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**CLARIFYING THE ASSOCIATION BETWEEN MOTHER-FATHER
RELATIONSHIP AGGRESSION AND PARENTING**

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Clarifying the Association Between Mother-Father Relationship Aggression and Parenting

ABSTRACT

Although much research has investigated consequences of relationship aggression for parenting, longitudinal examination of couple-level data is limited. Further, studies focused on the association between fathers' perpetration and mothers' parenting, ignoring consequences of mothers' perpetration for fathers' parenting as well as consequences of aggression perpetration for one's own parenting. Analyses using a sample of married or cohabiting couples from the Fragile Families and Child Wellbeing Study ($N = 1,112$) show that fathers' relationship aggression is positively related to both parents' stress and mothers' spanking frequency, whereas it is negatively related to fathers' engagement with children; and that mothers' aggression is positively related to both parents' stress and fathers' spanking frequency. Yet, in fixed effects models only the association between fathers' relationship aggression and fathers' parenting stress remains significant. In sum, the previously claimed association between relationship aggression and parenting appears to be largely due to selection factors.

Key words: family systems theory, fixed-effects models, gender, parenting styles, relationship aggression, selection effects, stress

The quality of parenting and the stressfulness that accompanies parenting play important roles in influencing child outcomes (Abdin, 1992; Amato & Fowler, 2002; Simons et al., 2002). Thus, family scholars have long investigated factors that influence the quality of parenting (Astone & McLanahan, 1991; Buehler & Gerard, 2002; Conger et al., 1993; McLeod & Shanahan, 1993; Turney & Wildeman, 2013) as well as parenting stress (Cooper, McLanahan, Meadows, & Brooks-Gunn, 2009; Deater-Deckard, 2004; Nomaguchi & Johnson, 2014). On the basis of family systems theory (Cox & Paley, 1997), prior research has emphasized the role of mother-father relationship quality in shaping the character of parenting practices and the degree of parenting stress (Carlson, Pilkauskas, McLanahan, & Brooks-Gunn, 2011; Deater-Deckard, 2004; Erel & Burman, 1995; Krishnakumar & Buehler, 2000). In particular, empirical studies have shown that tension, hostility, conflict, or aggression in the mother-father relationship is related to more parenting stress (Levendosky et al., 2006; Owen, Thompson, & Kaslow, 2006; Renner, 2009; Taylor, Lee, Guterman, & Rice, 2010) and more ineffective parenting, including less engagement, more inconsistency, and greater harshness (Edleson, 1999; Holden & Ritchie, 1991; Ritchie & Holden, 1998; Taylor, Cuterman, Lee, & Rathouz, 2009). Although scholars have conceptualized the adverse nature of relationship quality in various ways, such as marital conflict, marital discord, relationship aggression, and intimate partner violence (IPV) (Erel & Burman, 1995; Krishnakumar & Buehler, 2000), we call it “relationship aggression” as a broader term that is inclusive of emotional, physical, or economic abuse with a large range of intensity.

Despite the large volume of studies in this area, prior research is limited in at least three ways. First, most research on the association between relationship aggression and parenting outcomes focuses on mothers’ victimization—i.e., fathers’ aggression—and mothers’ parenting stress and quality of parenting (Gustafsson & Cox, 2012; Holden & Ritchie, 1991; Postmus,

Huang, & Mathisen-Stylianou, 2012; Taylor et al., 2009), overlooking the fact that community and population studies consistently find that women are as likely as men to be perpetrators of aggression and violence in intimate relationships (Johnson, Giordano, Manning, & Longmore, 2014; Melander, Noel, & Tyler, 2010; Renner & Whitney, 2010; Whitaker, Haileyesus, Swahn, & Saltzman, 2007). Although knowledge of conflict and aggression within romantic relationships has developed tremendously in the past two decades (Anderson, 2010), research on the consequences of relationship aggression on parenting continues to be lacking in this regard.

Second, most prior research has relied on cross-sectional data (e.g., Levendosky & Graham-Bermann, 2000; 2001; Taylor et al., 2010). Even though recent studies used longitudinal data (Gustafsson & Cox 2012; Huang, Wang, & Clements, 2010; Postmus et al., 2012), these studies typically linked relationship aggression at an early wave to parenting outcomes at a later wave without adequately controlling for factors that might be related to both relationship aggression and parenting outcomes. It could be that, for example, parents who have poor interpersonal skills, have attained lower levels of education, or are experiencing multiple life stressors are more likely to be a perpetrator of relationship aggression, while the same characteristics are related to less engagement with their children (Capaldi, Knoble, Shortt, & Kim, 2012; Krishnakumar & Buehler, 2000). Thus, a research design such as a fixed-effects model that can rule out potential selection effects (Allison, 2009) is necessary to advance our understanding of the association between relationship aggression and parenting outcomes.

