Emotionally Focused Therapy for Australian Couples Experiencing Infertility-Related Distress

A Randomized Controlled Trial

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Introduction

1.1 Scope, Impact and Significance

Infertility, operationally defined as the inability to achieve clinical pregnancy after twelve months of regular unprotected sexual intercourse or six months for women aged 35 years or older (Zegers-Hochschild et al., 2017), affects one in six Australian couples according to Family Planning Australia (2021). This reproductive challenge creates complex psychological sequelae characterized by clinically significant symptoms of depression, anxiety, and stress that meet diagnostic thresholds on standardized assessment instruments. The psychological burden extends beyond individual symptomatology to encompass relationship distress, defined as scores below 97 on the Dyadic Adjustment Scale indicating clinically significant relationship dysfunction (Spanier, 1976).

The Australian healthcare system currently addresses infertility through medical interventions including assisted reproductive technologies, yet psychological support remains fragmented and inadequately integrated within fertility care pathways. This project proposes implementing Emotionally Focused Couples Therapy, a manualized intervention based on attachment theory that restructures emotional responses and interaction patterns through systematic therapeutic processes (Johnson, 2019). The intervention addresses both individual psychological distress and dyadic functioning through three operationalized stages: cycle deescalation, attachment restructuring, and consolidation of secure bonding patterns.

The significance of this intervention extends beyond symptom reduction to address fundamental attachment disruptions that infertility creates within couple relationships. When reproductive expectations remain unfulfilled, partners experience attachment injury characterized by accessibility failures and responsiveness breakdowns that amplify individual distress while eroding relationship security. This project provides systematic intervention addressing these attachment disruptions through evidence-based therapeutic processes, potentially improving both psychological outcomes and fertility treatment persistence for Australian couples navigating reproductive challenges.

1.2 Literature Review

1.2.1 Empirical Foundation for Intervention

The psychological impact of infertility demonstrates consistency across international samples, with Australian data revealing comparable distress patterns to global populations. Depression, operationally de-

fined as scores exceeding 21 on the Depression subscale of the Depression Anxiety Stress Scales indicating severe symptomatology (S. H. Lovibond & P. F. Lovibond, 1995), affects between 23% and 57% of individuals undergoing fertility treatment. Anxiety disorders, characterized by excessive worry and physiological arousal scoring above clinical thresholds, manifest in 67% of women experiencing fertility challenges (Gozuyesil et al., 2019).

Recent meta-analytic evidence examining Emotionally Focused Couples Therapy demonstrates robust effectiveness for relationship distress across diverse populations. Beasley & Ager (2019) analyzed nine randomized controlled trials revealing a weighted effect size using Hedges' g = 2.09 (95% CI: 0.04, 4.14), indicating substantial therapeutic benefit exceeding conventional intervention thresholds. Follow-up analyses demonstrated maintenance of gains with Friedman's test revealing sustained improvement (χ^2 = 6.500, p = 0.039), suggesting durability of therapeutic changes beyond active intervention periods.

The theoretical mechanisms underlying EFT align particularly with infertility-related distress patterns. Attachment theory posits that threats to reproductive goals activate attachment systems, triggering hyperactivation strategies characterized by anxious pursuit or deactivation strategies manifesting as emotional withdrawal (Mikulincer & Shaver, 2016). These patterns create negative interaction cycles wherein one partner's pursuit for emotional connection triggers the other's withdrawal, establishing self-perpetuating distress patterns that EFT specifically targets through systematic intervention processes.

Australian couples face unique contextual factors influencing infertility experiences, including Medicare funding limitations for assisted reproductive technologies and geographical barriers to specialized fertility services. These structural constraints compound psychological distress, making accessible psychological interventions particularly critical for this population. Evidence from Iranian samples demonstrates EFT effectiveness in reducing depression, anxiety, and stress among infertile couples (Soltani et al., 2014), though Australian-specific outcome data remains absent, highlighting the need for culturally contextualized intervention research.

1.2.2 Research Question and Hypotheses

This study addresses the following primary research question using PICO framework: Among Australian couples experiencing infertility (Population), does Emotionally Focused Couples Therapy (Intervention) compared to waitlist control (Comparison) reduce psychological distress and improve relationship satisfaction (Outcomes)?

