

Work Stress and Parenting Quality in Working Mothers: Does Emotion Regulation Moderate the Relationship?

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Abstract: This study examined whether emotion regulation moderates the relationship between work stress and parenting quality among working mothers with children aged 7–11 years. A quantitative, correlational design was employed with purposive sampling. Participants were 304 formally employed working mothers (civil servants and non-shift private employees) from Indonesia; an initial pool of 384 respondents was collected, of whom 80 were excluded due to non-consent, trial entries, or irregular response patterns. Work stress was measured using the HSE Management Standards Indicator Tool (HSE-MS IT), parenting quality using the PAFAS-Parenting subscale, and emotion regulation using the Emotion Regulation Questionnaire (ERQ), assessing cognitive reappraisal and expressive suppression separately. Moderated regression analysis revealed that work stress was negatively and significantly associated with parenting quality ($\beta = -0.284$, $p < .001$, $R^2 = 0.081$), indicating that higher work stress is associated with lower parenting quality. However, neither cognitive reappraisal (interaction $\beta = -0.007$, $p = .897$) nor expressive suppression (interaction $\beta = -0.028$, $p = .618$) moderated this relationship. The null moderation effect suggests that general, trait-level emotion regulation may not buffer the impact of work stress on parenting behavior, possibly because stress spills over into parenting through mechanisms other than emotion regulation (e.g., reduced time, fatigue). These findings highlight the importance of direct work stress management interventions for working mothers rather than relying solely on emotion regulation training. Limitations include self-report data, cross-sectional design, and the low reliability of the cognitive reappraisal subscale ($\alpha = 0.629$). Future research should explore mediating mechanisms and use context-specific measures of parenting-related emotion regulation.

Keywords: Cognitive Reappraisal, Emotion Regulation, Parenting Quality, Work-Related Stress, Working Mothers

A. Introduction

Women's participation in the workforce in Indonesia has shown a notable increase in recent years. Data from the National Labor Force Survey (SAKERNAS) released by the Central Statistics Agency (Badan Pusat Statistik, 2024) show that the female Labor

Force Participation Rate (TPAK) increased from 53.13% in 2020, to 53.34% in 2021, 53.41% in 2022, 54.52% in 2023, and reaching 56.42% in 2024. This trend means that working mothers face dual demands—occupational and caregiving—which potentially increase psychological pressure and affect the quality of care provided to their children. Social support provided to working mothers has been shown to influence stress levels and parenting effectiveness (Nasution et al., 2022). Several prior studies indicate that working mothers are vulnerable to role conflict when balancing professional and domestic responsibilities, which can affect their psychological well-being (Agustin & Safitri, 2023; Widiningtyas, 2022). Despite this growing participation, in Indonesian culture mothers still bear primary responsibility for child-rearing.

Research by Nona & Sumargi (2022) explains that working mothers are prone to role conflict due to the pressure of household responsibilities spilling into the workplace and vice versa. This pressure negatively impacts mothers' psychological well-being and can affect children through negative parenting practices such as emotional rejection and harsh parenting (Fabris et al., 2025; Li et al., 2024). In Indonesia, although extended family involvement may help alleviate caregiving burdens, traditional norms still position mothers as the primary caregiving figure (Haryani et al., 2021). This imbalance between work demands and parenting responsibilities can amplify emotional pressure, which then influences the quality of mother-child interaction. Therefore, a discussion of working mothers' dynamics must specifically examine how work stress relates to parenting quality and how mothers can manage their emotions when facing these demands.

This study focuses on working mothers with children aged 7–11 years, because children in the primary school age range are in the *industry vs. inferiority* phase, during which consistent parental support is critical for developing competence and self-confidence through academic and social experiences (Erikson, 1963; Papalia & Martorell, 2021). During this period, the quality of parent-child interaction plays an important role in supporting children's academic and social adjustment; hence consistency in parenting, discipline application, provision of positive reinforcement, and quality of the parent-child relationship are relevant dimensions to observe (Qian et al., 2024; Sumargi et al., 2018). The 7–11 age range is therefore an appropriate context for examining the relationship between maternal work stress and parenting quality, and for evaluating the role of emotion regulation as a potential moderating factor.

The urgency of this research can be viewed from several levels. At the individual level, maternal work stress has the potential to reduce parenting quality and negatively affect children's emotional development and self-confidence (Wang et al., 2024; Ward & Lee, 2020). At the family level, unmanaged work stress can disrupt the harmony of the mother-child relationship and reduce parental involvement in child-rearing (Bilodeau et al., 2023). At the organizational level, mothers who struggle to balance work demands with parenting risk experiencing reduced productivity, which

ultimately affects work effectiveness (Bakker & Demerouti, 2007). Based on this reasoning, the present study also examines the role of emotion regulation as a moderator between work stress and parenting quality among working mothers.

Prior studies have laid the groundwork for understanding each of these concepts and their interrelationships. Grasiawaty et al. (2022) examined the validity and reliability of the Indonesian-language version of the Health and Safety Executive (HSE) instrument in a sample of 210 employees, finding that the instrument is valid and reliable for use in Indonesia. This tool assesses seven work-related dimensions that are particularly relevant to the context of formally employed working mothers (Vaamonde & Giacobino, 2023). The PAFAS instrument was used by Sanders et al. (2024) in an evaluation of the Family Life Skills Triple P (FLSTP) program involving 50 parents of children aged 3–9 years. Furthermore, Cenusa & Turliuc (2025) noted that emotion regulation may play a role in clarifying the relationship between parenting stress and the quality of parent-child interaction, where emotion regulation ability can serve as a protective factor against the negative impact of stress, while difficulty regulating emotions can worsen parenting quality.

