



TIMING OF RETURN TO WORK AFTER CHILDBIRTH AND POSTPARTUM DEPRESSIVE SYMPTOMS: THE ROLE OF JOB TYPE AND PERCEIVED SOCIAL SUPPORT

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ABSTRACT

Returning to paid employment after childbirth is a normative transition for most mothers, yet its timing may carry implications for maternal mental health. This study examined the association between timing of return to work and postpartum depressive symptoms in 100 employed mothers, and tested whether perceived social support and job type were related to symptom severity. Participants completed the Edinburgh Postnatal Depression Scale (EPDS) and the Multidimensional Scale of Perceived Social Support (MSPSS) and reported weeks postpartum at return to work. Mothers returning early (≤ 12 weeks, $n = 55$) reported higher EPDS scores ($M = 7.38$, $SD = 3.48$) than those returning later (> 12 weeks, $n = 45$; $M = 5.09$, $SD = 3.37$), $t(97.66) = 3.33$, $p = .001$, $d = 0.67$. Weeks until return correlated negatively with EPDS scores, $r(98) = -.33$, $p = .001$, and remained a significant predictor in a regression controlling for age, parity, breastfeeding status, and delivery mode, $b = -0.17$, $p < .001$. Contrary to expectations, perceived social support was unrelated to depressive symptoms, $r(98) = -.02$, $p = .883$. Symptoms differed by job type, $F(4, 95) = 2.87$, $p = .027$, with healthcare workers scoring lowest. An exploratory moderation analysis suggested that job type shaped the strength of the return-to-work association, but the interaction block did not reach conventional significance, $F(4, 90) = 2.32$, $p = .063$, and is reported as hypothesis-generating. Findings suggest earlier return is associated with greater depressive symptomatology independent of several demographic and obstetric factors. Implications for parental leave policy are discussed.



KEYWORDS: postpartum depression, return to work, maternity leave, social support, EPDS.

INTRODUCTION:

Postpartum depression (PPD) is one of the most common complications of childbearing, with prevalence estimates in high-income countries generally ranging from 13% to 19% of mothers in the first six months after delivery (O'Hara & McCabe, 2013). Beyond its direct impact on maternal wellbeing, PPD has been linked to disruptions in mother-infant bonding, breastfeeding difficulties, and adverse outcomes for children's cognitive and emotional development (O'Hara & McCabe, 2013). Identifying modifiable risk factors that predict elevated depressive symptoms in the early postpartum period is therefore a priority for both clinical practice and family-friendly workplace policy.

One factor that has received growing attention is the timing of a mother's return to paid employment after childbirth. In the United States, the Family and Medical Leave Act guarantees only 12 weeks of unpaid leave to eligible employees, and many mothers return to work considerably earlier for

financial or occupational reasons. Dagher, McGovern, and Dowd (2014) followed a cohort of employed mothers across the first postpartum year and found that the relationship between leave duration and depressive symptoms was curvilinear, with shorter leave associated with elevated depressive symptoms, an effect that was most pronounced among mothers with more complicated deliveries or fewer workplace resources. Systematic reviews of maternity leave policy have likewise reported that shorter or unpaid leave is associated with poorer postpartum mental health, although the evidence base is heterogeneous in design and measurement (Hidalgo-Padilla et al., 2023; Kornfeind & Sipsma, 2018; Shumbusho et al., 2020). These findings suggest that a longer period of leave before returning to work may allow more time for physical recovery, infant bonding, and adjustment to the parenting role, potentially reducing depressive symptomatology.

A separate line of research has emphasized the protective role of perceived social support in buffering the psychological impact of stressful life transitions, including childbirth (Beck, 2001). The stress-buffering hypothesis proposes that support from family, friends, and a significant other reduces the psychological impact of stressors by providing tangible assistance and enhancing coping resources (Cohen & Wills, 1985). Applied to the postpartum period, mothers who perceive greater support from their partner or extended family may be better equipped to manage the demands of early parenting alongside employment, potentially weakening the association between an early return to work and depressive symptoms.

