

## Research Article

# Anger, Forgiveness, And Depression in the Postnatal Experience

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## ABSTRACT

This study examined the relationship between anger, forgiveness, and depression in the postnatal period. The study was based on a group of 93 women with infant children. The results indicated that those with a depression diagnosis were prone to higher levels of anger and lower levels of forgiveness. These factors were also found to predict the severity of depressive symptoms experienced. A relationship between anger and forgiveness was observed as well, with anger-

in contributing the most to difficulties with forgiveness and depression. Through mediation analysis, the anger was shown to have both a direct impact on depression and an indirect through forgiveness. The findings support the notion that the capacity for forgiveness is an important construct for the management of anger and depressive symptoms in the postnatal period.

**Keywords:** postnatal depression, anger, forgiveness

## Introduction

Postnatal depression (PND) is a common condition affecting approximately 10-15% of women who have children, with serious consequences for both mothers and children [1-3]. However, understanding of the aetiology and full clinical manifestations of PND remains inconclusive [4]. The role of anger in PND appears important, with profound negative repercussions of habitual and unresolved anger for both a woman and her infant and that PND has been associated with problematic anger [5-7]. Research has also demonstrated forgiveness is linked to anger, being linked to lower levels of anger, and that it is an important factor in facilitating psychological wellbeing [8]. Despite this, the relationship between anger and forgiveness in PND has been largely neglected. The purpose of this study was to investigate relationships between anger and forgiveness in women with or without a depression diagnosis (i.e. PND, MDD) in the years following the birth of a child.

### Anger & PND

In general, previous research has demonstrated a strong correlation between anger and depression in both normal and clinical populations [9-11]. In line with these findings, anger is thought to provide a vulnerability to PND and to be important in the experience of it [12,13]. It has been proposed that difficulty with anger regulation is a key component of PND, and that many women suffering from this disorder have difficulty managing anger, feel guilt about their anger and are also frightened of expressing it [14].

Initial research has supported the proposed link between anger and PND, indicating that PND is associated with elevated levels of anger and more frequent anger episodes [13,15]. This was highlighted in research by Vliegen & Luyten [13] who proposed that dependency and self-critical personality traits act as vulnerabilities for depression and anger. Results of their study revealed that mothers with PND displayed significantly higher levels of dependency and self-criticism as well as exhibiting higher levels of depressive symptoms than those without PND. Contrary to previous literature, dependency was positively related to state anger in the non-depressed mothers but unrelated to state anger in the depressed mothers [13].

To explain this finding, it was suggested that postpartum depressed mothers may deny or underreport angry feelings. This was based on the idea that dependency is related to a desire to regulate and control information in social interactions in order to promote a positive perception of the self and the parent-child relationship [13]. In support of this, anger has been identified as an important recurring theme in studies of mothers with postpartum depression, yet these feelings are also considered to be associated with considerable concerns and worries, with many mothers finding it difficult to admit to feelings of aggression and ambivalence towards their child. Dependency has also been associated with the turning of anger against the self [16,17].

In Vliegen & Luyten's [13] study, self-critical mothers tended to report that they were more likely to direct their anger towards others as well as themselves. They also reported a

perceived lack of control concerning their anger. Such anger may be problematic as hostility towards others has been suggested to negatively impact upon mothers' levels of social support [18,19].

Findings of self-directed anger in postnatal depression are consistent with cognitive theory. This theory focuses on negative biases apparent in thinking about the self. Such biases tend to become more pronounced in depression. According to cognitive theory individuals frequently use harsher, more rigid criteria to judge their own perceived failings than that of others [20].

Qualitative research has supported the cognitive theory in PND, revealing that conflicting expectations and experiences of motherhood play a key role in the development of this disorder [15,21]. Individuals become disillusioned with motherhood as they fail to fulfil expectations of themselves as the perfect mother, with despair and sadness initiating the spiral into postnatal depression [22,23]. In line with the model of self-directed anger noted above, it can be suggested that these cognitions may be responsible for anger in the experience of PND as well.

In the context of the postnatal period, negative consequences of anger have been established for both a woman and her children [5,24]. For example, research indicates that anger difficulties may be associated with rejecting or aggressive behaviour towards infants, with important implications for infant attachment and health [25]. Chronic anger can also act as an impediment to the process of treatment [26].