Third, little research has examined gender differences in consequences of relationship aggression for parenting practices and parenting stress. Research has shown that, despite great strides toward gender equality in some areas, such as access to college education, both parenting and dynamics in heterosexual intimate relationship remain gendered (England, 2010). It is

possible that consequences of relationship aggression for parenting outcomes may differ for women and men. Based on prior research (Holden & Ritchie, 1991; Palazzolo, Roberto, & Babin, 2010; Taylor et al., 2010), we examine two contrasting predictions—the “gendered parenting” perspective and the “gender in intimate relationship” perspective—as to whether mothers’ or fathers’ parenting is more likely than the other to be influenced by relationship aggression.

In this paper, we address these limitations, using couple-level longitudinal data from Waves 3 and 4 in the Fragile Families and Child Wellbeing Study (FFCWS). We examine the associations between mothers’ or fathers’ aggression reported by the other partner and three aspects of parenting of mothers and fathers, including frequency of engagement with children, frequency of spanking, and parenting stress. To examine whether the associations are due to selection factors, we compare results from fixed-effects models that control for unmeasured characteristics with those from random-effects models, the models that prior research primarily used.

BACKGROUND

Family systems theory (Cox & Paley, 1997) posits that marital relationship and parenting are interdependent to each other. Earlier studies have examined the link between marital quality and parenting broadly (Erel & Burman, 1995; Krishnakumar & Buehler, 2000). More recently, research has focused on IPV and its consequences for parenting stress and parenting behavior (e.g., Postmus et al., 2012; Taylor et al., 2009, 2010). Both lines of research have conceptualized the link into two contrasting hypotheses. The first perspective is the spillover hypothesis. It posits that higher levels of relationship aggression are related to more parenting stress and poorer parenting (Erel & Burman, 1995). Scholars have suggested different spillover mechanisms.

Some suggest that there is a direct transfer of mood, affect, or behavior from one relationship to another. Negativity, stress, or frustration in the mother-father relationship may be carried over into their interactions with their children (Holden & Ritchie, 1991; Murray, Bair-Meritt, Roche, & Cheng 2012; Palazzolo et al., 2010; Renner, 2009; Taylor et al., 2010). Others emphasize the role of stress, conceptualizing mother-father relationship aggression as a stressor that could lead to reductions in psychological well-being, which, in turn, may lead to ineffective parenting (Gustafsson & Cox, 2012; Postmus et al., 2012). The second perspective is the compensatory hypothesis, which contends that couple aggression is related to better parenting—more engagement and less harshness. Parents whose intimate partnership is conflictual and less affectionate may try to be highly involved in their relationship with their children to obtain affection and closeness (Brody, Pillegrini, & Sigel, 1986). Empirical studies generally support the spillover hypothesis, showing a positive association between relationship aggression and parenting stress and poorer parenting practices, (Erel & Burman, 1995; Krishnakumar & Buehler, 2000). A few studies showed findings that support the compensation hypothesis, however. Using a small sample of racially-diverse mothers with preschool children, Levendosky, Huth-Bocks, Shapiro, and Semel (2003) found that IPV victimization was positively related to mothers' warm, responsive parenting. DeVoe and Smith's (2002) qualitative study illustrated that some mothers consciously avoid using physical punishment in order to teach children not to use physical force, suggesting a nuanced implication of IPV victimization for spanking.

Past research has several limitations that obscure our understanding of the link between relationship aggression and parenting. First, most research uses cross-sectional data. Even recent studies that used longitudinal data did not control for outcome variables in an earlier time period (Gewirtz, DeGarmo, & Medhanie, 2011; Gustafsson & Cox 2012; Huang, Wang, & Clements,

2010; Postmus et al., 2012). Such a research design does not address the issue of selection. In fact, there are a number of characteristics that may be related to relationship aggression, parenting stress, and parenting behavior. These include: poverty, unemployment, work-family conflict, child health, the number of children, and relationship status (Anderson, 2010; Conger et al., 1993; Cooper et al., 2009; McLeod & Shanahan, 1993; Nomaguchi & Johnson, 2014; Turney & Wildeman, 2013). Furthermore, there may be other unobserved characteristics such as mothers or fathers' antisocial personality or lack of interpersonal skills which are related to both relationship aggression and less effective parenting (Simmons, Lehmann, & Dia, 2010). The present analysis controlled for these background characteristics using fixed-effects models.