Although these studies enrich the understanding of work stress, emotion regulation, and parenting quality, their participant contexts and research foci remain insufficiently specific to working mothers with primary school-aged children. Grasiawaty et al. (2022), for instance, focused on employees in general. Sanders et al. (2024) involved parents of children aged 3–9 years with a limited sample size. Cenusa & Turliuc (2025) addressed the moderating role of emotion regulation but did not situate it in the specific context of working mothers with school-aged children. Accordingly, a research gap remains, as few studies have specifically analyzed the relationship between work stress and parenting quality among working mothers with children aged 7–11 years while simultaneously examining the role of emotion regulation as a moderator. The present study was therefore conducted to address this gap and to contribute to the literature by empirically testing emotion regulation as a potential moderator in the work stress–parenting quality relationship within the specific context of Indonesian formally employed mothers. This study addresses the following research questions: (1) Is there a significant relationship between work stress and parenting quality among working mothers with children aged 7–11 years? (2) Does emotion regulation (cognitive reappraisal and expressive suppression) moderate the relationship between work stress and parenting quality?

According to Lazarus & Folkman (1984), work stress is a psychological condition that arises when job demands are perceived to exceed an individual's resource capacity. Within the *Job Demands-Resources Model* Bakker & Demerouti (2007), high job demands—such as heavy workloads and long working hours—can increase the risk of emotional exhaustion and stress. If this condition is not managed effectively, mothers may exhibit less warm parenting responses or even harsh behavior, thereby reducing the quality of interaction with their children. Bilodeau et al. (2023) findings

indicate that work pressure tends to increase the use of authoritarian parenting practices. Work stress is therefore important in understanding how workplace pressure can manifest in the quality of everyday parenting.

Parenting quality refers to the degree to which parents implement warm, consistent, and developmentally supportive parenting practices. According to Sanders et al. (2014), parenting quality encompasses four main dimensions: consistency in setting rules, appropriate discipline practices, providing positive reinforcement for good behavior, and maintaining a warm, communicative relationship with the child. The ERQ, developed by Gross & John (2003), includes two main aspects: *cognitive reappraisal* – the effort to change one’s perspective on a situation, which tends to have positive effects on psychological well-being and parenting quality – and *expressive suppression* – the attempt to inhibit or reduce the expression of emerging emotions, which can reduce the quality of interaction with the child (Gross, 2023; Hu et al., 2014). Mothers with good emotion regulation capacity tend to maintain warm and responsive interactions even under stressful conditions (Gross, 2015; Hajal & Paley, 2020). Cenuša & Turliuc (2025) research also demonstrated that emotion regulation can act as a protective factor that attenuates the negative impact of work stress on parenting quality. Theoretically, the process model of emotion regulation (Gross & John, 2003) posits that individuals who habitually employ cognitive reappraisal are better able to reframe stressful work situations as less threatening, thereby preserving psychological resources needed for responsive parenting. In contrast, habitual suppression may deplete these resources by requiring ongoing inhibitory effort, potentially amplifying stress spillover. Within the Job Demands-Resources framework (Bakker & Demerouti, 2007), emotion regulation can be conceptualized as a personal resource that buffers the negative consequences of high job demands; mothers high in reappraisal may therefore be less vulnerable to the parenting-quality impairments associated with elevated work stress. Based on this theoretical framework, the following hypotheses were formulated.

Hypothesis 1: There is a negative relationship between the level of work stress and parenting quality among mothers with primary school-aged children.

Hypothesis 2: Emotion regulation moderates the relationship between work stress and parenting quality among mothers with primary school-aged children.

B. Methods

This study employed a non-experimental quantitative approach with a correlational design to analyze the relationship between work stress and parenting quality, and to test the moderating role of emotion regulation. Data were collected online via a Google Form questionnaire. According to Creswell (2018), a quantitative correlational approach is used to examine relationships among variables based on numerical data from standardized measures without manipulating the research variables. Hypothesis testing within a regression framework can be extended by incorporating a moderator

variable and the predictor-by-moderator interaction term ($X \times M$) to assess whether the relationship between variables differs at certain levels of the moderator.

Participants

Participants were working mothers with children aged 7–11 years, meeting the following inclusion criteria: (1) employed in the formal sector (civil servants [ASN] and non-shift private employees) with a minimum of 40 working hours per week; (2) aged 30–40 years; (3) having a child aged 7–11 years; and (4) maintaining regular working hours with administrative responsibilities and the possibility of involvement in additional tasks such as official travel or overtime.

Purposive sampling was used, a non-probability method based on specific criteria aligned with the research objectives (Creswell, 2018). The minimum sample size was determined by the Krejcie & Morgan (1970) formula with parameters $X^2 = 3.841$, $p = 0.5$, and $d = 0.05$, yielding a minimum of 384 participants as the recruitment target. A total of 384 responses were received; after data cleaning – excluding three trial entries, three participants who did not provide consent, and 74 responses with irregular answer patterns – 304 valid responses remained for analysis. It is acknowledged that the final analyzed sample ($N = 304$) falls below the Krejcie–Morgan-derived target. However, post-hoc power considerations suggest that $N = 304$ remains adequate for detecting moderate-sized effects in moderated regression (Cohen, 1992; Faul et al., 2007), and the primary analyses (M1) achieved sufficient statistical power ($f^2 = 0.088$, power > 0.99). The sample reduction is therefore noted as a limitation rather than a fatal flaw. Future studies are encouraged to conduct an a priori power analysis specifically for interaction effects, given that detecting moderation typically requires larger samples than detecting main effects alone.

