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Hypothesis 2a was that the association between maternal relative earnings and father responsibility for routine childcare tasks would be stronger in couples in which mothers reported higher levels of emotional intimacy than for other couples. Controlling for covariates (see Table 6, column 3), emotional intimacy did not interact with maternal relative earnings to predict father responsibility for routine childcare tasks ( $b = -0.00, p = .06$ ). Thus, hypothesis 2a was not supported.

### **Hypothesis 2b: Parenting Stress as a Moderator**

Hypothesis 2b was that the association between maternal relative earnings and father responsibility for routine childcare tasks would be stronger in couples in which mothers reported higher levels of parenting stress than for other couples. Controlling for covariates (see Table 6, column 4), emotional intimacy interacted with maternal relative earnings to predict father responsibility for routine childcare tasks ( $b = -0.01, p < .01$ ).

In order to test and interpret the significant interaction effect, a *Johnson-Neyman* graph was created using the MODEL CONSTRAINT: LOOP PLOT command in Mplus (Clavel, 2015). The Johnson-Neyman technique (Johnson & Neyman, 1936) is considered more specific than the simple slopes technique when examining a continuous by continuous moderator because it allows for the calculation of regions of significance across the entire range of the moderator, rather than splitting the moderator into “low” and “high” groups using some predetermined cut points. A visual inspection of the significant interaction terms can be found in Figure 1. The X-axis in the Loop plot depicts a continuous range of parenting stress, and the Y-axis represents a continuous range of

values for the adjusted effect of maternal relative earnings on father responsibility for routine childcare tasks (Clavel, 2015). The red line represents values of the adjusted effect (maternal relative earnings on father responsibility for routine childcare tasks) that correspond to the full range of all continuous values of parenting stress (measured in standard deviation units  $-SD$   $-$ ). The blue lines above and below the red plot line represent 95% confidence bands around the adjusted effect of maternal relative earnings on father responsibility for routine childcare tasks. Consequently, the plot shows that the effect of maternal relative earnings on father responsibility for routine childcare tasks was significant and positive for mothers experiencing low parenting stress (below  $.15$  SD). The effect of maternal relative earnings on father responsibility for routine childcare tasks was not significant for mothers with higher parenting stress ( $.15$  SD and above), approximately. Given that the predictor was time-varying and the data were lagged, this plot shows that the lower parenting stress is, the more maternal relative earnings is associated with subsequent father responsibility for routine childcare tasks. Although the association between maternal relative earnings and father responsibility for routine childcare tasks was moderated by parenting stress, due to it being in the opposite direction as hypothesized, hypothesis 2b was not supported.



## CHAPTER V

### DISCUSSION

The goal of this study was to examine whether increases in maternal relative earnings are predictive of later increases in father responsibility for routine childcare tasks, as increasing father involvement has been found to be beneficial for both fathers and mothers. Emotional intimacy and maternal parenting stress were examined as potential moderators of this association as mothers may be more likely to express a need for help with their partners when their relationships are more emotionally intimate, or when they are experiencing higher levels of parenting stress. The results of past research have shown that maternal relative earnings play a role in influencing father involvement in routine childcare tasks occurring across the same time points. The results of this study extend this literature by suggesting that maternal relative earnings also predict subsequent father involvement in routine childcare tasks, and that this longitudinal association may be conditional.

#### **Maternal Relative Earnings and Subsequent Father Responsibility**

The first goal of the study was to determine if maternal relative earnings from child age 6 to 24 months is related to subsequent father responsibility for routine childcare tasks from 15 to 36 months. A unique feature of this study was the lagging of the dependent variable to examine subsequent change rather than parallel associations in which the predictor and dependent variable change together over time. This lagging lent

strength to the time-ordered assumptions of the model. The findings of this study confirmed the time-ordered hypothesis, as maternal relative earnings was predictive of later father responsibility for routine childcare tasks. This suggests that not only do these variables change over time, but that maternal relative earnings has an influence on later changes in father involvement for routine childcare across the infancy and toddlerhood periods. That a maternal employment factor affected father involvement can be explained by a bioecological theoretical perspective, as a part of fathers' exosystem indirectly impacted them through their partners, a part of their microsystem. Further, as the inclusion of maternal work hours did not affect the association between maternal relative earnings and father responsibility for routine childcare tasks and numerous time-invariant and time varying controls were considered, this suggests that mothers' earnings from work are uniquely predictive of later responsibility for routine childcare tasks, and not the number of hours that mothers spend working.

