



Evaluation Report:

WellBeing International Limited

*An Analysis of the
'Wellbeing for Mothers and Babies' Course*

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Executive Summary

Maternal mental health is a vital public health concern, with postnatal depression and anxiety affecting up to 20% of women and posing risks to both mother and child. While effective treatments exist, many mothers face barriers to accessing care, including stigma, underdiagnosis, and a lack of culturally sensitive interventions. Against this backdrop, the *Wellbeing for Mothers and Babies* course offers a promising, community-based intervention designed to support the emotional, psychological, and relational well-being of mothers and their infants. This evaluation, led by Dr. Christopher Barnes (University of Derby), examined the impact of the five-week course on key psychological outcomes in 56 mothers. Participants completed validated measures of parental self-efficacy, well-being, happiness, depression, anxiety and stress before and after the course.

Key Findings:

- Significant improvements were observed across all measured outcomes:
 - Increased parental self-efficacy, mental well-being, and happiness
 - Decreased stress, anxiety, and depression
- Large effects were noted for parental self-efficacy, well-being, happiness, and stress reduction, indicating meaningful psychological benefits throughout the period of the program.
- Parental self-efficacy emerged as a key predictor of improved outcomes, accounting for 12–16% of the variance in well-being, stress, and happiness.

Practical Implications

- Short-term, skills-based courses, such as *Wellbeing for Mothers and Babies*, can provide substantial mental health benefits for new mothers.
- Building parental self-efficacy is crucial in improving psychological outcomes and may offer a gateway to longer-term resilience and bonding.

Recommendations

- Widen access to the course through enhanced delivery models and ongoing support beyond the initial five weeks.
- Tailor interventions to individual needs by integrating mindfulness, coping strategies, and social support mechanisms.
- Investigate additional factors influencing maternal well-being - such as cultural background, social context, and environmental support - to further enhance program impact.

This evaluation offers robust, preliminary research-based evidence that the *Wellbeing for Mothers and Babies* course effectively improves maternal mental health and wellbeing. As such, it represents a scalable and compassionate approach to addressing the emotional and psychological needs of new mothers in the postnatal period.

The Importance of Maternal Health and Wellbeing

The arrival of a new baby is often a time of immense happiness; however, for many families, it can be accompanied by the onset or exacerbation of mental health issues. These challenges can have negative effects on mothers, their children, their families, and society at large (Howard and Khalifeh, 2020). Research suggests that approximately 15–20% of women experience postnatal depression (Shorey et al., 2018), while around 10% face postnatal anxiety (Dennis et al., 2017; Fawcett et al., 2019). The prevalence of mental health issues during the postnatal period can often be higher, especially in women facing certain social, economic, or psychological risks. For example, women who experience traumatic births, lack social support, or come from disadvantaged backgrounds are more vulnerable to mental health issues. The causes of these conditions are multifaceted and not entirely understood. Over the years, several risk factors have been identified in the literature as key contributors to postnatal depression, starting with early meta-analyses. These include limited social support, stressful life events, and a history of depression (Beck, 1996; O'Hara and Swain, 1996; van der Zee-van den Berg et al., 2021). Other factors include severe life events, particularly adverse childhood experiences, complications during pregnancy, a family history of mood disorders, and low maternal self-efficacy (van der Zee-van den Berg et al., 2021; Yim et al., 2015; Nidey et al., 2020; Racine et al., 2020). A recent meta-analysis identified premenstrual syndrome, experiences of violence, and unintended pregnancies as particularly strong risk factors for some women (Gastaldon et al., 2022). For postnatal anxiety, contributing factors include a previous history of depression, low partner support, low maternal self-efficacy, difficult childbirth experiences, and excessive infant crying (van der Zee-van den Berg et al., 2021).