## Forgiveness

Forgiveness has been defined as giving up one's desire for retribution and releasing negative affect i.e. anger and depression [27]. Expanding on this, forgiveness has been defined as an adaptive process whereby an individual abandons feelings, cognitions and behaviours of resentment towards an individual who has transgressed against them (which can include the self) while fostering compassion, generosity and good will towards that person [28]. Theorists also emphasise that forgiveness involves not only a reduction of unforgiving, negative emotions but also an increase in positive, prosocial emotions [29]. Unfortunately there has been little research conducted on the role of forgiveness in PND.

In terms of the health benefits of forgiveness, these are suggested to arise through both direct and indirect means. The direct effect of forgiveness on mental health has been described in terms of 'unforgiveness', through rumination relating to resentment, bitterness, hatred, hostility, anger, and fear. Supporting this, a dispositional difficulty toward forgiving others and oneself has been shown to promote higher levels of depression, state and trait anxiety, and PTSD symptomatology [29,31-33]. Unforgiveness has also been shown to be associated with trait anger and life dissatisfaction [8].

Rumination has been suggested to play an important role in the relationship between anger and forgiveness [34-36]. Research suggests that unforgiveness is associated with a greater tendency to ruminate rather than to resolve transgressions from others or to deal with the emotions directly [37].

To better understand the emotional barriers to forgiveness, Barber et al. [36], integrated both anger and rumination in a study. They proposed that there would be a negative association between anger rumination and both forgiveness of self and of others. This was based on their assertion that individuals who fail to forgive themselves or others are equally likely to maintain angry ruminations towards either themselves or the other person. Participants completed subscales from The Heartland Forgiveness Scale and also The Anger Rumination Scale to measure forgiveness and anger respectively. From the study a negative association between forgiveness and anger rumination was broadly supported. Negative relationships were reported between forgiveness of self and anger rumination variables and between forgiveness of others and all anger rumination variables. For forgiveness of self, anger memories were found to account for the unique variance in this aspect of forgiveness [36]. This suggests that individuals who experience difficulty in forgiving themselves also hold on to angry memories and therefore ruminate about these events from the past resulting in increased anger.

Growing evidence also supports a link between unforgiveness and adverse physical health outcomes, including alcohol and cigarette use and negative changes to aortic blood pressure and circulation [38,39].

Research by Lawler-Row, Karremans, Scott, Edlismatityahou, and Edwards (2008), sought to understand whether reductions in anger underlie the beneficial effects of forgiveness or whether it has beneficial health effects above and beyond the effects of decreasing anger. They conducted a study examining both forgiveness and anger in the context of recalling a past betrayal and measuring both physiological responses and self-reported health in participants. The study revealed that state and trait forgiveness were associated with all measures of health tested. Trait forgiveness accounted for less health variance than state forgiveness however. This finding lent weight to the assertion that forgiveness in a particular salient context is more predictive of health than a general perception of forgiveness. The study also revealed that feeling less hostile, angry or upset about an experience mediated the forgiveness-health pathway, suggesting that health consequences of lack of forgiveness may be increased by negative emotion.

Elsewhere, higher levels of forgiveness has been shown to predict better mental and physical health, which includes lower levels of anxiety, anger, stress and, depression [38,40]. Forgiveness has also been suggested to promote mental health indirectly through mediating variables such as social support, interpersonal functioning and health behaviour [32].

## Self-Forgiveness

With issues of self-criticism being implicated in the experiences of anger and depression in the postnatal period, self-forgiveness may be particularly relevant to understanding the relationship between anger and PND [15,19,41]. Definitions of self-forgiveness emphasise self-love and respect and a shift from self-estrangement to a being comfortable with the self [42]. Similarly self-forgiveness has also been described as a positive

attitudinal shift in the feelings, actions and beliefs about the self following a perceived transgression or wrongdoing committed by the self [43].

Underscoring the importance of such understanding and self-forgiveness, both Beck [20] and Ellis [44] argue that judgments of the self are damaging to mental health. This was highlighted clearly in research conducted by Maltby, Macaskill and Day [31] who discovered that a failure to forgive oneself was associated with psychopathology. In particular, failure to forgive oneself demonstrated a positive relationship with neuroticism, depression and anxiety. For women, failure to self-forgive was also specifically associated with psychoticism.

