automatically and an individual cannot choose whether to feel an emotion (Ekman, 2007). In addition to the universal function of emotions, Ekman (2007) proposed that there are seven universal emotions that cross language, cultural, and racial barriers: anger, contempt, disgust, enjoyment, fear, sadness, and surprise. EFT was developed in the context of Western culture, but its application to Asian couples may be appropriate given that core emotions are experienced across cultures. Using emotions to shape the meaning of narratives and communicate with one another is also considered a universal experience (Johnson, 2019).

Emotional expression occurs across cultures, yet individual displays of emotion vary among different cultures. Ekman (2018) proposed the concept of display rules regarding how and to whom one can show their emotions. These display rules are socially and culturally constructed and develop over time. Display rules can "specify that an emotion be suppressed, de-amplified, exaggerated, or even masked altogether" (Ekman, 2018, para 1). For example, moderating and controlling one's emotional expressivity is seemingly the cultural norm in Asia (Ryder et al., 2008). Expression of high arousal emotions (e.g., excitement or anger) is discouraged, and it is considered more culturally appropriate to express emotions moderately (Lim, 2016). Due to this cultural norm, it is common for individuals from Asian cultures to suppress or indirectly express their high arousal emotions (Matsumoto et al., 2008).

To ensure EFT therapists maintain sensitivity to cultural differences of attachment needs and emotions, Liu and Wittenborn (2011) proposed guidelines for therapists in working with diverse populations. First, it is the therapist's responsibility to recognize the meanings and functions related to clients' emotional expressions and attachment needs. Therapists must familiarize themselves with the display rules their clients use to show and process emotions (Liu & Wittenborn, 2011). Second, therapists need to strive to use words and metaphors that relate to clients' emotional experiences (Liu & Wittenborn, 2011). The application of EFT to couples in Asia is appropriate given that attachment and emotions are experienced across cultures, and it is critical that therapists are mindful that attachment and emotions can be expressed differently in diverse cultural contexts.

Other Predictors of Success in EFT

Levels of masculinity/femininity and traditionality/modernity affect partners' perceptions of intimate relationships and openness to emotion expressivity. In EFT, emotional expressivity is considered to be the fundamental process of successful EFT outcomes. Johnson and Talitman (1997) found that partners with higher traditionality might have extreme pursue/withdraw interactional patterns that make emotional vulnerability more difficult to access during therapy. A small body of research has examined the association between relationship satisfaction and partners' levels of masculinity and femininity. Snyder et al. (1993) explored predictors of couple therapy outcomes and found that lower femininity scores at intake predicted higher marital distress at four-year follow up. However, some studies found femininity and masculinity did not predict relationship satisfaction after couple therapy (Jacobson et al., 1986).

Partners' levels of traditionality and modernity are also examined in several couple therapy intervention studies. Snyder et al. (1993) found the higher the level of traditionality at

couple therapy intake, the lower the relationship satisfaction post-treatment. However, Johnson and Talitman (1997) found that traditionality was not associated with relationship satisfaction in their EFT study. In a study examining the relationship between traditionality/modernity and relationship satisfaction among 150 married couples in Taiwan, Kao and Lu (2006) found that when husbands had higher traditionality than their wives, both husbands and wives reported poorer marital satisfaction. In addition, when wives had higher modernity than their husbands, both partners reported poorer marital satisfaction (Kao & Lu, 2006).

CHAPTER III: METHODOLOGY

In the current study, I conducted a single-arm pragmatic clinical trial (Thorpe et al., 2009) of EFT for couples in Taiwan. Rather than conducting this study in a laboratory setting, I collaborated with community-based therapists who implemented EFT with couples in Taiwan. To do this, assessments of relationship distress and depression were administered to couples after each couple therapy session. This study also examined predictors of change to help researchers and clinicians understand factors that are associated with success or lack of response to EFT among couples in Taiwan.

Procedure

Certified EFT couple therapists in Taiwan were located through the Asia EFT website (www.asia-eft.com). To facilitate the recruitment process, I also collaborated with the coordinator and director of the Asia EFT Center. I contacted EFT couple therapists through email to invite them to collaborate on the study. Each therapist then invited their couple clients who met the inclusion criteria to participate in the study, and couple clients who showed interest in participating in the study reviewed the research participant information and consent form. Once couples signed the consent form, they were officially enrolled in the study.

Therapists were contacted to collaborate in the study if they met the following criteria: (1) completed the requirements for certification as an EFT therapist by the International Centre for Excellence in Emotionally Focused Therapy (ICCEFT), (2) practiced EFT in Taiwan, (3) received supervision from EFT certified supervisors biweekly during the time of this research phase, and (4) worked with Taiwanese couples. A total of 14 therapists were contacted, and they all expressed interest in assisting with recruitment for the current study. However, four therapists did not recruit couples for this study due to confidentiality concerns among clients. One therapist

stated that her couple clients had concerns regarding whether confidentiality could be maintained. The other three therapists' clinics had concerns over therapists recruiting participants for research in the clinic, worrying that it might affect clients' perceptions regarding confidentiality and willingness to receive therapy in their clinics. Therefore, a total of 10 therapists assisted with recruitment in the current study.

All couple participants were asked to complete EFT therapy sessions in their therapists' practice settings. In addition to the baseline surveys they completed after the first session, couples also had to complete questionnaires after each session. They could complete assessments through online surveys or paper-pencil surveys in their therapists' offices immediately following the completion of each therapy session. Couples were able to access online surveys through their smartphones; if smartphones were not accessible, therapists provided paper-pencil surveys.

Couple participants each received NT$100 gift voucher (approximately $3 U.S. dollars) after every 3 sessions they completed (i.e., each partner received NT$100 after each 3 sessions upon completion of their third assessment) until the termination of therapy. Therapists received a NT$700 (approximately $23 U.S. dollar) gift voucher for each couple for their assistance. All the gift vouchers were sent electronically to couples and therapists by emails or texts.

Participants

Couple participants were eligible if (1) they enrolled in couple therapy with a participating EFT therapist in Taiwan, (2) each partner was age 18 or older, and (3) both partners were willing to participate in the study. Couples who met the following criteria were not included in this research: (1) clinically significant past or ongoing intimate partner violence, (2) reporting infidelity in the past three months, or (3) reporting severe suicidal ideation in the past three months. Exclusion criteria were assessed by the EFT therapists. Expressions of

vulnerability is a key to change in EFT; intimate partner violence, infidelity, and suicidal ideation can impede or deteriorate the therapeutic process given that sharing vulnerability is likely to be unsafe, dysfunctional, or ineffective (Johnson, 2019). Individuals with severe suicidal ideation also require immediate crisis intervention and management, which was not offered in this study.

A total of 19 couples expressed interest in participating in this study after therapists explained the research information and process. Of those, 17 couples signed the consent forms and completed assessments after each therapy session. Thus, 17 couples were included in the analysis of this study.

Measures

Demographics

Participants responded to demographic questions at the intake session only, including (1) age, (2) gender, (3) education level, (4) combined family income, (5) marital status, (6) years in current relationship, (7) years married, (8) number of children, (9) whether they have received couple therapy before, and (10) whether they were receiving any additional treatment at intake, including medication, individual therapy, or group therapy.

Patient Health Questionnaire

Participants completed the Patient Health Questionnaire (PHQ-9; Kroenke et al., 2001) at intake and after each therapy session to assess depressive symptoms. This measure uses a 4-point Likert-type scale (0 = *not at all*, 3 = *nearly every day*) to ask participants to rate if they have been bothered by any of the following problems in the last 2 weeks, such as little interest or pleasure in doing things. The PHQ-9 score was obtained by adding the scores from the nine items, with higher scores indicating higher levels of depressive symptoms. For this study I used a version of

the PHQ-9 that was translated into Chinese and was tested with Chinese populations with a reliability of .86 and validity of .92 (Wang et al., 2014). Cronbach's alpha in the current study ranged from .88 to .98 for men and .56 to .96 for women.

Dyadic Adjustment Scale

Participants completed the Dyadic Adjustment Scale (DAS; Spanier, 1976) at intake and after each therapy session to assess their intimate relationship adjustment. The DAS has four subscales: consensus (13 items), satisfaction (10 items), cohesion (5 items), and affectional expression (4 items). The total score (range of 0 to 151) is obtained by summing item responses, with higher scores indicating better adjustment to one's relationship (Spanier, 1976). The DAS demonstrates high reliability, with a Cronbach's alpha coefficient of .96 (Spanier, 1976). The DAS version used in this study was previously translated into Chinese and has been validated in various studies (Shek, 1995; Shek et al., 1993; Shek & Cheung, 2008). The Chinese version DAS showed high reliability with a Cronbach's alpha coefficient of .91 (Shek et al., 1993). Cronbach's alpha in the current study ranged from .92 to .98 for men and .87 to .98 for women.

Experiences in Close Relationships

Participants completed the Experiences in Close Relationships Relationship Structures Questionnaire (ECR-RS; Fraley et al., 2011) at their intake sessions. The ECR-RS is derived from the Experiences in Close Relationships—Revised Inventory (ECR-R; Fraley et al., 2000), and aims to assess individuals' attachment styles on four relational domains: relationships with mother, father, romantic partner, and best friend. Each domain consists of the same 9 items assessing attachment-related anxiety and avoidance (Fraley et al., 2011). Only the romantic partner domain was used in this study. Participants were asked to rate on a 7-point scale (1 = *strongly disagree*; 7 = *strongly agree*) in regards to the extent to which they worry their partner

may reject them (anxiety dimension, i.e., I often worry that this person doesn't really care for me) and how uncomfortable they are to open up and depend on their partner (avoidance dimension, i.e., It helps to turn to this person in times of need) (Fraley et al., 2000). The avoidance and anxiety scores were computed separately; the avoidance score was computed by averaging items 1 to 6 (after reverse coding items 1 to 4), and the anxiety score was obtained by averaging items 7 to 9, with higher scores indicating more avoidance or anxiety. Cronbach's alphas in previous research were .87 (avoidance domain) and .91 (anxiety domain) (Fraley et al., 2011). Cronbach's alpha in the current study was .90 for men and .45 for women regarding attachment avoidance, and for attachment anxiety, it was .70 for men and .91 for women.

Femininity Ideology Scale–Short Form

Participants completed the Femininity Ideology Scale Short Form (FIS–SF; Levant et al., 2017) at their intake sessions. This is a 12-item measure that uses a 5 point Likert-type scale (1 = *strongly disagree*; 5 = *strongly agree*) to examine traditional femininity ideology. Three subscales include statements to measure how women should or should not behave, think, and feel: dependence/deference (e.g., Women should not succeed in the business world because men will not want to marry them), purity (e.g., Woman should not read pornographic magazines), and emotionality and traditional roles (e.g., It is expected that women will have a hard time handling stress without getting emotional). Total scores range between 12 to 60, with higher scores indicating higher endorsement of traditional femininity ideology. Cronbach's alphas for subscales ranged from .82 to .88 and the total scale was .85 in prior research (Levent et al., 2017). Cronbach's alpha in the current study was .84 for men and .77 for women.

Male Role Norms Inventory–Short Form

Participants completed the Male Role Norms Inventory Short Form (MRNI–SF; Levant et al., 2013) at intake sessions. The MRNI–SF is a 21-item measure that uses a 7-point Likert-type scale (1 = *strongly disagree*, 7 = *strongly agree*) with total sum scores ranging between 21 to 147; higher scores indicate greater levels of endorsement of traditional masculinity ideology. MRNI-SF includes 7 subscales: avoidance of femininity (e.g., Boys should prefer to play with trucks rather than dolls), negativity toward sexual minorities (e.g., All homosexual bars should be closed down), self-reliance through mechanical skills (e.g., Men should have home improvement skills), toughness (e.g., I think a young man should try to be physically tough, even if he is not big), dominance (e.g., A man should always be the boss), importance of sex (e.g., Men should always like to have sex), and restrictive emotionality (e.g. A man should never admit when others hurt his feelings). MRNI-SF was developed by selecting three of the highest loadings for each factor from the Male Role Norms Inventory-Revised scale (Levant et al., 2007). A Chinese version of MRNI-SF has been developed and tested (Liu et al., 2018), and was used in this study Cronbach alphas were .92 for men and .94 for women for the total scale; for subscales, alphas ranged from .79 to .90 for men and .75 to .88 for women (Levent et al., 2013). Cronbach's alpha for the Chinese version was .86 (Liu et al., 2018). Cronbach's alpha in the current study was .86 for men and .91 for women.

The Multidimensional Scale of Chinese Individual Traditionality–Short Form

Participants completed the Multidimensional Scale of Chinese Individuals Traditionality Short Form (MS-CIT–SF; Kao & Lu, 2006) at intake sessions. This scale was originally developed by a Taiwanese researcher (Yang, 1996) and included 50 items. MS-CIT–SF is a 15-item Chinese-language measure that uses a 6-point Likert-type scale (1 = *strongly disagree*, 6 =

strongly agree) with total sum scores ranging from 15 to 90; higher scores indicate greater levels of endorsement of traditionality. This measure includes five subscales: submission to authority, filial piety and ancestral worship, conservatism and endurance, fatalism and defensiveness, and male dominance. The Cronbach's alphas with a Taiwanese sample was .81 (Kao & Lu, 2006). Cronbach's alpha in the current study was .89 for men and .94 for women.

The Multidimensional Scale of Chinese Individual Modernity—Short form

Couple participants completed the Multidimensional Scale of Chinese Individual Modernity Short Form (MS-CIM–SF; Kao & Lu, 2006) at intake sessions. This measure is a 15-item Chinese-language measure that uses a 6-point Likert-type scale (1 = *strongly disagree*, 6 = *strongly agree*) with total sum scores ranging between 15 to 90; higher scores indicate greater levels of endorsement of modernity. Same as the MS-CIT–SF, this scale was originally developed with 50 items (Yang, 1996). This measure includes five subscales: Egalitarianism and open-mindedness, independence and self-reliance, optimism and assertiveness, affective hedonism, and sex equality. The Cronbach's alpha with a Taiwanese sample was .71 (Kao & Lu, 2006). Cronbach's alpha in the current study was .55 for men and .83 for women.

Emotional Expressivity Scale

Participants completed the 17-item Emotional Expressivity Scale (EES; Kring et al., 1994) at intake to assess participants' emotional expressivity. Participants were required to respond to a 6-point Likert-type scale (1 = *never true*, 6 = *always true*), with higher sum scores indicating a higher level of emotional expression. Sample items include, "I keep my feelings to myself", "My partner is not easily able to observe what I am feeling", and "I don't like to let my partner see how I am feeling". This scale was translated and tested with Chinese populations in

China with a high reliability of .82 (Chan et al., 2010). The Chinese version of the EES was used in this study. Cronbach's alpha in the current study was .75 for men and .73 for women.

Materials Translation

The target population of this study was Chinese-speaking Taiwanese couples in Taiwan. Therefore, the study materials, including recruitment flyers, informed consents, and some English measures, were all translated into Chinese. When translating supporting materials from English to Chinese, it is important to ensure the translation is "reliable, complete, accurate, and culturally appropriate" (Pan & Puente, 2005, p.5). In addition, translated measurements should also have semantic equivalence (i.e. words in English and Chinese represent the same meaning), conceptual equivalence (i.e. the commonality of the concept between English and Chinese), and normative equivalence (i.e. the translated measure should address the difference in social norms between two cultures) (Behling & Law, 2000; Pan & Puente, 2005).

Geisinger (1994) proposed steps for measurement translation and addressed the importance of the inclusion of qualified translators who are fluent in both languages, extremely familiar with both cultures, and knowledgeable about the instrument. To meet this rigorous requirement, I completed all English to Chinese translations myself; I am a doctoral student studying couple and family therapy in the U.S. who is bilingual in both the Chinese and English language and is familiar with both cultures. The translation started by translating the documents and instruments from English into Chinese with detailed records of the specific translation challenges encountered and decisions made to deal with those challenges. After I completed the translation, I had two translator reviewers who are also native Chinese speakers with high English proficiency review the documents to ensure the text and semantics are accurate, to identify problematic areas, and to provide suggestions for improvements. After translator

reviewers provided suggestions, I modified the translations based on their suggestions and developed a final version of the translated documents. In this study, only FIS-SF, MRNI-SF, and EE were translated into Chinese as the rest of the assessments either had translated Chinese versions or were developed in the Chinese language.