Measures

Work stress was measured using the HSE Management Standards Indicator Tool (HSE-MS IT; Health and Safety Executive, 2003), a 35-item instrument with a 5-point scale (1 = *never* to 5 = *always*) covering seven dimensions: *job demands*, *control*, *managerial support*, *colleague support*, *relationship*, *role*, and *change*. The Indonesian version, adapted and validated by Grasiawaty et al. (2022) through forward-back translation, demonstrated good construct validity and reliability ranging from $\alpha = 0.67$ – 0.82 . In the original HSE instrument, items are positively keyed such that higher scores reflect more favorable working conditions (i.e., lower stress); for example, a response of “always” to “I have a say in my own work speed” indicates good control. To aid interpretation, all item scores were reversed (by subtracting each score from the maximum scale value plus one, i.e., $6 - \text{item score}$) so that higher total scores indicate higher work stress, consistent with the directionality of the other measures in the model.

Parenting quality was measured using the Parenting & Family Adjustment Scales-Parenting Subscale (Sanders et al., 2014), adapted into Indonesian by Sumargi et al. (2018). This 18-item subscale uses a 4-point scale (0 = *not at all* to 3 = *very much*) and covers four dimensions: consistency, discipline, positive encouragement, and the parent-child relationship. Items reflecting negative practices were reverse-scored. PAFAS demonstrated reliability with Cronbach's α above 0.70 (Martins et al., 2024; Sanders et al., 2014, 2024).

Emotion regulation was measured using the Emotion Regulation Questionnaire (ERQ) (Gross & John, 2003), adapted into Indonesian by Radde et al. (2021). The ERQ comprises two subscales: *cognitive reappraisal* (6 items) and *expressive suppression* (4 items), using a 7-point Likert scale. The instrument demonstrated good construct validity based on confirmatory factor analysis and reliability ranging from $\alpha = 0.75$ – 0.82 (Radde et al., 2021). Moderation analyses were conducted separately for each ERQ dimension. It should be noted that in the present sample, the cognitive reappraisal subscale yielded a Cronbach's $\alpha = 0.629$, which falls below the conventional threshold of 0.70 (DeVellis, 2017; Tavakol & Dennick, 2011). This constitutes a psychometric limitation that is acknowledged in the Limitations section and may have contributed to the null moderation finding for cognitive reappraisal.

Procedure

Data were collected online via Google Form distributed through relevant institutional internal groups and WhatsApp groups meeting the inclusion criteria. Online data collection was chosen for efficiency, cost reduction, and enhanced participant privacy (Dillman et al., 2014). Before completing the questionnaire, eligible participants received an explanation of the research objectives, data confidentiality, estimated completion time, the right to withdraw without consequence, and researcher contact details, via an informed consent form. Participants then completed the three-scale questionnaire (HSE-MS IT, PAFAS-Parenting, and ERQ). Data were collected over three weeks. After all data were collected, quality checks were conducted for completeness, duplicate entries, and inconsistent response patterns. Data were then analyzed using JASP 0.95.0.0. Before hypothesis testing, data cleaning per inclusion criteria was performed, followed by assumption checks: internal reliability, normality, linearity, homoscedasticity, and multicollinearity. Moderated regression analysis was then conducted with work stress (HSE) as the predictor (X), parenting quality (PAFAS-Parenting) as the outcome (Y), and emotion regulation (ERQ) as the moderator (M).

C. Results and Discussion

Participant Characteristics

Data were collected from 384 respondents. After data cleaning – removing three trial

responses, three participants who did not consent, and 74 invalid responses (irregular answer patterns)—304 valid participants remained. Descriptive statistics for participant characteristics are presented in Tables 1–3.

Table 1. Participant Age Distribution

Mother Age Group	Frequency	Percentage
30–32 years	65	21.38
33–36 years	136	44.74
37–40 years	103	33.88
Total	304	100.00

Note. n = 304.

As shown in Table 1, the majority of participants were aged 33–36 years ($n = 136$, 44.74%), followed by 37–40 years ($n = 103$, 33.88%) and 30–32 years ($n = 65$, 21.38%).

Table 2. Participant Employment Status

Employment Status	Frequency	Percentage
Civil Servants (ASN)	158	51.97
Private Employees	146	48.03
Total	304	100.00

Note. n = 304. ASN = Civil Servant; Private = non-shift private employees.

As shown in Table 2, civil servants comprised 51.97% ($n = 158$) and private employees 48.03% ($n = 146$), with a relatively balanced distribution consistent with the inclusion criteria.

Table 3. Child Age Distribution

Child Age Group	Frequency	Percentage
7–8 years	122	40.13
9–11 years	182	59.87
Total	304	100.00

Note. n = 304.

As shown in Table 3, the majority of children were aged 9–11 years ($n = 182$, 59.87%), with 40.13% ($n = 122$) aged 7–8 years. This age range is consistent with the study's participant criteria.

Variable Category Analysis

Participants were predominantly in the moderate category across all variables: work stress (67.1%), parenting quality (68.8%), *cognitive reappraisal* (66.8%), and *expressive suppression* (65.8%). Details are presented in Table 4.

Table 4. Descriptive Category Analysis Per Variable

Variable	Category	Frequency	Percentage
Work Stress (HSE)	Low	49	16.1
	Moderate	204	67.1
	High	51	16.8
Parenting Quality (PAFAS-Parenting)	Low	51	16.8
	Moderate	209	68.8
	High	44	14.5
Cognitive Reappraisal (ERQ-CR)	Low	45	14.8
	Moderate	203	66.8
	High	56	18.4
Expressive Suppression (ERQ-ES)	Low	47	15.5
	Moderate	200	65.8
	High	57	18.8

Note. Score categories were derived based on mean and standard deviation: Low ($\leq M - 1$ SD), Moderate ($M - 1$ SD < score < $M + 1$ SD), and High ($\geq M + 1$ SD).