It is suggested that some individuals may also suffer from guilt and shame due to a lack of self-forgiveness for engaging in self-destructive behaviours [45]. This was demonstrated by Zechmesiter and Romero [41] who found that compared to individuals who had not forgiven themselves for an offence, those who had reached self-forgiveness were less likely to report guilt. This could be particularly important for women with PND, as guilt and shame are commonly reported by women experiencing PND [46]. Thus the high occurrence of these feelings in postnatal depression once again alludes to the potential difficulty for depressed mothers to self-forgive.

## Summary

Depression and anger have been consistently demonstrated to relate to one another, including in the context of the postnatal period. A possible driver of these emotions is self-deprecating criticism. Both of these negative affective states have implications for the mental health of mothers and their families. One factor suggested to influence the experience of depression and anger more generally has been forgiveness. To date there is little research exploring the role of forgiveness, and specifically self-forgiveness, in such anger and depression. The current study aimed to explore the relationships between depression, anger, and forgiveness in the postnatal period. It was hypothesised that:

1. The PND group will report with higher levels of anger in comparison to the non-PND group; with higher levels of self-directed anger in particular.
2. The PND group will display lower levels of forgiveness in comparison to the non-PND group. This group is expected to score lower on measures of self-forgiveness in particular.
3. Higher levels of anger are will predict lower levels of forgiveness.
4. Higher levels of anger and lower levels of forgiveness will predict the severity of PND symptoms.
5. The relationship between anger and depression will be mediated by forgiveness.

## Method

### Participants

This study included 93 female participants, ranging in age from 19 to 50 years ( $M = 33.67$ ,  $SD = 5.21$ ). Most of the

participants were married (67.3%), followed by living with a partner or in a defacto relationship (22.3%). Of the sample, 48 (51.6%) participants reported having received a diagnosis of a depressive disorder (PND or other). They had a child that was 3 years or younger, however, some also reported having older children. The women reported a mean of 1.80 ( $SD = 0.73$ ) children.

## Measures

The materials for the study involved a number of questionnaires to assess demographic variables, experience of anger, experience of postnatal depression, and forgiveness.

**Anger:** To measure experience of anger the State-Trait Anger Expression Inventory-2 (STAXI-2; Spielberger, [47]) was used. The STAXI-2 consists of 57 items, each scored on a 4-point Likert-type scale. The *STAXI-2* consists of six scales and an Anger Expression Index that provides an overall measure of total anger expression. The scales measure the intensity of anger as an emotional state (state anger), and the disposition to experience anger as a personality trait (trait anger). In addition, the anger expression and anger control scales assess the tendency to hold in or suppress angry feeling (anger expression-in), the expression of anger towards other people or objects in the environment (anger expression-out), the control of angry feelings by preventing the expression of anger toward other persons or objects in the environment (anger control-out) and the control of suppressed angry feelings by calming down or cooling off (anger control-in). The scale has been found to have good reliability and validity with internal consistencies (Cronbach's alpha) ranging from .73 to .93 and support for validity comes from relationships with other measures of anger and hostility [47].

**Heartland Forgiveness Scale (HFS):** The HFS consists of 18 items, each scored on a 7-point Likert-type scale, measuring an individual's dispositional forgiveness of self, others and situations beyond anyone's control [48]. This scale consists of the total HFS as well as three subscales; forgiveness of self, forgiveness of others and forgiveness of situations. This scale has demonstrated good internal consistency, with reported Cronbach's alpha co-efficient of .86 [48].

**Edinburgh Postnatal Depression Scale (EPND):** The EPND is a 10-item self-report scale developed to screen for postnatal depression [49]. Measuring items on a 4-point Likert-type scale, the EPND measures the presence and intensity of depressive symptoms in the last 7 days. The EPND also demonstrates good internal consistency, with reported Cronbach's alpha co-efficient of .87 [50].

## Procedure

Ethical approval for this study was obtained from the Cairnmillar Human Research Ethics Committee. Participants were recruited from two sources, either in person or online. Those recruited in person were from postnatal depression support groups and playgroups across Melbourne. A researcher attended these groups to advertise the study and paper based questionnaires were provided to those who volunteered to

participate. This included a plain language statement and a set of the measures. Reply paid envelopes were provided, and consent was implied by return of the questionnaire.

In terms of online recruitment, advertisements were placed with online support groups for PND, with a link provided to the study host site on SurveyMonkey. Consent for this group was implied by completion of the online measures.

## Results

Data analyses were conducted using Statistical Package for the Social Science (SPSS). Data cleaning identified the presence of several outliers, all such values were plausible responses and were deemed appropriate and included in the analyses. All variables demonstrated an acceptable skewness within absolute 3.0 and a kurtosis within absolute 8.0 [51]. Table 1 presents the descriptive statistics of all variables measured for both the depression group and group with no depressive diagnosis.