In addition to translation, the adaptation of an instrument on a question-by-question basis may be needed to ensure the question is culturally meaningful to the target population (Geisinger, 1994; Tran, 2009). In this study, some questions in the MRNI-SF had to be adapted. For example, the question "The President of the U.S. should always be a man" was revised to "The President of Taiwan should always be a man". Another question, "Men should watch football games instead of soap operas", was adapted and changed to "Men should watch baseball games instead of soap operas". Watching football games is a popular activity in the U.S., while in Taiwan, football is not often played and is overshadowed by baseball in terms of popularity.

Statistical Analysis

To answer the research questions, I employed dyadic growth curve modeling to examine change over time and the nature of the change (linear or curvilinear); analyses were also used to understand baseline predictors of change over time. Since this study included a sample of both partners, a dyadic growth curve model was used to examine "how change over time is coordinated across two partners" (Kashy et al., 2008, p. 317). Dyadic growth modeling approaches are useful in examining dyadic longitudinal data as it can evaluate whether the rate of change for one partner is associated with the rate of change for the other partner (Kashy & Donnellan, 2008). Another advantage of using dyadic growth modeling is that it accounts for the nonindependence of the data (Kenny et al., 2006). That is, the data from each member of the dyad might be correlated. For example, in our study examining relationship satisfaction after

each therapy session, two members of a dyad reported on the same relationship. By using a more sophisticated analysis, such as dyadic growth modeling, the interdependence nested within a dyad is accounted for (Kenny et al., 2006).

Researchers have proposed two ways to analyze dyadic data: structural equation modeling and multilevel modeling (Kashy & Donnellan, 2008; Ledermann & Kenny, 2017; Planalp et al., 2017). Multilevel modeling (MLM; Raudenbush & Bryk, 2002) was used to examine the dyadic growth models in this study. There are several strengths of using MLM in the current study. First, MLM deals with varying time points and time intervals across and within dyads without increasing the number of missing values (Atkins, 2005; Ledermann & Kenny, 2017). In our study, couples participated in a range of 1 to 17 sessions of EFT. In addition, couples attended therapy with varying time intervals; some couples had sessions weekly and some couples had varying session intervals. This variability of time points and intervals are common challenges in real-life effectiveness studies compared to efficacy studies that require a specific number and frequency of sessions. Second, MLM handles small sample sizes well by using restricted maximum likelihood (REML) (Ledermann & Kenny, 2017). Third, MLM uses maximum likelihood estimation with the expectation-maximization algorithm to deal with missing data, which is a common issue in clinical data (Bartle-Haring et al., 2020). In a clinical trial, clients may not complete the assessment for one session, but they might complete one at the next session, or clients may drop out of therapy before they receive the number of sessions anticipated to create an effect. MLM uses all the data from each participant and can provide unbiased estimates, as long as the data are missing at random (Atkins, 2005; Ledermann & Kenny, 2017; Schafer & Graham, 2002).

Plan of analysis

The first set of analyses examined research question one: Does EFT improve clinical outcomes (i.e. relationship satisfaction, depression) among Taiwanese couples in Taiwan? Two separate multilevel models were used to test the two outcomes (i.e., relationship satisfaction and depression). The second set of analyses answered research question two: Do attachment style, traditional/modern values, femininity/masculinity ideology, and emotional expressivity at baseline predict an increase in relationship satisfaction and a decrease in depressive symptoms among Taiwanese couples in Taiwan who receive EFT? This question was answered by adding each predictor variable to the two separate multilevel models, yielding a total of 14 models. Each predictor was added to the model to test the relationship between the predictor and the initial level and rate of change for each outcome (i.e., relationship satisfaction and depressive symptoms).

CHAPTER IV: STUDY ONE

Abstract

This is the first study to begin to explore the effectiveness of emotionally focused therapy for relationship satisfaction and depressive symptoms among couples in Taiwan. This one-arm pragmatic trial assessed the clinical outcomes of 17 couples using paired-samples t-tests and multilevel modeling. Paired-sample t-tests revealed no statistical differences in relationship satisfaction and depressive symptoms before and after EFT. Additionally, multilevel modeling indicated no change in relationship satisfaction over time. However, there was a quadratic change in depressive symptoms over the course of EFT. The study results were unexpected, though it is important to note that most couples did not receive the recommended treatment "dose" in this pragmatic trial. In addition, the small sample size limited statistical power. Future research is needed to continue to examine the effectiveness of EFT for couples in Taiwan.

Introduction

Depression is a prevalent and burdensome mental disorder. Globally, an estimated 5% of all adults suffer from depression (World Health Organization, 2021). In Taiwan, an estimated 8.9% of individuals aged 15 and older had subsyndromal depression and 5.2% had major depressive disorder according to data from 2004 (Ministry of Health and Welfare, 2020). More recent data indicate that about 1.19 million people in Taiwan sought treatment from psychiatrists for depression from 2016–2018 (Taiwan Association Against Depression, 2020), and about 5.9% were prescribed antidepressants in 2019 (Ministry of Health and Welfare, 2020).

Depression is the leading global cause of medical disability (WHO, 2021). It affects physical health, daily function, and cognition, and it is a strong predictor of chronic disease and suicidal thoughts and behaviors (National Institute of Mental Health, 2019; Simon et al., 2016). Depression is associated with an increased risk of poor physical and mental health, and it has also been found to have a reciprocal association with relationship satisfaction (Atkins et al., 2009; Beach et al., 2003; Foren et al., 2015; Whisman et al., 2004). Further, the burden of relationship problems, including low relationship satisfaction, high conflict, separation, or divorce, is detrimental to physical and mental health (Slatcher & Selcuk, 2017; Doss et al., 2021). Greater relationship quality is related to better health and lower cardiovascular reactivity during relationship conflict (Robles, et al., 2014). Further, relationship distress has been found to predict an increase in depressive symptoms over time (Beach & O'Leary, 1993).

Couple therapy is an effective approach to treat depression and improve relationship satisfaction (Barbato et al., 2018). Emotionally Focused Therapy (EFT), an evidence-based couple therapy, is an efficacious treatment for improving depression (Denton et al., 2012; Dessaulles et al., 2003; Wittenborn et al., 2019), and relationship satisfaction (Denton, 2000;

Dalgleish et al., 2015; Johnson & Talitman, 1997). However, most EFT research has been conducted in North America. Few researchers have examined the effectiveness of EFT to treat depression and improve relationship satisfaction in Asia (Ahmadi et al., 2014; Soleimani et al., 2015; Soltani et al., 2013; Soltani et al., 2014). To date, there have been no known studies of EFT among couples in Taiwan. The purpose of this study is to empirically evaluate the effectiveness of EFT in Taiwan. Specifically, the study hypothesis is that EFT will improve clinical outcomes (i.e., increased relationship satisfaction and decreased depression) among Taiwanese couples in Taiwan, based on the assumption in EFT that attachment is universal and thus the approach is applicable to couples across cultures (Johnson, 2019).

An Evidence-Based Couple Intervention—Emotionally Focused Therapy

This study examines EFT, a widely researched, implemented, and empirically supported couple therapy that is efficacious at decreasing depressive symptoms and relationship distress (e.g., Denton et al., 2012; Dessaulles et al., 2003; Wittenborn et al., 2019). The most recent meta-analysis included 20 studies totaling 332 couples and found medium to large effects for EFT pre- to post-test, pre-test to follow-up, and in comparison to other couple interventions (Spengler et al., in press). Another recent meta-analysis found that EFT had moderate effects on relationship satisfaction changes from the first to last couple therapy session (Rathgeber et al., 2019). In addition, couples who received EFT reported significant growth in relationship satisfaction across a 2-year follow-up (Wiebe et al., 2017).

EFT consists of three stages: cycle de-escalation, restructuring of interactional positions, and consolidation and integration of therapeutic gains (Johnson, 2019). In the first stage, therapists track and identify negative interactional cycles and help couples access unrecognized emotions underlying their negative interactions. In the second stage, therapists guide couples to

respond to and support each other in an emotionally attuned way, which leads to changes in interactional patterns and new emotional engagement. In the third stage, therapists help couples explore and identify new and more secure solutions to their problems. Change occurs through EFT as a result of new corrective emotional experiences in therapy. When therapists can address and access each partner's emotions and identify the attachment needs underlying their negative interaction cycles, couples can start to reconnect and create positive cycles of bonding and connection (Johnson, 2019). These shifts, in turn, lead to increased relationship satisfaction.

The Application of EFT in Taiwan

There is a lack of empirical research regarding EFT among couples outside of North America (Wiebe & Johnson, 2016). A small body of research has tested EFT outcomes among Iranian couples in Iran (Ahmadi et al., 2014; Soltani et al., 2013; Soltani et al., 2014; Soleimani et al., 2015). However, the existing EFT research in Taiwan has been limited to a case study (Liu & Hung, 2019), a qualitative study of couples' experiences of EFT (Sun, 2019), a clinical study of EFT among couples who had affairs (Wang & Wang, 2015), and a study of the effectiveness of EFT in a "Hold Me Tight" psychoeducational group for unmarried couples (Sun & Liu, 2015).

EFT was developed by Sue Johnson in a North American context grounded in Euro-American cultural values and beliefs. It would be problematic to claim that this intervention is effective in all populations, including those outside of the Euro-American cultural context without careful clinical research of the intervention in these cultures. Researchers have argued that EFT is applicable in other cultural contexts because the two core concepts of EFT—attachment and emotions—are universally experienced (Ekman, 2007; Johnson, 2019). Based on this argument, we assume that EFT can be applied to Taiwanese couples and lead to desirable outcomes.

The Purpose of the Study

Most EFT studies have been conducted in a laboratory or other controlled setting (e.g., Johnson & Greenberg, 1985; Dandeneau & Johnson, 1994; Johnson & Talitman, 1997; Denton et al., 2000; Dessaulles et al., 2003; Denton et al., 2012). Few research studies have tested the effectiveness of EFT in real-life settings (e.g., Ahmadi et al., 2014; Wittenborn et al., 2019), and no studies have examined clinical outcomes among Taiwanese couples in Taiwan. There is a critical need to test the effectiveness of EFT among Taiwanese couples to determine its effectiveness in a different cultural context. In the absence of such information, therapists and couples cannot feel confident that EFT can be successfully used in Taiwan. The purpose of this study was to begin to explore whether EFT improves relationship problems and depression among Taiwanese couples in Taiwan. We hypothesized that couples who receive EFT will demonstrate significant increases in relationship satisfaction and significant decreases in depression over the course of EFT.

Method

This pragmatic clinical trial (Thorpe et al., 2009) examined the effectiveness of EFT in real-life settings in Taiwan. Rather than conducting this clinical research in a controlled setting, we collaborated with therapists trained in EFT to implement the intervention with couples in their practices in Taiwan. A pragmatic clinical trial enables therapists to apply an intervention flexibly as they would in typical clinical practice. This design imposes minimum constraints, includes few selection criteria, and allows therapists to determine the length of treatment for couples (Sox & Lewis, 2016).

Procedures

Therapists who were certified in EFT were identified through the Asia EFT website (www.asia-eft.com) in collaboration with the coordinator and director of the Asia EFT Center. Therapists were contacted to collaborate on this study if they (1) had completed the EFT therapist certification requirements established by the International Centre for Excellence in Emotionally Focused Therapy (ICCEFT), (2) used EFT in their practice in Taiwan, (3) received supervision from EFT-certified supervisors biweekly, and (4) worked with Taiwanese couples. Each EFT couple therapist was contacted by email, and the study information was shared. Therapists who expressed interest in collaborating on the study were invited to a Skype meeting to explain the study information in detail and describe their role in the study.

Therapists invited their couple clients who met the research inclusion criteria to participate in the study. Couple participants were included in this study if they (1) agreed to receive couple therapy from a participating EFT-certified therapist in Taiwan, (2) were aged 18 or older, and (3) agreed to participate in the study. Couples were excluded from participating in this study if they (1) reported ongoing or past intimate partner violence, (2) reported suicidal thoughts or ideation in the past 3 months, or (3) reported ongoing infidelity. These exclusion criteria were set based on the rationale that clients needing treatment for intimate partner violence, suicidal ideation, and infidelity are not often best served by couple therapy alone (Johnson, 2019).

Once couples had reviewed the study information and signed the consent forms, they were officially enrolled in the study, and emails were sent to couples to confirm their enrollment. All participants received EFT in their therapist's practice setting. Participants completed surveys at intake and after each therapy session. They were encouraged to complete surveys through their

smartphones after each therapy session; if smartphones were not accessible, therapists provided paper-and-pencil surveys, which were then sealed in envelopes to protect the participants' confidentiality.

Participants each received an NT$100 gift voucher (equal to approximately USD$3) after each three sessions for which they completed surveys until the termination of EFT. Therapists received an NT$700 gift voucher (equal to approximately USD$23) to compensate them for their time. All gift vouchers were sent to couples and therapists through emails or text messages.

Participants

The average age of participants in the sample was 33 years for male partners (*SD* = 7.90) and 32 years for female partners (*SD* = 7.47). Participant couples' relationship duration ranged from less than one year to 21 years, with an average of 7 years (*SD* = 6.70). Among the couples, 65% did not have children, 24% had one child, and 12% had two children. Regarding educational attainment, 18% of male participants and 18% of female participants had completed high school, 65% of males and 59% of females had bachelor's degrees, and 18% of males and 24% of females had graduate degrees. The most commonly reported income level among participants was above NT75,000 (equal to approximately USD$2,500) monthly.

EFT Intervention

In all, 17 couples were seen by 10 therapists, including 1 male therapist and 9 female therapists. All therapists had master's degrees and held professional mental health licenses in Taiwan. Five had counseling psychologist licenses, four had clinical psychologist licenses, and one was a licensed social worker. Therapists had practiced for an average of 9 years (*SD* = 5.34; range: 4–22 years). Therapists provided EFT in their practices and were instructed to determine

the number of sessions needed to achieve positive outcomes based on the needs of each couple. All therapists were instructed to provide EFT according to the EFT manual (Johnson, 2019).

Couple participants completed 1–17 sessions ($M = 7$), and only 41% of couples ($N = 7$) completed more than 8 sessions; the recommended treatment length for EFT is between 8–20 sessions (Alan & Zeidlhack, 2021). In all, 29% of couples ($N = 5$) dropped out of the study. Three couples left before the third session because they stopped attending therapy without explanation, one couple left before the second session because they ended their relationship, and one couple left before their seventh session because the therapist had observed an increase in violent behaviors and depressive symptoms and asked the partners to be seen individually.

Instruments

Demographic Information

Demographic information collected from participants included age, gender, education level, combined family income, marital status, years in the current relationship, number of children, and whether they had received or were currently receiving any mental health treatment (e.g., medication, individual treatment, group therapy).

Dyadic Adjustment Scale

The Dyadic Adjustment Scale (DAS; Spanier, 1976) is a measure of relationship satisfaction that includes four subscales: consensus (13 items), satisfaction (10 items), cohesion (5 items), and affectional expression (4 items). The total score (range: 0–151) is obtained by summing all 32 scale items, and a higher score indicates higher relationship satisfaction (Spanier, 1976). The DAS has demonstrated high reliability with a Cronbach's alpha coefficient of .96 (Spanier, 1976). The DAS has also been translated into Chinese and validated in various studies (Shek, 1995; Shek et al., 1993; Shek & Cheung, 2008). The Chinese-language version of the

DAS was used for the current study (C-DAS; Shek et al., 1993). The C-DAS has demonstrated high reliability with a Cronbach's alpha coefficient of .91 (Shek et al., 1993). For this study, the internal reliability of DAS was high across treatment and ranged from .92 to .98 for men and .87 to .98 for women.