Second, prior research has largely focused on the association between fathers' perpetration of relationship aggression—i.e., mothers' victimization—and mothers' parenting experience. Yet, recent research has shown that women are as likely as men to be aggressive toward their intimate partner physically or verbally (Anderson, 2010). Thus, it is important to examine how mothers' aggression relates to fathers' parenting. In addition, it is possible that mothers' or fathers' perpetration of relationship aggression may affect their own parenting stress and practices. Based on the spillover hypothesis, we expect that similar to victimization, perpetration of relationship aggression will be related to more parenting stress and less effective parenting through direct spillover of negative mood and frustration. Holden and Ritchie (1991) found that fathers who perpetrate IPV are less effective in parenting. Using unique couple-level data, the current study examined how maternal and paternal perpetrations of relationship aggression are related to their own as well as the other parent's parenting stress and practices.

Third, little research has examined gender differences in the role of relationship aggression in influencing parenting. Prior research provides two contrasting predictions

regarding how mothers and fathers may differ in the link between intimate partner aggression and parenting practices and stress. One is the “gendered parenting” perspective. Research has shown that mothers often play the primary role in parenting, managing their children’s daily routines, whereas fathers tend to be “mothers’ helpers” (Fox, 2009). Thus, fathers’ participation in parenting tends to be greatly affected by mothers’ encouragement or “gatekeeping” (Fagan & Barnett, 2003; Sobolewski & King, 2005). These ideas suggest that men’s parenting is more vulnerable to relationship aggression enacted by the mother of their children (Erel & Burman, 1995). In contrast, the other perspective, the “gender in intimate relationship” perspective, contends that women are more likely than men to pay attention to the well-being of their romantic relationship and are more likely to be distressed by poor relationship quality (Anderson, 2010). These ideas suggest that women’s parenting may be more vulnerable to relationship aggression of the father of their children than men’s parenting. Empirical findings are inconsistent. Erel and Burman’s meta-analysis (1995) reported that there was little gender difference in the magnitude of the association between relationship quality and parenting. In contrast, Krishnakumar and Buehler (2000), also based on a meta-analysis, reported that fathers’ parenting is more strongly influenced by relationship aggression than mothers’ parenting. Past research is limited in that most studies relied on one person’s report, usually the mother. The present analysis uses couple-level data, which allows us to examine gender differences in the link between relationship aggression perpetration and victimization.

THE PRESENT STUDY

This study examines the association between relationship aggression and parenting among married or cohabiting couples. We examine how mothers’ and fathers’ aggression toward the other parent is related to their own and the other parent’s parenting. For parenting outcomes,

we focus on frequency of engagement in activities with children, frequency of spanking children, and parenting stress, indicators that are commonly used as important aspects of parenting (Holden & Ritchie, 1991; Simmons et al., 2010; Taylor et al., 2009; Taylor et al., 2010).

Whereas researchers tend to agree that a higher level of parental engagement and lower level of parenting stress are beneficial for children (Abdin, 1992; Amato & Fowler, 2002; Levendosky et al., 2006), there has been a debate over the conceptualization of spanking. Although some researchers regard spanking as ineffective or harsh parenting on the basis of research findings that spanking is related to poorer child adjustments (e.g., Buehler & Gerard, 2002; Gershoff, 2002), other research has shown that it depends on the contexts in which spanking is used (Lansford, Deater-Deckard, Dodge, Bates, & Petit., 2004; McLoyd & Smith, 2002; Simons et al., 2002). As found in Simons and colleagues' (2002) study, spanking remains considered a legitimate form of discipline in some communities; and in such communities, spanking is not related to children's poorer adjustments. In such context, a decline in frequency of spanking could reflect more lax parenting. We will take this debate into account when we interpret our findings. We examine parenting stress and parenting practice as separate outcomes, because some research has shown that parenting stress has a direct effect on children's behaviors (Huth-Bocks & Hughes, 2008), although others suggest that parenting stress could be a mediator (Owen et al., 2006; Postmus, Huang, & Mathisen-Stylianous, 2012).

Overall, on the basis of the spillover hypothesis, we expect that relationship aggression—either victimization or perpetration—is negatively related to engagement with children, positively related to spanking, and positively related to parenting stress. By using fixed-effects models, we carefully control for factors that are related to both relationship aggression and parenting. In addition, we pay special attention to gender differences in the associations between

relationship aggression and the three aspects of parenting. We have two contrasting hypotheses on gender differences. First, on the basis of the gendered parenting perspective, we expect that the association between relationship aggression and parenting will be stronger for fathers' parenting than mothers' parenting. Second, on the basis of women's relationship orientation perspective, we expect that the association will be stronger for mothers' parenting than fathers' parenting.