The addition of the numerous controls is also important for understanding this association. When maternal relative earnings increase, so does father responsibility for routine childcare at the next time point, even after controlling for the significant effects of total family income, hours in nonmaternal childcare, prenatal maternal employment, and maternal neuroticism on father responsibility for routine childcare tasks. This suggests that maternal relative earnings might play a significant and important role in predicting father responsibility for routine childcare tasks, even after controlling for some of the other important predictors. According to bargaining theory, couples rely on their individual contributions to negotiate issues within their relationships (Lundberg & Pollak,

1996). As contributions increase, so should an individual's bargaining power. Therefore, when mothers experience increases in their earnings, they should also increase their negotiating power and can use it to allocate additional tasks to fathers to complete in their stead, which the current finding supports. As parenting can be time consuming and stressful, having this option can be especially beneficial for mothers in order to get everything done, as mothers are more likely to take on the majority of parenting work compared to fathers, even though father involvement is increasing (Kotila et al., 2013). Therefore, mothers who earn a greater proportion of the family income relative to their partners are at an advantage when negotiating who does which childcare tasks.

Although this finding provides support for the use of bargaining theory in research on the division of childcare, the majority of past research using the theory has focused on the division of housework (Bittman et al., 2003; Schneider, 2011). There is limited research guided by bargaining theory examining the relationship between relative earnings and childcare responsibilities, and the results have been mixed with some finding an association in the opposite direction (Meteyer & Perry-Jenkins, 2010) and others not finding a significant association (Deutsch et al. 1993; Marsiglio, 1991). However, Raley and colleagues (2012) suggested that these mixed findings may have been due to researchers focusing on childcare in general. They argued that because parents were more likely to find intrinsic enjoyment from parenting tasks, that mothers may only be willing to bargain away the less desirable, or routine childcare tasks, keeping the more enjoyable ones for themselves. When examining the association using a measure of routine childcare tasks measured using daily time diaries, and controlling for

mothers' work hours, Raley and colleagues (2012) found a positive association between maternal relative earnings and father involvement for children up to the age of thirteen, as well as no association between mothers' work hours and father involvement. This finding supports the tenets of bargaining theory, as fathers increased their responsibility when mothers earned a greater proportion of the couples' income. Further, the current study controlled for maternal work hours as Raley and colleagues did and found that maternal relative earnings was predictive of father responsibility for routine childcare tasks above and beyond those of maternal work hours. This provides additional evidence that it is the maternal employment factor of relative earnings that uniquely plays a role in predicting father involvement rather than the number of hours mothers work

The current finding that increases in maternal relative earnings was associated with increases in father responsibility for routine care tasks is consistent with past findings from Raley et al. (2012). The current study also extended these initial findings in a variety of ways. For example, Raley and colleagues focused on married couples with children under the age of thirteen, and the current study focused specifically on the infancy and toddlerhood period and included both married and cohabitating couples. By following couples with infant-aged children across 4 time points, this study provided the ability to examine the association between maternal relative earnings and father responsibility for routine childcare tasks during the infancy and toddlerhood periods specifically, with all parents dealing with the parenting challenges reflective of those particular developmental periods.

Additionally, the current study extends Raley et al.'s (2012) research by following couples across multiple time points, and by examining the effects of maternal relative earnings on subsequent father involvement. These additions allow for the examination of changes over time both within and between individuals, as well as strengthens the time-ordered assumptions of the model. As bargaining theory posits that income provides mothers with bargaining power, the finding that as mothers' relative earnings increases, so does subsequent father responsibility for routine childcare tasks provides important support for the theory and its utility in future studies. Finally, this study extends Raley et al.'s (2012) work through its inclusion of two potential moderating factors that help to explain this association.

### **Emotional Intimacy as a Moderator**

Emotional intimacy and parenting stress were identified as the two potential moderating factors. Reis and Shaver argued in their Interpersonal Process Model of Intimacy (1988) that emotional self-disclosures are strongly related to intimacy, and those that feel more understood and cared for in their relationships will be more likely to continue sharing their thoughts and feelings. Therefore, the hypothesis was proposed that mothers who felt that their partners were more open to hearing their thoughts and needs, reflected as higher emotional intimacy, would be more likely to use their bargaining power from the relative earnings to discuss their needs for parenting help with their partners. However, this hypothesis was not supported, as emotional intimacy did not moderate the relationship between maternal relative earnings and father responsibility for routine childcare tasks. Emotional intimacy also did not have a main effect on father

responsibility for routine childcare tasks, suggesting that whether mothers feel their partners are supportive and respectful of their thoughts and feelings may not play a significant unique role in whether they choose to delegate tasks to fathers.