Patient Health Questionnaire

The Patient Health Questionnaire (PHQ-9; Kroenke et al., 2001) is a tool used to assess depressive symptoms on a 4-point Likert-type scale (0 = *not at all*, 3 = *nearly every day*). Participants rated the extent to which they had experienced each symptom in the last two weeks. Examples of symptoms include "feeling down, depressed, or hopeless," and "poor appetite or overeating". The sum of the PHQ-9 score indicates participants' depression level such that a higher score indicates a higher level of depressive symptoms. The PHQ-9 has been translated to Chinese and tested among Chinese populations with a high reliability of .96 and a high validity of .92 (Wang et al., 2014). The Chinese-language version of the PHQ-9 was used for this study. The internal reliability of PHQ-9 was high across treatment and ranged from .88 to .98 for men. For women, the reliability was poor to acceptable, ranging from .56 to .96 for women (see Table 1).

Material Translation

This study was conducted in Taiwan and all participants spoke Mandarin. Therefore, all study materials, including the research information flyer and informed consent materials, were written in Mandarin by the first author, who is fluent in both Mandarin and English. All therapy sessions were conducted in Mandarin.

Data Analysis

In this study, we aimed to explore the effectiveness of EFT in Taiwan through a one-arm pragmatic trial. We used two types of analyses to begin to explore the research question, including paired-samples t-tests and multilevel modeling. Given our pragmatic approach and the exploratory nature of this study, we also conducted a paired-samples t-test in order to assess change between participants' own intake and termination scores. This analysis was conducted because the number of sessions couples completed varied. In addition, we used multilevel modeling (MLM) to examine change over time using participants weekly scores throughout treatment. In MLM, we planned to use intent-to-treat (ITT) analyses (Gupta, 2011; Kruse et al., 2002). ITT is generally recommended for clinical trials research because it ensures that all participants are included in the analysis regardless of whether or not they completed treatment, thus reducing bias in the estimation of the treatment effects (Gupta, 2011; Kruse et al., 2002). However, we did not use ITT analyses for paired-samples t-tests because in order for pair-samples t-tests to accurately capture the differences between intake and termination scores, we could only include participants who had completed both intake and termination assessments. To ensure this approach was appropriate for our data, we also empirically tested whether missing data effected our model before proceeding.

Paired-Samples T-Tests

We calculated paired-samples t-tests to compare participants' relationship satisfaction and depressive symptoms scores from intake to termination (Tabachnick & Fidell, 2013). Only couples who completed EFT ($N = 9$) were included in the t-tests to ensure that the results accurately reflected the differences in scores from intake to termination. Given that participants

in our study received a wide range of sessions, each participant's score at their termination session was used.

Multilevel Modeling

This study includes data from both partners and aims to describe change over time in one treatment condition; thus, dyadic growth curve modeling was used to answer the research question. A dyadic growth curve model can examine "how change over time is coordinated across two partners" (Kashy et al., 2008, p. 317), and this approach also accounts for interdependence nested within a dyad (Kenny et al., 2006).

Multilevel modeling (MLM) and structural equation modeling (SEM) are both appropriate methods for the analysis of dyadic data (Kashy & Donnellan, 2008; Ledermann & Kenny, 2017; Planalp et al., 2017). This study employs MLM (Raudenbush & Bryk, 2002) for data analysis for several reasons. First, couples in the study completed 1-17 sessions (varying time points) and attended therapy with varying frequency (varying time intervals). An MLM approach can account for varying time points and intervals across and within dyads without increasing the number of missing values (Atkins et al., 2005; Ledermann & Kenny, 2017). Second, the study recruited a small sample, which is common in clinical research (McNeish & Stapleton, 2016). The MLM approach accounts for a small sample size by using restricted maximum likelihood (REML; Ledermann & Kenny, 2017).

In MLM, partners' scores across the weeks of treatment (level 1) were nested within couples (level 2). This type of growth model is created by an intercept (initial score) and slope (rate of change), where the slope is grand mean centered. To develop the MLM growth model for relationship satisfaction, we first determined the number of random effects (i.e., intercept and/or random slope) in our model. Next, we evaluated if nonlinear or quadratic slopes better explained

the change across treatment. Then we used omnibus tests of distinguishability to determine if the model was distinguishable by gender. Chi-square difference (or deviance) tests guided our analysis in each step to determine better-fitting models where lower loglikelihood values indicated a more parsimonious model. After completing each of these steps for the DAS, the same analytic steps were completed to develop a model for the PHQ-9.

Missing Data

Since our study was a pragmatic trial in a real-world setting, it was expected that couples might not attend a session each week or couples might drop out of therapy before we would expect them to have improved. In this case, MLM can use maximum likelihood estimation to handle missing data, which is a common issue in clinical data (Bartle-Haring et al., 2020). MLM also uses all the data from each partner and provides unbiased estimates, as long as the data are missing at random (Atkins et al., 2005; Ledermann & Kenny, 2017; Schafer & Graham, 2002).

Restricted maximum-likelihood methods (REML) and Kenward-Roger adjustment (Kenward & Roger, 1997) are the recommended methods for analyses with small sample sizes (McNeish & Stapleton, 2016). REML estimates unbiased variance components well, especially for continuous outcome variables (McNeish & Stapleton, 2016). Kenward-Roger adjustment avoids an inflated Type I error rate resulting from underestimated fixed-effect standard errors (Kenward & Roger, 1997). Thus, researchers recommend using the Kenward-Roger adjustment to guard against biased estimates (Bell et al., 2013).

Since this is a study of naturally occurring therapy, the amount of sessions in which couples completed therapy varied. In our study, one couple continue treatment until week 17, while almost half of the couples (47%) completed treatment before the 10^{th} week. However, our MLM model showed that missing at week 17 did not affect our model; one possible explanation

for that was that so many couples actually completed treatment before week 17 instead of dropping out from treatment. Because missing data in a study of this design is inevitable, we employed pattern-mixture models separately for the DAS and PHQ-9 to examine if missing data at Week 17 (*observed* = -1, *missing* =1) affected our model intercepts and slopes (Son et al., 2012). For the DAS model, there was no difference in model fit when missing at week 17 was added to the model, ($\chi^2(2) = -2.61$, $p = .27$). Specifically, missing at week 17 was not associated with the initial ($p = .45$) and rates of change in relationship satisfaction across treatment ($p = .17$). Similarly, for the PHQ-9 model, there was no difference in model fit when missing at week 17 was added to the model, (($\chi^2(2) = 2$, $p = .38$). Particularly, missing at week 17 was not associated with the initial ($p = .40$), linear rates of change ($p = .10$), and the quadratic rates of change in depressive symptoms across treatment ($p = .05$). Together, the lack of improved model fit when missing was included in the model as well as the lack of associations of missing with the initial and rates of change provide evidence for missing at random in both the PHQ-9 and DAS models. Therefore, we used REML and Kenward Roger standard error corrections in our models.

Results

Before completing the paired-samples t-tests and MLM, we examined descriptive scores of the outcome variables. The majority of participants in the study (65%) were moderately distressed at intake, with an average DAS score of 85.13 (range: 47–140, *SD* = 21.54). In addition, the majority of participants scored at or above moderate to severely depressed, with a mean PHQ-9 score of 10.55 (range: 0–24, *SD* = 6.7). Specifically, 12% of male participants and 12% of female participants in the current study had moderate depression (PHQ-9 scores: 10–14), 24% of males and 24% of females had moderately-severe depression (PHQ-9 scores: 15–19),

and 6% of males and 12% of females had severe depression (PHQ-9 scores: 20–27). The mean, standard deviation, and internal reliability of relationship satisfaction and depressive symptoms are presented in Table 1.

Paired-Samples T-Tests

For couples ($N = 9$) who completed treatment and completed intake and termination assessments, we also ran paired-samples t-tests to evaluate the impact of EFT on couples' scores on the DAS and PHQ-9. We compared DAS and PHQ-9 scores from intake to termination. For the DAS, there was no statistical difference in the relationship satisfaction scores before and after EFT for men ($p = .49$) and women ($p = .33$). For the PHQ-9, there was no statistical difference in depressive symptoms before and after EFT for men ($p = .60$) and women ($p = .20$).

Multilevel Modeling

Model Building-DAS Unconditional Model

In MLM models, we included all couples ($N = 17$) in the analysis. For the DAS model, we began with an undistinguishable dyad model that modeled an intercept and slope as fixed effects. We then evaluated the number of random effects. We first included random intercepts into the model, both variance ($p = .01$) and covariance ($p = .04$) of intercept were significant. However, when we added random slopes into the model, model fit improved (χ (2) = -19.02, $p <$ 01), but the random effect was not significant ($p = .87$). For parsimony, we only accounted for intercept random effect in the DAS model.

Next, we evaluated if nonlinear or quadratic slopes better explained the growth of the DAS model. There was no difference in the model fit when a quadratic slope was included in the model (χ^2 (1) = .32, $p = .57$); therefore, we included a linear slope in the model. Next, we evaluated if the DAS model could be distinguished by gender (*female* = 1, *male* = -1). The

omnibus test of distinguishability revealed that the model was not distinguishable by gender (χ^2 (4) = -3.53, p = .47). Specifically, the intercept (p = .65) and slope (p = .77) did not differ by gender. After completing the above steps, an indistinguishable dyadic multilevel model for the DAS model, including a relationship satisfaction intercept, linear slope, and treatment weeks as fixed effects was the best fitting model (Kenny et al., 2006).

Model Building-PHQ-9 Unconditional Model

For the PHQ-9 model, we also used an undistinguishable dyad model that modeled an intercept and slope as fixed effects. We also evaluated the number of random effects. When we tested random intercepts, both variance (p = .03) and covariance (p =.04) of intercept were significant. However, when we accounted for slope random effect, model fit improved (χ (2) =12.90, p < .05), but the random effect was not significant (p =.21). For parsimony, we only accounted for the intercept random effect in the PHQ-9 model.

Next, we determined if nonlinear or quadratic slopes explained the rate of change of the PHQ-9 model better. The model fit improved when adding the quadratic slope ($\chi^2(1) = 4.78$, p <.05). Specifically, there was small, but notable quadratic slope (b = .03, p <.05), while the linear slope was not significant (b = -.14, p =.08), for depressive symptoms across treatment. Hence, we included the quadratic slope in the PHQ-9 model. Last, we tested if the PHQ-9 model could be distinguished by gender (*female* = 1, *male* = -1). Similar to the DAS model, for the PHQ-9 model, the omnibus test of distinguishability revealed that the model was not distinguishable by gender (χ^2 (5) = 8.64, p = .12). Particularly, the intercept (p = .85), linear slope (p = .05), and quadratic slope (p =.66) did not differ by gender. After completing these steps, an indistinguishable dyadic multilevel model for depressive symptoms that included an intercept,

quadratic slope, and treatment weeks as fixed effects was the best fitting model (Kenny et al., 2006).

Indistinguishable Dyadic Multilevel Growth Models

The variances, covariances, and residuals of the growth models were highly correlated with each other over time. For example, relationship satisfaction for each week was highly correlated (ρ = .75, p <.01) while depressive symptoms for each week was also highly correlated (ρ = .75, p <.01). Given these high correlations over time, we used an autoregressive (1) matrix structure for the variance, covariance, and residuals because it assumes covariances are correlated, and it factors in declining correlations over time (Leyland, 2004).

For the DAS model, the average relationship satisfaction intercept was significant (b = 88.26, p <.01) and varied across couples (σ^2 = 430.15, SE = 138.61, p < .05) (See Figure 1). However, there was no significant linear change in relationship satisfaction over time (b = -.09, p = .76).

For the PHQ-9 model, the average depressive symptoms intercept was significant (b = 8.57, p < .01). The model also revealed that the average depressive symptoms intercept varied across couples (σ^2 = 31.21, SE = 10.14, p < .05) (See Figure 2). There was no significant linear change in depressive symptoms (b = -.15, p =.09), but there was a significant quadratic change in depressive symptoms over time (b = .03, p < .05), indicating curvilinear growth.

Discussion

This is the first study to examine whether EFT was effective for couples in Taiwan. The primary purpose of this study was to examine the effectiveness of EFT for depression and relationship satisfaction among Taiwanese couples in Taiwan. The multilevel growth model findings indicate that couples receiving EFT did not report change in relationship satisfaction

over time. The paired samples t-tests (i.e., pre- and post-tests) also did not reveal a significant increase in relationship satisfaction from intake to study termination. This finding is unexpected because prior studies have found that EFT was more effective than a range of control groups (e.g., behavioral approaches, wait-list, other therapy approaches) at increasing relationship satisfaction (e.g., Johnson & Greenberg, 1985; Denton et al., 2000; Wittenborn et al., 2019). One prior study found that couples had an overall 0.39-point increase in relationship satisfaction each week during EFT (Dalgleish et al., 2015). Our study findings also provide preliminary information regarding the rate of change of depressive symptoms over the course of EFT. There was no significant linear rate of change in depressive symptoms, but there was a significant quadratic change (i.e., a curvilinear change in depression) over EFT.

There are several possible reasons for the lack of increase in relationship satisfaction over time in this study. First, a highly plausible explanation is that couples did not receive enough sessions for EFT to improve partners' relationship satisfaction. It is recommended that couples receive 8 to 20 sessions as they move through the three stages of EFT, with more sessions needed for more severe symptoms (Alan & Zeidlhack, 2021; Johnson, 2019). In our study, 17 couples completed a range of 1 to 17 sessions, with only 41% ($N = 7$) of couples completing more than 8 sessions. Therefore, couples did not likely receive the correct "dose" of treatment, especially given the severity of the symptoms experienced by partners. A second possible explanation for this finding is that the current study included a small sample size, and there was insufficient power to detect the treatment effect (McNeish & Stapleton, 2016). The lack of a robust sample may have contributed to the findings (Evans & Ildstad, 2001).

Another possible explanation for the unexpected study findings relates to the public health system in which the study occurred. Taiwan's national health insurance provides universal

coverage; however, counseling and therapy services in private practice are not covered by the national health insurance (Guo et al., 2013; Ministry of Health and Welfare, 2021). In Taiwan, the cost of therapy is high, ranging from $40 to $160 per hour, depending on the geographic location of the private practice and the therapist's years of experiences (Taiwan Counseling Psychologist Union, 2011). The high cost of couple therapy could have contributed to the low number of completed sessions. It may be the case that couples discontinued therapy when they started to feel better. The first major change process in EFT is de-escalation of the negative cycle, which occurs at the end of the first stage of EFT (Johnson, 2019). At that point in therapy, couples often experience new ways of interacting and begin to feel newly hopeful about their relationship (Johnson, 2019). It is possible that couples began to feel some relief and, given the high cost, decided to terminate treatment. Doing so would prevent couples from receiving the full "dose" of treatment (e.g., three stages of EFT), which could alter the immediate and sustained impact of EFT (Burgess Moser et al., 2016).

Regarding depression, the majority of participants scored above the cutoff point for moderate depression at the initial assessment. In Taiwan, only 20 percent of people with depression seek professional help (Taiwan Association Against Depression, 2020). For those who seek professional help, they often receive treatment from psychiatrists rather than counselors or therapists; Between 2016 to 2018, around 1.19 million people in Taiwan sought treatment from psychiatrists for depression (Taiwan Association Against Depression, 2020). In Asia, including Taiwan, mental health problems are seldom diagnosed due to the lack of accessibility and availability of services and stigma associated with seeking services (World Health Organization, 2017). For individuals who have intentions to seek help, most would prefer to use sources and support from their social networks, such as family and friends, rather than

from healthcare providers (Oliver et al., 2005; Arnault, 2009). This phenomenon might explain the severity of depression in our study sample since partners might suffer from depression, but delay seeking treatment until it becomes unbearable. For people experiencing severe depression, the most effective treatment is a combination of antidepressant medication and therapy (National Institute for Health and Care Excellence, 2009). It is possible that participants with severe depression may have experienced more improvement with a combination of EFT and antidepressant medication, though future research is needed to test this.