As shown in Table 1, those diagnosed with a depressive disorder reported higher levels of depression than those who had not previously received a diagnosis of a depressive disorder.

### Group differences on Anger

To assess differences in levels of anger between the group with a depression diagnosis and the non depressed group a one-way MANOVA was performed. Four dependent variables were used including state anger, trait anger, anger expression (in) and anger expression (out). A statistically significant difference between groups was found for the combined dependent variables (Wilks'  $\Lambda = .82$ ,  $F(4, 88) = 4.69$ ,  $p < .002$ ,  $\eta^2 = .18$ ). To further explore the interaction between diagnosis and levels of anger, a series of t-tests were conducted (see Table 1).

The results of these t-tests demonstrated that those with

PND scored higher on the measures of state anger, trait anger and anger expression in. Based on Cohen's  $d$ , these were found to represent moderate-large effect sizes for state anger and anger expression in, and a moderate effect size for trait anger.

### Group differences on Forgiveness

To assess group differences amongst forgiveness variables a one-way MANOVA was performed. Three dependant variables were used including forgiveness of self, forgiveness of others and forgiveness related to situations. A difference between the two groups was found (Wilks'  $\Lambda = .90$ ,  $F(3, 89) = 3.20$ ,  $p < .05$ ,  $\eta^2 = .097$ ). To further explore the interaction between diagnosis and levels of forgiveness, a series of t-tests were conducted (see Table 1).

The t-tests revealed that the group with a depression diagnosis were less forgiving on all of the measures. The difference between the groups represented moderate effect sizes.

### Anger and Forgiveness

A multiple regression analysis was conducted to assess whether higher levels of anger predicted lower levels of forgiveness. The predictors included total scores on trait anger, state anger, anger expression (out), anger expression (in), anger control (out) and anger control (in), while the criterion variable was total scores on the HFS. All of the Anger scales were correlated with HFS, and with each other. The correlations did not indicate any issues with multicollinearity, and were all in the expected directions. The regression model indicated that 57% of the variance in forgiveness scores could be accounted for by the combination of anger measures ( $F(6, 86) = 19.154$ ,  $p < .001$ ). The anger expression-in scale demonstrated the only unique contribution to this relationship, and this was in a negative direction (see Table 2).

**Table 1.** Descriptive Statistics of Anger, Forgiveness and PND Variables among both PND/Depression and No Diagnosis Groups

	Depression Diagnosis		No Diagnosis		<i>p</i>	Cohen's D
	<i>N</i>	48	<i>N</i>	45		
	<i>M</i>	(SD)	<i>M</i>	(SD)		
<b>STAXI</b>						
State Anger Total	29.79	7.97	24.84	5.08	.001	.74
-State Anger Feeling Angry	11.31	2.64	9.91	2.39	.009	.56
-State Anger Verbal	11.19	3.61	9.42	2.49	.008	.57
-State Anger Physical	7.29	2.71	5.51	1.22	.000	.85
Trait Anger Total	18.83	6.25	16.00	3.87	.011	.54
-Trait Anger Angry Temperament	7.06	2.93	6.18	2.06	.098	.35
-Trait Anger Angry Reaction	8.42	2.91	7.11	2.26	.018	.50
-Anger Expression Out	15.52	4.20	14.18	2.64	.070	.38
-Anger Expression In	19.42	4.19	16.51	3.75	.001	.73
-Anger Control Out	21.77	5.56	22.58	4.19	.433	.16
-Anger Control In	21.17	5.86	21.13	5.14	.977	.01
<b>HFS</b>						
Forgiveness Total	77.79	19.17	88.69	15.01	.003	.63
Forgiveness Self	24.71	7.89	28.20	7.20	.029	.46
Forgiveness Others	27.60	7.72	30.58	5.12	.032	.45
Forgiveness Situation	25.48	7.71	29.91	6.54	.004	.62
Edinburgh PND Score	14.48	4.99	9.18	5.29	.000	1.03

**Anger and Depression**

A second regression was conducted to determine the effect of anger on depression scores. Correlations indicated weak-moderate relationships between scores on the EPND and the various anger scales, with experience of anger scales being positively correlated with the EPND and control of anger scales being negatively related to it. The model indicated that 54% of the variance in EPND scores could be accounted for by the combination of anger measures ( $F(6, 86) = 16.603, p < .001$ ). The anger expression-in scale demonstrated the only unique contribution to this relationship, and this was in a positive direction (see Table 3).