Past results have been more consistent with the Interpersonal Process Model of Intimacy (1988), finding that when couples have less emotionally intimate relationships, fathers are less responsive to mothers' emotional needs and requests for help with childcare tasks (Matta & Knudson-Martin 2006). Additionally, mothers may avoid discussing their need for help with routine childcare tasks with their partners if they expect their partners to be unsupportive, instead choosing to do most of the tasks as a self-protective behavior to avoid the potential of not receiving the support that they need (Levy et al., 2001). Therefore, if mothers do not feel that fathers will be responsive, they may not feel that it is worth using their bargaining power as it will likely not be successful. However, this idea was not supported.

One reason that an effect might not have been found in this study may have been due to the inclusion of both biological and stepfathers in the analysis. Using the same dataset, Adamsons et al. (2007) found that marital intimacy was significantly related to the amount of involvement for stepfathers but not biological fathers. Therefore, it is possible that emotional intimacy may have functioned as a moderator only for the stepfathers in the sample. It is possible that the role of emotional intimacy is more relevant when bargaining with a parent who has chosen the parenting role, rather than one who is related biologically and may view the fathering role differently. Had the analysis been conducted with each type of father independently, it is possible that an

effect would have been found. However, as this study's focus was specifically on residential fathers as a group, a second-order moderating analysis in regard to type of father was not proposed.

A second reason for the lack of an interaction may be that emotional intimacy is a reflection of the marital relationship rather than the coparenting relationship. According to McBride and Rane (1998), assessments of coparenting relationships may be stronger predictors of father involvement than are parents' global ratings of marital satisfaction, because the coparental relationship is related to children whereas the marital relationship is not. Therefore, examining factors related to the coparenting relationship rather than the marital relationship may prove to be more effective. Despite the fact that the effect of the coparenting relationship may be stronger than that of the marital or couple relationship, it still does not explain why a significant, yet smaller effect was not found. One limitation of the Interpersonal Processing Model of Intimacy is that the focus is on the emotional intimacy of a specific relationship, rather than on specific aspects of that relationship. This overlooks the fact that mothers might pick and choose which thoughts and feelings to disclose. Therefore, it is possible that mothers could be very open with their partners about their thoughts and feelings about personal issues, but withhold those related to childrearing. Gatekeeping theory can help to shed light on this, as mothers who hold more traditional beliefs about parenting may be more likely to withhold sharing their need for parenting help with their partners. Following this reasoning, if mothers choose to disclose everything personal except for their parenting needs with their partners, then

whether or not they view the relationship as emotionally intimate might have little bearing on whether fathers get more involved.

In addition to focusing on the coparenting relationship, future studies should also consider the father-child relationship. Research has found that men consider their experiences as fathers to be highly influenced by their relationships with their children (Palkovitz, 2002). Therefore, mothers may be more concerned with the father-child relationship than with the coparenting relationship when trying to influence father involvement. As the conceptualization of father involvement has very recently begun to shift to that of father-child relationship quality (FCRQ; Palkovitz, 2019), an exciting future direction will be to examine the role that FCRQ plays in predicting father responsibility for routine childcare tasks.

### **Parenting Stress as a Moderator**

The second identified moderator was parenting stress. According to role strain theory (Pearlin, 1989), it is important to study stress as it provides the opportunity to observe how the structural arrangements of people's lives, and the experiences that they have due to these arrangements, affects their well-being. As higher stress is related to less sensitive parenting behaviors (Belsky, 1983), understanding the role of parenting stress in relation to father involvement is important for understanding how to help mothers share some of the childcare burden. Therefore, the hypothesis was proposed that mothers who were experiencing higher levels of parenting stress would be more likely to use their bargaining power from the relative earnings to discuss their needs for parenting help with their partners.



Findings have shown that increases in fathers' parenting contributions predict significant declines in mothers' parenting stress (Coley & Schindler, 2008; Nomaguchi et al., 2017). However, no study as of yet has examined this relationship in the opposite direction, with parenting stress predicting father involvement, or with parenting stress acting as a moderator. Although the hypothesis regarding the directional moderating effect of parenting stress was not supported, an interesting finding emerged. Parenting stress did moderate the association between maternal relative earnings and subsequent father responsibility for childcare tasks, but the Johnson-Neyman plot (Clavel, 2015) showed that the effect was in the opposite direction as hypothesized. Rather than the association between maternal relative earnings and subsequent father responsibility for childcare tasks being stronger for couples in which parenting stress was higher, the relationship was stronger only for couples in which parenting stress was lower. It appears that mothers may be more likely to use their bargaining power afforded from their increased earnings when they are not highly stressed, suggesting that bargaining may be stressful in and of itself, with mothers avoiding it when their parenting stress is higher. It will be important in future research to have mothers report on whether bargaining about childcare responsibility itself adds to their parenting stress, in order to support the use of role strain theory in similar work.