It is also possible that EFT may need to be culturally adapted to fit the needs of couples in Taiwan in order to facilitate change. Bernal and colleagues (2009) have recommended the consideration of language, cultural patterns, meaning, and values when systematically modifying an evidence-based treatment for cultural adaptation. Some specific cultural characteristics in Chinese culture may affect how couples interact with one another and how EFT can be used to facilitate change. For example, tolerance in relationships is encouraged in the Chinese cultural context (Chang et al., 2020). Chang and colleagues (2020) found that tolerance is often used to repress negative emotions to maintain harmony among Taiwanese couples. Chen and Li (2007) also found that tolerance can predict an individual's marital satisfaction and their partner's supportive behaviors. The main mechanism of change in EFT is the expression of emotions to create new connections and experiences. This mechanism may conflict with the cultural concept of tolerance in that couples in Taiwan and other Chinese cultural contexts may use tolerance as a coping strategy.

Limitations

This study had several limitations. First, only 41% of couples completed more than 8 EFT sessions; the remaining couples completed 8 or fewer sessions (29%) or discontinued

treatment (29%). Couples are recommended to receive at 8 to 20 or more sessions, based on the needs of the couple, to improve (Alan & Zeidlhack, 2021). Partners who report more severe symptoms often need more sessions or even other treatment plans (e.g., adjunctive antidepressant medication). The pattern mixture model indicated that missing data at week 17 did not affect the model; however, the fact that the majority of couples in the study did not have the recommended treatment "dose" could explain the lack of clinical improvement.

Additionally, another limitation of the study is the small sample size. A larger sample size might give the model more power to detect a treatment effect. Finally, while most couples completed their measures immediately after their session, others were delayed for various reasons and didn't complete them until the following day. The validity of the assessment might be affected if all couples did not complete the assessment immediately after each treatment session.

Conclusions

This is the first study to begin to explore the effectiveness of EFT among couples in Taiwan. The results of the one-arm pragmatic trial did not indicate significant change in clinical outcomes; however, several limitations, including the small sample size and small treatment "dose" may have accounted for the limited change observed. Future research that studies a longer course of treatment with a larger sample of couples is needed to continue to explore whether EFT is effective for couples in Taiwan.

CHAPTER V: STUDY TWO

Abstract

This study examined predictors of change in relationship satisfaction and depression over the course of EFT in a pragmatic clinical trial of 17 couples in Taiwan. Results of multilevel modeling revealed that high traditionalism at intake predicted an increase in relationship satisfaction for women. Attachment was also a significant predictor of change; men with high attachment avoidance at intake demonstrated a significant decrease in depression, and men and women with high attachment anxiety at intake also experienced a significant decrease in depression. Lastly, emotional expressivity at intake was associated with an increase in relationship satisfaction and a decrease in depression for both men and women. Our study suggested that traditionalism, attachment, and emotional expressivity are important predictors of change among couples in Taiwan who receive EFT. While more research is needed, these findings offer preliminary support for the types of partners who may be more likely to experience change after receiving EFT.

Introduction

Attachment theory, the theoretical foundation of Emotionally Focused Therapy (EFT), considers attachment a universal experience across cultures (Bowlby, 1988; Johnson, 2019). Based on this assumption, EFT is assumed to be applicable across a variety of populations. Emotion, another important change mechanism in EFT, regulates and organizes attachment responses (Johnson, 2019). Emotions occur automatically, and seven universal emotions have been identified that cross language, cultural, and racial barriers: anger, contempt, disgust, enjoyment, fear, sadness, and surprise (Ekman, 2007, 2018). EFT was developed in a North American context and has demonstrated efficacy in prior studies (e.g., Dalgleish et al., 2015; Wittenborn et al., 2019), as well as studies that have examined baseline client characteristics associated with change (Johnson & Talitman, 1997). However, it is important to examine predictors of change among couples receiving EFT in non-Western cultural contexts.

Understanding the baseline characteristics of partners that are associated with improvement after receiving EFT is an important step in determining which couples might benefit from such treatment. Not all couples benefit from couple therapy; some couples fail to show improvement in relationship satisfaction over the course of treatment. Understanding predictors of change enables clinicians to ensure that their clients are receiving the treatment best suited to their needs (Atkins et al., 2005; Dalgleish et al., 2015). Few studies have examined predictors of success in EFT (e.g., Johnson & Talitman, 1997; Dalgleish et al., 2015), and none have focused on Taiwanese couples in Taiwan. The aim of this paper is to identify which baseline characteristics predict improvement among couples receiving EFT in Taiwan. Specifically, the paper will explore associations between partners' attachment, emotional expressivity, and specific Taiwanese cultural characteristics (e.g., traditional values and

masculinity ideology) at baseline with changes in relationship satisfaction and depressive symptoms over the course of EFT.

Attachment

Attachment between infants and mothers exist in every culture (van Ijzendoorn & Sagi-Schwartz, 2008), and adult attachment styles have also been identified across cultures (van Ijzendoorn & Bakermans-Kranenburg, 1996). Regarding patterns of attachment, a securely attached adult is characterized by low attachment avoidance and low attachment anxiety, whereas an insecurely attached adult is characterized by high levels of attachment avoidance and/or anxiety (Bartholomew & Horowitz, 1991). Individuals with high attachment avoidance develop deactivating strategies (e.g., withdrawal, focusing on other tasks instead of relationship problems) to self-soothe whereas individuals with high attachment anxiety tend to develop hyperactivating strategies (e.g., consistent attempts to reach proximity) to ensure the support and love they are seeking is still attained (Johnson, 2019).

While studies have examined attachment across cultures, some scholars argue that the assumptions of attachment constructs are rooted in Western culture (Rothbaum et al., 2000; Wang & Mallinckrodt, 2006). As a result, some researchers have argued against the universality of these constructs because cultural values and beliefs may affect how these attachment styles are perceived in different cultural settings. Schmitt and colleagues (2004) examined differences in adult attachment across 62 cultures and found that preoccupied attachment was more prevalent in Eastern cultures (e.g., Taiwan, Hong Kong, and China) than in other cultures. Ditommaso and colleagues (2005) also found that Chinese individuals had significantly lower attachment security than Canadian individuals. In addition, higher attachment avoidance has been reported among Asian Americans than among Caucasian and Hispanic Americans (Wei et al., 2004).

Wang and Mallinckrodt (2006) found that Taiwanese individuals idealized avoidance behaviors more than Americans and that Taiwanese men idealized anxiety-attachment behaviors more than American men.

Baseline attachment styles could be an important predictor of success in EFT given that EFT emphasizes changes in attachment-related bonds, thoughts, and behaviors (Johnson, 2019; Dalgleish et al., 2015). Some studies have examined the influence of attachment style on relationship satisfaction during EFT treatment among couples. Couples who demonstrated insecure attachment prior to EFT treatment have been found to have a significant decrease in relationship satisfaction over the course of EFT treatment (Dalgleish et al., 2015; Burgess Moser et al., 2016); Specifically, compared to couples with low attachment anxiety, those with high attachment anxiety at intake experienced a decrease in relationship satisfaction across EFT sessions (Dalgleish et al., 2015). Similarly, Johnson and Talitman (1997) found that male partners who showed reluctance to turn to their partner for support at intake (e.g., a characteristic of attachment avoidance) had a higher level of relationship satisfaction at termination of EFT. These findings suggest that EFT could be beneficial for couples with insecure attachment, as the main goal of EFT is to help couples identify and express unmet attachment needs, as well as reconsider their partner's criticism, anger, and frustration as attachment hurts and fear (Johnson, 2019).

Though attachment behaviors are universal across cultures, some cultures may be more accepting of insecure attachment than others. Specifically, couples in Taiwan may display insecure attachment more often than couples in the U.S. because these attachment styles are more culturally acceptable (Wang & Mallinckrodt, 2006). EFT is assumed to be an effective intervention to increase relationship satisfaction and reduce depression for couples in Taiwan,

but it is important to examine how the attachment styles of partners receiving EFT affect the trajectory of change in relationship satisfaction and depression.

Emotional Expressivity

Emotional expression, which is thought to be one of the most important mechanism of change in EFT, enables couples to organize the ways they respond to each other in a way that helps their partner understand their needs (Johnson, 2019). Johnson and Talitman (1997) found that male partners who were described as emotionally inexpressive by their partners at intake had the greatest gains in relationship satisfaction at EFT termination. This finding highlights the importance of emotional expressivity in EFT, which could help male partners access and share their vulnerable emotions with their partners. Another study found that Iranian women demonstrated increased emotional expressivity after EFT (Motaharinasab et al., 2016).

When examining the role of emotional expressivity in EFT among couples in Taiwan, it is imperative to consider how Chinese culture shapes and informs the expression of emotion. In Chinese culture, consideration of the reactions of others and emphasis on the maintenance of harmonious relationships affects individual's comfort levels and willingness to express emotions (Hwang & Han, 2010). Tolerance and suppression of one's emotions are qualities that are valued in Chinese culture (Chang et al., 2020). Tolerance facilitates harmony among Taiwanese couples, which can entail suppressing one's emotions and sacrificing one's needs (Chang et al., 2020; Chen & Li, 2007; Huang, 2009). Li (2006, 2012) also found that suppressing emotion is considered an indirect conflict management approach in Western culture, but is considered a helpful coping strategy in Chinese culture. Indeed, suppressing emotions has been associated with increased relationship satisfaction among couples in Taiwan (Li & Hsiao, 2016).

Emotional expressivity may look different in Taiwanese couples due to the Chinese cultural influence, and it is important to examine whether individual differences in emotional expressivity at baseline predict change over the course of EFT. This finding has important implications for EFT therapists regarding how emotion in the Taiwanese cultural context may affect clinical outcomes.

Traditional/Modern Values and Masculinity/Femininity Ideologies

Taiwan has undergone rapid economic and societal changes since 1960 (United Nations, 2014). It has become increasingly common for women in Taiwan to delay marriage and childbearing, and pursuit of higher education and career goals are increasingly seen as priorities for women (Wang & Yang, 2019). Moreover, individuals in Taiwan have increasingly embraced liberal values, such as the belief that one can enjoy a satisfactory life without a relationship or marriage and the adoption of singlehood as a life choice (Cheng & Yang, 2021; Tsai et al., 2021).

Despite the influence of modern and progressive values, traditional values persist in Taiwan and continue to shape individual's perspectives on relationships and family (Li & Hsiao, 2016). The Confucian emphasis on patriarchal and traditional values is still present in Taiwanese culture (Li & Hsiao, 2016; Yu, 2006). Several studies have found that Taiwanese women who adhere to traditional gender roles and values experience higher relationship satisfaction than women who endorse modern values (e.g., Yu, 2006). Taiwanese women who endorse egalitarian values also have lower relationship satisfaction than women in other East Asian countries (e.g., China, Korea; Fan & Qian, 2022). Due to the continued influence of traditional values on Taiwanese society, women with egalitarian values may need to consistently negotiate their values because they conflict with societal expectations (Fan & Qian, 2022; Qian & Sayer,

2016). Women in Taiwan may also experience low relationship satisfaction because they are sensitive to and aware of power inequalities, such as the unequal division of housework in relationships (Davis & Greenstein, 2009).

Another approach to examining traditionalism and modernism is to look at masculinity and femininity ideologies. Masculinity and femininity ideologies refer to an individual's internalization of cultural beliefs about male and female gender roles (Levant et al., 2007). For example, Levant and Richmond (2007) found that individuals in China, Russia, Japan, and Pakistan were more likely than Americans to endorse a traditional masculinity ideology. It is important for therapists to assess a couple's masculinity and femininity ideologies to determine whether the couple's conflicts may be related to their implicit assumptions regarding men's and women's roles in relationships (Levant et al., 2013).

To date, only one study has examined the influence of traditionalism on EFT treatment outcomes (Johnson & Talitman, 1997), and it was conducted in North America. The study found that partners' levels of traditionalism at intake did not predict EFT outcomes. The present study was conducted in Taiwan, where Confucianism and a mix of traditional and modern values shape individuals' worldviews (Tsuya & Bumpass, 2004); thus, it is particularly important to examine how partners' traditionalism, modernism, and masculinity and femininity ideologies affect EFT outcomes.

Current Study

Examining predictors of change over the course of EFT is important in distinguishing between couples who are responsive to EFT and those who are not (Johnson & Talitman, 1997; Roth et al., 2005). Considering cultural values and characteristics and exploring individuals' and couples' levels of traditionalism, modernism, masculinity, and femininity may help to explain

why some couples in Taiwan experience greater changes in relationship satisfaction and depression during EFT. The aim of this study is to examine how baseline attachment style, traditional and modern values, femininity and masculinity ideologies, and emotional expressivity predict changes in relationship satisfaction and depressive symptoms among Taiwanese couples in Taiwan who received EFT. Responses to couple therapy vary, and it is important to identify certain characteristics of individuals that might affect therapy outcomes. By developing an understanding of how couples in Taiwan responded to EFT based on their individual and couple characteristics, therapists can better predict which couples will be most responsive to EFT.

Methods

This study is a single-arm pragmatic clinical trial of EFT for couples in Taiwan. Participants received EFT in therapists' practice settings and were asked to complete an assessment after each therapy session throughout the course of treatment. At the intake session, couples were asked to complete a demographic survey and an assessment of predictors that were hypothesized to be associated with change in EFT for couples in Taiwan.

Procedures

In this study, we collaborated with the coordinator of the Asia EFT Center to assist us with the recruitment of therapists in Taiwan. The coordinator assisted us in locating Certified EFT Therapists in Taiwan. Researchers then contacted each certified EFT therapist through email to explain the study purpose and compensation and to ask about their interest in participating in our research study. Once therapists expressed interest in the study, researchers then set up individual meetings with them through Skype to review the research study in detail. Therapists then helped researchers to recruit couples who met eligibility criteria at intake in their practices.

Therapists collaborated in our study if they: (1) received certification as an EFT therapist by the International Centre for Excellence in Emotionally Focused Therapy (ICCEFT), (2) used EFT in Taiwan to treat couples in Taiwan, and (3) received supervision from EFT certified supervisors biweekly. Therapists reached out to couples they planned to treat in their practice to inquire about their interest in participating in the study. A total of 10 therapists (9 women and 1 man) enrolled in this study. All therapists hold masters' degrees in a mental health field, and all therapists were licensed mental health professionals in Taiwan (1 social worker, 4 clinical psychologists, and 5 counseling psychologists). Therapists had practiced for an average of 9 years (*SD* = 5.34; range: 4–22 years).

The inclusion criteria for couple participants were: (1) more than 18 years old, (2) received couple therapy from a participating EFT therapist in Taiwan, and (3) both partners agreed to participate. Couples were excluded from the study if they: (1) experienced past or ongoing intimate partner violence, (2) reported infidelity in the past 3 months, (3) and experienced suicidal ideation in the past three months. EFT encourages couples to show vulnerability and express their inner needs and emotions. Expressing vulnerability could be problematic and put partners at risk if there is intimate partner violence or infidelity in the relationship (Johnson, 2019). In this study, participating EFT therapists assisted researchers in determining participants' eligibility.

Participants completed assessments in their therapist's office independently after each session. Partners completed assessments independently through their smartphones; those unable to use smartphones received paper-pencil surveys from their therapist. At intake, partners completed an assessment of their demographic characteristics, attachment style, femininity and masculinity ideology, traditional and modern values, emotional expressivity, relationship

satisfaction, and depressive symptoms. After the second session, partners completed assessments of relationship satisfaction and depressive symptoms after each couple therapy session until treatment was terminated.

Therapists received a NT$700 (approximately $23 U.S. dollar) gift voucher for the assistance in the study. Each couple received a NT$100 gift voucher (approximately $3 U.S. dollars) after they completed every three sessions until termination of therapy. Researchers sent gift vouchers to therapists and couples through SMS texts or emails.

Participants

All couples reported being in a different-sex relationship. Couple participants had been together for an average of 7 years (*SD* = 6.70), ranging from less than one year to 21 years. The average age of male partners was 33 years (*Median* = 35; *SD* = 7.90; range: 19–47 years) and female partners was 32 years (*Median* =31; *SD* = 7.47; range: 20–45 years). Regarding children, 65% of couples reported having no children, 24% had one child, and 12% had two children. The majority of participants had high educational attainment, with 18% of males and 24% of females holding graduate degrees and 65% of males and 59% of females holding bachelor's degrees. The majority of the participants (41%) reported a monthly income level above NT75,000 (equal to approximately USD$2,500).

