

# Emotionally Focused Couples Therapy: A Systematic Review of Its Effectiveness over the past 19 Years

Candice C. Beasley & Richard Ager

To cite this article: Candice C. Beasley & Richard Ager (2019): Emotionally Focused Couples Therapy: A Systematic Review of Its Effectiveness over the past 19 Years, Journal of Evidence-Informed Social Work, DOI: [10.1080/23761407.2018.1563013](https://doi.org/10.1080/23761407.2018.1563013)

To link to this article: <https://doi.org/10.1080/23761407.2018.1563013>



Published online: 03 Jan 2019.



Submit your article to this journal [↗](#)



Article views: 7



View Crossmark data [↗](#)



# Emotionally Focused Couples Therapy: A Systematic Review of Its Effectiveness over the past 19 Years

Candice C. Beasley and Richard Ager

Tulane University, School of Social Work, New Orleans, LA, USA

## ABSTRACT

**Purpose:** A meta-analysis is the review of several qualifying studies where the findings of each study is analyzed and is then pooled as to determine if an intervention is effective or not. The aim of this meta-analysis was to evaluate if the intervention of Emotionally Focused Couples Therapy (EFCT), also referred to as Emotionally Focused Therapy (EFT), continues to be an effective intervention, since its last meta-analysis in 1999, and to determine whether the improvements noted in EFCT continue to be effective, over a period of time, following the initial intervention.

**Method:** For the meta-analysis, nine studies which identify as randomized control trials (RCTs), were extracted and utilized from the original systematic search. These nine studies were used to evaluate EFCT's initial pre to post-treatment effectiveness. The portion of the meta-analysis, which evaluates whether EFCT sustained improvement at follow-up, consisted of four studies that identify as RCTs.

**Results:** The results strongly suggest that the intervention of EFCT not only improved marital satisfaction (Hedge's  $g$  coefficient = 2.09) but also, the improvement in marital satisfaction was sustained at follow up. This sustained improvement was evident through the results of both the Friedman's repeated-measures and the post hoc Wilcoxon ( $\chi^2 = 6.500, p = 0.039$ ).

**Conclusion:** The findings provide preliminary support that, as it relates to marital satisfaction, EFCT is an effective treatment, both in facilitating change during treatment, and in maintaining those improvements following treatment.

## KEYWORDS

Emotionally focused therapy; couples therapy; meta-analysis; randomized controlled trials; outcome study; emotionally focused couples therapy

## Rationale for study

There is extensive evidence that couple discord not only causes pain for each partner, but negatively impacts one's psycho-social, familial, and health well-being resulting in depression (Denton, Wittenborn, & Golden, 2012), eating disorders (Maier, 2015; Wnuk, Greenberg, & Dolhanty, 2015), and, of course, relationship dissolution. In a large sample study, relationship discord was associated with psychological distress, suicidal ideation, social impairment and employment dysfunction (Whisman & Uebelacker, 2006). It is critical that effective interventions are available to address the diverse needs of couples. Based on results from a 2013 survey of expert therapists, couples therapy was predicted to show more growth in the coming decade than any other approach, including individual, group and family treatment (Norcross, Pfund, & Prochaska, 2013). Given Lebow's (2014)

finding that Emotionally Focused Therapy (EFT) represents one of just a few effective couples approaches, it is well positioned to play a prominent role in addressing relationship discord.

Based on an evaluation of outcome studies, prior to 1999, Johnson, Hunsley, Greenberg, and Schindler's (1999) findings supported the effectiveness of EFT with couples. More specifically, a meta-analysis on four randomized control trials, using the Dyadic Adjustment Scale (Spanier, 1976) as a common measure, yielded a large Weighted Mean Effect Size ( $d^+$ ) = 1.31, which was statistically significant ( $Z = 6.42$ ;  $p < .001$ ). Three of the four studies used in this analysis were conducted by at least one of the two founders of EFT. However, there was no therapist overlap across these studies. The only information Johnson and colleagues provided, about their search strategy, was that they restricted their studies to randomized control trials (RCTs) on EFT with couples.

There have been two other meta-analyses involving EFT. Wood, Crane, Schaalje, and Law (2005) conducted a meta-analysis on various behavioral couples interventions, including EFT, focusing on the effectiveness with different severities of marital distress: mild, moderate and severe. Their findings suggest that EFT demonstrated superior effectiveness compared to isolate Behavioral Therapy interventions in treating moderate relationship distress. The other meta-analysis by Dunn and Schwebel (1995) compared Behavioral Therapy, Cognitive Behavioral Therapy and a mix of what the authors referred to as "Insight-oriented therapies", of which EFT was included. Four of the Insight-oriented Therapies (IOT) studies used EFT and two used what was referred to as "insight-oriented marital psychotherapy". The results suggested that IOT was more effective than both Behavioral Therapy and Cognitive Behavioral Therapy in improving relationships functioning. However, Cognitive Behavioral Marital Therapy was the only approach demonstrating improvement in post-treatment relationship-related cognitions. All of the meta-analyses above-involved studies published in 1999 or earlier, and; therefore, do not overlap with the current study.

Since 1999, EFT has expanded its application from couples to individuals (MacLeod & Elliott, 2012), families (Stavrianopoulos, Faller, & Furrow, 2014), adult groups (Compare & Tasca, 2016) and couples groups (Stavrianopoulos, 2015). The current study focused exclusively on randomized control trials (RCT) with couples. However, Emotionally Focused Couples Therapy (EFCT) RCTs have broadened their application to diverse situations. Studies have continued to address couples with typical relationship difficulties (Wiebe & Johnson, 2016). However, research-practitioners have used RCTs to test its application with different ethnic/cultural populations including Middle Eastern samples (Najafi, Soleimani, Ahmadi, Javidi, & Hoseini, 2015; Soltani, Shairi, Roshan, & Rahimi, 2014). EFCT RCTs have been employed with couples facing medical difficulties such as infertility (Najafi et al., 2015), chronically ill children (Cloutier, Manion, Walker, & Johnson, 2002), breast cancer (Naaman, 2009) and end-stage cancer (McLean, Walton, Rodin, Esplen, & Jones, 2011). Other RCTs have focused on psychological challenges such as wives who are either suffering from depression (Dessaulles, Johnson, & Denton, 2003) or are survivors of childhood trauma (Dalton, Classen, Greenman, & Johnson, 2013).