One reason for why this contradictory result may have been found is informed by gatekeeping theory. Although gatekeeping is often referred to in terms of inhibitive behaviors, or those that mothers employ to prevent fathers from getting involved in childcare, it can also be viewed in terms of facilitative behaviors, or behaviors that

mothers employ to increase father involvement. Research has shown that mothers are more likely to allow fathers to parent when they view them as capable caregivers (Fagan & Barnett, 2003). When mothers are less stressed about parenting, they may consider childcare tasks to be easy and consider it to be something that fathers can do successfully. Under these conditions, mothers may then be willing to use the power afforded to them by their relative earnings to allocate tasks for fathers to complete, using facilitative gatekeeping behaviors. On the other hand, mothers who are more stressed about parenting may evaluate it as difficult. They may choose to take on all of the tasks related to the parenting role rather than allow fathers to attempt them and potentially fail. This might be especially true for mothers with more traditional childrearing beliefs, who view parenting tasks as being the part of the “mother” role. In this sense, mothers may believe that they are the only ones capable of childcare duties, and thus rely on inhibitive gatekeeping behaviors to keep fathers from getting involved. Explication of this interaction would benefit from a measure of mother’s childrearing beliefs. Despite this, this finding suggests that the association between maternal relative earnings and subsequent father responsibility for routine childcare tasks is conditional on parenting stress, leading to a potential point of intervention.

### **Strengths and Limitations**

The current study contributes to the knowledge of the association between maternal relative earnings and later father responsibility for routine childcare tasks across infancy and toddlerhood, with specific attention to the moderating role of parenting stress. The strengths of this study include the time-ordering of study variables, the

extensive use of time-varying and invariant controls, the use of father reports of parenting behaviors, and the specific focus on involvement in routine childcare tasks. Time-ordering of the variables was done in order to strengthen the assumptions of the model. Rather than examining the predictor and dependent variables changing over the same time periods, the associations between mothers' relative earnings at a given time point and father responsibility for routine childcare tasks at the next time point was estimated. Time-lagging the longitudinal data and also including both time-varying and time invariant controls helped to control for the influence of relatively stable effects in addition to potentially confounding variables (Curran & Bauer, 2011).

The use of father reports of parenting behavior is another strength of the current study. First, though mothers can be adequate reporters of fathers' time with children, their reports can be subject to bias as they are not always available to see fathers and children together. Importantly, fathers have been found to be reliable reporters of their own involvement with their young children (Wical & Doherty, 2005). Second, when researchers rely on single informants to report on both the independent and dependent variables in their studies, this leads to increases in shared-method variance. According to Marsiglio et al. (2000), shared-method variance tends to increase the correlation between variables, resulting in overestimates of the real association. This makes it difficult to know whether the correlations are accurate estimates, or if they are due to factors related to the informants. By having mothers report on the independent variables and fathers report on the dependent variable, this reduces the threat of inflated associations due to shared informant bias.

Finally, this study focused on responsibility for routine childcare tasks. There currently are many individual fathering theories being used, rather than one all-encompassing theory. This has led to issues with comparing across studies due to multiple conceptualizations of the construct (Cabrera et al., 2007). Schoppe-Sullivan and colleagues (2004) conducted a confirmatory factor analysis using four facets of involvement (responsibility, affection/communication, participation in activities, and cognitive monitoring) to compare the utility of unidimensional and multidimensional models and to provide measurement advice to researchers. Their modeling procedures supported conceptualizing father involvement as a multidimensional construct, consisting of distinct domains. They proposed that global indexes of involvement were not effective, and that researchers should decide which aspects are important for their studies and collect data on them. Following their suggestions, this study focused on routine childcare tasks, as mothers report doing twice the routine childcare as fathers, making it a place in which bargaining can occur (Kotila et al., 2013).

Despite these strengths, the study is not without limitations. First, as this study focused on the first three years of childhood, these results cannot be generalized to couples with children beyond the toddlerhood age. As mentioned previously, the infancy and toddlerhood ages can be particularly challenging for parents as these children require substantial hands-on attention with daily tasks that older children may be able to do themselves. Parents need to spend more time directly engaged in routine childcare such as feeding and changing diapers, tasks specific to these age groups, and some mothers may find this particular type of involvement to be especially stressful due to the amount

of direct engagement required. Additionally, though mothers may take time off from employment for other reasons and thus experience a decrease and then increase in earnings as they return, the period immediately following the birth of a child is unique as all mothers must make the decision as to whether to continue working, to decrease their hours, or to take time off, which is often dependent on their access to family leave.