Measures

Attachment Avoidance and Anxiety

Partners completed the Experiences in Close Relationship-Relationship Structures Questionnaire (ECR-RS; Fraley et al., 2011) at the intake session. ECR-RS assessed attachment styles of four domains: relationships with mother, father, romantic partner, and best friend. In our study, we specifically assessed participants' attachment with their romantic partner. ECR-RS

consisted of 9 items on a 7-point Likert scale (1 = *strongly disagree*; 7 = *strongly agree*). Item 1 to 6 assessed how comfortable participants were to open up and depend on their partners (avoidance dimension, i.e., It helps to turn to this person in times of need), and items 7 to 9 assessed the extent to which participants worried their partners may reject them (anxiety dimension, i.e., I often worry that this person doesn't really care for me) (Fraley et al., 2000). Avoidance scores were obtained by averaging items 1 to 6, with item 1 to 4 reverse coded. Anxiety scores were obtained by averaging items 7 to 9. In previous research, the internal reliability was .87 (avoidance domain) and .91 (anxiety domain) (Fraley et al., 2011). ECR-RS was translated into Chinese and tested with Chinese populations (Zhang et al., 2021). In our study, the internal reliability of attachment avoidance was .90 for men and .45 for women, and attachment anxiety was .70 for men and .91 for women.

Femininity Ideology

Partners completed the Femininity Ideology Scale–Short Form (FIS-SF; Levant et al., 2017) at the intake session. FIS-SF examined traditional femininity ideology through 12 items with a 5-point Likert scale (1 = *strongly disagree*; 5 = *strongly agree*). FIS-SF includes three subscales: dependence/deference, purity, and emotionality and traditional roles. Scores were obtained by summing 12 items, ranging from 12 to 60, with higher scores indicating more endorsement of traditional femininity ideology. In prior research, the internal reliability was .85 (Levant et al., 2017). In our study, we translated this scale into Chinese, and the internal reliability was .84 for men and .77 for women.

Masculinity Ideology

Partners completed the Male Role Norms Inventory–Short Form **(**MRNI-SF; Levant et al., 2013) at the intake session. MRNI-SF examined traditional femininity ideology through 21

items using 7-point Likert-type scales (1 = *strongly disagree*, 7 = *strongly agree*). MRNI-SF includes seven subscales: avoidance of femininity, negativity toward sexual minorities, self-reliance through mechanical skills, toughness, dominance, importance of sex, and restrictive emotionality. The total sum scores ranged from 21 to 147, with higher scores indicating higher endorsement of traditional masculinity ideology. In prior research, internal reliability was .92 for men and .94 for women for the total scale with a North-American sample (Levant et al., 2013). In our study, we translated the MRNI-SF, and the internal reliability was .86 for men and .91 for women.

Traditional Values

Partners completed the Multidimensional Scale of Chinese Individual Traditionality–Short form (MS-CIT–SF; Kao & Lu, 2006) at the intake session. MS-CIT–SF examined traditional values by using 15 Chinese-language items (6-point Likert scale, 1 = *strongly disagree*, 6 = *strongly agree*). The total sum ranges from 15 to 90, with higher scores indicating higher endorsement of traditionality. MS-CIT–SF has five subscales: submission to authority, filial piety and ancestral worship, conservatism and endurance, fatalism and defensiveness, and male dominance. This scale was developed in Taiwan, and the internal reliability with a Taiwanese sample was .81 (Kao & Lu, 2006). In our study, the internal reliability was .89 for men and .94 for women.

Modern Values

Partners completed the Multidimensional Scale of Chinese Individual Modernity—Short form (MS-CIM–SF; Kao & Lu, 2006) at the intake session. MS-CIM–SF assessed modern values with 15 Chinese-language items on a 6-point Likert-type scale (1 = *strongly disagree*, 6 = *strongly agree*). The total sum score has a possible range of 15 to 90, with higher scores

indicating higher endorsement of modernity. This measure includes five subscales: Egalitarianism and open-mindedness, independence and self-reliance, optimism and assertiveness, affective hedonism, and sex equality. This scale was developed in Taiwan, and the internal reliability with a Taiwanese sample was .71 (Kao & Lu, 2006). In our study, the internal reliability was .55 for men and .83 for women.

Emotional Expressivity

Partners completed the Emotional Expressivity Scale (EES; Kring et al., 1994) at the intake session. EES assessed participants' emotional expressivity by using 17 questions with a 6-point Likert scale (1 = *never true*, 6 = *always true*). The total sum could range from 17 to 102, with higher scores indicating higher levels of emotional expressivity. Sample items include, "I think of myself as emotionally expressive" and "I don't like to let my partner see how I am feeling." EES was translated in to Chinese and tested with a Chinese population with a high reliability of .82 (Chan et al., 2010). In this study, we used the translated Chinese version of EES, and the internal reliability was .75 for men and .73 for women.

Relationship Satisfaction

Partners completed the Dyadic Adjustment Scale (DAS; Spanier, 1976) at intake and after each therapy session until the termination of treatment. The DAS has four subscales: consensus, satisfaction, cohesion, and affectional expression. The possible score ranges from 0 to 151, with higher scores indicating higher relationship satisfaction (Spanier, 1976). The DAS demonstrates a high reliability, with internal reliability of .96 (Spanier, 1976). The DAS was translated into Chinese and has been validated in various studies with Chinese populations (Shek, 1995; Shek et al., 1993; Shek & Cheung, 2008), with high reliability of .91 (Shek et al., 1993).

We used the Chinese version of DAS (Shek et al., 1993) for this study, and the internal reliability was high across treatment, ranging from .92 to .98 for men and .87 to .98 for women.

Depressive Symptoms

Partners completed the Patient Health Questionnaire (PHQ-9; Kroenke et al., 2001) at intake and after each therapy session until the termination of treatment. PHQ-9 assessed depressive symptoms through nine questions with a 4-point Likert-type scale (0 = *not at all*, 3 = *nearly every day*). Scores were obtained by summing up responses to the 9 questions, with higher scores indicating higher depressive symptoms. The PHQ-9 was translated into Chinese and was tested with Chinese populations with a reliability of .86 and validity of .92 (Wang et al., 2014). We used the Chinese version of the PHQ-9 in this study, and the internal reliability was high across treatment, ranging from .88 to .98 for men. The reliability was acceptable for women, ranging from .56 to .96.

Materials Translation

This study included Chinese-speaking couples in Taiwan. To ensure cultural sensitivity throughout the research study, all research materials (e.g., flyers, recruitment emails, consent forms, measures) were translated into Chinese. For measures, only FIS-SF, MRNI-SF, and EES were translated into Chinese; ECR-RS, DAS, and PHQ-9 had existing Chinese versions, and MS-CIT–SF, MS-CIM–SF were developed in the Chinese language. Translation of the FIS-SF, MRNI-SF, and EES were completed using the following procedures.

Translation from English to Chinese should ensure semantic equivalence (i.e. words and phrases in English and Chinese represent the same meaning), conceptual equivalence (i.e. the commonality of the concept between English and Chinese), and normative equivalence (i.e. the translated measure should address the difference in social norms between two cultures) (Behling

& Law, 2000; Pan & Puente, 2005). It is important to include translators who are fluent in both English and Chinese, very familiar with both cultures, and knowledgeable about the measures (Geisinger, 1994). To meet this requirement, the first author completed all English to Chinese translation. The first author was fluent in both English and Chinese and studied couple and family therapy in master's and doctoral programs in the U.S. She was also very familiar with both cultures. The translation process was completed as follows: (1) the first author translated materials and measures from English to Chinese and documented specific translation challenges encountered and decisions made to handle those challenges, (2) the first author asked two translator reviewers who were also fluent and bilingual in English and Chinese to review the translation. The goal of the review was to ensure the text and semantics were accurate, identify problematic translation, and provide feedback. (3) The first author then revised the translation based on reviewers' feedback and developed a finalized version of translated materials and measures.

It is also important to adapt measures on a question-by-question basis when translating the measure to ensure items are culturally meaningful to the target population after translation (Geisinger, 1994; Tran, 2009). When translating MRNI-SF, we determined there were a few items that needed to be adapted. For example, the question "Men should watch football games instead of soap operas" was adapted and changed to "Men should watch baseball games instead of soap operas". Football is a popular sport in the U.S. but not popular in Taiwan, and the equivalent popular sport in Taiwan is baseball.

Data Analysis

We used multilevel modeling (MLM; Raudenbush & Bryk, 2002) to answer our research question: Do attachment style, femininity/masculinity ideology, traditional/modern values, and

emotional expressivity at baseline predict change in relationship satisfaction and depression among Taiwanese couples in Taiwan who receive EFT?

This research question builds off the work from manuscript 1. Specifically, in manuscript 1, we developed multilevel growth models for relationship satisfaction and depressive symptoms. In developing both models, we determined the number of random effects in our model and whether nonlinear or quadratic slopes could explain the rate of change in relationship satisfaction across 17 weeks of EFT better than linear rates of change. During each step, we used chi-square difference tests (or deviance tests) to determine if model fit improved, where a more parsimonious model had a lower loglikelihood value.

The current study extends upon the multilevel growth models of relationship satisfaction and depressive symptoms in manuscript one by adding seven separate predictors (i.e., attachment anxiety, attachment avoidance, femininity ideology, male role norms, traditional values, modern values, and emotional expressivity) to both relationship satisfaction and depressive symptoms growth models respectively, yielding a total of 14 models. Specifically, each predictor was added to the model to test the initial level (intercept) and rate of change (slope) for relationship satisfaction and depressive symptoms. Since theories and past research studies indicated that there were gender differences in the levels of these predictors (e.g., Levant, 2013), we then added gender (*female* = 1, *male* = 0) as a predictor to examine gender differences in the association between the predictor and initial levels as well as rates of change.

Missing Data

It is common for clinical studies to have missing data (Bartle-Haring et al., 2020). To handle missing data, MLM can use maximum likelihood estimation to provide unbiased estimates (Atkins et al., 2005; Ledermann & Kenny, 2017; Schafer & Graham, 2002). It is also

common to have small sample sizes in clinical research (Miller, 2020). To handle small sample sizes, it is recommended to use Restricted maximum-likelihood methods (REML) and Kenward-Roger adjustment (Kenward & Roger, 1997).

We used two pattern-mixture models separately for relationship satisfaction and depressive symptoms to determine if missing data at Week 17 (*observed* = -1, *missing* =1) affected our model (Son et al., 2012). For both models, the model fit did not change when missing was added to the model (relationship satisfaction: $\chi^2(2) = -2.613$, $p = .27$; depressive symptoms: $\chi^2(2) = 2$, $p = .377$). Missing at week 17 was not associated with initial ($p = .453$) and rate of change ($p = .166$) in relationship satisfaction or initial ($p = .401$) and rate of change ($p = .10$) in depressive symptoms. Together, it provided evidence that missing data in both models were missing at random. We then used REML and Kenward Roger standard errors when running our models.

Results

Before running MLM, we examined the data to ensure that all the scales were normally distributed. We also examined descriptive statistics. Couples ($N = 17$) completed a range of 1 to 17 sessions ($M = 7$). Using the clinical cutoff of 10 points, the majority of the participants started out therapy moderately depressed to severely depressed (44%), as measured by the Patient Health Questionnaire (PHQ-9; Kroenke et al., 2001). Using the cutoff of 97 points, the majority of couples (65%) experienced relationship distress when they started EFT, as measured by the Dyadic Adjustment Scale (DAS; Spanier, 1976). Means and deviations for all predictors are shown in Table 3.

Indistinguishable Dyadic Multilevel Growth Models

Relationship Satisfaction

For the relationship satisfaction model, we only accounted for the random intercept because the random slope was not significant (p =. 87). We also determined that a quadratic slope did not improve model fit, compared to only including the linear slope (χ^2 (1) = .32, p = .57). For all models, we used an autoregressive matrix structure to estimate the variances, covariances, and residuals. For more details regarding the procedures and findings, please refer to the results section of manuscript 1.

To examine predictors of change in relationship satisfaction, we ran seven separate models to test each predictor and gender differences. Three predictors were not associated with changes in relationship satisfaction. Specifically, attachment avoidance at intake was not associated with the rate of change in relationship satisfaction (*b = -.31, p = .29*) and this association did not differ between women and men (*b = .21, p = .49*; see Table 4). Attachment anxiety at intake, also, was not associated with the rate of change in relationship satisfaction (*b = .12, p = .44*) and this association did not differ between women and men (*b = .03, p = .89*; see Table 5). Similarly, modern values at intake was not associated with the rate of change in relationship satisfaction (*b = .01, p = .81*) and this association did not differ between women and men (*b = -.05, p = .22*; see Table 9).

On the other hand, four predictors were associated with changes in relationship satisfaction and some differed by gender. Particularly, femininity ideology at intake was associated with a small increase in the rate of change in relationship satisfaction (*b = .08, p = .01*) and this association differed between women and men (*b = .12, p = .00*; see Table 6). We then used a two-intercept approach to evaluate gender differences further by using binary codes

for men (*men = 1, women = 0*) and women (*women = 1, men = 0*) to test both trajectories simultaneously. This revealed that higher femininity ideology at intake was associated with an increase in rate of change in relationship satisfaction for women ($b = .19$, $p < .01$), but not for men (See Figure 3). Similarly, male role norms at intake were associated with a small increase in the rate of change in relationship satisfaction ($b = .05$, $p < .01$) and this association did differ between women and men ($b = .04$, $p = .01$; see Table 7). A two-intercept model revealed that higher masculinity ideology at intake was associated with a small increase in the rate of change in relationship satisfaction for women ($b = .09$, $p < .01$), but not for men (See Figure 4). Traditional values at intake were not associated with the rate of change in relationship satisfaction ($b = .12$, $p = .44$), but this association differed between women and men ($b = .06$, $p = .01$; see Table 8). A two-intercept model revealed that traditional values at intake were associated with a small increase in the rate of change in relationship satisfaction for women ($b = .11$, $p < .01$), but not for men (See Figure 5). Finally, emotional expressivity at intake was associated with a small increase in the rate of change in relationship satisfaction ($b = .08$, $p < .01$), however, this association did not differ between women and men ($b = -.02$, $p = .39$; see Table 10).

Depressive Symptoms

For the depressive symptoms model, we only accounted for the random intercept because the random slope was not significant ($p =$. 21). We also determined that a quadratic slope ($b =$ .03, $p <$.05) explained the rate of change of the model better than a linear slope ($b =$ -.14, $p =$.08). Then, we determined that the model could not be distinguished by gender (χ^2 (5) = 8.64, p = .12), indicating that depressive symptom trajectories were similar for both partners. For all models, we

used an autoregressive matrix structure to estimate the variances, covariances, and residuals. Refer to manuscript 1 for more extensive details regarding the procedures and results.

To examine predictors of change in depressive symptoms, we ran seven separate models that tested the predictor and gender differences. Four predictors were not associated with changes in depressive symptoms. First, femininity ideology at intake was not associated with the rate of change in depressive symptoms ($b = -.00, p = .78$) and the association did not differ between men and women ($b = -.02, p = .06$; see Table 13). Male role norms at intake was also not associated with the rate of change in depressive symptoms ($b = -.00, p = .87$) and the association did not differ between men and women ($b = -00, p = .88$; see Table 14). Similarly, traditional values at intake was not associated with the rate of change in depressive symptoms ($b = -.00, p = .55$) and this association did not differ between men and women ($b = -.01, p = .31$; see Table 15). Lastly, modern values at intake was not associated with the rate of change in depressives symptoms ($b = -.01, p = .56$) and this association did not differ between men and women ($b = .01, p = .31$; see Table 16).