Lebow (2014) recently reviewed couples therapy outcome studies to report on which were found to be effective. Two approaches stood out as having a notable collection of studies showing significant results – Cognitive-Behavioral/Behavioral Therapy and EFT. He further reported that one of the primary challenges of couple treatment is not whether

the improvement is notable just after treatment; but, whether it is maintained over time. He cited evidence prior to Johnson et al.'s (1999) meta-analysis, suggesting that EFT demonstrated maintenance of changeover short follow-ups. An intended contribution of the current study is to systematically evaluate EFCT/EFT's effectiveness over the past 19 years, to analyze its effectiveness with a more diverse set of populations and problems, and for the first time to systematically evaluate through meta-analysis whether its effectiveness is maintained at follow-up.

## **Emotionally focused couples therapy: from theory to practice**

### ***Theoretical underpinnings***

Emotionally Focused Therapy (EFT) was created by Drs. Sue Johnson and Leslie Greenberg in the 1980s (Greenberg & Johnson, 1988). It is increasing in popularity in the U.S. and throughout the world. At its core, EFT offers clinicians a vehicle to reduce conflict through the creation of the safe emotional connection. Emotionally Focused Therapy has been used with a diverse array of couples, individuals and families who face a variety of challenges. But, its original focus was on couples, which is the focus of this analysis.

The theoretical foundation of EFT is derived from several sources. It has adopted a Humanistic Experiential perspective, as described by Rogers (1951) and Perls (1973). It draws from Systems Theory to understand how each partner's response dictates the reaction of the other, and the resulting interchange may evoke a characteristic problematic 'dance' driven by unbridled reflexive feelings (Minuchin & Fishman, 1981). Emotionally Focused Therapy embraces Gottman's empirical work on healthy vs. unhealthy relationships which highlights the destructive impact of cycles of interaction infused with criticism, defensiveness, and complaining, among others. For example, Gottman reports that men and women typically regulate emotions differently in interpersonal conflict. Women tend to gravitate toward criticizing and complaining (a role which Johnson refers to as the Pursuer), whereas men tend to pull away and stonewall (a role which Johnson refers to as the Withdrawer) (Gottman, 1991; Gottman & Levenson, 1986).

Attachment Theory (Bowlby, 1988) lies at the heart of EFT where relationship distress is best understood in terms of separation anxiety in reaction to an insecure bond. On the flip side, seeking and maintaining a connection with others is the central motivating factor in our survival and growth. When the attachment is threatened, partners are compelled to act out in predictable sequences of interaction beginning with protest and anger, followed by seeking/clinging, and finally depression and despair. If the partner does not respond and connect, detachment and separation results (Bowlby, 1969).

### ***Treatment procedures***

The treatment procedures for assisting couples are organized in several steps that fall within three stages. Stage One focuses on de-escalating the couple's conflict. Here, partners work to identify and understand the nature of their negative cycle, which is repetitive and related to underlying attachment issues. The therapist helps each partner to access underlying emotions, which drives the intensity of his/her arguing. These emotions ultimately relate to attachment issues, rather than merely the surface issues being debated. The EFT therapist

helps each partner discover the underlying feelings that drive their arguments so both can come to understand, acknowledge and accept their own as well as their partner's underlying feelings. At the end of this stage, couples understand the cycle, how they are unwittingly involved and controlled by it, the role they and their partner play in the cycle, and the triggers that set it off. Rather than blaming the partner for the cycle and demanding s/he change, the cycle itself becomes the problem to overcome and ultimately change.

Stage Two focuses on restructuring the relationship bond so as to alter the negative cycle. This begins with clients identifying their own attachment needs (e.g., need for reassurance and comfort relating to fears of unworthiness). At the same time, partners learn about and are helped to acknowledge, accept and develop empathy for their partner's vulnerabilities and needs. Finally, partners are helped to express their needs and wants. In effect, once partners can (a) identify the cycle as it emerges, (b) understand and express their own emotions and needs that fuels their reactive involvement, and (c) empathize with one's partner's needs, they can change the negative cycle over which they previously had no or little control.

In Stage Three couples develop new healthier cycles of interacting and assume new positions when dealing with their old problems. Their stories of conflict are now reflecting less discourse and demonstrate enhanced capacity to repair. They further expand their changes to establish new solutions to pragmatic issues. The therapist commends the couple on their newfound capacity to more openly share their vulnerability, clearly express their needs, and empathically respond to their partner. Their old cycle, which will begin to emerge from time to time, is more readily interrupted and replaced with a different dance, one that is sensitive, supportive, and sustains stable attachment. The therapist directs the couple to solve problems that have plagued them and stirred their unproductive negative cycle in the past. They ultimately develop a newfound capacity to identify when the negative cycle begins, understand their own and their partner's underlying issues fueling the cycle, and express their needs. This helps them to be less reactive and better able to manage their negative affect as well as the underlying fears and needs. Instead of expressing negative often critical emotions, vulnerabilities can be shared, which make it easier for each to listen, understand, and support each other. These new responses are consolidated in a "Resiliency Story" which represents the couple's narrative of their new bonding rituals (Johnson, 2008).

## Method

### *Search strategy and inclusionary criteria*

The authors completed the following steps as to gather qualifying studies for this meta-analysis. In an attempt to locate the qualifying studies for this meta-analysis, a systematic search was performed utilizing the following database: Academic Search Complete, CINAHL Plus, E-Journals, ERIC, Family Studies Abstracts, Health and Psychosocial Instruments; MEDLINE, PsycARTICLES, PsycINFO, Psychology and Behavioral Sciences Collection, Social Sciences Full Text, Social Work Abstracts, and SocINDEX with Full Text were searched from January 01, 1999 through December 31, 2017, screening for both "peer reviewed" publications and those publications that were labeled as "dissertation". The keywords used were: "Emotion Focused Therapy", "Emotionally Focused Therapy", "Emotion

Focused Couples Therapy”, “Emotionally Focused Couples Therapy”, “Emotion Focused Therapy for Couples”, “Emotionally Focused Therapy for Couples”, “EFT”, “EFCT”, “EFT-C”; along with “Randomized Control Trial”, “Outcome Study” and published in English. Dissertations were included to address the common journal bias of only publishing studies with successful outcomes (Campbell Collaboration, 2014). This was done by conducting two separate searches, the first including just peer-reviewed journal articles, the second including just dissertations, and both using the same keywords listed above. The search also included the International Centre for Excellence in Emotionally Focused Therapy site, which lists EFT research on the following page: <http://www.iceeft.com/images/PDFs/EFTResearch.pdf>. The authors did perform independent searches as to ensure that all potential studies were captured. Finally, the authors examined the references of articles that met the inclusionary criteria, mentioned below, as well as couples treatment outcome review articles.