Additionally, though the time-ordering of the longitudinal variables helps to strengthen inferences, definitive conclusions about the causal relations cannot be made as the associations were not also modeled in the opposite direction to rule them out nor was an experimental design used. A benefit of experimental designs is that participants are randomly assigned to groups, removing the need to control for additional variables or selection effects. This study did rely on extensive time-varying and time invariant controls, but it is possible that there are other variables that were not accounted for in this study. For example, mother involvement was not controlled as mothers did not directly report on their responsibility for routine childcare tasks. Although mothers' involvement could potentially be inferred from the father involvement measure, it is subject to bias as fathers are not always available to see mothers' interactions with their children.

Another limitation of the current study is in regard to the internal consistency of the father responsibility for routine childcare tasks measure. Although the 24 and 36 month Cronbach alphas were acceptable at .79 and .78, respectively, the 15 month alpha was relatively low at .69. This suggests that the measure may not be unidimensional. If this is the case, the measure may be better reflected as an index score. Unlike scales, which measure levels of intensity at the variable level, indexes are constructed by

accumulating the scores assigned to individual items without concern about the intercorrelations. An assumption when using the measure as a scale is that fathers who are highly responsible for one task should be highly responsible for other tasks. However, as couples may divide up tasks between them, it is possible that some fathers may be high on the tasks that they are responsible for and low on the tasks that they aren't responsible for, suggesting that an index may be more appropriate.

A final limitation of the current study has to do with historical context. As the data for the current study were collected beginning in 1990, the Family and Medical Leave Act (FMLA) had not yet been established. FMLA entitles eligible employees to take unpaid, job-protected leave after the birth of a child and to care for the newborn child within the first year after birth. By the time FMLA was established in 1993, the children in the study were close to three years old. Therefore, the data in the study do not reflect the current state of parental leave in the country, in which many mothers are able to take unpaid time off after the birth of a child without the risk of losing their jobs, which can affect patterns of postpartum maternal employment and earnings (Schott, 2012).

### **Future Directions**

This study helps to understand how maternal relative earnings influences later father responsibility for routine childcare tasks across the infancy and toddlerhood periods. However, it also provides direction for future studies. First, although this study examined change over time, it was examined time linearly. Due to this, it is unclear whether any of the associations were stronger between specific time points or weaker at

others. Future work should examine the rate of change across the infancy and toddlerhood, or utilize a cross-lagged panel design to test for potentially different patterns among the associations across the waves.

Second, this study focused on mothers' experiences with the goal of better understanding how to help get fathers more involved. However, it did not take into account paternal factors such as fathers' perceptions of emotional intimacy or stress, which may play a role in how involved they become. Maternal parenting stress acted as a moderator, but fathers' parenting stress may as well, as more stressed fathers may be less likely to want to take on additional tasks. Future studies should also focus on the contexts surrounding fathers' experiences, such as their parenting stress and their reports of emotional intimacy, and their appraisals of their own parenting skills in order to gain a fuller understanding of the context of the entire couple relationship.

Finally, as mentioned above, the conceptualization of father involvement has very recently begun to shift to that of father-child relationship quality (FCRQ; Palkovitz, 2019). Therefore, an exciting future direction will be to examine the role that FCRQ plays in predicting father responsibility for routine childcare tasks. Potential questions should revolve around whether and how fathers' relationships with their children impact how involved they become. Another theory that can help to guide future work is that of identity theory (Styker, 1968). Although external factors like maternal bargaining or gatekeeping behaviors may influence father involvement, there are also internal factors that may play a role as well. For example, where does the parenting role fall on fathers' identity hierarchies? Are fathers who identify more with the parenting role more likely to

become involved, or more easily bargained with? What does father involvement look like for fathers who wish they could be more or less involved than they are? These are just a few possible questions for future work.

In conclusion, results of this study demonstrate that maternal relative earnings play a role in influencing subsequent father involvement in routine childcare tasks. This association is conditionalized on parenting stress, such that the relationship is stronger for couples in which parenting stress was lower, and not significant for couples in which parenting stress was higher. Future studies including mother reports of responsibility for routine childcare tasks, mother beliefs about childrearing, and father-child relationship quality are warranted.