Three predictors were associated with changes in depressive symptoms and some differed by gender. Specifically, attachment avoidance at intake was associated with a small decrease in the rate of change in depression ($b = -22, p < .05$). There was also a significant difference in the rate of change of depressive symptoms between men and women ($b = .21, p < .05$). Specifically, the two-intercept model showed that higher attachment avoidance at intake was associated with a large decrease in the rate of change in depression for men ($b = -.43, p < .01$; see Table 11 and Figure 6). Similarly, attachment anxiety at intake was associated with a decrease in the rate of change in depression symptoms throughout treatment ($b = -.21, p < .01$). The results also showed that the association between attachment anxiety and rate of change in depressive

symptoms was not significantly different for men and women; however, it was likely because attachment anxiety for both partners were decreasing at a similar rate of change. Upon further examination by running a two-intercept model, it showed that higher attachment anxiety at intake was associated with a decrease in the rates of change in depression for *both* men ($b = -.20, p < .05$) and women ($b = -.22\ p < .001$; see Table 12 and Figure 7). Lastly, emotional expressivity at intake was associated with a small decrease in the rate of change in depression ($b = -.02\ p < .05$). However, the association between emotional expressivity and the rate of change in depressive symptoms was not significantly different for men and women ($b = -.01\ p = .17$; See Table 17).

Discussion

The aim of this study was to examine predictors of the trajectories of relationship satisfaction and depressive symptoms among couples in Taiwan over the course of EFT. Overall, the results provide meaningful evidence regarding sample characteristics that predict change in EFT. Identifying predictors of change in EFT is particularly important because this study is the first EFT effectiveness study among couples in Taiwan. The results provide insight regarding which couples in Taiwan might be most responsive to EFT.

Attachment Avoidance and Anxiety

The study findings indicated that attachment avoidance at intake did not predict change in relationship satisfaction over the course of EFT. However, men with high attachment avoidance at intake were found to experience a significant decrease (by 0.43 points on average) in depression each week during EFT. The nonsignificant association between attachment avoidance and relationship satisfaction is consistent with prior study findings (Dalgleish et al., 2015). High avoidance may indicate withdrawing patterns in a relationship, and such patterns make it difficult

for couples to engage in therapy because withdrawing partners use deactivating and over-regulating strategies as coping mechanisms (Horowitz et al., 1993; Myung et al., 2022). Withdrawer re-engagement, one of the key change events associated with EFT, is often characterized by withdrawers' experiences of shame, grief, and hurt, all of which are emotions associated with deep sadness (Lee et al., 2017; Myung et al., 2022). The experience of sadness is a key indicator of a shift from a focus on others to a focus on self, and this transition provides opportunities for change (Myung et al., 2022). This pattern may explain the finding in the present study that men who had high attachment avoidance experienced a significant decrease in depression each week. Based on this theory, men's depression would have decreased as they focused more on their own sadness than on their partner's criticizing and blaming behavior.

Additionally, findings indicated that attachment anxiety at intake did not predict changes in relationship satisfaction. However, attachment anxiety at intake did predict changes in depressive symptoms over the course of EFT, with men experiencing a decrease of 0.20 points and women experiencing a decrease of 0.22 points each week. These findings are inconsistent with prior study findings that attachment anxiety predicted growth in relationship satisfaction at the end of EFT (Johnson & Talitman, 1997) and during treatment (Dalgleish et al., 2015). Another important key change event in EFT is blamer softening, which requires successful withdrawer re-engagement, and blamer softening was previously found to predict change in relationship satisfaction (Burgess-Moser et al., 2017; Dalgleish et al., 2015). However, the current study findings suggest that both men and women with high attachment anxiety at intake experienced a reduction in depressive symptoms over time.

The present study findings highlight the importance of EFT as a tool to treat depression, particularly for men who are insecurely attached. Attachment anxiety is strongly related to

depression (Zheng et al., 2020), and EFT can serve as an effective treatment. Men with depression tend to use maladaptive coping strategies (e.g., withdrawal from relationship, abuse substance, etc.) to manage their depression instead of seeking help (Chuick et al., 2009). Men sometimes experience shame related to their depression and worry about being perceived as a failure by their partners (Wittenborn & Liu, 2012). Research has shown that men can be less emotionally expressive than women (Levant et al., 2013). EFT can serve as a helpful guide to encourage men to recognize and express emotions that arise in their relationships (Greenman et al., 2012).

Traditional Values/Modern Values and Femininity/Masculinity

In the present study, women who endorsed higher levels of traditional femininity ideology, masculinity ideology, and traditional values at intake experienced greater rates of change in relationship satisfaction throughout EFT. This finding indicates that women with traditional ideologies and values benefited more from EFT treatment than women who were less traditional. Johnson and Talitman (1997) also examined traditional values as a predictor of success of EFT but found that traditional values among couples did not predict EFT outcomes.

A possible cultural explanation for this result is that several research studies have found that women in Taiwan who endorse more traditional gender roles experience greater relationship satisfaction in their relationships (e.g., Lin, 1996; Yu, 2006). Taiwan has undergone significant societal and economic changes in the last 50 years, and women are now encouraged to pursue higher education; however, traditional values regarding gender roles in relationships are still prevalent (Fan & Qian, 2022). Female traditionalism is considered an important factor for the maintenance and health of a relationship because women who endorse traditional values, traditional femininity ideology, and masculinity ideology meet societal expectations of

womanhood (Thompson & Walker, 1989). Women in Taiwan who are more traditional may benefit from EFT because EFT encourages women to share the emotions and desires they might otherwise suppress due to cultural expectations. Within traditional gender roles, women who express their needs might be seen as demanding because women are traditionally expected to accommodate the needs of others (Zeytinoglu-Saydam, 2018). EFT provides a safe space for women to explore their attachment needs, and therapists may encourage women clients to express their inner needs, which in turn can help them reconnect with their partners.

Emotional Expressivity

The study findings suggested that participants with higher emotional expressivity at intake experienced an increase in relationship satisfaction throughout EFT than participants with lower emotional expressivity. In addition, participants with higher emotional expressivity at intake reported a decrease in depressive symptoms throughout EFT than participants with lower emotional expressivity. This finding conflicts with prior study findings that partners who suppressed negative emotion at intake had greater changes in relationship satisfaction throughout EFT than those who were emotionally expressive at intake (Dalgleish et al., 2015).

This finding highlighted the important role of emotion in EFT. Emotional accessibility and responsiveness are an important part of EFT (Johnson, 2019). In EFT, changes occur when partners can access and reprocess their emotions, leading to the creation of new corrective emotional experiences and new ways to connect with their partners (Johnson, 2019). In Taiwan, tolerance and suppression of one's emotions are culturally appreciated because emotional control is considered a means to maintaining harmonious relationships (Chang et al., 2020; Chen & Li, 2007). Couples in Taiwan may consider therapy as a last resort and therefore may be more open to exploring their needs and wants, even if they are not used to being expressive due to cultural

expectations (Zeytinoglu-Saydam, 2018). Based on this perspective, EFT may be a particularly useful tool for couples in Taiwan if they are ready to be emotionally expressive in therapy. Though Taiwanese individuals and couples are not encouraged to express negative emotions in their cultural context (Chang et al., 2020), therapy can provide a safe place for them to identify and process their underlying emotions. Therapists working with couples in Taiwan should bear in mind the specific cultural perspective on tolerance and suppression of emotions. However, they should also consider that these cultural characteristics may enable therapy to provide an opportunity for couples to discover and express an emotional connection in a safe environment.

Limitations

There are some limitations to this study. First, the sample size was very small. Small sample sizes are expected in clinical studies (Bartle-Haring et al., 2020); however, a larger sample size would provide more statistical power and more confidence in the findings. Second, previous study findings have indicated that assessment of sample characteristics at baseline may not accurately predict outcomes and growth if these characteristics evolve over the course of treatment (Atkins et al., 2005). Future studies should examine the trajectories of changes in these characteristics over time as time-varying co-variates and assess whether change in personal characteristics are associated with change in clinical outcomes in EFT (Dalgleish et al., 2015).

Conclusion

This is the first study to examine predictors of change among couples in Taiwan receiving EFT. The study findings suggest that EFT may be particularly effective at increasing relationship satisfaction for women with high traditionalism at intake and for women and men with high emotional expressivity at intake. EFT was successful at decreasing depression for men with high attachment avoidance at intake and for men and women with high attachment anxiety

and emotional expressivity at intake. Future research is needed to explore who benefits most from EFT.

APPENDICES

APPENDIX A

Tables

Table 1. Descriptive Information for Relationship Satisfaction and Depression Over Time

	Sample Size	Relationship Satisfaction			Depression		
		M	*SD*	*Alpha(α)*	*M*	*SD*	*Alpha(α)*
Men							
Week 1	17	83.75	6.09	.94	10.13	1.68	.92
Week 2	17	84.93	6.61	.95	9.86	1.59	.88
Week 3	12	87.72	7.48	.95	6.63	1.63	.93
Week 4	11	91.90	7.12	.92	6.60	1.85	.95
Week 5	9	93.44	9.17	.95	7.89	2.21	.93
Week 6	9	84.00	8.67	.94	6.13	3.03	.98
Week 7	7	81.00	13.18	.97	7.17	3.94	.98
Week 8	7	83.86	11.92	.98	7.00	2.53	.96
Week 9	6	91.67	14.51	.97	7.83	2.96	.96
Week 10	6	89.80	11.18	.96	9.20	4.63	.98
Week 11	4	70.67	14.26	.97	12.25	4.07	.95
Week 12	3	78.50	20.50	.95	12.00	7.00	.95
Week 13	3	86.00	13.00	.94	12.00	5.00	.95
Week 14[a]	2	96.00	-	-	4.00	-	-
Week 15[a]	2	99.00	-	-	4.00	-	-
Week 16[a]	1	95.00	-	-	7.00	-	-
Week 17[a]	1	99.00	-	-	4.00	-	-
Women							
Week 1	17	86.60	4.85	.90	11.00	1.76	.94
Week 2	16	84.50	5.74	.87	9.64	1.48	.90
Week 3	12	100.50	4.87	.90	6.80	1.56	.92
Week 4	11	95.00	7.77	.95	7.50	1.76	.89
Week 5	9	95.22	5.03	.87	8.44	2.22	.96
Week 6	9	93.71	7.18	.91	7.28	1.67	.89
Week 7	7	87.29	7.99	.95	5.86	1.92	.92
Week 8	7	93.14	7.18	.95	4.42	1.56	.87
Week 9	6	87.17	14.37	.95	5.50	1.77	.91
Week 10	6	85.00	10.87	.98	7.33	2.47	.95
Week 11	4	76.00	20.07	.97	2.67	1.76	.88
Week 12	3	80.33	14.38	.93	8.33	2.96	.75
Week 13[a]	3	78.00	31.00	-	6.50	2.50	.90
Week 14[a]	2	86.00	22.00	-	6.00	3.00	.94
Week 15[a]	2	97.50	15.50	-	6.00	1.00	.56
Week 16[a]	1	109.00	-	-	3.00	-	-
Week 17[a]	1	107.00	-	-	2.00	-	-

Table 2. Dyadic Multilevel Growth Model of Relationship Satisfaction and Depression

	Indistinguishable Dyadic Model of ***Relationship Satisfaction***				*Indistinguishable Dyadic Model of* ***Depression***			
	b	*SE*	*CI*	*p*	*b*	*SE*	*CI*	*p*
Fixed Effects								
Intercept	88.26*	4.80	78.11, 98.42	<.001	8.57*	1.32	5.80, 11.34	<.001
Linear Slope	-.09	.30	-.70, .51	.76	-.15	.09	-0.32, 0.02	.089
Quadratic Slope					.03*	.01	0.00, 0.06	<.05
Random Effects								
Intercept Variance	430.16*	138.61	228.74, 808.93	<.05	31.21*	10.14	16.51, 59.00	<.05
Intercept Covariance	.65*	.16	0.24, 0.86	<.001	.67*	.16	0.22, 0.88	<.001

Notes: SE = Standard error. CI = 95% Confidence intervals. *$p < .05$

Table 3. Means and Standard Deviations of Predictor Variables

Variable	*N*	*M*	*SD*
Men			
Experiences in Close Relationships-Attachment Avoidance	17	3.50	0.33
Experiences in Close Relationships-Attachment Anxiety	17	4.25	0.34
Femininity Ideology	17	26.76	1.68
Male Role Norms	17	66.76	4.01
Traditional Values	17	41.06	2.87
Modern Values	17	66.65	1.44
Emotional Expressivity	16	62.69	2.18
Women			
Experiences in Close Relationships-Attachment Avoidance	17	3.25	0.20
Experiences in Close Relationships-Attachment Anxiety	17	5.20	0.38
Femininity Ideology	17	25.53	1.42
Male Role Norms	17	55.00	4.42
Traditional Values	17	32.47	3.28
Modern Values	17	72.65	1.96
Emotional Expressivity	15	60.80	2.78

Table 4. Dyadic Multilevel Growth Model of Relationship Satisfaction Trajectories: Estimated Effects of Predictor Attachment Avoidance

	Undistinguishable Dyad Model					
	b	*SE*	*df*	*t*	*CI*	*p*
Fixed Effects						
Intercept	88.42*	3.37	10.03	26.22	80.91, 95.93	.00
Rates of Change	-.10	.32	97.65	-.31	-0.73, 0.53	.75
Gender	-.59	2.69	8.98	-.22	-6.67, 5.48	.83
Rates of Change *Gender	.11	.18	79.00	.62	-0.24, 0.46	.54
Rates of Change *Attachment Avoidance	-.31	.30	132.76	-1.07	-0.90, 0.27	.29
Attachment Avoidance * Gender	-.43	3.50	31.12	-.12	-7.57, 6.71	.90
Rates of Change *Attachment Avoidance*Gender	.21	.31	145.78	.69	-0.40, 0.82	.49
Random Effect						
Initial Variance	245.68*	76.50			133.45, 452.30	.00

Notes: SE = Standard error. CI = 95% Confidence intervals. *$p < .05$

Table 5. Dyadic Multilevel Growth Model of Relationship Satisfaction Trajectories: Estimated Effects of Predictor Attachment Anxiety

	Undistinguishable Dyad Model					
	b	*SE*	*df*	*t*	*CI*	*p*
Fixed Effects						
Intercept	87.51*	5.14	17.00	17.02	76.66, 98.36	.00
Rates of Change	-.03	.31	97.67	-.11	-0.65, 0.58	.91
Gender	-.42	2.65	15.05	-.16	-6.06, 5.22	.88
Rates of Change *Gender	.11	.19	85.28	.57	-0.26, 0.48	.57
Rates of Change *Attachment Anxiety	.12	.16	107.63	.78	-0.19, 0.44	.44
Attachment Anxiety * Gender	1.35	2.19	20.60	.61	-3.22, 5.91	.55
Rates of Change *Attachment Anxiety*Gender	.03	.19	172.528	.14	-0.35, 0.41	.89
Random Effect						
Initial Variance	451.89*	152.32			233.41, 874.89	.00

Notes: SE = Standard error. CI = 95% Confidence intervals. *$p < .05$

Table 6. Dyadic Multilevel Growth Model of Relationship Satisfaction Trajectories: Estimated Effects of Predictor Femininity Ideology

	Undistinguishable Dyad Model					
	b	*SE*	*df*	*t*	*CI*	*p*
Fixed Effects						
Intercept	89.29*	5.00	17.07	17.85	78.74, 99.85	.00
Rates of Change	-.13	.28	86.72	-.47	-0.68, 0.43	.64
Gender	.95	2.40	16.46	.40	-4.12, 6.02	.70
Rates of Change *Gender	.11	.18	79.12	.60	-0.25, 0.46	.55
Rates of Change *Femininity Ideology	.08*	.03	101.67	2.65	0.02, 0.14	.01
Femininity Ideology * Gender	-.07	.50	23.20	-.15	-1.12, 0.97	.89
Rates of Change *Femininity Ideology*Gender	.12*	.04	175.39	3.26	0.05, 0.19	.00
Random Effect						
Initial Variance	454.00*	147.78			239.87, 859.28	.00