**Forgiveness and Depression**

The relationship between the EPND and the subscales of the HFS were similarly examined through multiple regression. The correlation matrix did not indicate any issues with

multicollinearity. The model indicated that 40% of the variance in EPND scores could be accounted for by the HFS ( $F(3, 89) = 19.745, p < .001$ ), with high rates of forgiveness predicting lower levels of depression. The forgive situation scale demonstrated the only unique contribution to this relationship (see Table 4).

**Anger, Forgiveness and Postnatal Depression**

Based on the premise that forgiveness may reduce the impact of anger on postnatal depression, a set of mediation analyses were performed. As the STAXI does not provide an overall score for anger difficulties the Anger EI subscale was chosen to represent anger difficulties. This was based on its ability to independently explain the majority of the variance between the STAXI and the EPND scale. For forgiveness, the overall HFS scale score was used. The results are shown in Figure 1.

All conditions of the mediation model were met. The mediation demonstrated that forgiveness acted as a partial

**Table 2.** Regression analysis between forgiveness and anger

	HFS	Trait Anger	State Anger	Anger Exp (out)	Anger Exp (in)	Anger Control (out)	B	$\beta$	sr <sup>2</sup>
Trait Anger	-.30**						.53	.21	3.8%
State Anger	-.45***	.78***					-.67	-.20	2.2%
Anger Exp (out)	-.28**	.57***	.72***				-.07	-.01	0.0%
Anger Exp (in)	-.69***	.42***	.49***	.29**			-2.58***	-.60	37.8%
Anger Con (out)	.36***	-.42***	-.47***	-.34***	-.21*		.29	.08	0.6%
Anger Con (in)	.46***	-.29**	-.37***	-.19*	-.30**	.72***	.67	.20	4.1%
							R <sup>2</sup> = .572		
							Adjusted R <sup>2</sup> = .542		

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Unique variance summed: .388

Shared variance: .184

**Table 3.** Regression analysis between anger and EPND

	EPND	Trait Anger	State Anger	Anger Exp (out)	Anger Exp (in)	Anger Control (out)	B	$\beta$	sr <sup>2</sup>
Trait Anger	.54***						.18	.23	4.1%
State Anger	.54***	.78***					-.08	-.08	0.3%
Anger Exp (out)	.46***	.57***	.72***				.29	.18	3.2%
Anger Exp (in)	.64***	.42***	.49***	.29**			.69***	.50	28.1%
Anger Con (out)	-.37***	-.42***	-.47***	-.35***	-.21*		-.21	-.18	2.8%
Anger Con (in)	-.30**	-.29**	-.37***	-.19*	-.30**	.72***	.05	.05	0.2%
							R <sup>2</sup> = .537		
							Adjusted R <sup>2</sup> = .504		

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Unique variance summed: .388

Shared variance: .149

**Table 4.** Regression analysis between forgiveness and EPND

	EPND	Forgive Other	Forgive Situation	B	B	sr <sup>2</sup>
Forgive self	-.52***			-.115	-.154	1.9%
Forgive Other	-.34***	.32***		-.052	-.061	0.5%
Forgive Situation	-.62***	.72***	.48***	-.371***	-.481	13.6%
				R <sup>2</sup> = .400		
				Adjusted R <sup>2</sup> = .379		

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Unique variance summed: .159

Shared variance: .241

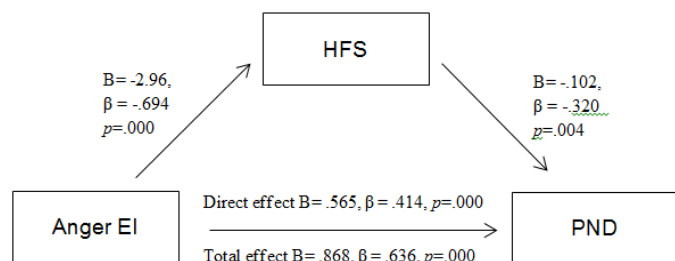


Figure 1. Partial mediation between Anger EI, forgiveness and PND.

mediator for the impact of Anger EI on EPND ( $F(2, 90) = 38.045$ ,  $p < .000$ ). That is, inhibited expression of anger has a direct effect on depression, but also has an indirect influence on depression through its relationship with forgiveness.