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APPENDIX A

TABLES

Table 1. Descriptive Statistics for Primary Variables

Variable	6 months	15 months	24 months	36 months
Father responsibility for routine childcare tasks				
Descriptive				
<i>M</i>		2.47	2.47	2.49
<i>SD</i>		0.37	0.40	0.41
Total <i>N</i>		416	413	262
Missing <i>n</i>		56	59	210
Maternal relative earnings				
Descriptive				
<i>M</i>	28.30	30.74	31.58	
<i>SD</i>	27.49	29.14	29.33	
Total <i>N</i>	454	454	452	
Missing <i>n</i>	18	18	20	
Emotional intimacy				
Descriptive				
<i>M</i>	3.96	3.89	3.76	
<i>SD</i>	0.77	0.81	0.90	
Total <i>N</i>	326	399	371	
Missing <i>n</i>	146	73	101	
Parenting stress				
Descriptive				
<i>M</i>	2.56	2.55	2.52	
<i>SD</i>	0.67	0.57	0.59	
Total <i>N</i>	471	471	445	
Missing <i>n</i>	1	1	27	

Table 2. Descriptive Statistics for Time-Varying Control Variables

Variable	Prenatal	1 month	6 months	15 months	24 months
Maternal depressive symptoms					
Descriptive					
<i>M</i>		10.98	8.67	9.25	9.13
<i>SD</i>		8.71	8.14	8.60	8.62
Total <i>N</i>		472	471	471	446
Missing <i>n</i>		0	1	1	26
Total family income					
Descriptive					
<i>M</i>		38,798	48,797	49,378	52,489
<i>SD</i>		32,424	37,047	35,146	36,347
Total <i>N</i>		462	470	471	465
Father work hours					
Descriptive					
<i>M</i>		42.84	44.17	42.58	41.93
<i>SD</i>		14.20	13.48	15.66	14.39
Total <i>N</i>		461	445	460	448
Missing <i>n</i>		11	27	12	24
Mother work hours					
Descriptive					
<i>M</i>		2.51	21.67	23.01	23.36
<i>SD</i>		8.48	18.80	19.78	19.05
Total <i>N</i>		472	470	470	465
Missing <i>n</i>		0	2	2	7
Hours in childcare					
Descriptive					
<i>M</i>		4.95	23.46	24.38	25.91
<i>SD</i>		13.22	21.10	21.21	21.58
Total <i>N</i>		472	472	471	470
Missing <i>n</i>		0	0	1	2
Father work hour scheduling flexibility					
Descriptive					
<i>M</i>		2.75	2.56		
<i>SD</i>		0.72	0.79		

Total <i>N</i>	433	431		
Missing <i>n</i>	39	41		
Mother work hour scheduling flexibility				
Descriptive				
<i>M</i>	3.24	2.79	2.78	2.80
<i>SD</i>	0.86	0.86	0.85	0.80
Total <i>N</i>	49	319	318	320
Missing <i>n</i>	423	153	154	152
# of children in household				
Descriptive				
<i>M</i>		1.89		2.04
<i>SD</i>		0.96		1.03
Total <i>N</i>		471		466
Missing <i>n</i>		1		6

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Table 3. Descriptive Statistics for Time-Invariant Control Variables

Variable	<i>N/n (%)</i>	<i>M (SD)</i>
Baby's sex	472 (100)	
Female	230 (48.7)	
Male	242 (51.3)	
Baby's birth order	472 (100)	1.86 (.90)
Infant temperament	471 (100)	2.33 (.55)
Father's age	455 (96)	30.92 (5.73)
Mother's age	472 (100)	28.51 (5.51)
Father's education ( <i>N</i> = 462)		
< High School	33 (3.5)	
High School or GED	82 (17.7)	
Some college, no degree	156 (33.8)	
Bachelor's degree	106 (22.9)	
Some graduate work or Master's degree	64 (13.9)	
Law degree	9 (1.9)	
More than a masters or a doctoral degree	12 (2.6)	
Mother's education ( <i>N</i> = 472)		
< High School	32 (6.8)	
High School or GED	96 (20.3)	
Some college	158 (33.5)	
Bachelor's degree	112 (23.7)	
Some graduate work or Master's degree	61 (12.9)	
Law degree	7 (1.5)	
More than a masters or a doctoral degree	6 (1.3)	
Father's race ( <i>N</i> = 471)		
Other	43 (9.1)	
White	428 (90.9)	
Mother's race ( <i>N</i> = 471)		
Black	31 (6.8)	
White	440 (93.2)	

Father Hispanic ( <i>N</i> = 471)		
Yes	20 (4.2)	
No	451 (95.8)	
Mother Hispanic ( <i>N</i> = 471)		
Yes	24 (5.1)	
No	448 (94.9)	
Maternal prenatal employment status		
Full time ( <i>n</i> / %)	303 (64.2)	
Part time ( <i>n</i> / %)	102 (21.6)	
Not employed ( <i>n</i> / %)	67 (14.2)	
Mother personality		
Neuroticism	469 (99)	29.74 (7.19)
Extraversion	469 (99)	43.22 (5.49)
Agreeableness	469 (99)	46.67 (5.12)

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Table 4. Intercorrelations Among Time-Varying Variables