The study only considered EFCT/EFT randomized control trials and outcome studies with couples in which the subjects were administered the Dyadic Adjustment Scale (DAS) (Spanier, 1976) or a similar relationship functioning instrument. The DAS was utilized as inclusionary criteria because it is a self-reporting instrument, utilized by couples in therapy, which measures levels of relationship improvement. Therefore, the data extracted from the DAS, provides the base of analysis in determining the levels of the intervention’s effectiveness. Along with this, Randomized Control Trials, as well as Outcome Studies, were utilized as inclusionary criteria because it is studies of this nature that will include data which in turn will be used to perform the meta-analysis.

## PRISMA Flow diagram

Through the use of the PRISMA Flow Diagram (Moher, Liberati, Tetzlaff, & Altman, 2009), records identified, through database searching, yielded 8160 possible articles with 86 articles being listed as RCT and 816 articles being listed as outcome studies. Because part of the inclusionary criteria is that a qualifying study (a) must be an outcome study or RCT, (b) must utilize couples as the subjects of the intervention, and (c) the study used an instrument which measured relationship functioning. This decreased the original 8160 articles to 902 articles. Therefore, 902 full-text articles were assessed for eligibility. Of the 902 articles assessed for eligibility, 894 full-text articles were excluded due to: (a) not meeting RCT criteria, (b) treating entities other than couples (e.g., individuals, families, or couples groups), (c) study did not use an instrument which measured relationship functioning, and (d) being identified as a duplicate record. Therefore, there were a total of 9 studies, out of 902, included in the final meta-analysis synthesis ( $n = 9$ ) as only 9 articles met all aspects of the inclusionary criteria. Of the 9 included studies, only 4 included follow-up data which was utilized in the intervention sustainment analysis.

## Analyses

Two meta-analyses were conducted. The first of the meta-analyses consisted of a pre-post analysis (i.e., an analysis that exams improvement from the onset of treatment until its termination). This analysis was used to evaluate if the intervention allowed for the improvement of marital satisfaction over the course of therapy. The second of the meta-analyses consisted of a follow-up analysis. This analysis was used to evaluate whether

improvements gained during treatment were maintained at follow-up. Hedge's  $g$  was employed for the pre- post-treatment analysis because it utilizes pooled Standard Deviation scores while correcting for population effect size bias, especially in sample sizes fewer than 20 (Hedges, 1981). The Hedges  $g$  is a measure of effect size, which tells you how much one group differs from another. In this study, we are examining how much the improvement of the group receiving EFCT/EFT differed from the comparison group. The Comprehensive Meta-analysis (CMA) statistical package was used to compute effect sizes and the overall Hedge's  $g$  score. The Naaman (2009) study failed to report the standard deviations, which were required for computing Hedges'  $g$ . Lipsey and Wilson (2001) indicate that a missing standard deviation can be substituted with a standard deviation from a similar study which uses the same assessment instrument. Therefore, scores from the Dalton et al.'s (2013) study were used.

The Friedman's Test (Friedman, 1937) was employed for the follow-up meta-analysis because it is a non-parametric statistical test used to detect differences in treatments across multiple time points that does not require the dependent variable to follow a normal distribution. As it relates to this study, "multiple attempts" includes Pre-EFT treatment, Post-EFT treatment, and Follow-up. Friedman's was calculated by utilizing IBM SPSS Statistics (v.23) software. The Wilcox Test was included as a post hoc analysis of the Friedman's Test, to evaluate whether improvements gained during treatment were sustained at follow-up. In other words, this test examines whether the changes achieved at the end of treatment, are sustained for a certain period of time after treatment

In short, Hedges  $g$  is used to analyze if an intervention is effective when there is a small sample size ( $n = 9$ ). Although Hedges  $g$  tells that the intervention caused an effect, it does not tell if the effect was positive or negative. The Friedman's test is used to analyze if the intervention has a negative effect (the treatment is ineffective) or a positive effect. Finally, the Wilcox test analyzes if the positive and/or negative effect continues after the conclusion of the intervention or does the intervention plateau at the conclusion of treatment. Table 1 lists whether the study was included in the pre-post meta-analysis and/or the follow-up meta-analysis.

## Results

### *Description of studies*

#### *Sample descriptions*

Tables 1 and 2 list descriptive data for the 9 eligible publications included in the two analyses. For the pre-post meta-analysis, sample sizes of studies were quite small with the mean of approximately  $M = 14$  subjects in the experimental condition and approximately  $M = 13$  subjects in the control condition. Subject mean ages ranged across studies from approximately 33 to 56 years. The mean length of relationships ranged from 10 to 29 years; however, all but one study's participant relationships ranged from 10 to 14 years (see Tables 1 and 2).

For the follow-up meta-analysis, sample sizes of studies were quite small with the mean of  $M = 10$  subjects in the experimental condition and  $M = 10$  subjects in the control condition. Subject mean ages ranged across studies from 33 to 37 years while the mean length of relationships ranged from 11 to 14 years (see Tables 1 and 2).



**Table 1.** Sample sizes and meta-analysis assignment.

Article	Pre-post Test Group (n)	Pre-post Control Group (n)	Follow-Up Test Group (n)	Follow-Up Control Group (n)	Included in Pre -Post Analysis	Included in Follow- Up Analysis
Ahmadi et al., (2014)	15	15	N/A <sup>a</sup>	N/A <sup>a</sup>	Yes	No
Cloutier et al. (2002) <sup>b</sup>	13	N/A <sup>a</sup>	13	N/A <sup>a</sup>	No	Yes
Dalton et al. (2013)	12	10	N/A <sup>a</sup>	N/A <sup>a</sup>	Yes	No
Denton et al. (2012)	12	12	4	7	Yes	Yes
Dessaullles et al. (2003) <sup>b</sup>	9	9	5	5	No	Yes
McLean et al. (2011)	22	20	18	18	Yes	Yes
Najafi et al. (2015)	15	15	N/A <sup>a</sup>	N/A <sup>a</sup>	Yes	No
Naaman (2009)	6	6	N/A <sup>a</sup>	N/A <sup>a</sup>	Yes	No
Walsh (2002)	15	10	N/A <sup>a</sup>	N/A <sup>a</sup>	Yes	No

Note: Meta-analytic results from the RCTs utilized in the Pre-Post analysis provided an overall effect size of 2.09.