METHOD

Data

Data for the present analysis were drawn from Waves 3 and 4 of FFCWS. Launched between 1998 and 2000, the FFCWS is a stratified, multistage, probability sample of 4,898 children, of which 3,712 were born to unmarried parents (Reichman, Teitler, Garfinkel, & McLanahan, 2001). Mothers were selected from 75 hospitals in 20 cities with populations of at least 200,000. The baseline interviews were conducted in the hospital soon after the child's birth (W1). Wave 2 (W2), Wave 3 (W3), Wave 4 (W4), and Wave 5 (W5) interviews were conducted by telephone when the child was one, three, five, and nine years old respectively. We focused on data from W3 and W4, because W1 did not include any questions on relationship aggression, W2 did not include questions asking fathers about mothers' physical aggression, and W5 did not ask all parents about parenting stress and had different question items from previous waves to measure parental engagement with children. We first selected cases where the focal child's mother and father both participated in W3 and W4 and had the national weights, which would adjust the sample to be representative of those in urban areas ($n = 1,782$). Then we limited the sample to those who were married or cohabiting in both waves ($n = 1,112$). The W3 and W4 data were pooled into one data set ($N = 2,224$ person years).

The average age for fathers in the sample was 31.1 years (Table 1). Racial/ethnic compositions included 44% White, 17% Black, 32% Hispanic, and 7% other race. Nineteen percent of fathers did not complete a high school degree, 21% had a high school diploma, 33% had some college education, and 27% had a Bachelor's degree or more. Attrition analyses indicate that White mothers and fathers were more likely to be retained at W3, as were those with higher education, and those who reported being married at W1. We examined whether patterns of results would differ for couples who were excluded from the sample with no significant differences.

[Table 1 about here]

Measures

Fathers' and mothers' engagement with children (W3 & W4) was a time-varying variable measured as the average of four questions ($\alpha = .84$ in both W3 and W4 for fathers; and $\alpha = .74$ in W3 and $.73$ in W4 for mothers) that asked fathers and mothers how many days a week they would (a) sing songs or nursery rhymes; (b) read stories; (c) tell stories; or (d) play inside with the child. Responses ranged from 0 to 7 days per week. Fathers and mothers who did not see the child in the past month were coded 0. The same measure was used in other studies (Carlson, McLanahan, & Brooks-Gunn, 2008; Ryan, Kalil, & Ziol-Guest, 2008).

Fathers' and mothers' frequency of spanking was a time-varying variable measured based on two questions. Fathers and mothers were asked whether they spanked their children in the previous month because their children were misbehaving or acting up. If they answered "yes", they were asked how often they spanked their children. A measure of frequency of spanking was created for fathers and mothers respectively where 0 = *none*, 1 = *only once or twice*, 2 = *a few times*, 3 = *a few times*, 4 = *every day or nearly every day in the past month*.

Because very few parents reported “every day”, we combined them with “a few times”. Close to a half of mothers (46.8%) and fathers (39.3%) reported having spanked the focal child at least once during the previous month. Frequency of spanking was positively related to engagement with children ($\gamma = .076, p < .001$ for mothers and $\gamma = .195, p < .001$ for fathers). These suggest that spanking was a normative method of discipline among parents in the present sample.

Fathers’ and mothers’ parenting stress was a time-varying variable measured as the average of four questions ($\alpha = .63$ in W3 and $.66$ in W4 for fathers; $\alpha = .67$ in both W3 and W4 for mothers), (a) “Being a parent is harder than I thought it would be”; (b) “I feel trapped by my responsibilities as a parent”; (c) “I find that taking care of my child(ren) is much more work than pleasure”; (d) “I often feel tired, worn out, exhausted from raising a family” (1 = *strongly disagree*, 2 = *disagree*, 3 = *agree*, 4 = *strongly agree*). These four items were derived from the JOBS Child Outcome Survey by Child Trends, Inc. and Abidin’s Parent Stress Inventory (Abidin, 1995; Hofferth, Davis-Kean, Davis, & Finkelstein, 2014). Our alpha reliability coefficients were comparable to those obtained by Abidin (1995) and Hofferth et al. (2014).