Primary hypotheses specify that couples receiving EFT will demonstrate significantly greater reductions in depression, anxiety, and stress scores on the DASS-42 compared to waitlist controls, with effect sizes exceeding d = 0.80. Secondary hypotheses predict improved relationship satisfaction on the Dyadic Adjustment Scale and improved fertility-specific quality of life, with treatment gains maintained at three-month follow-up assessment.

2

Method

2.1 Participants and Recruitment

This study will recruit 48 heterosexual Australian couples currently experiencing infertility from fertility clinics in metropolitan Sydney, Melbourne, and Brisbane. Infertility is operationally defined according to World Health Organization criteria as failure to achieve clinical pregnancy after twelve months of regular unprotected intercourse for women under 35 years, or six months for women 35 years or older, confirmed through medical documentation from treating fertility specialists.

Inclusion criteria encompass couples where both partners score above mild symptom thresholds on at least one DASS-42 subscale (Depression $>$ 14, Anxiety $>$ 10, or Stress $>$ 19), indicating clinically relevant distress requiring intervention. Couples must demonstrate relationship commitment through cohabitation for minimum twelve months and both partners must consent to participation. Exclusion criteria include current substance use disorders assessed through AUDIT and DUDIT screening instruments, active psychotic symptoms evaluated via clinical interview, domestic violence history screened through Conflict Tactics Scale, or concurrent couples therapy that would confound treatment effects.

2.2 Sample Size Calculation

Sample size determination employed G*Power 3.1 software using the following formula for independent samples t-test:

$$n = \frac{2\sigma^2(Z_{\alpha/2} + Z_{\beta})^2}{\delta^2} \tag{2.1}$$

Where σ represents population standard deviation, $Z_{\alpha/2}$ represents critical value for Type I error (1.96 for $\alpha = 0.05$), Z_{β} represents critical value for Type II error (0.84 for $\beta = 0.20$), and δ represents minimum detectable difference.

Based on previous EFT research demonstrating effect sizes ranging from 0.80 to 2.09, conservative estimation using d = 0.80 yields:

$$n = 2 \times \left[\frac{(1.96 + 0.84)}{0.80}\right]^2 = 24.5 \text{ couples per group} \tag{2.2}$$

Accounting for 15% attrition based on previous couples intervention research, final recruitment target equals 28 couples per group, totaling 56 couples. However, resource constraints limit recruitment to 48

couples (24 per group), providing 80% power to detect large effects (d = 0.88) while accepting reduced power for medium effect detection.

2.3 Intervention Protocol

Emotionally Focused Couples Therapy follows Johnson's (2019) validated treatment manual across twelve weekly 90-minute sessions delivered by certified EFT therapists. The intervention progresses through three systematically defined stages with specific therapeutic tasks and process markers.

Stage One encompasses sessions one through four, focusing on assessment and deescalation. Therapists identify negative interaction cycles specific to infertility stressors, mapping pursuit-withdrawal patterns triggered by reproductive challenges. Couples learn to recognize how secondary emotions like anger mask primary attachment fears of abandonment or inadequacy. Process markers include couples articulating their cycle using "when-then" statements and expressing understanding of partner's position within the cycle.

Stage Two spans sessions five through nine, restructuring attachment bonds through choreographed enactments. Partners express attachment needs and fears directly while therapists facilitate responsive engagement from the other partner. Withdrawal partners articulate fears underlying distancing behaviors while pursuing partners soften demands to create emotional safety. Successful stage completion requires both partners accessing and expressing vulnerable emotions while experiencing acceptance from their partner.

Stage Three comprises sessions ten through twelve, consolidating new patterns and developing resilience narratives. Couples practice applying secure interaction patterns to infertility-specific challenges including treatment decisions and pregnancy loss. Therapists guide creation of relationship stories integrating infertility experiences within broader relationship meaning, establishing templates for future challenge navigation.