Reliability and Item Analysis

One HSE item with a negative Corrected Item–Total Correlation (CITC) was removed, improving Cronbach’s α from below threshold to 0.910. The remaining instruments showed adequate to excellent reliability (Table 5).

Table 5. Instrument Reliability

Instrument	Initial Items	Items Used	Cronbach’s Alpha
HSE	35	34	0.910
PAFAS-Parenting	18	18	0.733
ERQ-CR	6	6	0.629
ERQ-ES	4	4	0.788

Note. HSE = work stress; PAFAS = parenting quality; ERQ = emotion regulation.
Cronbach’s $\alpha \geq 0.70$ indicates acceptable reliability.

Normality Testing

The Shapiro-Wilk test indicated that HSE followed a normal distribution ($p = .080$), whereas PAFAS, ERQ-CR, and ERQ-ES showed significant deviations ($p < .001$). However, skewness and kurtosis values remained within acceptable ranges, and visual inspection of histograms and Q-Q plots suggested approximately normal distributions. Accordingly, Spearman’s rho was employed for correlation analyses as a conservative approach. Descriptive statistics and normality test results are presented in Table 6.

Table 6. Descriptive Statistics and Normality Test Results

	Total HSE	Total PAFAS	Total ERQ-CR	Total ERQ-ES
Valid	304	304	304	304
Missing	0	0	0	0
Mean	75.86	35.42	32.20	17.77
SD	17.21	4.914	4.742	5.079
Skewness	0.228	-0.608	-0.789	-0.393
Kurtosis	-0.181	0.029	1.215	-0.345
Shapiro-Wilk	0.992	0.967	0.962	0.979
p-value (S-W)	.080	<.001	<.001	<.001
Minimum	38.00	18.00	12.00	4.000
Maximum	128.0	44.00	41.00	28.00

Note. HSE = work stress; PAFAS = parenting quality; ERQ-CR = cognitive reappraisal; ERQ-ES = expressive suppression. Shapiro-Wilk $p < .05$ indicates deviation from normality.

Linearity Testing

A simple regression of PAFAS on HSE yielded $R^2 = 0.081$, $F(1, 302) = 26.51$, $p < .001$, confirming a linear relationship between work stress and parenting quality. The residuals vs. predicted values plot (Figure 1) shows that residual points do not form a curved pattern, confirming that the linearity assumption is met.

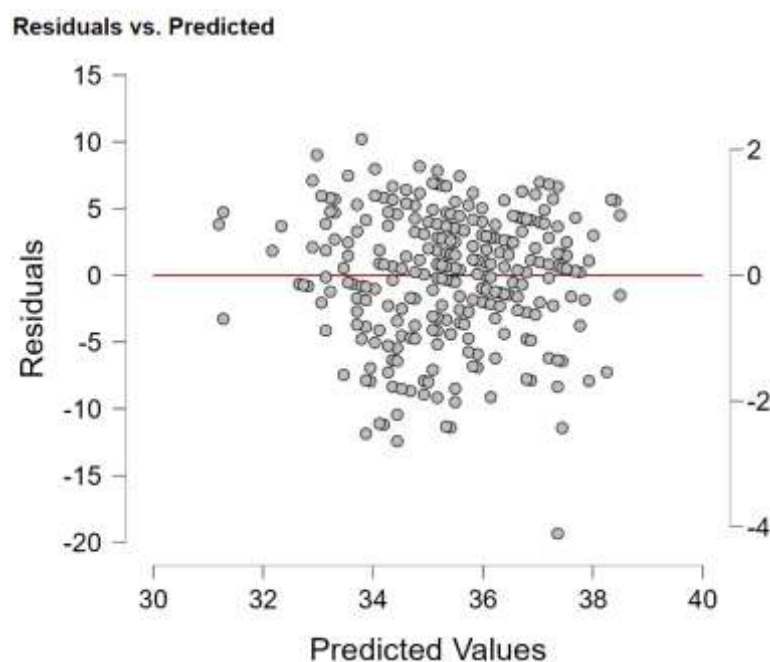


Figure 1. Residual Scatter Plot of the Regression Model

Note. Each dot represents one respondent.

Normality of Residuals

The standardized residuals histogram (Figure 2) approximates a bell curve, with relatively balanced distribution on both sides. The Q-Q plot of standardized residuals (Figure 3) shows that most points align with the diagonal, with slight deviations at the tails. Overall, residuals are approximately normally distributed, satisfying the normality assumption for regression inference.

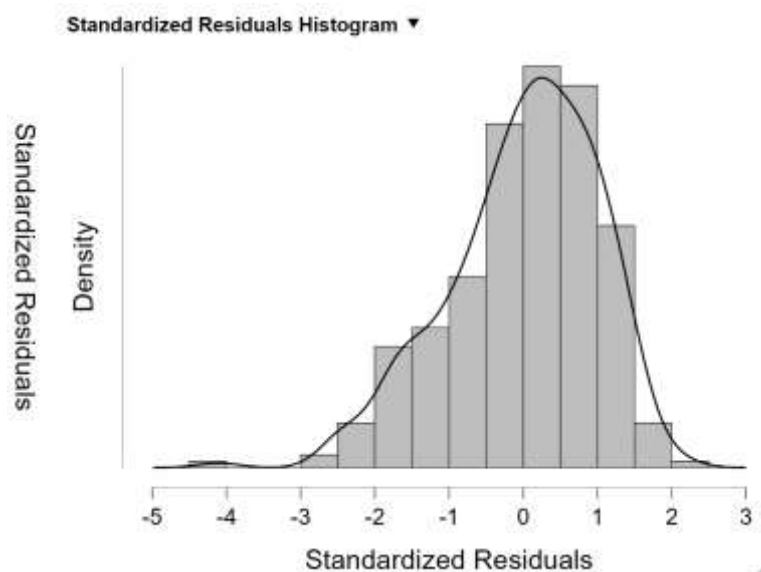


Figure 2. Histogram of Standardized Residuals

Note. Each dot represents one respondent.