Although both psychological and pharmacological treatments for postnatal depression have demonstrated effectiveness (Howard and Khalifeh, 2020), many mothers do not receive appropriate care. This is often due to underdiagnosis, long wait times for therapy, childcare responsibilities, and concerns about potential medication side effects (Cox et al., 2016; Owais et al., 2018). Additionally, in some cultural contexts, there is a degree of scepticism about applying Western medical concepts like "postnatal depression" to explain human suffering, which may be viewed as requiring treatment in a clinical setting (Oates et al., 2004; Husain et al., 2022). In such cases, postnatal distress may be seen as a natural reaction to a lack of social or economic support (Taylor et al., 2022; Chung et al., 2004), or as part of the challenging transition to motherhood that is not widely marked by significant cultural recognition or ritual in many Western societies (Rallis et al., 2014). Furthermore, many treatment approaches fail to consider the importance of the mother-infant relationship (Forman et al., 2007). This demonstrates the need for research into new, adaptable, and sustainable interventions that not only support maternal mental health but also engage both mother and infant, potentially offering benefits across diverse cultural and social settings. Supporting maternal mental health in the postnatal period is essential not only for the well-being of mothers but also for the healthy development of their children. As highlighted by the National Institute for Health and Care Excellence (NICE), mental health issues affect approximately 1 in 10 women during the perinatal period. These conditions, such as postnatal depression, anxiety, and psychosis, can have a profound impact on both the mother and the child if left unaddressed. In fact, untreated mental health conditions can result in poor maternal bonding, developmental delays in children, and difficulties in family dynamics, making it vital that mothers receive adequate support during this crucial time. A combination of early intervention, accessible services, and social support can significantly improve outcomes for both mothers and their children, promoting long-term well-being and family stability as highlighted in policies such as [The NHS Long Term Plan](#).

Therefore, supporting maternal mental health involves not only providing psychological support but also facilitating the physical and emotional connection between mothers and their infants.

About

The report author

Dr Christopher Barnes is a Chartered Psychologist, Associate Fellow of the British Psychological Society, and Senior Lecturer at the University of Derby. His published research focuses on parenting and child development in diverse and clinical contexts, as well as the impact of nature on human health across the lifespan. He has also co-edited and authored the books 'Family Relationships in the Early Years' and 'Expanding Frontiers of Neonatal Care: An Interdisciplinary Approach'.

The Wellbeing for Mothers and Babies course

[Wellbeing International Ltd](#) is an organisation dedicated to enhancing the emotional, mental, and physical well-being of individuals in the corporate world and beyond. Their team of committed experts offers a range of Wellbeing Capsules, Training Sessions, Workshops, and Retreats both online and in person.

Researchers at the University of Derby have been invited to evaluate one of the organisation's courses, [Wellbeing for Mothers and Babies](#), which is specifically designed for baby massage practitioners. Upon completing the training, instructors are qualified to lead a 5-week course for mothers and babies (aged 3 months to 1 year). This innovative and unique course was developed by Kate Pigeon-Owen and Caroline Roberts, both of whom are International Association of Infant Massage Trainers with over 20 years of experience working with young families. Practitioners are trained in four key areas:

- Share with mothers the fundamental aspects of physical, emotional & mental wellbeing for them & their baby.
- Enhance your facilitation skills leading Icebreakers, Theory & Discussion. Explore further ways of creating & holding a safe place.
- Deepen the attachment/bonding process by sharing Wellbeing Story Massage & rhyme time
- Learn additional ways to relax mothers with guided breathing, movement & a simple back massage

The Evaluation Methodology

Purpose

This study aimed to evaluate a short course, 'Wellbeing for mothers and babies,' for parents who wish to learn more about their babies' development and well-being and deepen their attachment relationship.

Study Design

A repeated measures within-subjects pre- post-test design was used in this study. Measures were completed by parents immediately before the 5-week course and immediately following its end.

Participants

A total of 56 mothers provided data at both time points (pre- and post-course). There were 86% of mothers who described themselves as White British and the remaining 14% included those who defined their ethnicity as (Count - Mixed race [3], Asian [2], Irish white [2] and Hispanic [1]). The mean age of mothers was 34 years (range 23-44) with their youngest child being an average age of 22 weeks of age (5.5 months) and ranging between eight to 40 weeks of age. For many it was their first child (73%) with almost all others having at least one other (23%) with only one mother having either three (2%) or four children (2%).

Measures

Parental Self-efficacy Scale (PMPSE; Barnes, 2007)

Is a 20 item measure of parenting self-efficacy. The scale is measured on a 4-point Likert scale (1- Strongly Disagree- 4-Strongly Agree). The scale, although initially developed with a population of parents of hospitalised preterm neonates, has been used extensively and with other diverse and non-hospitalised populations. Cronbach's alpha of between 0.89-0.92 are reported across published studies.

The Short Warwick-Edinburgh Mental Well-being Scale (SWEMWBS; Stewart-Brown et al., 2009)

This 7-item scale is comprised of only positively worded items relating to different aspects of positive mental health measured on a 1- 5 Likert scale (1 – none of the time; 5 – all of the time). With a student population, the scale has a Cronbach's alpha of .89 and .91 with a general population sample.