Occupational context may also shape postpartum adjustment. Jobs that differ in scheduling flexibility, physical demands, and workplace culture could plausibly be associated with different levels of postpartum strain, although this has been studied less systematically than leave duration or social support (Greenhaus & Beutell, 1985; Guendelman et al., 2009). Similarly, obstetric and infant-feeding factors, such as mode of delivery and breastfeeding status, have been proposed as correlates of postpartum mood, though findings in the broader literature have been mixed (Alimi et al., 2022; Sun et al., 2021; Xia et al., 2022).

Occupational context may not only be associated with depressive symptoms directly but may also shape how strongly the timing of return to work matters for maternal mood. Jobs differ in schedule flexibility, physical demands, continuity of role responsibilities, and the extent to which colleagues and supervisors are accustomed to accommodating family needs. It is plausible that in occupations offering greater flexibility or a culture more attuned to caregiving demands, an early return to work carries less psychological cost than in occupations with rigid schedules or high performance pressure. If so, job type would not simply predict depressive symptoms on its own but would moderate — that is, strengthen or weaken — the association between return-to-work timing and depressive symptoms.

The present study used a cross-sectional dataset of 100 employed mothers to examine the association between the timing of return to work and postpartum depressive symptoms, assessed using the Edinburgh Postnatal Depression Scale (EPDS; Cox, Holden, & Sagovsky, 1987), and to test whether perceived social support, assessed using the Multidimensional Scale of Perceived Social Support (MSPSS; Zimet et al., 1988), was associated with depressive symptoms. The study also explored whether depressive symptoms varied by job type, delivery mode, and breastfeeding status. Based on the reviewed literature, the following hypotheses were tested:

Hypothesis 1 (H1). Mothers who return to work early (≤ 12 weeks postpartum) will report significantly higher EPDS scores than mothers who return to work later (> 12 weeks postpartum).

Hypothesis 2 (H2). Number of weeks postpartum at return to work will be significantly negatively correlated with EPDS scores, such that a longer period before returning to work is associated with fewer depressive symptoms.

Hypothesis 3 (H3). Perceived social support (MSPSS total score) will be significantly negatively correlated with EPDS scores.

Hypothesis 4 (H4, exploratory). Depressive symptoms will differ significantly by job type, delivery mode, and breastfeeding status.

Hypothesis 5 (H5, exploratory). Job type will moderate the association between return-to-work timing and depressive symptoms, such that the negative association between weeks until return and EPDS scores will be stronger in some occupational groups than in others.

METHOD

Participants

Participants were 100 employed mothers ($N = 100$) who had returned to paid work following the birth of a child. All data were collected directly from participants by the research team for the purposes of the present study; no responses were simulated, imputed, or drawn from a secondary source. Mothers ranged in age from 21 to 37 years ($M = 28.94$, $SD = 3.74$) and reported between one and three children ($M = 1.71$, $SD = 0.76$). Delivery mode was vaginal for 59% of the sample and cesarean for 41%. At the time of assessment, 60% of mothers reported currently breastfeeding. Job type was distributed across corporate/office work (33%), healthcare (19%), education (18%), service industry (18%), and self-employment (12%). Reported household support arrangements were partner-only support (45%), support from parents or extended family (37%), and no partner support (18%). Table 1 presents full sample characteristics. Because the sample was restricted to mothers who had already returned to paid work at the time of assessment, mothers who were unable to return — for example, because of more severe depressive symptoms, extended unpaid leave, or job loss — are not represented in this dataset; this selection criterion may attenuate the observed association relative to the broader population of postpartum mothers.