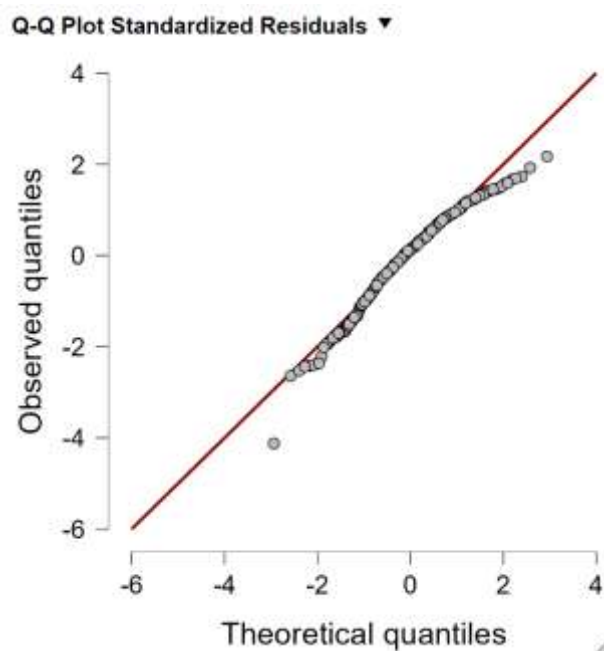


Figure 3. Q-Q Plot of Standardized Residuals

Note. Each dot represents one respondent.

Homoscedasticity Testing

The residuals vs. predicted values plot (Figure 4) shows residuals scattered randomly around the zero line without discernible clustering, indicating no heteroscedasticity. The standardized residuals histogram further confirms approximately constant variance across all regression output values. The homoscedasticity assumption is therefore satisfied.

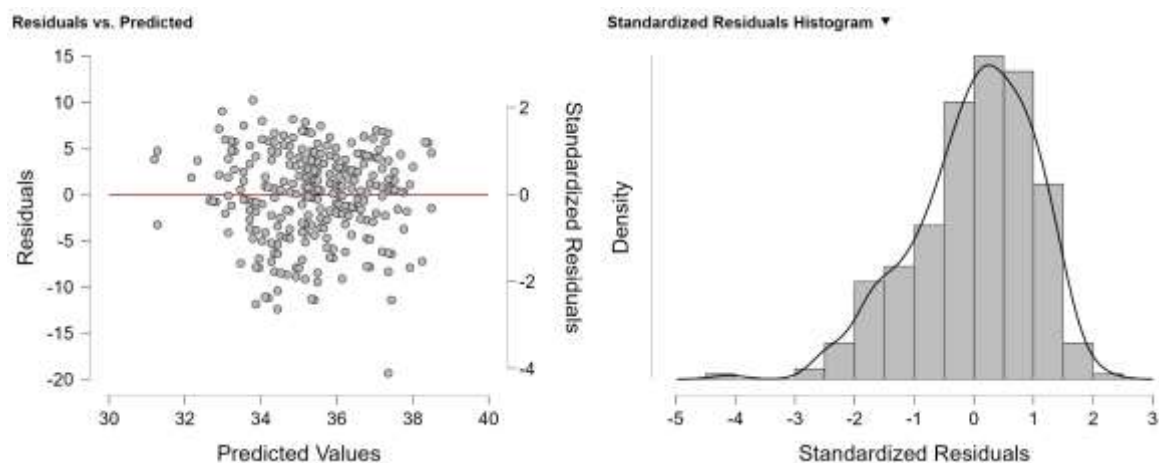


Figure 4. Residual Distribution Plot for Homoscedasticity Assessment

Note. Each dot represents one respondent.

Multicollinearity Testing

All tolerance values exceeded 0.10 and VIF values were below 10 across all models (Table 7), confirming that multicollinearity does not present a problem. Predictors and moderators can therefore be jointly included in the moderated regression model.

Table 7. Multicollinearity Test Results (Tolerance and VIF)

Model		Unstd.	SE	Std.	t	p	95% CI [Lower, Upper]	Tolerance / VIF
M0	(Intercept)	35.424	0.282		125.694	<.001	34.870 35.979	
M1	(Intercept)	35.424	0.271		130.879	<.001	34.892 35.957	
	HSE_c	-0.081	0.016	-0.284	-5.149	<.001	-0.112 -0.050	1.000 / 1.000
M2	(Intercept)	35.424	0.271		130.674	<.001	34.891 35.958	
	HSE_c	-0.081	0.016	-0.282	-5.051	<.001	-0.112 -0.049	0.978 / 1.022
	ERQCR_c	0.014	0.058	0.013	0.235	.814	-0.100 0.128	0.978 / 1.022

M3	(Intercept)	35.419	0.274		129.185	<.001	34.880 35.959 -0.112	
	HSE_c	-0.081	0.016	-0.282	-5.044	<.001	0.978 / -0.049 1.023	
	ERQCR_c	0.014	0.058	0.013	0.240	.810	-0.100 0.976 / 0.128 1.024	
	INT_HSE_ERQCR	-0.0004	0.003	-0.007	-0.129	.897	-0.007 0.997 / 0.006 1.003	

Note. Tolerance > 0.10 and VIF < 10 indicate the absence of multicollinearity.