Fathers’ and mothers’ perpetration of relationship aggression (W3 & W4) was a time-varying variable measured as the average of seven questions that were asked for the other parent ($\alpha = .64$ in W3 and $.66$ in W4 for fathers; $\alpha = .69$ in W3 and $.71$ in W4 for mothers): (a) “S/He insults or criticizes you or your ideas”; (b) “S/He tries to keep you from seeing or talking with your friends or family”; (c) “S/He tries to prevent you from going to work or school”; (d) “S/He withholds money, makes you ask for money, or takes your money”; (e) “S/He slaps or kicks you”; (f) “S/He hits you with a fist or an object that could hurt you”; and (g) “S/He tries to make you have sex or do sexual things you don’t want to do” (1 = *never*, 2 = *sometimes*, 3 = *often*). Past research has used these items in FFCWS to measure relationship aggression or IPV (e.g.,

Postmus et al., 2012; Taylor et al., 2009; 2010). As supplemental analyses (data not shown), we examined measures of relationship aggression excluding physical violence (i.e., questions e, f, g in the above list) to examine whether findings would vary depending on the intensity of aggression with little difference in patterns of findings. Although research has shown that relationship aggression is often mutual (Johnson, Giordano, Longmore, & Manning, (2014), the correlation between fathers' and mothers' relationship aggression in the present sample was modest ($\gamma = .229$, $p < .001$).

Several control variables were included. We controlled for fathers' and mothers' characteristics that are related to parenting and parenting stress as well as relationship aggression (e.g., Conger et al., 1993; Crouter, Bumpus, Head, & McHale, 2001; Nomaguchi & Johnson, 2014; Turney & Wildeman, 2013). *Fathers' and mothers' current employment status* (W3 & W4) was a time-varying variable measured as dummy variables. Following other research that used 60 hours as the cut-point for overwork for fathers (Crouter et al., 2001), five dummy variables were created including not employed, employed part-time (< 35 hours per week), employed full-time (35 to 44 hours per week) (reference), employed full-time with extended hours (45 to 59 hours per week), and employed full-time with overwork (60 hours or more per week). For mothers, because very few worked 60 hours per week or more, four instead of five dummy variables were created including not employed, employed part-time (< 35 hours per week), employed full-time (35 to 44 hours per week) (reference), and employed full-time with overtime (45 hours or more per week). *Fathers' and mothers' workplace inflexibility* (W3 & W4) was a time-varying variable measured as the average of three questions ($\alpha = .59$ in W3 and $.56$ in W4 for fathers; and $\alpha = .64$ in W3 and $.63$ in W4 for mothers) including: (a) "My shift and work schedule cause extra stress for me and my child"; (b) "Where I work, it is difficult to

deal with child care problems during working hours”; (c) “In my work schedule I have enough flexibility to handle family needs (reverse coded)” (1 = *never*, 2 = *sometimes*, 3 = *often*, 4 = *always*). We created four dummy variables including (a) never (reference), (b) sometime, (c) often or always, and (d) non-employed. *Income-to-poverty ratio* (W3 & W4) was a FFCWS constructed time-varying variable measured based on the father’s report. *Father’s incarceration history* (W3 & W4) was measured as a dichotomous variable where those who had ever been incarcerated were assigned 1s and others were assigned 0s. *Cohabitation* (W3 & W4) was a dummy variable where couples who were cohabiting were assigned 1s and those who were married were assigned 0s. *Fathers’ age* at W3 was a time-invariant variable. *Fathers’ race and ethnicity* at W1 was a series of time-invariant dummy variables including White (reference), Black, Hispanic, and other race. *Fathers’ levels of education* at W1 was measured as a series of time-invariant dummy variables including less than high school diploma, high school diploma (reference), some college, and college or above. Because fathers and mothers were similar to each other in age, race/ethnicity, and levels of education in most couples, we included fathers’ age, race/ethnicity, and levels of education only. Two indicators of children’s characteristics were controlled. *The number of children* under age 18 in the household (W3 & W4) was a time-varying variable measured based on the mother’s report as a continuous variable. *Child’s health* (W3 & W4) was a time-varying categorical variable ranging from 1 = *poor* to 5 = *excellent* measured as the mother’s report. Table 1 presents descriptive statistics for variables in the analyses.

Analytical plan

To examine the association between fathers’ or mothers’ relationship aggression and parenting outcomes, we used the pooled data set to estimate random-effects and fixed-effects

models (Allison, 2009; Johnson, 1995). A random-effects model, which is a standard regression model typically used in prior research, examines variations across individuals in the sample. In contrast, a fixed-effects model focuses on the within-person variation while controlling for time-invariant unmeasured characteristics—i.e., selection factors—that are related to both relationship aggression and parenting outcomes, although it does not control for time-varying unmeasured characters (Allison, 2009; Nomaguchi & DeMaris, 2013). The Hausman tests of differences in the coefficients between random-effects and fixed-effects models were significant for all models (data not shown), suggesting that fixed-effects models would be more appropriate than random-effects models (Allison, 2009). Missing cases were imputed using multiple imputations in SAS with five iterations (Allison, 2002).