MEASURES

Postpartum Depressive Symptoms

Depressive symptoms were measured with the Edinburgh Postnatal Depression Scale (EPDS; Cox et al., 1987), a widely used 10-item self-report screening measure in which mothers rate the frequency of depressive symptoms over the preceding seven days on a 4-point scale. Total scores range from 0 to 30, with higher scores indicating greater depressive symptomatology. The EPDS is a screening instrument rather than a diagnostic tool; elevated scores indicate a higher likelihood of clinically significant depressive symptoms but do not constitute a clinical diagnosis, which would require structured clinical interview. Consistent with common screening conventions, a score of 13 or above was treated as indicating probable depression (Levis et al., 2020); elevated scores do not correspond to a DSM-5 diagnosis of major depressive disorder (American Psychiatric Association, 2013). Internal consistency in the present sample was [INSERT Cronbach's α]. In the present sample, EPDS total scores ranged from 0 to 15 ($M = 6.35$, $SD = 3.60$), and 4% of mothers met the probable-depression threshold.

Perceived Social Support

Perceived social support was measured with the Multidimensional Scale of Perceived Social Support (MSPSS; Zimet et al., 1988), a 12-item self-report measure assessing perceived support from family, friends, and a significant other. Total scores in the present dataset ranged from 41 to 75 ($M = 57.02$, $SD = 7.28$), out of a possible range of 12 to 84, with higher scores reflecting greater perceived support. Internal consistency in the present sample was [INSERT Cronbach's α].

Return-to-Work Timing

Mothers reported the number of weeks postpartum at which they returned to paid employment (range = 4 to 30 weeks, $M = 14.01$, $SD = 7.50$). For group-comparison analyses, mothers were classified into an early-return group (≤ 12 weeks postpartum, $n = 55$) and a late-return group (> 12 weeks postpartum, $n = 45$), consistent with the 12-week unpaid leave period specified under U.S. federal law.

Additional Variables

Additional variables included maternal age, number of children, delivery mode (vaginal vs. cesarean), current breastfeeding status (yes/no), job type (five categories), and household support arrangement (three categories).

Procedure

This study used a cross-sectional, correlational design in which each participant completed a single wave of self-report measures. The EPDS, the MSPSS, and the demographic and employment items were administered at one postpartum assessment point. Participants were recruited from [INSERT RECRUITMENT SETTING] between [INSERT DATA COLLECTION DATES] using [INSERT SAMPLING METHOD]. All participants provided [INSERT written/verbal] informed consent prior to participation. The dataset was analysed in de-identified form, with participant identifiers replaced by numeric codes (M001–M100).

DATA ANALYSIS

All analyses were conducted in Python (pandas, SciPy, and statsmodels). Prior to hypothesis testing, the dataset was screened for out-of-range values, duplicate records, and missing responses. Complete data were available for all 100 participants on every study variable, so all analyses were conducted on the full sample and no imputation or case deletion was required. Continuous variables were inspected for normality and for influential cases prior to the regression analyses. Descriptive statistics were computed for all study variables. H1 was tested using a Welch independent-samples t-test comparing EPDS scores between the early- and late-return groups, with Cohen's d calculated as a measure of effect size. H2 and H3 were tested using Pearson product-moment correlations. A multiple linear regression predicting EPDS total scores from return-to-work weeks, MSPSS total score, age, number of children, breastfeeding status, and delivery mode was conducted to evaluate the association between return-to-work timing and depressive symptoms while statistically controlling for other variables. H4 was tested using a one-way ANOVA comparing EPDS scores across the five job-type categories, with Tukey HSD post hoc comparisons conducted following a significant omnibus test, and Welch independent-samples t-tests comparing EPDS scores by delivery mode and by breastfeeding status. H5 was tested with a moderated multiple regression predicting EPDS total score from return-to-work weeks, job type (dummy-coded, corporate/office as reference), and their interaction terms; simple slopes for each job type were derived from the interaction model, and the interaction block was evaluated with an incremental F-test comparing the interaction model to a main-effects-only model. A chi-square test of independence examined whether the proportion of mothers meeting the probable-depression threshold differed between return-to-work groups; because expected cell counts fell below five, this test is reported for completeness only and should be interpreted with caution. The alpha level for all tests was set at .05.