The Oxford Happiness Questionnaire (OHQ; Hills & Argyle, 2001)

The Oxford Happiness Questionnaire, designed to measure individual happiness, is based on the Oxford Happiness Inventory (OHI). The OHQ is valid and reliable; researchers found "a battery of personality variables known to be associated with well-being [that] were stronger for OHQ than for the OHI" (Hills & Argyle, 2001, p. 1073). This questionnaire has 29 self-report statements for responses on a 6-point Likert scale. We are using the shortened 8-item version.

Depression, Anxiety and Stress Scale (DASS-21 ; Lovibond & Lovibond, 1996)

The Depression, Anxiety and Stress Scale - 21 Items (DASS-21) is a set of three self-report scales designed to measure the emotional states of depression, anxiety and stress. Each of the three DASS-21 scales contains 7 items, divided into subscales with similar content. The depression scale assesses dysphoria, hopelessness, devaluation of life, self-deprecation, lack of interest/involvement, anhedonia and inertia. The anxiety scale assesses autonomic arousal, skeletal muscle effects, situational anxiety, and subjective experience of anxious affect. The stress scale is sensitive to levels of chronic nonspecific arousal. It assesses difficulty relaxing, nervous arousal, and being easily upset/agitated, irritable /over-reactive and impatient. Scores for depression, anxiety and stress are calculated by summing the scores for the relevant items.

Analysis

Data were analysed using a series of paired samples t-tests to evaluate any change across time (pre-course to post-course). We also investigated whether change in Parental Self-efficacy as a result of the course predicted wellbeing, Stress and Happiness using a Simple Linear Regression.

Results

Descriptive Statistics and Paired Samples t-Tests

A series of **paired samples t-tests** were conducted to examine changes in **parental self-efficacy, well-being, happiness, stress, anxiety, and depression**, following a five-week parental course. Summary data is presented in Table 1.

Significant improvements were observed for **parental self-efficacy (PMPSE), well-being (SWEMWBS), happiness (OHQ), stress, anxiety, and depression (DASS)**. Post-intervention scores for **PMPSE, SWEMWBS, and OHQ were significantly higher**, indicating increased **self-efficacy, well-being, and happiness**. Conversely, post-intervention **stress, anxiety, and depression scores were significantly lower**, suggesting these factors decreased.

Table 1. Paired Samples t-Test Results

Measure	Pre-Test Mean (SD)	Post-Test Mean (SD)	t	p-value
PMPSE (Self-Efficacy)	67.67 (8.24)	72.07 (5.72)	-6.832	<.001
SWEMWBS (Wellbeing)	23.30 (3.99)	26.83 (2.85)	-8.460	<.001
DASS - Stress	16.46 (8.35)	9.78(6.26)	9.733	<.001
DASS - Anxiety	6.53 (6.93)	4.28 (4.43)	4.903	<.001
DASS - Depression	8.25 (7.63)	5.46 (5.16)	4.136	<.001
OHQ (Happiness)	31.20 (6.62)	34.92 (6.15)	-9.661	<.001

Effect Sizes¹

Cohen's d was calculated to assess the magnitude of change (see Table 2) from before to after the 5-week parental course. Large effect sizes were observed for **well-being (d = -1.131), happiness (d = -1.315), and parental self-efficacy (d = -0.913)**, indicating substantial improvements. A large effect was also observed for **stress reduction (d = 1.301)**, while moderate effects were found for **anxiety (d = 0.655) and depression (d = 0.553)**.

¹ Effect size is a statistical term that quantifies the magnitude of a difference or relationship observed in a study, providing insight into its practical significance. While statistical significance (often represented by p-values) indicates whether an effect exists, effect size reveals the strength of that effect, helping us understand its real-world importance.