	1	2	3	4	5	6	7	8	9	10	11	12
Father responsibility for routine childcare tasks	--											
Maternal relative earnings	.28**	--										
Emotional intimacy	.09**	-.03	--									
Parenting stress	.01	-.04	-.29**	--								
Maternal depressive symptoms	.07*	.01	-.37**	.41**	--							
Total family income	-.12**	-.02	.13**	-.10**	-.23**	--						
Father work hours	-.19**	-.43**	.03	-.03	-.07**	.23**	--					
Mother work hours	.22**	.72**	.03	-.08**	-.11**	.16**	---.03	--				
Hours in childcare	.25**	.66**	-.02	-.03	-.10**	.15**	-.10**	.70**	--			
Father work hour scheduling flexibility	-.05	-.11*	.12*	-.09	-.04	.08*	-.13**	-.15**	-.16**	--		
Mother work hour scheduling flexibility	-.15**	-.19**	-.04	-.04	.01	-.05	.03	-.28**	-.25**	.15**	--	
# of children in household	-.03	-.09**	.00	.08*	.07*	-.02	-.03	-.12**	-.17**	.02	-.05	--

Notes: \* $p \leq .05$ , \*\* $p \leq .01$

Table 5. Intercorrelations Among Time-Invariant Variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Father responsibility for routine childcare tasks	--														
Baby's sex <sub>1</sub>	-.15*	--													
Baby's birth order	-.06*	.03	--												
Infant temperament	-.11*	.06**	-.07*	--											
Father age	-.06	.03	.21**	.05*	--										
Mother age	-.10*	.03	.23**	.06**	.76**	--									
Father education	-.06*	-.01	-.01	.15*	.35**	.41**	--								
Mother education	-.06*	.07**	-.03	.14**	.38**	.51**	.61**	--							
Father race <sub>2</sub>	-.10*	.03	-.13*	.12**	.12**	.19**	.13**	.19**	--						
Mother race <sub>2</sub>	-.08*	.02	-.16*	.09**	.10**	.12**	.09**	.15**	.75**	--					
Father Hispanic <sub>3</sub>	.07*	.03	.03	-.05*	-.05*	*	*	*	.04	.04*	--				
Mother Hispanic <sub>3</sub>	.09**	.03	.05*	-.02	-.01	-.03	-.01	-.05*	.06**	.04	.14**	--			
Mother neuroticism	.06*	-.04	-.09*	-.14*	-.17*	-.24*	-.21*	-.23*	-.07*	-.07*	.06**	-.01	--		
Mother extraversion	-.06*	.01	.03	.05*	-.02	.01	.11**	.09**	.07**	.06**	-.02	.03	-.32*	--	



Mother agreeableness	-.16*												*	
	*	.07**	.06**	.15**	.12**	.21**	.23**	.22**	.09**	.07**	-.05*	.00	-.43*	

Notes: \* $p \leq .05$ , \*\* $p \leq .01$

1 0 = male, 1 = female

2 0 = Other, 1 = White

3 0 = Not Hispanic, 1 = Hispanic

Table 6. Multilevel Models Predicting Fathers' Responsibility for Routine Care Tasks

Predictors	Unstandardized Coefficients			
	(1)	(2)	(3)	(4)
Father responsibility for routine care tasks				
Intercept	2.43**	3.43**	3.51**	3.43**
Time (child age)	0.01	0.14	0.12	0.13
Maternal relative earnings		0.01*	0.01*	0.01*
Emotional Intimacy			0.03	
Emotional Intimacy X Maternal Relative Earnings			-0.00	
Parenting Stress				0.01
Parenting Stress X Maternal Relative Earnings				-0.01**
Control variables				
Maternal depressive symptoms		0.01	0.02	0.01
Total family income		-0.01**	-0.01**	0.01**
Father work hours		-0.00	-0.00	-0.00
Mother work hours		0.01	0.00	0.01
Hours in childcare		0.02**	0.02**	0.02*
Father's work hour scheduling flexibility		-0.01	-0.01	-0.01
Mother's work hour scheduling flexibility		-0.02	-0.02	-0.02
# of children in household		0.03	0.03	0.03
Baby's sex <sub>1</sub>		-0.04	-0.04	-0.05
Baby's birth order		-0.08	-0.09	-0.08
Infant temperament		0.04	0.04	0.05
Father's age		-0.01	-0.01	-0.00
Mother's age		-0.09	-0.09	-0.09
Father's education		-0.01	-0.01	-0.01
Mother's education		0.01	0.00	0.01
Father's race <sub>2</sub>		-0.13	-0.13	-0.13
Mother's race <sub>2</sub>		-0.04	-0.04	-0.04

Father Hispanic <sup>3</sup>	0.03	0.03	0.04
Mother Hispanic <sup>3</sup>	0.22	0.22	0.23
Prenatal Full-time (FT)	-0.03**	0.04	-0.03
Prenatal Not-employed (NE)	-0.05**	-0.02	-0.01
Mother personality			
Neuroticism	0.13**	0.13*	0.12*
Extraversion	0.00	-0.01	0.00
Agreeableness	-0.05	-0.04	-0.05

Notes: Parameters are unstandardized regression coefficients.