Results

Descriptive statistics for all study variables are presented in Table 1.

Table 1
Sample Characteristics (N = 100)

Variable	n / M	% / SD
Age (years)	28.94	3.74
Number of children	1.71	0.76
Return to work (weeks)	14.01	7.50
EPDS total score	6.35	3.60
MSPSS total score	57.02	7.28

Variable	n / M	% / SD
Delivery mode: Vaginal	59	59.0%
Delivery mode: Cesarean	41	41.0%
Breastfeeding: Yes	60	60.0%
Breastfeeding: No	40	40.0%
Job type: Corporate/Office	33	33.0%
Job type: Healthcare	19	19.0%
Job type: Education	18	18.0%
Job type: Service Industry	18	18.0%
Job type: Self-employed	12	12.0%
Household support: Partner only	45	45.0%
Household support: Parents/Extended family	37	37.0%
Household support: No partner support	18	18.0%
Return group: Early (≤ 12 weeks)	55	55.0%
Return group: Late (> 12 weeks)	45	45.0%
Probable depression (EPDS ≥ 13)	4	4.0%

Note. EPDS = Edinburgh Postnatal Depression Scale; MSPSS = Multidimensional Scale of Perceived Social Support.

Return-to-Work Timing and Depressive Symptoms (H1 and H2)

Consistent with H1, a Welch independent-samples t-test indicated that mothers in the early-return group (≤ 12 weeks) reported significantly higher EPDS scores ($M = 7.38$, $SD = 3.48$) than mothers in the late-return group (> 12 weeks; $M = 5.09$, $SD = 3.37$), $t(97.66) = 3.33$, $p = .001$. The effect size was moderate to large, Cohen's $d = 0.67$. The two groups did not differ significantly in perceived social support, $t(97.98) = -0.69$, $p = .490$ (Table 2).

Table 2
EPDS and MSPSS Scores by Return-to-Work Group

Group	n	M	SD
EPDS – Early return	55	7.38	3.48
EPDS – Late return	45	5.09	3.37
MSPSS – Early return	55	56.56	7.38
MSPSS – Late return	45	57.58	7.21

Consistent with H2, weeks until return to work was significantly negatively correlated with EPDS scores when treated continuously, $r(98) = -.33$, $p = .001$, indicating that a longer interval before returning to work was associated with fewer depressive symptoms. Bivariate correlations among the continuous study variables are presented in Table 3.

Table 3
Bivariate Correlations Among Continuous Study Variables

Variable	1	2	3	4	5
1. Age	—				
2. Number of children	.14	—			
3. Return to work (weeks)	-.06	.12	—		
4. EPDS total	.05	.01	-.33**	—	
5. MSPSS total	-.10	-.08	.08	-.02	—

Note. EPDS = Edinburgh Postnatal Depression Scale; MSPSS = Multidimensional Scale of Perceived Social Support. ** $p < .01$.

Perceived Social Support (H3)

Contrary to H3, perceived social support was not significantly correlated with depressive symptoms, $r(98) = -.02$, $p = .883$ (Table 3). Because the hypothesized main effect of MSPSS on EPDS was not observed, a moderation analysis testing MSPSS as a buffer of the return-to-work/EPDS association was not pursued, as an interaction term would have been difficult to interpret in the absence of a supported main effect.

Multiple Regression Predicting Depressive Symptoms

To evaluate whether return-to-work timing remained associated with depressive symptoms after accounting for other variables, a multiple linear regression was conducted with EPDS total score as the outcome and return-to-work weeks, MSPSS total score, age, number of children, breastfeeding status, and delivery mode as predictors. The overall model was significant, $F(6, 93) = 2.42$, $p = .032$, $R^2 = .14$, adjusted $R^2 = .08$. As shown in Table 4, return-to-work weeks remained the only statistically significant predictor, $b = -0.17$, $SE = 0.05$, $t = -3.58$, $p < .001$, such that each additional week before returning to work was associated with a decrease of approximately 0.17 points on the EPDS, holding other variables constant. MSPSS, age, number of children, breastfeeding status, and delivery mode were not significant predictors.