<sup>a</sup>Data not reported and unable to be obtained.

<sup>b</sup>Study was only included in the follow-up analysis as the pre-post analysis was already reported in the Johnson et al. (1999) meta-analysis.

<sup>c</sup>Study was not included in Pre – Post analysis; therefore, Hedges *g* effect size was not calculated.

**Table 2.** Sample and study characteristics.

Article	Age (M) <sup>a</sup>	Relationship Duration (M)	Treatment Integrity Adequate
Ahmadi et al. (2014)	N/A <sup>b</sup>	N/A <sup>b</sup>	No
Cloutier et al. (2002)	36.90 years	11.30 years	Yes
Dalton et al. (2013)	43.00 years	14.00 years	Yes
Denton et al. (2012)	32.90 years	N/A	Yes
Dessaullles et al. (2003)	37.00 years	10.85 years	No
McLean et al. (2011)	N/A <sup>b</sup>	N/A <sup>b</sup>	Yes
Najafi et al. (2015)	33.80 years	10.00 years	No
Naaman (2009)	56.20 years	28.90 years	Yes
Walsh (2002)	51.00 years	N/A <sup>b</sup>	Yes

<sup>a</sup>Averaged Age of both partners together.

<sup>b</sup>Data not reported and unable to be obtained.

### ***Relationship functioning instruments used in the study***

One of the criteria, for inclusion, was that the study used an instrument which measured relationship functioning. This inclusionary criteria was pertinent as to ensure that the intervention was directed toward marital satisfaction. Almost all studies used the Dyadic Adjustment Scale (DAS) (Spanier, 1976) or its abbreviated version, the Revised DAS. The Dyadic Adjustment Scale (DAS) and Revised DAS have been used in research extensively throughout the world and have been found to be reliable and valid measures (see Busby, Crane, Larson, & Christensen, 1995; Montesino, Gómez, Femántiez, & Rodríguez, 2013) in the testing of marital satisfaction. All but two of the studies, reported here, will use one of these two instruments (see Tables 3 and 4).

Two studies used different instruments: the Quality of Marriage Index and the Marital Conflict Questionnaire. Like the DAS and revised DAS, the Quality of Marriage Index measures marital discord (Norton, 1983). Psychometric analyses support its validity and reliability (Johnson, White, Edwards, & Booth, 1986, Norton, 1983; Schumm et al., 1986). Heyman, Sayers, and Bellack (1994) contend that it measures comparable constructs to the Dyadic Adjustment Scale (DAS) and a score of 28 or less corresponds to a score of 97 or less on the DAS.



**Table 3.** Pre-post meta-analysis results.<sup>a</sup>

Article (See superscript for marital functioning instrument)	EFT Pretherapy M/(SD)	Control Pretherapy M/(SD)	EFT Posttherapy M/(SD)	Control Posttherapy M/ (SD)	Pre – Post Effect Sizes
Ahmadi, Zarei, and Fallahchai (2014) <sup>b</sup>	135.2 (4.86)	134.73 (3.35)	93.33 (8.93)	138.33 (4.29)	6.250
Cloutier et al. (2002) <sup>c</sup>	99.15 (8.55)	101.10 (8.30)	108.38 (12.50)	99.10 (11.80)	N/A <sup>f</sup>
Dalton et al. (2013) <sup>c</sup>	95.95 (13.29)	89.05 (16.82)	104.81 (15.15)	88.32 (25.54)	0.736
Denton et al. (2012) <sup>e</sup>	15.90 (7.10)	20.40 (8.10)	36.00 (4.50)	26.20 (10.80)	1.144
Dessaullles et al. (2003) <sup>c</sup>	87.0 (14.9)	81.20 (14.44)	99.9 (17.1)	115.81 (19.02)	N/A <sup>f</sup>
McLean et al. (2011) <sup>d</sup>	44.91 (5.90)	43.58 (7.40)	55.29 (4.60)	42.91 (8.60)	1.763
Najafi et al. (2015) <sup>c</sup>	21.27 (4.27)	22.17 (4.32)	41.03 (3.59)	22.57 (4.42)	4.461
Naaman (2009) <sup>c</sup>	21.08 (13.29)	4.05 (16.82)	5.87 (15.15)	3.66 (25.54)	0.105
Walsh (2002) <sup>c</sup>	97.40 (12.10)	93.30 (10.2)	92.90 (8.30)	94.10 (8.80)	0.137

Note: Meta-analysis results for RTCs: Hedges  $g = 2.09$ .

<sup>a</sup>All scores are an average of both partners. Mean increases in all scores reflect relationship improvement except for

Ahmadi et al. (2014) and Naaman (2009).

<sup>b</sup>Marital Conflict Questionnaire.

<sup>c</sup>Dyadic Adjustment Scale.

<sup>d</sup>Revised Dyadic Adjustment Scale.

<sup>e</sup>Quality of Marriage Index.

Data not reported and unable to be obtained.

**Table 4.** Follow-up meta-analysis results.<sup>a</sup>

Article (See superscript for marital functioning instrument)	EFT Pretherapy M/(SD)	Control Pretherapy M/ (SD)	EFT Posttherapy M/(SD)	Control Posttherapy M/ (SD)	EFT Follow- Up M/(SD)	Control Follow-Up M/ (SD)
Cloutier et al. (2002) <sup>b</sup>	99.15 (8.55)	101.10 (8.30)	108.38 (12.50)	99.10 (11.80)	108.31 (13.17)	N/A <sup>e</sup>
Denton et al. (2012) <sup>d</sup>	15.90 (7.10)	20.40 (8.10)	36.00 (4.50)	26.20 (10.80)	27.0 (14.20)	23.6 (10.7)
Dessaullles et al. (2003) <sup>b</sup>	87.0 (14.9)	81.20 (14.44)	99.9 (17.1)	115.81 (19.02)	100.70 (19.18)	90.20 (27.80)
McLean et al. (2011) <sup>c</sup>	44.91 (5.90)	43.58 (7.40)	55.29 (4.60)	42.91 (8.60)	55.05 (6.05)	44.36 (10.25)

Note: Meta-analytic results from the RCTs utilized in the Follow-Up analysis provided a Friedman's result of  $\chi^2(3) = 6.500$ ,  $p = 0.039$ ; Wilcoxon signed-rank test:  $Z = -.730$ ,  $p = .465$ .