## Discussion

The present study aimed to explore the association between anger and forgiveness and to understand the relationships between these variables and the experience of depression in the postnatal period. Results confirmed the hypothesis that anger would be associated with PND, as measured by the EPND. They also supported the hypothesis that those with a depressive diagnosis would demonstrate higher levels of anger and lower levels of forgiveness, including on the self-forgiveness scale. The expectation that higher levels of anger would predict lower levels of forgiveness was similarly supported, with a negative relationship discovered between levels of anger and total levels of forgiveness. Forgiveness was then found to be a partial mediator for the relationship between anger and depression.

These results support previous research findings that PND is associated with elevated levels of anger [12,13,16]. Replicating the findings of other studies, elevated levels of state and trait anger were discovered in the depression group [13]. Both state anger, which refers to the intensity of an individual's angry feelings at the time of a situation, and trait anger, which is defined as an individual's general predisposition to becoming angry were higher overall in the depression group than in those who did not report having a diagnosis.

### Anger and Postnatal Depression

Research has explored the possibility of trait anger acting as a mediator in the development of a depressive disorder [28]. For example, Chioqueta and Stiles [27] explored the relationship between personality traits and depression. They discovered that depressive symptoms were positively predicted by the dimensions of neuroticism and openness, and by the angry hostility facet of neuroticism. Elevated levels of trait anger demonstrated by the depression group in the current study lend support to the suggestion that personality traits have an effect on the development of depressive disorders. Consistent with the study by Bruno et al. [12], the results of the current study suggest that a personality type featuring high levels of trait anger may predispose women to developing PND.

With regard to momentary experiences of anger and anger expressed in, the findings indicate that mothers with a depression diagnosis are more likely to keep anger in and not

express themselves. This could be explained by a tendency for self-directed anger based on self-criticism, perhaps as a result of predisposing personality traits. This is consistent with previous research [12]. It is also in line with literature that has asserted that pregnancy and the postpartum period are times when issues of identity and self-esteem are likely to arise and that high self-criticism during pregnancy predicts depressive symptoms after childbirth [19]. Such emotional distress and negative self-concepts have been shown to be positively related to a lack of assertiveness for women in other contexts [52,53].

A tendency to hold on to and suppress anger could thereby contribute to issues with social connection, social support, and a pre-occupation on negative ruminations that have a deleterious effect on mood state. This provides another possible reason for the degeneration of social support reported for women experiencing PND [18,19].

### Forgiveness and Postnatal Depression

Self-criticism is also thought to have significant implications for forgiveness in mothers [22,23]. The results of this study supported such an idea, as it was found that women with higher levels of depression displayed lower levels of forgiveness in comparison to controls, including for self-forgiveness. This is consistent with previous qualitative research on PND that has shown that women who develop the disorder tend to struggle with the discrepancy between their ideal expectations of themselves as a mother and the reality of being a mother [15,22]. Beggren-Clive's [22] study further supported this notion with reports from women who claimed that adjusting unrealistic expectations of themselves as a mother had been a significant factor in how they had overcome constraints they had imposed on themselves.

The finding that all three forms of forgiveness were negatively associated with reported levels of depression on the EPND could also indicate that a lack of forgiveness may account for other emotional difficulties, such as shame and guilt commonly experienced with PND. For instance, forgiveness of a situation may reduce shame over less than ideal parenting circumstances. This is consistent with Zechmesiter and Romero's [41] claims. It has also been claimed that shame is likely to promote self-destructive intentions, and to thereby be associated with a lack of self-forgiveness as individuals become more likely to view offences or transgressions as a reflection of their self-worth [45]. This assertion has been furthered by research examining help-seeking barriers for managing PND that identified shame and stigma as significant barriers in a woman's decision to seek or accept help [54].

Thus the ability to forgive may be an important factor for reconciling unrealistic expectations relating to parenting. Furthermore, the ability to forgive may act as a protective factor against PND, or may at least assist with promoting help seeking behaviour if the condition does arise.

### Anger and Forgiveness

The current study discovered that overall higher levels of anger were likely to predict lower levels of forgiveness.

Furthermore, approximately 53.7% of the variance in forgiveness scores was accounted for by the anger variables. A possible explanation for this is that anger acts as an inhibitory variable and a significant emotional barrier to forgiveness [36,41]. This would explain the higher experience of trait anger and lower levels of forgiveness found in the depression group. The finding that the depressed group were less inclined to report forgiveness across the three domains of self, other and situation is in line with Vliegen & Luyten's [13] earlier research that showed women with PND were more likely to report anger at both themselves and others.