Table 4
Multiple Regression Predicting EPDS Total Score

Predictor	b	SE	t	p
Intercept	7.94	4.16	1.91	.059
Return to work (weeks)	-0.17	0.05	-3.58	< .001
MSPSS total	0.01	0.05	0.19	.854
Age	0.02	0.10	0.19	.853
Number of children	0.19	0.47	0.40	.687
Breastfeeding (yes = 1)	-1.04	0.71	-1.47	.145
Cesarean delivery (yes = 1)	0.12	0.71	0.16	.871

Note. $N = 100$. $R^2 = .14$, adjusted $R^2 = .08$, $F(6, 93) = 2.42$, $p = .032$.

Job Type, Delivery Mode, and Breastfeeding (H4)

A one-way ANOVA indicated that EPDS scores differed significantly across job type, $F(4, 95) = 2.87$, $p = .027$ (Table 5). Tukey HSD post hoc comparisons indicated that mothers working in healthcare reported significantly lower EPDS scores than mothers in corporate/office roles (mean difference = -3.15, $p = .018$); no other pairwise comparisons reached significance.

Table 5
EPDS Total Score by Job Type

Job type	n	M	SD
Healthcare	19	4.00	3.40
Self-employed	12	6.25	3.55
Education	18	6.67	2.66
Service Industry	18	7.11	3.74
Corporate/Office	33	7.15	3.72

EPDS scores did not differ significantly by delivery mode (vaginal $M = 6.37$, $SD = 3.62$; cesarean $M = 6.32$, $SD = 3.62$) [VERIFY SDs AGAINST OUTPUT], $t(83.34) = 0.08$, $p = .939$, or by breastfeeding status (breastfeeding $M = 6.00$; not breastfeeding $M = 6.88$), $t(82.80) = -1.14$, $p = .257$. Age and number of children were also unrelated to EPDS scores (Table 3). A chi-square test of independence comparing the proportion of mothers meeting the probable-depression threshold ($EPDS \geq 13$) across return-to-work groups was not significant, $\chi^2(1, N = 100) = 0.10$, $p = .758$; this test was likely underpowered given that only 4 of the 100 mothers met the probable-depression threshold.

Job Type as a Moderator of Return-to-Work Timing (H5)

To test H5, a moderated multiple regression predicted EPDS total score from return-to-work weeks, job type, and their interaction (Table 6). The overall model was significant, $F(9, 90) = 3.81$, $p < .001$, $R^2 = .28$, adjusted $R^2 = .20$. An incremental F-test comparing this interaction model to a main-effects-only model showed that the interaction block did not reach conventional significance, $F(4, 90) = 2.32$, $p = .063$. At the level of individual coefficients, two interaction terms were significant prior to correction for multiple comparisons: the Weeks $\times$ Healthcare interaction, $b = 0.24$, $p = .042$, and the Weeks $\times$ Service Industry interaction, $b = 0.31$, $p = .016$. Under a Bonferroni correction for the four interaction terms tested ($\alpha = .0125$), neither term remained significant. H5 was formulated after inspection of the data rather than specified in advance, and was evaluated alongside other exploratory analyses (household support type, cumulative-risk grouping, and a curvilinear return-timing term) that did not reach significance and are not reported in detail. These results are therefore treated as hypothesis-generating throughout.

Table 6
Moderated Regression: Job Type $\times$ Return-to-Work Weeks Predicting EPDS Total Score

Predictor	b	SE	t	p
Intercept (Corporate/Office at 0 weeks)	11.09	1.17	9.47	< .001
Return to work (weeks)	-0.27	0.07	-3.83	< .001
Education	-3.11	2.07	-1.51	.136
Healthcare	-6.55	2.01	-3.27	.002
Self-employed	-0.52	2.41	-0.21	.831
Service Industry	-4.48	2.00	-2.24	.028

Predictor	b	SE	t	p
Weeks × Education	0.16	0.15	1.06	.291
Weeks × Healthcare	0.24	0.12	2.07	.042
Weeks × Self-employed	-0.04	0.15	-0.24	.807
Weeks × Service Industry	0.31	0.13	2.45	.016

Note. N = 100. Reference category for job type = Corporate/Office. $R^2 = .28$, adjusted $R^2 = .20$, $F(9, 90) = 3.81$, $p < .001$.