Correlation Analysis

Spearman's rho correlations among variables are presented in Table 8. Work stress was negatively and significantly correlated with parenting quality ($\rho = -0.307$, $p < .001$), indicating that higher work stress is associated with lower parenting quality. Work stress also showed a significant negative correlation with *cognitive reappraisal* ($\rho = -0.172$, $p = .003$). No significant correlation was found between work stress and *expressive suppression* ($\rho = -0.034$, $p = .556$), nor between parenting quality and either ERQ dimension (ERQ-CR: $\rho = 0.017$, $p = .774$; ERQ-ES: $\rho = -0.075$, $p = .191$). A small positive correlation was observed between the two ERQ dimensions ($\rho = 0.180$, $p = .002$).

Table 8. Descriptive Statistics and Inter-Variable Correlations

No	Variable	Mean	SD	1	2	3	4
1	Total HSE	75.86	17.21	—	—	—	—
2	Total PAFAS	35.42	4.914	-0.307***	—	—	—
3	Total ERQ-CR	32.20	4.742	-0.172**	0.017	—	—
4	Total ERQ-ES	17.77	5.079	-0.034	-0.075	0.180**	—

Note. $n = 304$. HSE = work stress; PAFAS = parenting quality; ERQ-CR = cognitive reappraisal; ERQ-ES = expressive suppression. ** $p < .01$, *** $p < .001$.

Hypothesis Testing

Moderated regression analysis was conducted in sequential steps: M0 (intercept-only), M1 (HSE predictor), M2 (adding ERQ moderator), and M3 (adding HSE $\times$ ERQ interaction). Model fit is presented in Table 9 and regression coefficients in Tables 10 and 11.

Table 9. Regression Model Summary – Total PAFAS

Model	R	R ²	Adj. R ²	RMSE
M0	0.000	0.000	0.000	4.914
M1	0.284	0.081	0.078	4.719
M2	0.284	0.081	0.075	4.727
M3	0.284	0.081	0.072	4.734

Note. M1 includes HSE_c; M2 includes HSE_c and ERQCR_c; M3 includes HSE_c, ERQCR_c, and INT_HSE_ERQCR.

Hypothesis 1 – Work stress and parenting quality. Model M1 showed $R = 0.284$, $R^2 = 0.081$, Adjusted $R^2 = 0.078$, $RMSE = 4.719$, $F(1, 302) = 26.513$, $p < .001$. Work stress (HSE_c) was negatively and significantly associated with parenting quality ($B = -0.081$, $SE = 0.016$, $\beta = -0.284$, $t = -5.149$, $p < .001$, 95% CI $[-0.112, -0.050]$), indicating that a one-unit increase in work stress is associated with a 0.081-unit decrease in parenting quality score. Hypothesis 1 is therefore supported.

Table 10. Regression Coefficients – ERQ-CR as Moderator

Model		Unstd.	SE	Std.	t	p	95% CI [Lower, Upper]	Tolerance / VIF
M0	(Intercept)	35.424	0.282		125.694	<.001	34.870 35.979	
M1	(Intercept)	35.424	0.271		130.879	<.001	34.892 35.957	
	HSE_c	-0.081	0.016	-0.284	-5.149	<.001	-0.112 -0.050	1.000 / 1.000
M2	(Intercept)	35.424	0.271		130.674	<.001	34.891 35.958	
	HSE_c	-0.081	0.016	-0.282	-5.051	<.001	-0.112 -0.049	0.978 / 1.022
	ERQCR_c	0.014	0.058	0.013	0.235	.814	-0.100 0.128	0.978 / 1.022
M3	(Intercept)	35.419	0.274		129.185	<.001	34.880 35.959	
	HSE_c	-0.081	0.016	-0.282	-5.044	<.001	-0.112 -0.049	0.978 / 1.023
	ERQCR_c	0.014	0.058	0.013	0.240	.810	-0.100 0.128	0.976 / 1.024
	INT_HSE_ERQCR	-0.0004	0.003	-0.007	-0.129	.897	-0.007 0.006	0.997 / 1.003

Note. Tolerance > 0.10 and VIF < 10 indicate no multicollinearity.

Table 11. Regression Coefficients – ERQ-ES as Moderator

Model		Unstd.	SE	Std.	t	p	95% CI [Lower, Upper]	Tolerance / VIF
M0	(Intercept)	35.424	0.282		125.694	<.001	34.870 35.979	
M1	(Intercept)	35.424	0.271		130.879	<.001	34.892 35.957	
	HSE_c	-0.081	0.016	-0.284	-5.149	<.001	-0.112 -0.050	1.000 / 1.000
M2	(Intercept)	35.424	0.271		130.757	<.001	34.891 35.957	
	HSE_c	-0.081	0.016	-0.284	-5.140	<.001	-0.112 -0.050	1.000 / 1.000
	ERQES_c	-0.035	0.053	0.037	-0.662	.509	-0.141	1.000 /

M3	(Intercept)	35.425	0.271		130.595	<.001	0.070 34.891 35.959	1.000
	HSE_c	-0.081	0.016	-0.285	-5.148	<.001	-0.112 -0.050	0.999 / 1.001
	ERQES_c	-0.035	0.054	-0.036	-0.658	.511	-0.100 0.070	1.000 / 1.000
	INT_HSE_ERQES	-0.001	0.003	-0.028	-0.499	.618	-0.007 0.004	0.999 / 1.001

Note. Tolerance > 0.10 and VIF < 10 indicate no multicollinearity.