<sup>a</sup>All scores are an average of both partners. Mean increases in all scores reflect relationship improvement.

<sup>b</sup>Dyadic Adjustment Scale.

<sup>c</sup>Revised Dyadic Adjustment Scale used.

<sup>d</sup>Quality of Marriage Index used.

<sup>e</sup>Data not reported and unable to be obtained.

The Marital Conflict Questionnaire (MCQ) (Barati & Sanai, 1996) also measures marital functioning. It draws from similar constructs to western marital functioning instruments. However, it is adapted to be sensitive to the norms of the Iranian culture, particularly with regard to capturing conflict. It has been found to demonstrate good internal reliability (Keikhayfarzaneh, Shahriari, Ghorbanshiroudi, Sourizaei, & Keikhayfarzaneh, 2011). Unlike the other three instruments used in the current study, higher scores on the MCQ indicate lower relationship functioning.

### Treatment integrity

The studies showed a broad range of treatment integrity (TI). Treatment integrity refers to the extent to which the treatment is accurately and consistently delivered. Beginning with Ahmadi, Zarei & Fallahchai (2014), investigators described what appeared to be an inadequate level of TI comprised of brief paragraphs summarizing what would be addressed in each of the nine 90 min treatment sessions. Cloutier et al. (2002) carried out a much more substantial

standardization of treatment protocol beginning with a treatment manual. Seven senior-level clinical psychology students, with a minimum of 1-year EFT, supervised training as well as specialized training in couples therapy with chronically ill children (a focus of the study), conducted the treatment. They received 3 h of supervision each week. Raters with similar training to the therapists used objective criteria to assess EFT consistency using portions of the audio-taped sessions. Only 3% of the session portions were found to include non-EFT therapist activity and the inter-rater reliability mean Kappa coefficient was .98 (Gordon-Walker, Johlison, Manion, & Cloutier, 1996).

Dalton et al.'s (2013) study demonstrated a moderate level of TI, primarily because they employed an EFT treatment manual written by Johnson (Johnson, 2004), one of the two creators of this treatment approach. Therapists received 5 months of weekly EFT training which included study of the treatment manual. Denton et al. (2012) similarly used Johnson's treatment manual which was the cornerstone of what appeared to be somewhat better than moderate TI. Therapists received a weeklong externship, conducted by Johnson, and they sustained an adequate score of at least 40 on the EFT-Therapist Fidelity Scale, which is an instrument intended to measure TI. They received weekly supervision by expert EFT supervisors during which video records of selected sessions were reviewed to enhance integrity.

Based on the description provided in the Dessaulles et al. (2003) article, the TI was inadequate. The authors only mentioned that therapy was conducted by six doctoral clinical psychology interns with a minimum of one year of supervised EFT training supplemented by 10 h of training in EFT with depressed populations (the targeted subjects). Treatment Integrity described in the McLean et al. (2011) study was much more substantial. They used an EFT manual adapted to address the issues faced by their subjects where one partner had advanced metastatic cancer. A quarter of the sessions were randomly selected for audio-tapings which were reviewed by Johnson to insure TI. All treatment was delivered by the lead author, Linda McLean.

Based on Najafi et al.'s (2015) description of their study, Treatment Integrity was inadequate. The researchers listed a table with a distilled version of the different EFT steps which therapists presumably followed. Naaman's (2009) treatment integrity was more substantial. Oversight of TI was provided by Johnson in consultation sessions. The clinicians were master's level psychologists with at least 7 years EFT experience, and they used a 1996 manual created by Johnson. Walsh's (2002) study also met adequate TI standards. The EFT therapists included 3 masters level Marital and Family Therapy (MFT) 2<sup>nd</sup> year interns, a 3<sup>rd</sup> year resident, and the author, who was getting a doctorate in an MFT program. The therapists received 12 h of EFT training in a marital and family therapy clinic where they studied an EFT text written by Johnson and used a treatment manual (Denton, 2001). Therapists also received weekly or biweekly supervision from Wayne Denton, an EFT researcher and director of a marital and family treatment program. This supervision, which included monitoring tapes and reviewing progress notes, was used to monitor adherence to the EFT model.

### **Effect sizes**

According to Cohen (1988), a Hedges *g* score of .20–.49, .50–.79, and .80 and greater is interpreted as 'small', 'medium,' and 'large' effect sizes, respectively. As noted in Table 3, seven of the nine studies listed provided sufficient data as to compute effect sizes. Of those

seven, five were far above the .20 minimum suggesting an adequate effect size. The two that were below the minimum were both dissertations that did not yield statistically significant findings on the marital functioning instrument, which was the Dyadic Adjustment Scale in both cases.

### ***Meta-analyses findings***

A random effects model Hedge's  $g$  coefficient was conducted to determine the effect size of the pre-post EFT treatment groups vs. control groups based upon a standardized mean difference. As listed in Table 3, the results of the analysis supported the effectiveness of EFT with the Hedge's  $g$  coefficient of 2.09, 95% CI (0.04, 4.14).

For the follow-up analysis, the results of the non-parametric Friedman's test of differences among repeated measures suggested a statistically significant improvement in relationship adjustment:  $\chi^2(3) = 6.500$ ,  $p = 0.039$ . Median marital satisfaction levels for Pre-EFT, Post-EFT and EFT Follow-up were 65.9, 77.5, and 77.8, respectively. A post hoc analysis, with Wilcoxon signed-rank tests, were also conducted. There were no significant differences between Post-EFT and EFT Follow-up trials ( $Z = -0.730$ ,  $p = 0.465$ ), suggesting the improvements were maintained at follow-up (See Table 4).

## **Discussion**

The results of this analysis add to the growing support for the effectiveness of EFT with couples. Hedges  $g$  scores of .20–.49, .50–.79, and .80 and greater are interpreted as 'small', 'medium,' and 'large' effect sizes (Cohen, 1988). Given the score, in this meta-analysis, of  $g = 2.09$ , the statistical support for the effectiveness of EFT for couples appears strong. It should be noted that this strong finding was generated despite the low Hedge  $g$  scores on two of the seven studies. These two studies were dissertations which were included to counter publication bias where only studies with positive findings tend to be accepted for publication in juried journals. Not surprisingly, the two dissertation studies also failed to achieve statistically significant results for the marital functioning instrument.