Simple slopes derived from the interaction model (Table 7) illustrate the pattern: among corporate/office mothers, each additional week before returning to work was associated with a 0.27-point decrease in EPDS score, and the slope was similarly steep for self-employed mothers (-0.31) and, to a lesser extent, education (-0.11). Among healthcare mothers, the slope was nearly flat (-0.03), and among service-industry mothers, the slope was slightly positive (0.04), indicating that the timing of return to work was essentially unrelated to depressive symptoms in these two groups. In other words, the protective association of a longer pre-return interval was concentrated among corporate/office and self-employed mothers and was largely absent among healthcare and service-industry mothers.

Table 7
Simple Slopes of Return-to-Work Weeks Predicting EPDS Total Score, by Job Type

Job type	Simple slope (b)
Self-employed	-0.31
Corporate/Office (reference)	-0.27
Education	-0.11
Healthcare	-0.03
Service Industry	0.04

DISCUSSION

This study examined whether the timing of return to work after childbirth was associated with postpartum depressive symptoms in a sample of 100 employed mothers, and whether perceived social support and job type were related to symptom severity. Consistent with H1 and H2, mothers who returned to work earlier reported significantly higher depressive symptoms than mothers who returned later, and this pattern held whether return-to-work timing was treated as a categorical group (early vs. late) or as a continuous variable. Notably, the association between return-to-work timing and depressive symptoms remained significant in a multiple regression that controlled for maternal age, parity, breastfeeding status, and delivery mode, suggesting that the relationship was not simply attributable to these other factors. This pattern is broadly consistent with prior research linking shorter maternity leave to elevated postpartum depressive symptoms (Dagher et al., 2014), and is consistent with the interpretation that additional time away from work in the early postpartum period may support physical recovery and psychological adjustment to parenting. A causal reading is only one of at least two plausible interpretations, however. Because return-to-work timing and depressive symptoms were measured at the same cross-sectional assessment, it is equally consistent with these results that mothers experiencing more severe depressive symptoms in the early postpartum period delayed their return to work — whether by choice, medical recommendation, or workplace accommodation — which would produce the same negative association without early return causing any symptoms at all. The present design cannot distinguish between these explanations, and the true process may involve both

directions of influence simultaneously (e.g., mild symptoms delaying return, and the delay itself then easing symptoms further). Any policy inference drawn from this association should therefore be provisional until it is tested with a design that measures depressive symptoms before the return-to-work decision is made.

Contrary to H3, perceived social support (MSPSS) was not significantly correlated with depressive symptoms in this sample, and social support did not differ between the early- and late-return groups. This null finding diverges from the broader stress-buffering literature on social support (Zimet et al., 1988) and may reflect several factors specific to this sample. First, MSPSS scores in this sample were relatively high and had a restricted range ($M = 57.02$ out of a possible maximum of 84), which may have limited the scale's ability to detect an association with depressive symptoms. Second, perceived support as measured by the MSPSS captures a general sense of support availability rather than support specific to the demands of return-to-work transitions, and a measure more narrowly focused on workplace or childcare support might have shown a stronger association. It is also possible that in the current sample, social support operates on postpartum wellbeing through pathways other than depressive symptoms as measured by the EPDS, or that the true association is smaller than this sample was powered to detect.