Hypothesis 2 – Emotion regulation as moderator. Adding ERQ-CR in M2 and the HSE × ERQ-CR interaction in M3 did not meaningfully increase explained variance (R^2 remained 0.081), and the interaction coefficient was non-significant ($B = -0.0004$, $p = .897$). Similarly, the HSE × ERQ-ES interaction was non-significant ($B = -0.001$, $p = .618$). ANOVA results (Table 12) confirm overall model significance in M2 and M3 ($p < .001$), driven primarily by HSE. Hypothesis 2 is therefore not supported.

Table 12. ANOVA Results for Parenting Quality

Model		Sum of Squares	df	Mean Square	F	p
M1	Regression	590.5	1	590.47	26.513	<.001
	Residual	6725.8	302	22.27		
	Total	7316.3	303			
M2	Regression	591.7	2	295.86	13.243	<.001
	Residual	6274.5	301	22.34		
	Total	7316.3	303			
M3	Regression	592.1	3	197.36	8.805	<.001
	Residual	6724.2	300	22.41		
	Total	7316.3	303			

Note. M1 includes HSE_c; M2 includes HSE_c and ERQCR_c; M3 includes HSE_c, ERQCR_c, and INT_HSE_ERQCR. The intercept-only model is omitted.

Differential Tests by Demographic Variables

An independent samples *t*-test comparing ASN and private-employee groups on parenting quality yielded no significant difference, $t(302) = 0.279$, $p = .781$ (Table 13). A one-way ANOVA across three maternal age groups also yielded no significant difference, $F(2, 301) = 0.903$, $p = .406$ (Table 14). Finally, an independent samples *t*-test comparing parenting quality by child age group found no significant difference, $t(302) = -0.446$, $p = .656$ (Table 15). Parenting quality did not differ significantly based on employment status, maternal age group, or child age group.

Table 13. Parenting Quality Differences by Employment Status

Employment Status	n	Mean	SD
Civil Servants (ASN)	158	35.50	5.120
Private Employees	146	35.34	4.679

Note. Independent samples t-test: $t(302) = 0.279$, $p = .781$.

Table 14. Parenting Quality Differences by Maternal Age Group

Mother Age Group	n	Mean	SD
30–32 years (1)	65	35.09	5.678
33–36 years (2)	136	35.18	4.913
37–40 years (3)	103	35.95	4.373

Note. One-way ANOVA: $F(2, 301) = 0.903, p = .406$.

Table 15. Parenting Quality Differences by Child Age Group

Child Age	n	Mean	SD
7–8 years (1)	122	35.27	5.135
9–11 years (2)	182	35.53	4.772

Note. Independent samples *t*-test: $t(302) = -0.446, p = .656$.

Discussion

The results confirm Hypothesis 1: work stress is negatively associated with parenting quality among working mothers. As work stress increases, parenting quality tends to decrease consistent with findings from Grasiawaty et al. (2022), who showed that HSE indicators validly capture work-related stress experiences in Indonesia. When work demands are high, mothers become less patient, show more negative reactions, and find it harder to maintain household rules, as reflected in PAFAS scores. This finding is grounded in the stress-coping framework of Lazarus & Folkman (1984) and the Job Demands-Resources Model (Bakker & Demerouti, 2007), and is further supported by Sanders et al. (2024), who demonstrated that parenting skills and parental emotion management are most closely linked to consistency in parenting under daily demands and pressures. Belsky (1984) parenting determinants model further explains that parenting quality is influenced by parental psychological functioning and contextual support; work stress depletes psychological resources and spills over into the home, reducing the mother's capacity for warm and consistent parenting.

These results are consistent with prior studies showing that work stress and women's role demands are associated with reduced psychological well-being and diminished parenting quality (Agustin & Safitri, 2023; Bilodeau et al., 2023; Nona & Sumargi, 2022; Widiningtyas, 2022). The consistently negative direction of the relationship – higher work pressure, lower parenting quality – reinforces the relevance of this issue, particularly for mothers of primary school-aged children who require active parental involvement in academic and behavioral regulation. Notably, most participants fell in the moderate category for both work stress and parenting quality, indicating that deterioration of parenting quality is not always expressed as severe dysfunction; rather, it often manifests as reduced patience, less consistent rule enforcement, and diminished positive responsiveness under increased pressure.

Hypothesis 2 was not supported: neither *cognitive reappraisal* nor *expressive suppression* moderated the work stress–parenting quality relationship. Statistically, adding

emotion regulation and the interaction term did not meaningfully increase explained variance, and interaction coefficients were non-significant. This finding contrasts with Cenusa & Turliuc (2025) work, in which emotion regulation moderated the parenting stress–interaction quality relationship. Several factors may explain the divergence. First, Cenusa and Turliuc used a Romanian sample and focused on parenting stress rather than occupational work stress; the mechanisms through which these distinct stressors affect parenting may differ. Second, their measure of emotion regulation may have been more proximal to parenting contexts, whereas the ERQ used here captures general, trait-level regulation that is not anchored to parenting situations (Radde et al., 2021). Third, methodological differences in sample characteristics and statistical power preclude direct comparison. *cognitive reappraisal* is generally considered a protective factor associated with mental health and social interaction quality (Gross, 1998; Hu et al., 2014). Multiple alternative explanations for the null moderation finding warrant consideration. First, as noted, the low reliability of the ERQ-CR subscale ($\alpha = 0.629$) introduces measurement error that attenuates the interaction coefficient, making it more difficult to detect a true moderating effect if one exists (DeVellis, 2017; Tavakol & Dennick, 2011). Second, range restriction in work stress scores – with the majority of participants in the moderate category – may have limited the statistical power to detect differential effects of emotion regulation at extreme stress levels (Nasution et al., 2022; Wang et al., 2024). Third, cultural factors specific to the Indonesian context, such as collectivist norms, extended family support, and role acceptance, may reduce variability in parenting responses to stress in ways that dampen moderation effects. Fourth, Cenusa & Turliuc (2025) suggest that parental emotion regulation relates to parent-child interaction through specific behavioral parenting mechanisms, meaning that its effect may not always manifest as simple moderation in regression. Accordingly, emotion regulation may be more appropriately conceptualized as a mediator bridging work stress and psychological well-being, which subsequently influences parenting quality. Future research is encouraged to explore this alternative model using path-analytic or structural equation modeling approaches.