There is tentative support for the effectiveness of EFT to sustain change after treatment ( $Z = -0.730$ ,  $p = 0.465$ ). Review of the mean scores of the four follow-up studies reveals that all showed improvement over the course of therapy and, compared to pre-treatment, all demonstrated improvement at follow-up. Three of the four studies showed that improvements registered at post treatment were completely maintained at follow-up. However, one study (Denton et al., 2012) showed a notable depression in score following treatment. About 45% of the improvement gained during therapy was lost. This could be related to the characteristics of the sample, which was comprised of couples in which the wife suffered from the major depressive disorder. Severe depression may represent a mediating factor in relationship improvement. Denton et al. (2012) also mentioned that the relationships in this sample were very unstable with a quarter of them separating during the study. In addition, they mentioned that there may have been a problem with the therapist's adherence to the EFT model. Although there was still marked improvement in the mean scores, at follow-up compared to pre-treatment, further attention should be given to the effectiveness of EFT with this population and whether a supplemental intervention might be considered.

Compared to Johnson et al.'s 1999 meta-analysis of EFT for couples, the studies evaluated here expand the breadth of application. They include outcome evaluations of Iranian samples (Najafi et al., 2015; Soltani et al., 2014), couples facing medical challenges such as infertility (Najafi et al., 2015), chronically ill children (Cloutier et al., 2002), breast cancer (Naaman, 2009) and end-stage cancer (McLean et al., 2011) and couples struggling with psychological challenges such as depression (Dessaules et al., 2003) and surviving childhood trauma (Dalton et al., 2013). Additionally, this was the first evaluation of RCT studies with follow-ups and the results suggest that improvements are maintained following treatment. In short, the findings add to the support for EFT as an effective intervention for couples with several different characteristics and problems.

### Limitations of study

Notable limitations of this evaluation are that (a) some studies failed to adhere to strict treatment integrity standards, (b) some studies had small samples sizes, (c) there were a limited number of studies, particularly for the follow-up analysis, (d) three studies were not juried publications, and (e) the follow-ups varied in length. With regard to treatment integrity (TI) as described in the Methodology, studies ranged from inadequate to very good. From the descriptions provided, three studies appeared to have inadequate TI (Ahmadi, Zarei, & Fallahchai, 2014; Dessaules et al., 2003; Najafi et al., 2015). The other six studies appeared to demonstrate TI that was at least acceptable. Clearly, the present study was restricted by the limited number of RCTs available in the literature, and therefore chose not to use TI as a criterion for selection. Still, problems in the TI of three of the nine studies weakens the strength of the positive results.

Another limitation was the small sample sizes in the follow-up evaluation. Only four studies were available and two of them had *n*'s in the experimental group of just 4 (Denton et al., 2012) and 5 (Dessaules et al., 2003). This small sample size was addressed statistically using the conservative nonparametric repeated measures Friedman's Test which still yielded a significant finding that the intervention was successful. Also, the finding of the post hoc Wilcox Test provided support for the maintenance of improvement at follow-up. A related limitation was that there were a limited number of studies, particularly for the follow-up analyses.

Another limitation was that two of the studies were not from juried journals. As discussed earlier, Campbell Collaboration (2014) suggested that in order to address journal bias in meta-analyses, where only studies with successful outcomes are published, one should consider including studies from other sources, such as dissertations. Although not juried, dissertation theses typically are subject to careful review by the committee to insure an acceptable quality of research and scholarship. It should be noted that neither of the two dissertations yielded statistically significant effect sizes (Naaman, 2009; Walsh, 2002). Despite their inclusion, the meta-analysis still demonstrated robust results.

A final limitation is that the follow-ups varied in length. Cloutier et al.'s (2002) study had the longest follow-up at 2 years, followed by Denton et al. (2012) and Dessaules et al.'s (2003) studies, which both had a 6-month follow-up, and the McLean et al.'s (2011) follow-up, which was the shortest at 3 months. Similar to the limitations in availability of RCT studies mentioned earlier, there were just 4 RTC studies available for this analysis. It deserves mention that the maintenance of improvements is arguably the most challenging

and possibly important result in treatment outcome research. This is addressed in the following statement sometimes attributed to the Vaudevillian comedian, W. C. Fields, “It’s easy to quit drinking. I know. I’ve done it a thousand times before”. Like drinking, improving one’s intimate relationship has limited value if all gains are lost after a few months. Although the number of studies is limited, all but one showed no change between the post and follow-up scores in marital adjustment. The one that showed some digression in score, still retained over half of its gains made during treatment. That study had the smallest sample size of just 4 couples in the follow-up stage of the evaluation. One of the larger follow-up studies, which had a sample size of 13, demonstrated the maintenance of improvement at two years, a notable period. Adding these points to the earlier outcomes reported, the results still suggest the maintenance of change, despite the limited number of studies evaluated. Nevertheless, further studies with long follow-ups are still needed to evaluate the extent to which improvements are maintained.

### **Future directions**

Clearly, EFT is becoming established as an evidence-based practice which needs to become part of every couples therapist’s intervention repertoire. Social work education programs, as well as programs from other treatment disciplines, are increasingly interested in teaching evidence supported models, and including EFT would strengthen those curricula. Although there has been progress in the breadth of randomized control trials of EFT with couples, more expansion of the diversity of target groups is necessary. For example, sorely missing are evaluation studies with various cultures, ethnicities and racial groups such as African-Americans, about which there is a paucity of outcome research (Harley & Stansbury, 2011).

Given EFT’s success in couples treatment, it would follow that EFT may have an application with other systems. For example, preliminary findings suggest tentative support for EFT effectiveness in group therapy (Ancha, 2004; Compare & Tasca, 2016), family therapy (Robinson, Dolhanty, Stillar, Henderson, & Mayman, 2016; Stavrianopoulos et al., 2014) and individual therapy (MacLeod & Elliott, 2012). However, more vigorous evaluation, such as randomized controlled trials with follow-up evaluation, is necessary for more credible support.