2.4 Measurement Strategy

Primary outcome assessment employs the Depression Anxiety Stress Scales-42 (DASS-42; S. H. Lovibond & P. F. Lovibond (1995)), a psychometrically validated instrument demonstrating internal consistency coefficients of 0.91 for depression, 0.84 for anxiety, and 0.90 for stress subscales. Australian normative data enables clinical threshold determination with established cut-points distinguishing mild, moderate, severe, and extremely severe symptom levels.

Relationship satisfaction assessment utilizes the Dyadic Adjustment Scale (DAS; Spanier (1976)), comprising 32 items measuring dyadic consensus, satisfaction, cohesion, and affectional expression. Clinical distress threshold of 97 distinguishes distressed from non-distressed couples with demonstrated sensitivity to therapeutic change. Australian validation studies confirm factor structure and predictive validity for relationship outcomes (Sharpley & Cross, 1982).

Secondary measures include the Fertility Quality of Life questionnaire (FertiQoL; Boivin et al. (2011)) assessing fertility-specific emotional, relational, and social functioning across 36 items with established international norms. The Experiences in Close Relationships-Revised (ECR-R; Fraley et al. (2000)) measures attachment anxiety and avoidance dimensions relevant to EFT mechanisms. Process assessment employs the Working Alliance Inventory (Horvath & Greenberg, 1989) at sessions 3, 6, and 9 to monitor therapeutic engagement.

2.5 Data Analysis Plan

Primary analyses employ multilevel modeling accommodating dyadic data structure with individuals (Level 1) nested within couples (Level 2) using the following equation:

$$Y_{ij} = \beta_0 + \beta_1(\text{Time}) + \beta_2(\text{Treatment}) + \beta_3(\text{Time} \times \text{Treatment}) + u_j + e_{ij} \tag{2.3}$$

Where Y_{ij} represents outcome for individual i in couple j, β coefficients represent fixed effects, u_j represents random couple intercept, and e_{ij} represents residual error.

Effect sizes will be calculated using Hedges' g formula accounting for small sample bias:

$$g = \frac{M_1 - M_2}{S_{\text{pooled}}} \times \left(1 - \frac{3}{4N - 9}\right) \tag{2.4}$$

Intent-to-treat principles guide primary analyses with maximum likelihood estimation handling missing data under missing-at-random assumptions. Sensitivity analyses compare complete-case results to evaluate missing data impact. Moderation analyses explore treatment effect variation by infertility duration, cause, and baseline severity using interaction terms within multilevel models.

2.6 Indicative Budget and Budget Justification

The project budget employs activity-based costing methodology normalizing expenses across the 18-month study period using the formula:

$$\text{Total Cost} = \sum(\text{Resource Units} \times \text{Unit Cost} \times \text{Time Allocation}) \tag{2.5}$$

Personnel costs constitute the primary expenditure, calculated using Australian university salary scales plus 30% on-costs for superannuation, leave provisions, and payroll tax. Research positions align with Higher Education Worker classifications based on qualification requirements and responsibility levels. Therapeutic services reflect Australian Psychological Society recommended rates for specialized couples therapy. Participant reimbursement follows National Health and Medical Research Council guidelines for research participation compensation.

Table 2.1: *Detailed Project Budget*

Budget Category	Calculation	Total Cost
Personnel		
Research Officer (HEW 6.4)	\$89,426 × 0.4 FTE × 1.5 years × 1.3 on-costs	\$69,751
Senior Research Officer (HEW 7.2)	\$93,841 × 0.2 FTE × 1.5 years × 1.3 on-costs	\$36,598
Clinical Services		
EFT Therapists	3 therapists × 288 sessions × \$200/session	\$57,600
Clinical Supervision	36 hours × \$250/hour	\$9,000
Participant Costs		
Reimbursement	48 couples × 3 assessments × \$50/assessment	\$7,200
Materials and Resources		
Assessment Licenses	DASS, DAS, FertiQoL licenses × 150 administrations	\$3,500
Data Management	REDCap database + SPSS license	\$2,000
Dissemination		
Conference and Publication	Registration + travel + open access fees	\$4,000
Indirect Costs		
University Overhead	10% of direct costs	\$18,965
Total Project Budget		**\$208,614**

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