These findings have practical implications for organizations, mental health practitioners, and policymakers. First, because work stress directly impairs parenting quality, employers should implement evidence-based stress management programs for working mothers, including flexible work arrangements, workload regulation, and access to employee assistance programs (EAPs). Second, the null moderation effect suggests that emotion regulation training alone may be insufficient to prevent stress spillover into the home; interventions should target work-related stressors directly (e.g., time management support, boundary-setting skills, supervisor coaching) rather than relying solely on individual coping strategies. Third, pediatric and mental health professionals should routinely assess maternal occupational stress when evaluating parenting difficulties, particularly for mothers in demanding formal-sector jobs, as the work environment may be a primary driver of observed parenting quality deficits.

This study has several limitations that should be considered when interpreting the findings. First, the correlational, cross-sectional design precludes causal inference; it is unknown whether work stress causes changes in parenting quality over time or whether other variables account for the observed associations. Second, all data were collected via self-report, which introduces potential social desirability and perception biases, particularly for parenting behavior. Third, the ERQ measures general, trait-level emotion regulation, which may not fully capture context-specific regulatory processes that occur during parenting under occupational stress; the low reliability of the ERQ-CR subscale ($\alpha = 0.629$) in this sample represents a specific psychometric concern and may have attenuated the ability to detect moderation effects. Fourth, the final sample ($N = 304$) fell below the initially planned recruitment target of 384, and no a priori power analysis was conducted for detecting interaction effects, which are known to require larger samples than main effects. Fifth, the focus on formally employed mothers (civil servants and non-shift private employees) limits generalizability to mothers in the informal sector, those with shift work, or those with different demographic or cultural characteristics outside Indonesia. Future research is recommended to consider longitudinal designs with observational measures of parenting, context-specific parenting emotion regulation scales, a priori power analyses for moderation, and additional variables such as social support, partner relationship quality, parenting-specific stress, and income level.

D. Conclusions

This study examined the relationships among work stress, emotion regulation (cognitive reappraisal and expressive suppression), and parenting quality in a sample of 304 working mothers with children aged 7–11 years. Three main conclusions emerge. First, work stress was negatively and significantly associated with parenting quality ($\beta = -0.284$, $p < .001$), confirming Hypothesis 1. This finding aligns with the Job Demands-Resources Model (Bakker & Demerouti, 2007) and extends prior research by demonstrating this relationship specifically among Indonesian working mothers of primary school-aged children. Second, neither cognitive reappraisal nor expressive suppression moderated the work stress–parenting quality relationship. This null finding (Hypothesis 2 not supported) suggests that general, trait-level emotion regulation may not buffer the impact of occupational stress on parenting behavior. Alternative explanations include the low reliability of the cognitive reappraisal subscale ($\alpha = 0.629$), range restriction in work stress scores, and the possibility that emotion regulation operates as a mediator rather than a moderator. Third, differential analyses revealed no significant differences in parenting quality based on employment status (civil servant vs. private employee), maternal age group, or child age group, indicating that the observed patterns are relatively consistent across these demographic subgroups.

This study contributes to the literature by empirically testing and failing to support the moderating role of emotion regulation in the work stress–parenting quality

relationship among Indonesian formally employed mothers. This null finding is theoretically meaningful: it suggests that the stress-buffering effects of reappraisal documented in other domains (Gross, 1998; Hu et al., 2014) may not extend automatically to the specific context of parenting under occupational stress, and those mechanisms other than trait emotion regulation (e.g., fatigue, time scarcity, contextual stressors) may be more proximal drivers of parenting quality impairment. The finding that employment status, maternal age, and child age do not moderate parenting quality further indicates that work stress effects are relatively uniform across these subgroups.

These findings have actionable implications for organizations, mental health practitioners, and policymakers. First, because work stress directly impairs parenting quality, employers should implement evidence-based stress management programs for working mothers, including flexible work arrangements, workload regulation, and access to employee assistance programs (EAPs). Second, the null moderation effect suggests that emotion regulation training alone may be insufficient to prevent stress spillover into the home; interventions should target work-related stressors directly (e.g., time management support, boundary-setting skills) rather than relying solely on individual coping strategies. Third, pediatric and mental health professionals should routinely assess maternal occupational stress when evaluating parenting difficulties, particularly for mothers in demanding formal-sector roles. Emotion regulation skills training remains a valuable component of parenting interventions, but should be embedded within broader, work-stress-focused programs rather than treated as a standalone buffer.

Key limitations include the cross-sectional design (precluding causal inference), self-report measures (potential social desirability bias), the low reliability of ERQ-CR ($\alpha = 0.629$), the final sample size falling below the intended target ($N = 304$ vs. 384), and limited generalizability to formally employed Indonesian mothers only. Longitudinal studies should examine whether work stress predicts changes in parenting quality over time. Future research should explore alternative models in which emotion regulation mediates (rather than moderates) the work stress–parenting quality relationship, and should employ context-specific measures of parenting-related emotion regulation. Comparative studies across cultures and employment sectors, as well as inclusion of additional variables such as social support, partner relationship quality, and parenting-specific stress, would enhance generalizability and theoretical depth.

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