Model 1: The unconditional growth model for fathers' responsibility for routine childcare tasks

Model 2: Maternal relative earnings predicting fathers' responsibility for routine childcare tasks, with covariates included

Model 3: Model 2 with the inclusion of emotional intimacy and the interaction between maternal relative earnings and emotional intimacy predicting fathers' responsibility for routine childcare tasks, with covariates included

Model 4: Model 2 with the inclusion of parenting stress and the interaction between maternal relative earnings and parenting stress predicting fathers' responsibility for routine childcare tasks, with covariates included

Father responsibility for routine childcare tasks is centered at 15 months.

Maternal relative earnings is centered at 6 months.

FT indicates the contrast between full-time and part-time work hours. NE indicates the contrast between no employment and part-time work hours.

<sup>1</sup> 0 = male, 1 = female

<sup>2</sup> 0 = Other, 1 = White

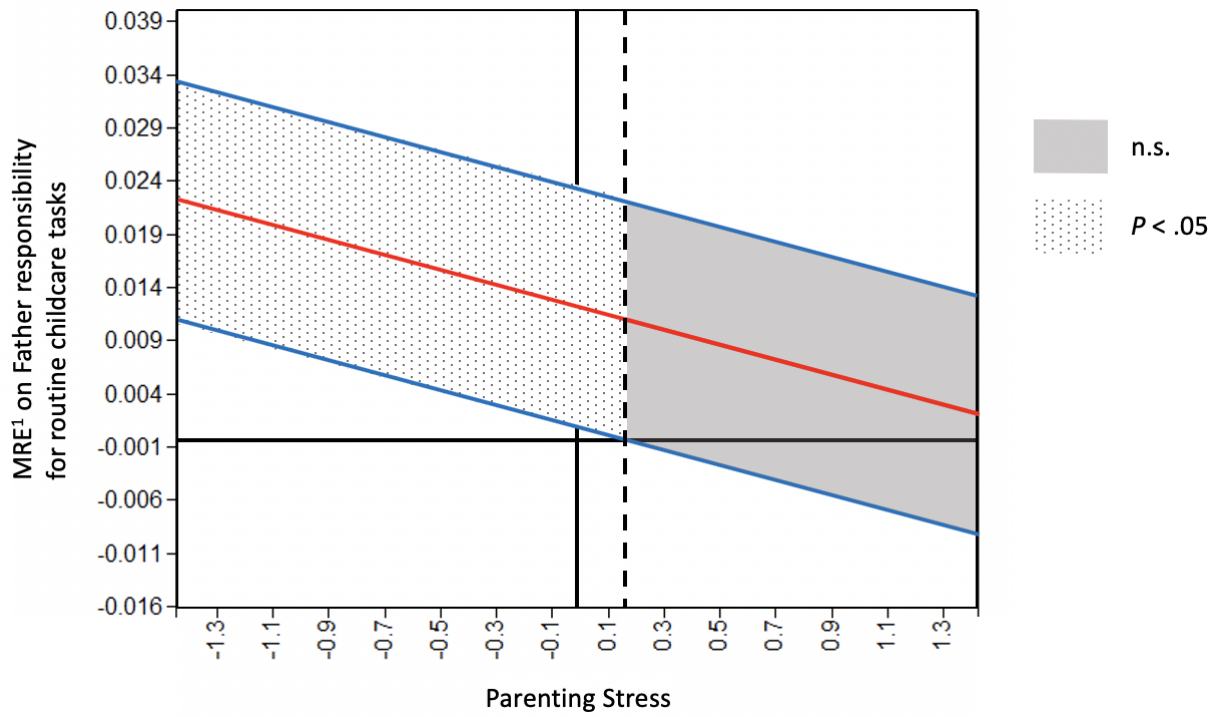
<sup>3</sup> 0 = Not Hispanic, 1 = Hispanic

\* $p \leq .05$ , \*\* $p \leq .01$

APPENDIX B

FIGURES

Figure 1. Maternal Relative Earnings by Parenting Stress in Prediction of Father Responsibility for Routine Childcare Tasks



Notes: Figure shows range from -1.5 SD to 1.5 SD of parenting stress as a moderator.  
1 MRE = Maternal relative earnings