### **Conflict of interest**

Authors Candice C. Beasley and Richard Ager declare that there are no conflicts of interest as it relates to this manuscript.

### **Compliance with ethical standards**

This submission is a manuscript entitled: Emotionally Focused Couples Therapy: A Meta-Analysis of Its Effectiveness Over the Past 19 Years. There was no funding provided for neither the research obtained in this manuscript, nor for the composition of this manuscript.

## Data availability

The authors confirm that the data supporting the findings of this study are available within the article and its supplementary materials.

## Declaration of conflicting interests

The authors declare no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

## Ethical approval

Because this study is categorized as a meta-analysis, the manuscript does not contain any studies with human participants or animals. Therefore, the treatment of subjects being in accordance with the ethical standards of the NASW and APA is not applicable.

## Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

## Publication statement

Authors Candice C. Beasley and Richard Ager declare that the manuscript entitled: Emotionally Focused Couples Therapy: A Meta-Analysis of Its Effectiveness Over the Past 19 Years, has not been published elsewhere and has not been submitted simultaneously for publication elsewhere.

## References

- Ahmadi, F.S., Zarei, E. & Fallahchai, S.R. (2014). The effectiveness of Emotionally-Focused Couple Therapy in resolution of marital conflicts between the couples who visited the consultation centers. *Journal of Education and Management Studies*, 4, 118–123.
- Ancha, A. J. (2004). Program evaluation of a time-limited, abuse-focused treatment for child and adolescent sexual abuse victims and their families. *Dissertation Abstracts International*, 64, 5770.
- Barati, T., & Sanai, B. (1996). Marital Conflict Questionnaire. In B. Sanai, S. Falahati, & A. Houman (Eds.), *Family and marriage scales* (pp. 9). Tehran, Iran: Besat Publications.
- Bowlby, J. (1969). *Attachment and loss*. New York, NY: Basic Books.
- Bowlby, J. (1988). *A secure base*. New York, NY: Basic Books.
- Busby, D. M., Crane, D. R., Larson, J. H., & Christensen, C. (1995). A revision of the Dyadic Adjustment Scale for use with distressed and nondistressed couples: Construct hierarchy and multidimensional scales. *Journal of Marital and Family Therapy*, 21, 289–308. doi:10.1111/j.1752-0606.1995.tb00163.x
- Campbell Collaboration. (2014). Campbell systematic reviews: Policies and guidelines. *Campbell Systematic Reviews*, 1 doi:10.4073/csrs.2014.1
- Cloutier, P. F., Manion, I. G., Walker, J. G., & Johnson, S. M. (2002). Emotionally focused interventions for couples with chronically ill children: A 2-year follow-up. *Journal of Marital & Family Therapy*, 28, 391–398. doi:10.1111/j.1752-0606.2002.tb00364.x
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed. ed.). New York, NY: Academic Press.



- Compare, A., & Tasca, G. A. (2016). The rate and shape of change in binge eating episodes and weight: An effectiveness trial of emotionally focused group therapy for binge-eating disorder. *Clinical Psychology & Psychotherapy*, 23, 24–34. doi:10.1002/cpp.1932
- Dalton, E. J., Classen, C. C., Greenman, P. S., & Johnson, S. M. (2013). Nurturing connections in the aftermath of childhood trauma: A randomized controlled trial of emotionally focused couple therapy for female survivors of childhood abuse. *Couple and Family Psychology: Research and Practice*, 2, 209–221. doi:10.1037/a0032772
- Denton, W. H. (2001). SHARE study treatment manual. Unpublished manuscript, School of Medicine, Wake Forest University, Winston-Salem, North Carolina.
- Denton, W. H., Wittenborn, A. K., & Golden, R. N. (2012). Augmenting antidepressant medication treatment of depressed women with emotionally focused therapy for couples: A randomized pilot study. *Journal of Marital and Family Therapy*, 38, 23–38. doi:10.1111/j.1752-0606.2012.00291.x
- Dessaullles, A. (1992). The treatment of clinical depression in the context of marital distress. *Dissertation Abstracts International*, 53, 1605.
- Dessaullles, A., Johnson, S. M., & Denton, W. H. (2003). Emotion-focused therapy for couples in the treatment of depression: A pilot study. *The American Journal of Family Therapy*, 31, 345–353. doi:10.1080/01926180390232266
- Dunn, R. L., & Schwebel, A. I. (1995). Meta-Analytic review of marital therapy outcome research. *Journal of Family Psychology*, 9, 58–68. doi:10.1037/0893-3200.9.1.58
- Friedman, M. (1937). The use of ranks to avoid the assumption of normality implicit in the analysis of variance. *Journal of the American Statistical Association*, 32, 675–701. doi:10.1080/01621459.1937.10503522
- Gordon-Walker, J., Johlison, S., Manion, L., & Cloutier, P. (1996). Emotionally focused marital interventions for couples with chronically ill children. *Journal of Consulting and Clinical Psychology*, 64, 1029–1036.
- Gottman, J. (1991). Predicting the longitudinal course of marriages. *Journal of Marital and Family Therapy*, 17, 3–7. doi:10.1111/j.1752-0606.1991.tb00856.x
- Gottman, J., & Levenson, R. W. (1986). Assessing the role of emotion in marriage. *Behavioral Assessment*, 8, 31–48.
- Greenberg, L. S., & Johnson, S. M. (1988). *Emotionally focused therapy for couples*. New York, NY: Guilford Press.
- Harley, D. A., & Stansbury, K. L. (2011). Diversity counseling with African Americans. In E. Mpofu (Ed.), *Counseling people of African ancestry* (pp. 193–208). New York, NY: Cambridge University Press.
- Hedges, L. V. (1981). Fitting categorical models to effect sizes from a series of experiments. *Journal of Educational Statistics*, 7, 119–137. doi:10.3102/10769986007002119
- Heyman, R. E., Sayers, S. L., & Bellack, A. S. (1994). Global marital satisfaction versus marital adjustment: An empirical comparison of three measures. *Journal of Family Psychology*, 8, 432–446. doi:10.1037/0893-3200.8.4.432
- Johnson, D. R., White, L. K., Edwards, J. N., & Booth, A. (1986). Dimensions of marital quality: Toward methodological and conceptual refinement. *Journal of Family Issues*, 7, 31–49. doi:10.1177/019251386007001003
- Johnson, S. M. (2004). *The practice of emotionally focused marital therapy: Creating connection*. New York, NY: Brunner-Routledge.
- Johnson, S. M. (2008). *Hold me tight: Seven conversations for a lifetime of love*. New York, NY: Little Brown & Co.
- Johnson, S. M., Hunsley, J., Greenberg, L., & Schindler, D. (1999). Emotionally focused couples therapy: Status and challenges. *Clinical Psychology: Science And Practice*, 6, 67–79.
- Keikhayfarzaneh, J. K., Shahriari, N., Ghorbanshiroudi, S., Sourizaei, M., & Keikhayfarzaneh, R. (2011). The investigation of the effectiveness of the solution-oriented counseling in reduction of the marital conflicts of two-career couples. *Journal of Basic Applied Science Research*, (2011, 3309–3315.
- Lebow, J. L. (2014). *Couple and Family Therapy: An integrative map of the territory*. Washington, DC: APA.