Depressive symptoms also differed significantly by job type, with mothers in healthcare roles reporting the lowest EPDS scores and mothers in corporate/office roles reporting the highest, a difference that remained significant under Tukey HSD correction for pairwise comparisons. This finding was exploratory and several explanations are plausible, including differences in schedule predictability, access to workplace mental health resources, or unmeasured selection factors that differ across occupational groups (for example, health literacy or comfort disclosing distress). Delivery mode and breastfeeding status were not significantly associated with depressive symptoms in this sample, consistent with the broader literature's mixed findings regarding these obstetric and infant-feeding variables.

H5 received only partial support. Job type appeared to condition the strength of the return-to-work/depression association, but the omnibus interaction test did not reach conventional significance ($p = .063$), and the two individual interaction terms that were significant before correction did not survive a Bonferroni adjustment. Among corporate/office and self-employed mothers, an earlier return to work was strongly associated with elevated depressive symptoms, whereas among healthcare and service-industry mothers, the timing of return was essentially unrelated to symptom levels. One interpretation is that healthcare and service-industry roles in this sample carried structural features — such as shift-based scheduling, team-based coverage, or routines already organized around irregular hours — that reduced the disruption associated with an earlier return, whereas corporate/office and self-employed mothers may have faced less institutional flexibility or more sustained individual responsibility for role continuity. An alternative explanation is that healthcare workers, who also reported the lowest overall EPDS scores, may differ from other groups on unmeasured factors (for example, health literacy, workplace mental health resources, or self-selection into the profession) that reduce depressive symptoms regardless of return-to-work timing, which would produce a similarly flattened slope without implying a true buffering mechanism. Because this moderation analysis was exploratory, was not adjusted for multiple comparisons across job-type interaction terms, and relied on modest cell sizes within some occupational groups (Self-employed $n = 12$), these interpretations should be treated as hypothesis-generating rather than confirmatory.

LIMITATIONS AND FUTURE DIRECTIONS

Several limitations qualify these findings. First, the design was cross-sectional, precluding causal conclusions about the direction of the association between return-to-work timing and depressive symptoms; it is possible that mothers experiencing more severe depressive symptoms delayed their return to work, rather than early return causing elevated symptoms. Second, the sample size ($N = 100$) provided limited statistical power for subgroup analyses, particularly the chi-square comparison of probable-depression rates, given that only 4 mothers met the probable-depression threshold, and the

job-type moderation analysis (H5) divided the sample into cells as small as $n = 12$, limiting power and precision for detecting and estimating interaction effects; the omnibus interaction test for H5 did not clearly reach significance ($p = .063$) even though two individual job-type slopes did, and this result awaits replication in a larger sample. Third, the study did not assess several variables likely to be relevant to postpartum depression risk, including prenatal or prior depression history, income or leave-pay status, infant health, and partner mental health. Fourth, all measures were self-reported by mothers at a single assessment point, so the findings may be subject to recall and social desirability bias, and return-to-work timing in particular was recalled retrospectively rather than recorded prospectively. Finally, the generalizability of the findings is bounded by the recruitment setting and geographic context of the sample. Future research should employ longitudinal designs that assess depressive symptoms before and after the return to work, incorporate objective or multi-informant measures of support and workplace flexibility, and test both social support and occupational context as moderators in larger and more diverse samples with adequate power to detect interaction effects.

CONCLUSION

In this sample of employed mothers, an earlier return to work after childbirth was associated with significantly greater postpartum depressive symptoms, an association that persisted after accounting for maternal age, parity, breastfeeding status, and delivery mode. Perceived social support was not associated with depressive symptoms in this sample, and depressive symptoms varied significantly by job type. An exploratory moderation analysis further suggested that the association between return-to-work timing and depressive symptoms was not uniform across occupations, appearing strongest among corporate/office and self-employed mothers and largely absent among healthcare and service-industry mothers, though this pattern requires replication given its only marginally significant omnibus test. Taken together, these findings tentatively support policies that provide mothers with the option of a longer period of leave before returning to paid employment, while underscoring the need for longitudinal, adequately powered research to clarify the direction, mechanisms, and occupational boundary conditions of this association.

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