RESULTS

Table 2 shows results from random-effects models (Model 1) and the results from fixed-effects models (Model 2) for the associations between fathers' or mothers' relationship aggression and three aspects of mothers' parenting. First we considered fathers' relationship aggression. In the random-effects models, fathers' relationship aggression was related to mothers' more frequent spanking and more parenting stress, as found in some of the prior studies (e.g., Murray et al., 2012; Owen et al., 2006; Taylor et al., 2009), although it was not related to mothers' engagement with children. In contrast, in the fixed-effects models, fathers' aggression was not related to any of the three parenting outcomes. These results suggest that the association between fathers' aggression and mothers' more frequent spanking and more parenting stress found in the random-effects model were largely due to unobserved characteristics that were related to both fathers' aggression and mothers' spanking or parenting stress.

Next we examined the association between mothers' relationship aggression and mothers' parenting, which has rarely been examined in prior research. The results from the random-effects models show that mothers' relationship aggression was related to mothers' own higher levels of parenting stress, although it was not related to mothers' engagement with children or mothers' frequency of spanking. Again, the association between mothers' relationship aggression and their parenting stress is not present in the fixed-effects model, suggesting that it was due to selection factors. Further, in the fixed-effects model, increased mothers' relationship aggression was related to decreased frequency of spanking, which was inconsistent with the spillover hypothesis.

[Table 2 around here]

Now we turn to the results for the association between fathers' or mothers' relationship aggression and fathers' parenting, which little prior research has examined. Models 1 and 2 in Table 3 present the results from random-effects and fixed-effects models, respectively, for the associations between fathers' or mothers' relationship aggression and three aspects of fathers' parenting. Again, we first examined fathers' relationship aggression. Fathers' aggression was related to fathers' less engagement with their children, consistent with findings by Holden and Ritchie (1991). Fathers' aggression toward mothers was also related to fathers' more parenting stress. The results from the fixed-effects models revealed that the former—i.e., the association between fathers' relationship aggression and fathers' engagement—was due to selection factors. That is, fathers who were harsh toward their spouse/partner were also less likely to be engaged with their children due to some unobserved characteristics that were associated with both relationship aggression and engagement with children for fathers. In contrast, the latter—i.e., the association between fathers' relationship aggression and father parenting stress—remained

significant in the fixed-effects model, suggesting a direct link between the two. Finally, we examined whether mothers' aggression was related to fathers' parenting outcomes. The results from the random-effects models show that mothers' aggression was related to fathers' more frequent spanking and more parenting stress. Yet, both relationships were explained by selection effects, according to the results from the fixed-effects models.

[Table 3 around here]

In sum, we found that fathers' increased relationship aggression was related to mothers' more frequent spanking and more parenting stress, but these associations were due to selection factors. Mothers who were harsher toward their spouse/partner were more likely than those who were less harsh to report higher levels of parenting stress, again due to selection factors. Fathers' relationship aggression was related to fathers' less engagement with their children and mothers' more parenting stress, but both associations were also due to selection effects. The only direct association remained in the fixed-effects models was the association between fathers' relationship aggression and fathers' increased parenting stress. Another direct association found in the fixed-effects models was the association between mothers' relationship aggression and mothers' decreased frequency of spanking.

To examine the robustness of the associations found above, we examined a couple of supplemental analyses (data not shown). First, we conducted the same models using non-physical violence measure of relationship aggression to examine whether the associations would depend on the intensity of relationship aggression. The patterns of the findings were very similar. Second, because the prevalence of relationship aggression varies by age (Johnson, Giordano, Manning, & Longmore, 2014), we examined whether patterns of the association would vary by

age. Again we found little difference. Third, we examined mothers' and fathers' aggressions in separate models with very similar patterns of findings,

DISCUSSION

Family scholars have long investigated the link between relationship aggression and parenting. The present analysis advanced knowledge in this area by using fixed-effects models with longitudinal data that controlled for other factors that could be related to both relationship aggression and parenting. In addition, while prior studies largely focused on fathers' relationship aggression and its consequences for mothers' parenting, we examined whether fathers' relationship aggression is related to fathers' own parenting, a neglected, but important question, given the increasingly critical role that fathers' parenting participation plays in influencing child outcomes (Pleck & Masciadrelli, 2004). Further, we examined how mothers' relationship aggression was related to fathers' and mothers' parenting, which, again, little prior research has examined, despite the research finding that mothers are also perpetrators of relationship aggression at least in its less serious, more common type of relationship aggression (Renner & Whitney, 2010).