- Lipsey, M. W., & Wilson, D. B. (2001). *Practical meta-analysis*. Thousand Oaks, CA: Sage.
- MacLeod, R., & Elliott, R. (2012). Emotion-focused therapy for social anxiety: A hermeneutic single case efficacy design study of a low-outcome case. *Counselling Psychology Review*, 27, 7–22.
- Maier, C. A. (2015). Feminist-informed emotionally focused couples therapy as treatment for eating disorders. *American Journal of Family Therapy*, 43, 151–162. doi:10.1080/01926187.2014.956620
- McLean, L. M., Walton, T., Rodin, G., Esplen, M., & Jones, J. M. (2011). A couple based intervention for patients and caregivers facing end-stage cancer: Outcomes of a randomized control trial. *Psycho-Oncology*, 22, 28–38. doi:10.1002/pon.2046
- Minuchin, S., & Fishman, C. (1981). *Family therapy techniques*. Cambridge, MA: Harvard University Press.
- Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G. (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *PLoS Medicine*, 6(7), e1000097. doi:10.1371/journal.pmed1000097
- Montesino, M. C., Gómez, J. G., Femántiez, M. P., & Rodríguez, J. A. (2013). Propiedades psicométricas de la Escala de Ajuste Diddico (DAS) en una muestra comunitaria de parejas. *Psicothema*, 25, 536–541. doi:10.7334/psicothema2013.85
- Naaman, S. C. (2009). Evaluation of the clinical efficacy of Emotionally Focused Therapy on psychological adjustment and Natural Killer Cell Cytotoxicity in early breast cancer. *Dissertation Abstracts International*, 69, 5044.
- Najafi, M., Soleimani, A. A., Ahmadi, K. H., Javidi, N., & Hoseini, K. E. (2015). The effectiveness of Emotionally Focused Therapy on enhancing marital adjustment and quality of life among infertile couples with marital conflicts. *International Journal of Fertility and Sterilization*, 9, 238–246.
- Norcross, J. C., Pfund, R. A., & Prochaska, J. O. (2013). Psychotherapy in 2022: A Delphi poll on its future. *Professional Psychology: Research and Practice*, 44, 363–370. doi:10.1037/a0034633
- Norton, R. (1983). Measuring marital quality: A critical look at the dependent variable. *Journal of Marriage and the Family*, 45, 141–151. doi:10.2307/351302
- Perls, F. (1973). *The gestalt approach and eyewitness to therapy*. San Francisco, CA: Science & Behavior Books.
- Robinson, A. L., Dolhanty, J., Stillar, A., Henderson, K., & Mayman, S. (2016). Emotion focused family therapy for eating disorders across the lifespan: A pilot study of a 2 day transdiagnostic intervention for parents. *Clinical Psychology & Psychotherapy*, 23, 14–23. doi:10.1002/cpp.1933
- Rogers, C. (1951). *Client-centered therapy*. Boston, MA: Houghton-Mifflin.
- Schumm, W. R., Paffbergen, L. A., Hatch, R. C., Obiorah, F. C., Copeland, J. M., & Meens, L. D. (1986). Concurrent and discriminant validity of the Kansas Marital Satisfaction Scale. *Journal of Marriage and the Family*, 48, 381–387. doi:10.2307/352405
- Soltani, M., Shairi, M. R., Roshan, R., & Rahimi, C. (2014). The impact of emotionally focused therapy on emotional distress in infertile couples. *International Journal of Fertility and Sterility*, 7, 337–344.
- Spanier, G. B. (1976). Measuring dyadic adjustment: New scales for assessing the quality of marriage and similar dyads. *Journal of Marriage & Family*, 38, 15–28. doi:10.2307/350547
- Stavrianopoulos, K. (2015). Enhancing relationship satisfaction among college student couples: An emotionally focused therapy (EFT) approach. *Journal of Couple & Relationship Therapy*, 14, 1–16. doi:10.1080/15332691.2014.953656
- Stavrianopoulos, K., Faller, G., & Furrow, J. (2014). Emotionally focused family therapy: Facilitating change within a family system. *Journal of Couple & Relationship Therapy*, 13, 25–43. doi:10.1080/15332691.2014.865976
- Walsh, S. B. (2002, September). Emotion-focused couples therapy as a treatment of somatoform disorders: An outcome study. *Dissertation Abstracts International*, 63, 1579.
- Whisman, M. A., & Uebelacker, L. A. (2006). Impairment and distress associated with relationship discord in a national sample of married or cohabiting adults. *Journal of Family Psychology*, 20, 369–377. doi:10.1037/0893-3200.20.3.369

- Wiebe, S. A., & Johnson, S. M. (2016). A review of the research in Emotionally Focused Therapy for couples. *Family Process*, 55, 390–407. doi:[10.1111/famp.12229](https://doi.org/10.1111/famp.12229)
- Wnuk, S. M., Greenberg, L., & Dolhanty, J. (2015). Emotion-focused group therapy for women with symptoms of bulimia nervosa. *Eating Disorders: the Journal of Treatment & Prevention*, 23, 253–261. doi:[10.1080/10640266.2014.964612](https://doi.org/10.1080/10640266.2014.964612)
- Wood, N. D., Crane, D. R., Schaalje, G. B., & Law, D. D. (2005). What works for whom: A meta-analytic review of marital and couples therapy in reference to marital distress. *The American Journal of Family Therapy*, 33, 273–287. doi:[10.1080/01926180590962147](https://doi.org/10.1080/01926180590962147)