Table 2. Effect Sizes (Cohen's d)

Measure	Cohen's d	Effect Size Interpretation
PMPSE (Self-Efficacy)	-0.913	Large improvement
SWEMWBS (Wellbeing)	-1.131	Large improvement
OHQ (Happiness)	-1.315	Large improvement
DASS - Stress	1.301	Large reduction
DASS - Anxiety	0.655	Moderate reduction
DASS - Depression	0.553	Moderate reduction

Regression Analyses

Three simple linear regression analyses were conducted to further examine the relationships between parental self-efficacy (predictor) and (i) well-being, (ii) stress, and (iii) happiness (three outcomes). Correlations and regression statistics can be seen in Tables 3 and 4. Results indicate that **changes in parental self-efficacy significantly predicted changes in all three outcome factors - well-being, stress, and happiness**. Higher parental self-efficacy improvements were associated with greater increases in well-being ($\beta = 0.349$, $p = .008$) and happiness ($\beta = 0.357$, $p = .008$), as well as greater reductions in stress ($\beta = -0.404$, $p = .002$). Although significant, the models accounted for a **modest proportion of variance** ($R^2 = 12.2\%$ for well-being, 16.3% for stress, and 12.7% for happiness), suggesting that **additional factors may contribute to changes in well-being and stress beyond self-efficacy**.

Table 3. Summary of correlations between factors

	PMPSE	SWEMWBS	Stress	Anxiety	Depression	OHQ
PMPSE	.	.349**	-.404**	.132	-.023	.357**
SWEMWBS	.349**	.	-.532**	-.367**	-.556**	.609**
DASS - Stress	-.404**	-.532**	.	.432**	.519**	-.343*
DASS - Anxiety	.132	-.367**	.432**	.	.560**	-.206
DASS - Depression	-.023	-.556**	.519**	.560**	.	-.449**
OHQ	.357**	.609**	-.343*	-.206	-.449**	.

Key: PMPSE = Parental Self-Efficacy; SWEMBS = Mental Wellbeing; OHQ = Happiness. Significance levels: $p < .01$ ** ~ $p < .05$ *

Table 4. Summary of Regression Analyses Predicting Well-being, Stress, and Happiness from Parental Self-Efficacy

Outcome Variable	β (Standardized)	R^2	F	p
Well-being (SWEMWBS_Change)	0.349	0.122	7.51	.008
Stress Reduction (DASS - Stress_Change)	-0.404	0.163	10.54	.002
Happiness (OHQ_Change)	0.357	0.127	7.58	.008

Conclusions

The evaluation of the **Wellbeing for Mothers and Babies** course indicates significant improvements in key psychological outcomes for participants. A pre-post comparison showed increased **parental self-efficacy, well-being, and happiness**, alongside significant reductions in **stress, anxiety, and depression**. Effect sizes suggest these improvements were substantial, particularly for well-being, happiness, and stress reduction.

Regression analyses further highlight the role of **parental self-efficacy** in predicting well-being, stress reduction, and happiness, although the explained variance was modest (12.2%–16.3%). This suggests that while self-efficacy plays a role in improving well-being outcomes, **other contributing factors should be explored** to fully understand the mechanisms driving these changes.

In summary, the findings provide **strong evidence** that the **Wellbeing for Mothers and Babies** course effectively enhances parental confidence and mental well-being.

Practical Implications

- Structured, **short-term parental support courses**, such as the 'Wellbeing for Mothers and Babies' can **significantly enhance parental self-efficacy, well-being, and happiness**, while also **reducing stress, anxiety, and depression**, highlighting its value in **mental health promotion for new mothers**.
- The findings emphasise the importance of **self-efficacy in driving improvements in well-being and stress reduction**, suggesting that **targeted interventions that build parental confidence** may yield broader psychological benefits.
- Given the **large effect sizes for stress and well-being**, integrating similar psychological support frameworks into **wider maternal health services** could help improve outcomes for other diverse populations.
- **The findings demonstrate that enhancing self-efficacy plays an instrumental role in improving well-being, reducing stress, and increasing happiness.** Building on this, incorporating **additional elements such as social support networks, practical parenting strategies, and emotional resilience training** could further strengthen the program's impact and provide comprehensive support for maternal mental health.

Key Recommendations and Considerations

- **Expand program accessibility and sustainability:** To maximise long-term benefits, consider **follow-up support** or **booster sessions** post-program completion to help parents maintain improvements in **self-efficacy, well-being, and stress management** over time.
- **Offer tailored approaches for stress and emotional regulation:** Since stress and emotional distress significantly improved, future adaptations could **personalise interventions** by incorporating **individualised coping strategies, mindfulness techniques, or peer-led discussions** to sustain these benefits beyond the program duration.
- **Explore additional factors influencing well-being:** Since self-efficacy only explained a portion of the variance in well-being and stress outcomes, further research should investigate other **external factors (e.g. social support)** to enhance program effectiveness.

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