Notes: SE = Standard error. CI = 95% Confidence intervals. *$p < .05$

Table 7. Dyadic Multilevel Growth Model of Relationship Satisfaction Trajectories: Estimated Effects of Predictor Male Role Norms

	Undistinguishable Dyad Model					
	b	*SE*	*df*	*t*	*CI*	*p*
Fixed Effects						
Intercept	88.28*	4.96	17.20	17.79	77.82, 98.74	.00
Rates of Change	.17	.31	107.67	.56	-0.44, 0.78	.58
Gender	-.25	2.84	17.77	-.09	-6.22, 5.72	.93
Rates of Change *Gender	.44*	.21	106.38	2.16	0.04, 0.85	.03
Rates of Change *Male Role Norms	.05*	.02	151.50	2.97	0.02, 0.08	.00
Male Role Norms * Gender	-.00	.18	19.68	-.01	-0.37, 0.37	.10
Rates of Change *Male Role Norms*Gender	.04*	.01	118.42	2.65	0.01, 0.07	.01
Random Effect						
Initial Variance	447.80*	144.40			238.02, 842.48	.00

Notes: SE = Standard error. CI = 95% Confidence intervals. *$p < .05$

Table 8. Dyadic Multilevel Growth Model of Relationship Satisfaction Trajectories: Estimated Effects of Predictor Traditional Values

	Undistinguishable Dyad Model					
	b	*SE*	*df*	*t*	*CI*	*p*
Fixed Effects						
Intercept	88.85*	4.96	18.30	17.93	78.45, 99.25	.00
Rates of Change	.13	.32	100.63	.40	-0.51, 0.77	.69
Gender	.99	2.66	17.68	.37	-4.61, 6.59	.71
Rates of Change *Gender	.14	.18	80.84	.74	-0.23, 0.50	.46
Rates of Change *Traditional Values	.05	.02	130.62	1.99	.0.00, 0.10	.05
Traditional Values * Gender	.14	.22	18.75	.65	-0.31, 0.59	.53
Rates of Change *Traditional Values*Gender	.06*	.02	112.43	2.56	0.01, 0.10	.01
Random Effect						
Initial Variance	413.48	137.06			215.93, 791.78	.00

Notes: SE = Standard error. CI = 95% Confidence intervals. *$p < .05$

Table 9. Dyadic Multilevel Growth Model of Relationship Satisfaction Trajectories: Estimated Effects of Predictor Modern Values

	Undistinguishable Dyad Model					
	b	*SE*	*df*	*t*	*CI*	*p*
Fixed Effects						
Intercept	88.79*	4.90	18.56	18.12	78.51, 99.06	.00
Rates of Change	-.07	.31	94.71	-.23	-0.68, 0.54	.82
Gender	1.90	2.84	17.55	.67	-4.07, 7.88	.51
Rates of Change *Gender	.06	.18	81.73	.34	-0.29, 0.42	.73
Rates of Change *Modern Values	.01	.05	160.50	.24	-0.08, 0.11	.81
Modern Values * Gender	.22	.50	25.50	.45	-0.81, 1.26	.66
Rates of Change *Modern Values*Gender	-.05	.04	126.42	-1.23	-0.14, 0.03	.22
Random Effect						
Initial Variance	417.42	134.40			222.07, 784.59	.00

Notes: SE = Standard error. CI = 95% Confidence intervals. *$p < .05$

Table 10. Dyadic Multilevel Growth Model of Relationship Satisfaction Trajectories: Estimated Effects of Predictor Emotional Expressivity

	Undistinguishable Dyad Model					
	b	*SE*	*df*	*t*	*CI*	*p*
Fixed Effects						
Intercept	87.55*	4.48	12.08	19.53	77.80, 97.31	.00
Rates of Change	.03	.32	92.63	.10	-0.60, 0.66	.92
Gender	.43	2.87	10.45	.15	-5.92, 6.78	.88
Rates of Change *Gender	-.02	.17	79.31	-.12	-0.36, 0.32	.91
Rates of Change *Emotional Expressivity	.08*	.03	139.59	3.12	0.03, 0.14	.00
Emotional Expressivity * Gender	.54	.37	16.58	1.46	-0.24, 1.33	.16
Rates of Change *Emotional Expressivity*Gender	-.02	.02	103.72	-.87	-0.07, 0.03	.39
Random Effect						
Initial Variance	373.20	125.41			193.15, 721.07	.00

Notes: SE = Standard error. CI = 95% Confidence intervals. *$p < .05$

Table 11. Dyadic Multilevel Growth Model of Depressive Symptoms Trajectories: Estimated Effects of Predictor Attachment Avoidance

	Undistinguishable Dyad Model					
	b	*SE*	*df*	*t*	*CI*	*p*
Fixed Effects						
Intercept	9.32*	1.25	14.81	7.48	6.66, 11.98	.00
Rates of Change	-.06	.07	101.42	-.81	-0.20, 0.09	.42
Gender	.75	.69	12.89	1.09	-0.74, 2.24	.30
Rates of Change *Gender	-.09	.07	104.18	-1.33	-0.22, 0.04	.19
Rates of Change *Attachment Avoidance	-.22*	.09	182.16	-2.41	-0.41, -0.04	.02
Attachment Avoidance * Gender	-.65	.92	19.18	-.71	-2.57, 1.26	.48
Rates of Change *Attachment Avoidance*Gender	.21*	.09	185.29	2.23	0.02, 0.39	.03
Random Effect						
Initial Variance	29.37*	9.80			15.28, 56.45	.00

Notes: SE = Standard error. CI = 95% Confidence intervals. *$p < .05$

Table 12. Dyadic Multilevel Growth Model of Depressive Symptoms Trajectories: Estimated Effects of Predictor Attachment Anxiety

	Undistinguishable Dyad Model					
	b	*SE*	*df*	*t*	*CI*	*p*
Fixed Effects						
Intercept	8.83*	1.24	17.14	7.11	6.21, 11.44	.00
Rates of Change	-.11	.07	102.14	-1.49	-0.25, 0.03	.14
Gender	.14	.76	13.75	.18	-1.48, 1.76	.86
Rates of Change *Gender	-.15*	.06	103.48	-2.28	-0.28, -0.02	.03
Rates of Change *Attachment Anxiety	-.21*	.05	158.15	-4.30	-0.31, -0.12	.00
Attachment Anxiety * Gender	.40	.61	19.99	.66	-0.87, 1.67	.52
Rates of Change *Attachment Anxiety*Gender	-.01	.05	170.03	-.16	-0.11, 0.09	.88
Random Effect						
Initial Variance	27.47*	8.94			14.51, 52.00	.00

Notes: SE = Standard error. CI = 95% Confidence intervals. *$p < .05$

Table 13. Dyadic Multilevel Growth Model of Depressive Symptoms Trajectories: Estimated Effects of Predictor Femininity Ideology

	Undistinguishable Dyad Model					
	b	*SE*	*df*	*t*	*CI*	*p*
Fixed Effects						
Intercept	9.65*	1.40	16.42	6.90	6.69, 12.60	.00
Rates of Change	-.04	.07	97.62	-.60	-0.18, 0.10	.55
Gender	.97	.65	16.62	1.48	-0.41, 2.34	.16
Rates of Change *Gender	-.12	.07	104.49	-1.78	-0.25, 0.01	.08
Rates of Change *Femininity Ideology	-.00	.01	156.38	-.28	-0.02, 0.02	.78
Femininity Ideology * Gender	.26	.14	20.85	1.93	-0.02, 0.55	.07
Rates of Change *Femininity Ideology*Gender	-.02	.01	166.46	-1.90	-0.04, 0.00	.06
Random Effect						
Initial Variance	34.77*	11.72			17.96, 67.34	.00

Notes: SE = Standard error. CI = 95% Confidence intervals. *$p < .05$

Table 14. Dyadic Multilevel Growth Model of Depressive Symptoms Trajectories: Estimated Effects of Predictor Male Role Norms

	Undistinguishable Dyad Model					
	b	*SE*	*df*	*t*	*CI*	*p*
Fixed Effects						
Intercept	9.81*	1.42	16.78	6.92	6.82, 12.81	.00
Rates of Change	-.04	.08	122.97	-.48	-0.20, 0.12	.63
Gender	.68	.69	15.15	.99	-0.78, 2.15	.34
Rates of Change *Gender	-.13	.07	134.40	-1.76	-0.28, 0.17	.08
Rates of Change *Male Role Norms	-.00	.00	177.95	-.16	-0.01, 0.09	.87
Male Role Norms * Gender	.08	.04	15.43	1.80	-0.01, 0.18	.09
Rates of Change *Male Role Norms*Gender	-.00	.00	173.51	-.16	-0.01, 0.01	.88
Random Effects						
Initial Variance	34.40*	11.84			17.52, 67.52	.00

Notes: SE = Standard error. CI = 95% Confidence intervals. *$p < .05$

Table 15. Dyadic Multilevel Growth Model of Depressive Symptoms Trajectories: Estimated Effects of Predictor Traditional Values

	Undistinguishable Dyad Model					
	b	*SE*	*df*	*t*	*CI*	*p*
Fixed Effects						
Intercept	9.31*	1.36	17.46	6.86	6.45, 12.16	.00
Rates of Change	-.06	.08	109.99	-.78	-0.21, 0.09	.44
Gender	.53	.83	16.34	.65	-1.21, 2.28	.53
Rates of Change *Gender	-.12	.07	110.36	-1.74	-0.27, 0.02	.09
Rates of Change *Traditional Values	-.00	.01	181.78	-.60	-0.02, 0.01	.55
Traditional Values * Gender	.03	.07	17.41	.52	-0.12, 0.18	.61
Rates of Change *Traditional Values*Gender	-.01	.01	176.51	-1.02	-0.02, 0.01	.31
Random Effects						
Initial Variance	32.50*	10.52			17.24, 61.30	.00

Notes: SE = Standard error. CI = 95% Confidence intervals. *$p < .05$

Table 16. Dyadic Multilevel Growth Model of Depressive Symptoms Trajectories: Estimated Effects of Predictor Modern Values

	Undistinguishable Dyad Model					
	b	*SE*	*df*	*t*	*CI*	*p*
Fixed Effects						
Intercept	9.45*	1.27	17.46	7.45	6.78, 12.11	.00
Rates of Change	-.04	.07	100.52	-.56	-0.19, 0.10	.58
Gender	.06	.77	16.14	.08	-1.57, 1.70	.94
Rates of Change *Gender	-.11	.07	101.58	-1.62	-0.24, 0.02	.11
Rates of Change *Modern Values	-.01	.01	186.05	-.59	-0.04, 0.02	.56
Modern Values * Gender	-.15	.14	24.39	-1.10	-0.43, 0.13	.28
Rates of Change *Modern Values*Gender	.01	.01	176.23	1.02	-0.01, 0.04	.31
Random Effects						
Initial Variance	27.89*	9.25			14.56, 53.43	.00

Notes: SE = Standard error. CI = 95% Confidence intervals. *$p < .05$

Table 17. Dyadic Multilevel Growth Model of Depressive Symptoms Trajectories: Estimated Effects of Predictor Emotional Expressivity

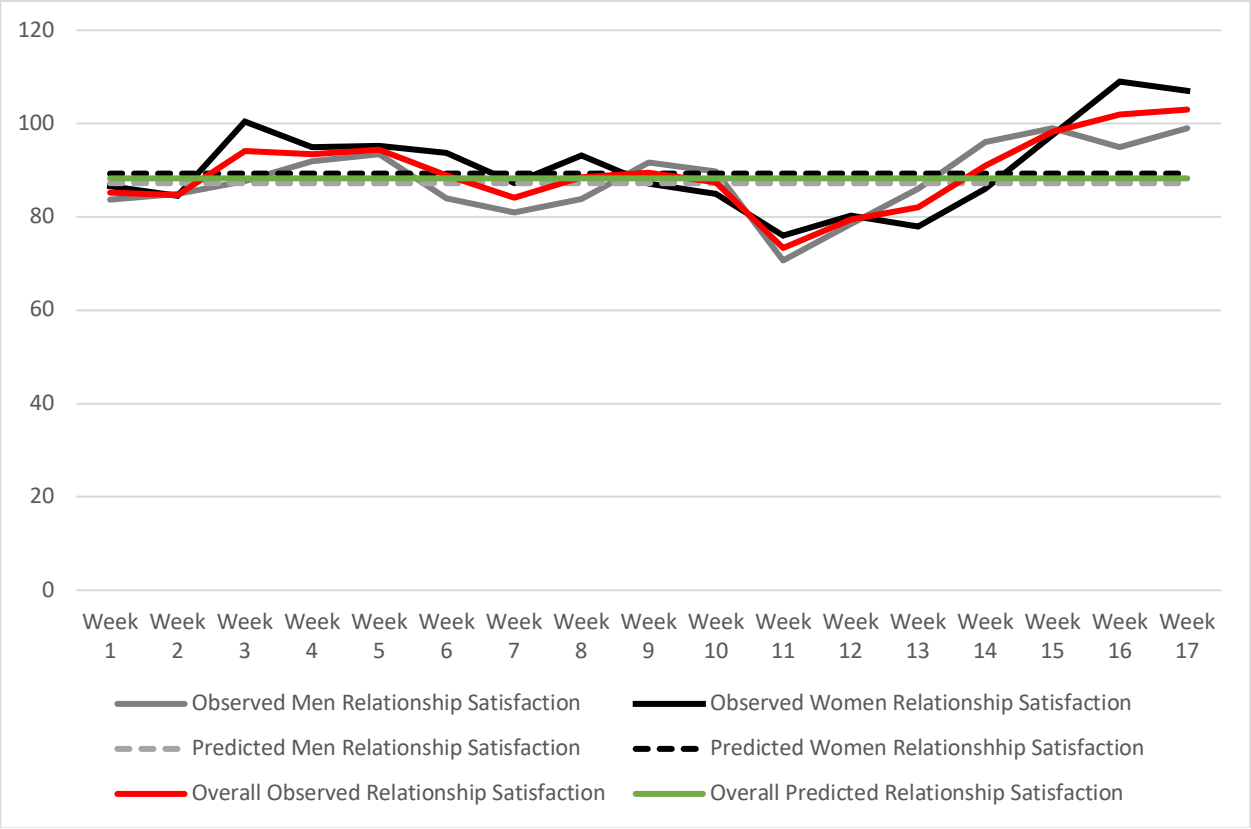
	Undistinguishable Dyad Model					
	b	*SE*	*df*	*t*	*CI*	*p*
Fixed Effects						
Intercept	9.42*	1.22	14.58	7.72	6.82, 12.03	.00
Rates of Change	-.06	.07	98.69	-.80	-0.20, 0.08	.43
Gender	.46	.64	17.33	.71	-0.90, 1.82	.49
Rates of Change *Gender	-.11	.06	104.40	-1.76	-0.24, 0.01	.08
Rates of Change *Emotional Expressivity	-.02*	.01	172.84	-2.71	-0.04, -0.01	.01
Emotional Expressivity * Gender	-.04	.08	19.55	-.54	-0.21, 0.13	.59
Rates of Change *Emotional Expressivity*Gender	-.01	.01	166.58	-1.39	-0.03, 0.00	.17
Random Effect						
Initial Variance	25.22	8.85			12.67, 50.17	.00

Notes: SE = Standard error. CI = 95% Confidence intervals. *$p < .05$

APPENDIX B

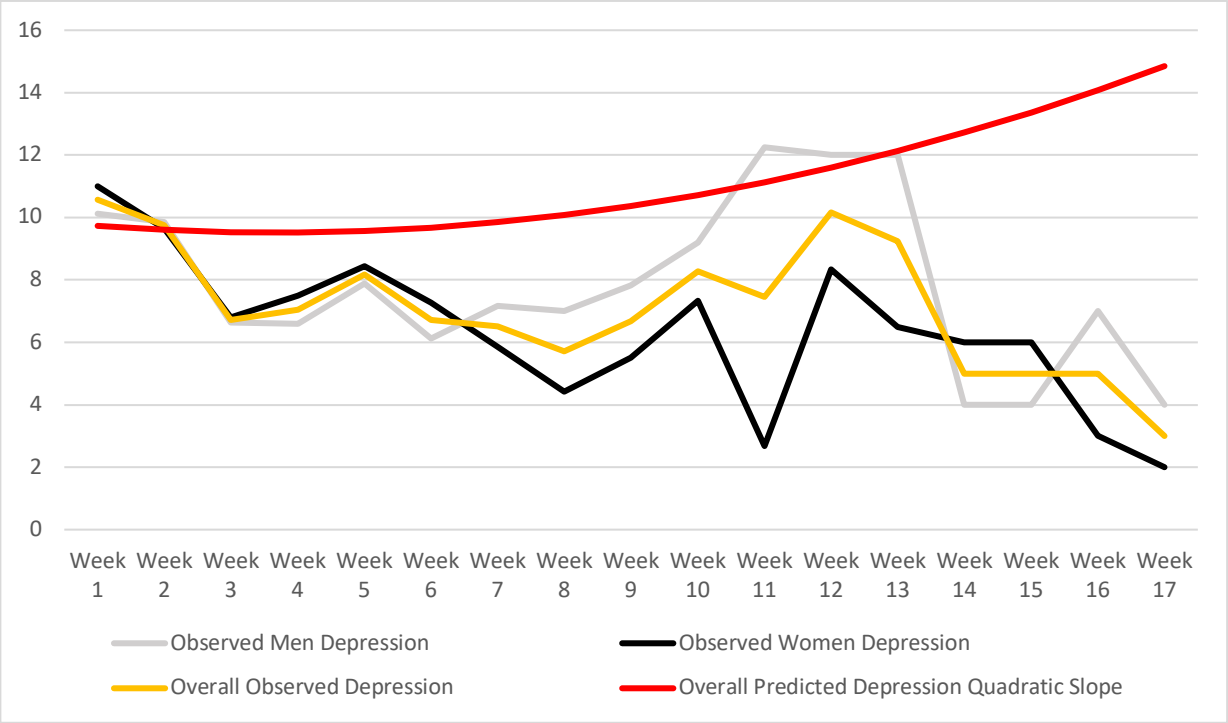
Figures

Figure 1. Relationship Satisfaction Trajectories Over the Course of EFT.