With regard to the link between fathers' relationship aggression and mothers' parenting, the commonly examined association in prior research in this area, our findings from the random-effects models are consistent with prior findings. Specifically, we found that fathers' relationship aggression is related to mothers' more frequent spanking and more parenting stress, as found in many prior studies (e.g., Hazen, Connelly, Kelleher, Barth, & Landsyerk, 2006; Murray et al., 2012; Owen et al., 2006; Taylor et al., 2009). Yet, we found that these associations are not significant once unobserved characteristics are held constant in the fixed-effects models. In short, our results underscore the importance of considering selection bias in understanding the link

between fathers' relationship aggression and mothers' parenting. This finding informs practitioners and clinicians that it is critical to understand factors that may be causing both relationship aggression and ineffective maternal parenting practices to enhance the well-being of children.

Another contribution of the present analysis is that we examined the associations between fathers' relationship aggression and fathers' parenting experiences. Again, we found significant associations in the random-effects models, but most of them are not significant in the fixed-effects models. Specifically, fathers' relationship aggression is negatively related to the frequency of engagement with their children, which is consistent with Holden and Ritchie (1991) who found that fathers who perpetrate IPV were less effective in parenting. Yet, our findings suggest that this association is not direct, but spurious due to some unobserved factors. We did find a direct association between fathers' relationship aggression and fathers' parenting stress. This finding appears to support the spillover perspective, which indicates that fathers carry over their negative mood or harshness in the relationship domain into their mood in the parenting domain. Another possibility is that the association is due to maternal gatekeeping—mothers may try to shield their children from harsh, controlling fathers (Levendoskey et al., 2003), which makes it more difficult for fathers to participate in parenting, a factor that is related to more parenting stress (Nomaguchi & Johnson, 2014). As mentioned earlier, fixed-effects models do not control for time-varying unobserved characteristics. So, it could be that her spouse/partner's increased anger toward her might have led a mother to discourage her children from spending time with him. In any case, our findings suggest that perpetration of relationship aggression has implications for emotional health in the parenting role for men.

We also examined the association between mothers' relationship aggression and parenting, which again prior research has ignored even though it has been increasingly important to understand women's relationship aggression and its consequences (Anderson, 2010). Although we found that an increase in harshness toward their spouse/partner is related to an increase in parenting stress among mothers, this association is again due to selection factors. It could be that mothers who have unrealistic expectations for others in interpersonal relationships—either spouses or children—may be more likely to be controlling or harsh in intimate relationships and more likely to be stressed out by parenting (Shapiro, 2014). One finding that emerged after selection factors are controlled for is that an increase in mothers' relationship aggression is negatively related to their frequency of spanking. This result could be interpreted as supporting the compensatory hypothesis, which contends that mothers try to seek a warmer, close relationship in their parenting role when they are unable to have it in their marriage/romantic partnership. Yet, as discussed earlier, although some scholars regard a decline in spanking as more effective parenting, it could be interpreted as an increase in lax parenting, if spanking is used as a legitimate tool of discipline (Simons et al, 2002). Given that close to a half of parents in the sample spanked their children at least once in the previous month, spanking appears to be a normative method of discipline among parents of the present sample. If so, our finding may indicate that mothers provide their children with less discipline when they become harsher toward or more controlling of their spouse/partner. Research has suggested that women's perpetration of relationship aggression typically reflect their frustrated attempt to control some issues in their relationships, such as financial strain, infidelity, men's substance use problems, or argument over division of labor (DeMaris et al., 2003). In such context, women may be

preoccupied with the issues they face in their marriage/partnership, which may distract them from parenting.

The present analysis has limitations that future research should address. First, measures of parenting are limited. Inconsistency in discipline and monitoring, such as TV or bed time rules, may be better measures of parenting that have direct effects on child outcomes and that could be affected by mother-father relationship aggression (Krishnakumar & Buehler, 2000). Second, the present analysis showed associations, but did not permit us to draw conclusions about the causal direction of the relationship between relationship aggression and parenting outcomes. Third, the present analysis focused on parents with children aged three to five and we do not know whether the same patterns will be found for mothers and fathers with younger or older children. Finally, the FFCWS focused on an urban, disadvantaged population, and thus future research using a nationally representative sample of U.S. parents is warranted.