In the current study a further distinction on this relationship was shown, with women who tended to hold anger in, or suppress anger, shown to be more likely to report lower levels of overall forgiveness. While gender differences in the expression of anger have not been consistently discovered in research, this study lends support to the theory that women may experience difficulty in expressing anger due to incompatibility with the feminine gender role [55]. Inward directed anger has also been linked to the experience of shame, suggesting that this emotion and a heavy focus on the self may contribute to a reduction in overall forgiveness, and perhaps self-forgiveness more specifically [56].

This link between anger and forgiveness has been proposed to be based on rumination. Theories of rumination propose that those who experience more frequent and salient discrepancies between their ideal goal outcomes and actual outcomes will experience more rumination [57]. This is thought to occur as a result of perfectionism which leads to excessive criticism and high personal standards, which increases the probability of failure perceptions and anger, which could be directed at self or others [58]. Rumination is then thought to result in psychological distress, including emotions such as anger [36]. Thus an increase in forgiveness may lead to a resolution of perfectionistic expectations, a reduction in rumination, and a reduction in anger.

### **Anger, Forgiveness and Postnatal Depression**

The mediating effect of forgiveness on the relationship between anger and PND supports the hypothesis that there is an overlap in the cognitive patterns contributing to each of these forms of emotional distress (Vliegen & Luyten, 2008), and that the ability to forgive can reduce the contribution of anger to PND [13]. The ability to forgive may help to reconcile differences between the idealised expectations of motherhood and the actual experience that appear to result in self-critical views and rumination [15,21-23]. Thus being able to forgive oneself may stop self-critical cycles and rumination associated with anger from becoming prolonged and deteriorating the individuals sense of self-worth, which would otherwise contribute to the experience of depressed mood.

The direct effect of anger on depression in the postnatal context indicates that there are other factors that contribute to this relationship beyond forgiveness. Given that the anger scale used was the expression-in scale, which reflects a tendency to keep the experience of anger to oneself and to not let other

know about the anger one experiences, this may reflect issues with assertiveness and/or with emotional suppression. As noted previously, a lack of assertiveness has been associated with a negative self-construct, and this could result in reduced social support and increased parenting pressures that may worsen depression [53]. Emotional suppression has similarly been shown to mediate the relationship between unhealthy perfectionism and depression [59]. Another factor to contribute to this relationship could be the impact of self-worth perceptions on self-efficacy, as these constructs tend to be highly correlated [60]. It is therefore possible that a negative sense of self-efficacy may also fuel ruminations that contribute to the relationship between anger and depression in the postnatal context [61-64].

### **Limitations**

The current study was limited in several ways. The study was of a cross-sectional design and as a result the analyses that were undertaken were unable to determine causal relationships. The eligibility criteria for the study were also quite general, opening the possibility that confounding variables may have influenced results (e.g. age of child, time since diagnosis, number of children, relationship status, etc.) [65-70]. Thus it is possible that in the face of parenting demands at differing developmental ages mothers could demonstrate differing anger, forgiveness and depression profiles. There was no control for possible treatment that some participants may have received relating to their depression diagnosis either [71-74].

### **Future Research**

Based on the suggestion that perfectionism and rumination are linked to anger and forgiveness, it would be worth investigating the role it may have on these constructs in the context of PND. In addition, while current results have identified the way in which PND sufferers are more likely to express anger inwards, further research would be useful in understanding the role of self-criticism, self-efficacy, and assertiveness in motherhood and whether these factors contribute to the experience of anger, and its relationship to depression. Examination of the role of social expectations on anger and forgiveness in relation to PND would be worthwhile as well.

### **Conclusion**

The current study adds to the literature regarding the interplay between anger, forgiveness and depression in the postnatal period. As predicted, elevated levels of anger and lower levels of forgiveness were discovered in recent mothers with a depression diagnosis. These factors were also found to predict the severity of depressive symptoms. The study showed that forgiveness partially mediates the relationship between anger and depression as well. It is important for research to continue to build on these findings and gain a comprehensive understanding of the many factors contributing to the development and maintenance of depression for mothers in the postnatal period. This will allow for the provision of more effective interventions for this population, improving the wellbeing of these women and their families.

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