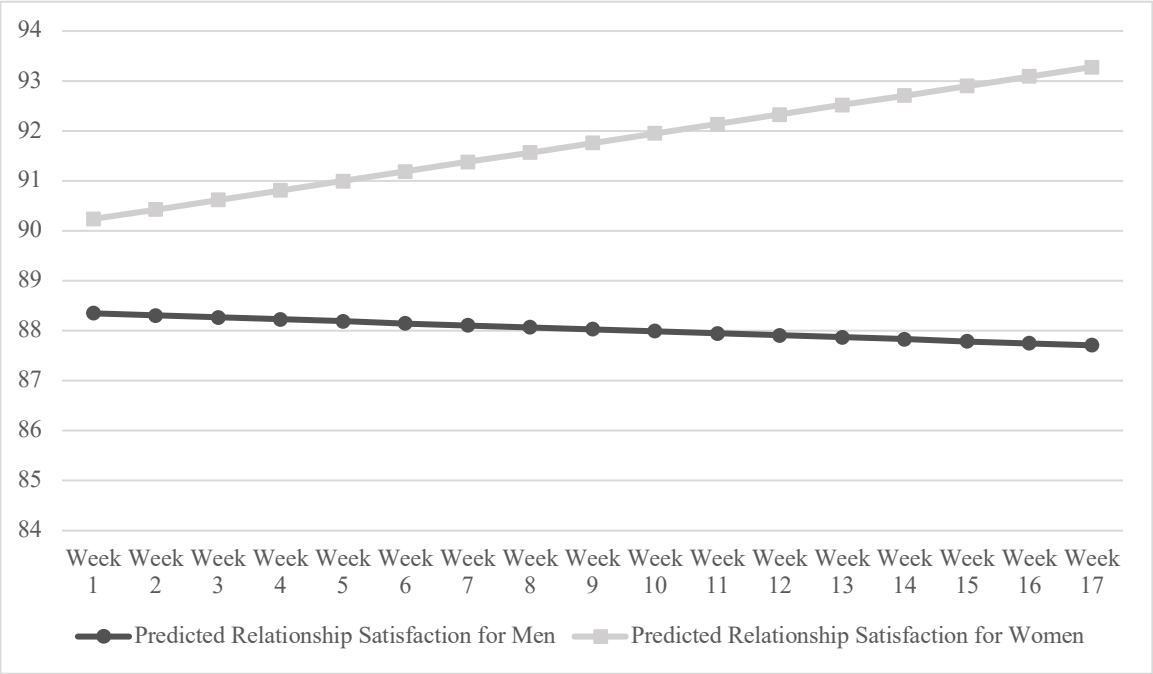
Note: There is no sex difference in the DAS model since this is an indistinguishable model. This graph still shows what men and women's trajectories of relationship satisfaction look like over time.

Figure 2. Depressive Symptoms Trajectories Over the Course of EFT.



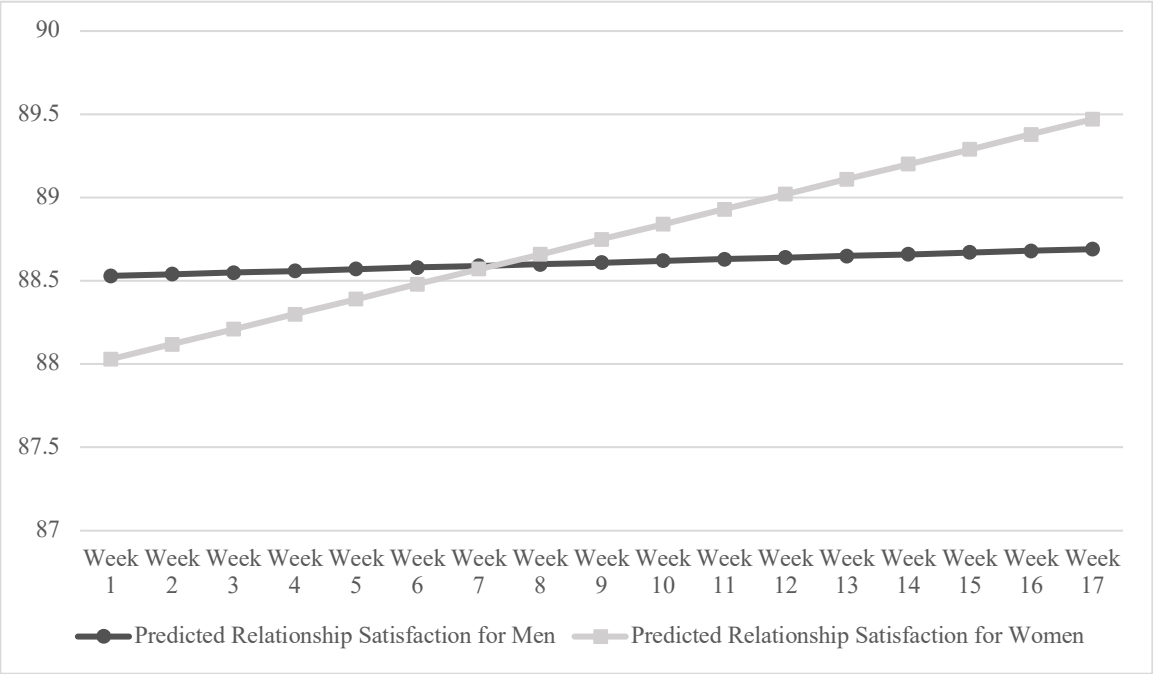
Note: There is no sex difference in the PHQ-9 model since this is an indistinguishable model.

Figure 3. Femininity Ideology Association with Rate of Change in Relationship Satisfaction Trajectory.



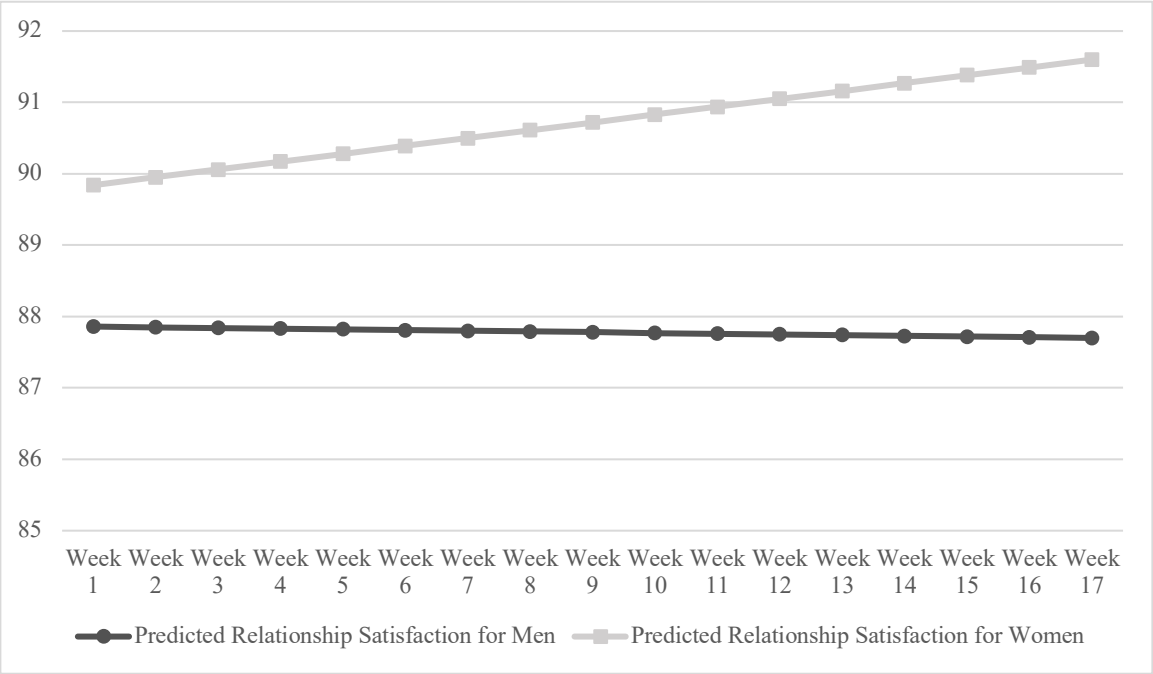
Note: The rate of change in relationship satisfaction is only significant for women.

Figure 4. Male Role Norms Association with Rate of Change in Relationship Satisfaction Trajectory.



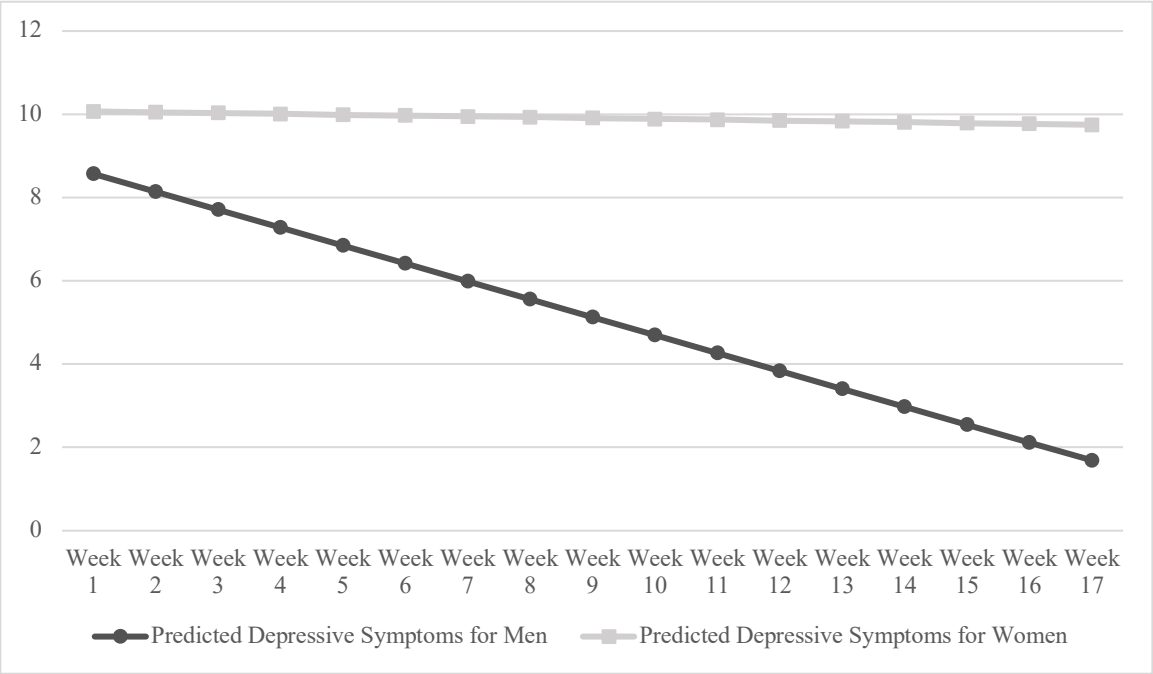
Note: The rate of change in relationship satisfaction is only significant for women.

Figure 5. Traditional Values Association with Rate of Change in Relationship Satisfaction Trajectory.



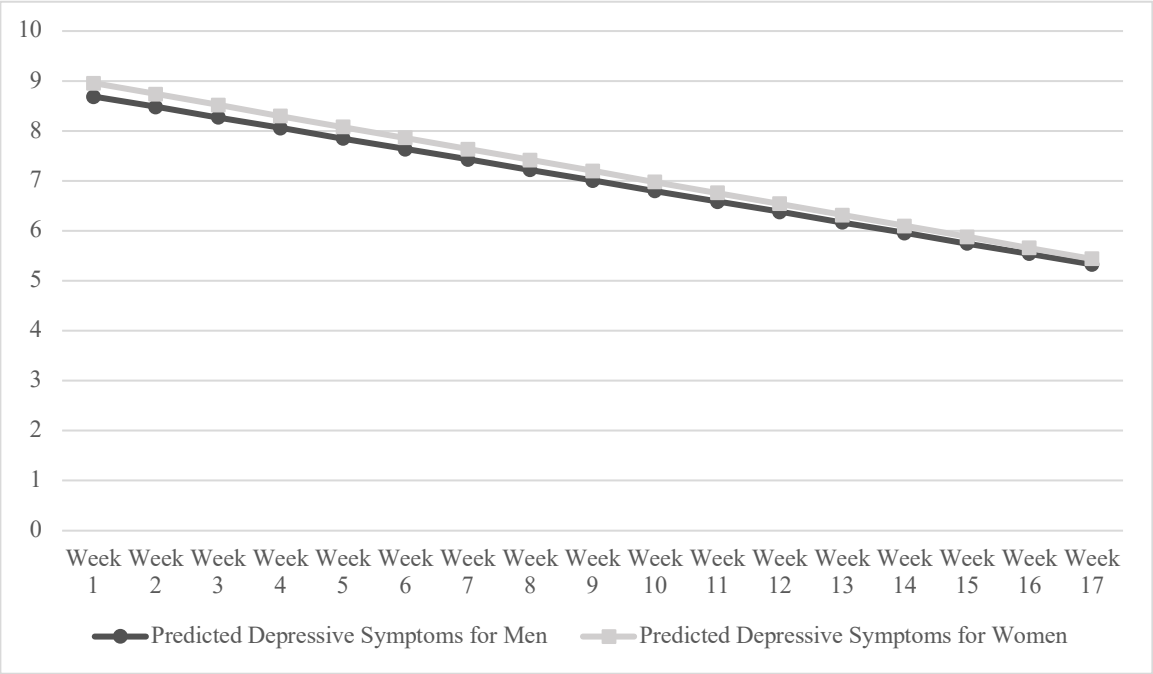
Note: The rate of change in relationship satisfaction is only significant for women.

Figure 6. Attachment Avoidance Association with Rate of Change in Depressive Symptoms Trajectory.



Note: The rate of change in depression is only significant for men.

Figure 7. Attachment Anxiety Association with Rate of Change in Depressive Symptoms Trajectory.



Note: The rate of change in depression is significant for both men and women.

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