To conclude, the present analysis suggests that it is critical to consider selection biases in order to better understand the associations between relationship quality and parenting. Controlling for unobserved characteristics, we found no association between fathers' relationship aggression and mothers' parenting. Our study also suggests that it is not victimization but perpetration of relationship aggression that might have direct influences on parenting for both mothers and fathers. Gender differences are found only in a nuanced way: perpetration of relationship aggression is linked to their own parenting practices for mothers, whereas it is related to their own emotional health within the parenting role for fathers.

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Table 1. Means (Std) for Variables in the Analysis (N = 1,112)

<i>Time variant variables</i>		
Fathers' Relationship Aggression (1 - 3)	1.10	(0.16)
Mothers' Relationship Aggression (1 - 3)	1.13	(0.18)
Parenting outcomes		
Fathers' engagement (0 - 7)	3.60	(1.89)
Mothers' engagement (0 - 7)	4.77	(1.75)
Fathers' spanking (0 - 3)	0.62	(0.90)
Mothers' spanking (0 - 3)	0.73	(0.94)
Fathers' parenting stress (1- 4)	2.03	(0.71)
Mothers' parenting stress (1- 4)	2.26	(0.64)
Controls:		
Fathers' employment		
Unemployed	0.08	
Employed part-time	0.07	
Employed full-time	0.41	
Employed full-time plus	0.32	
Overworked	0.13	
Work-family conflict none	0.28	
Work-family conflict some	0.42	
Work-family conflict a lot	0.22	
Mothers' employment		
Unemployed	0.44	
Employed part-time	0.18	
Employed full-time	0.29	
Overworked	0.08	
Work-family conflict none	0.22	
Work-family conflict some	0.26	
Work-family conflict a lot	0.07	
Father ever in jail	0.17	
Income-to-poverty ratio	3.44	(3.87)
Cohabiting (vs. Married)	0.16	
# of children < 18	2.31	(1.17)
Child health	4.50	(0.88)
<i>Time invariant variables</i>		
Fathers' age at W3	31.08	(6.32)
Fathers' race at W1		
White	0.44	
Black	0.17	
Hispanic	0.32	
Other race	0.07	
Fathers' education at W1		

< high school	0.19
High school	0.21
Some college	0.33
College graduates	0.27

Table 2. Coefficients from Random-Effects and Fixed-Effects Models for Mothers' Parenting Among Married or Cohabiting Parents (N = 1,112; 2,224 person-years)

	Mother Engagement				Mother Spanking				Mother Stress			
	Model 1		Model 2		Model 1		Model 2		Model 1		Model 2	
	Random Effects		Fixed Effects		Random Effects		Fixed Effects		Random Effects		Fixed Effects	
	<i>b</i>	<i>SE</i>	<i>B</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>
Fathers' aggression	-.308	.192	.274	.290	.289	.116*	.119	.186	.294	.076***	.144	.118
Mothers' aggression	.199	.179	.102	.260	-.107	.107	-.342	.167*	.149	.070*	.136	.108
Fathers' employment												
Unemployed ^a	-.258	.119*	-.297	.161	-.002	.071	-.022	.105	.047	.048	.061	.066
Employed part-time	-.464	.124***	-.496	.161**	-.094	.080	-.133	.123	.208	.049***	.206	.066**
Employed full-time+	-.111	.065	-.169	.085*	-.018	.041	-.068	.056	.067	.026*	.089	.035*
Overworked	.712	.097***	.878	.128***	-.001	.060	-.052	.082	.098	.040*	.144	.052**
WFC some ^a	-.059	.068	-.027	.088	-.118	.045**	-.128	.062*	-.026	.027	-.054	.035
WFC a lot	-.135	.094	-.162	.121	.117	.057*	.188	.081*	-.095	.036**	-.156	.049**
Mothers' employment												
Unemployed ^a	.155	.103	.244	.137	-.093	.058	-.137	.098	.233	.038***	.183	.057**
Employed part-time	.005	.117	-.041	.158	-.136	.063*	-.156	.099	.135	.040***	.110	.060
Overworked	.308	.123*	.313	.181	-.082	.078	-.065	.124	-.035	.049	-.032	.070
WFC some ^a	.092	.076	.264	.101**	-.021	.047	-.076	.064	.102	.030***	.075	.040
WFC a lot	.034	.132	.153	.189	-.107	.074	-.195	.104	.141	.048**	.061	.065
Father ever in jail	.107	.121	.544	.339	.042	.070	-.662	.224**	-.057	.049	-.043	.148
Income-to-poverty ratio	-.008	.010	-.011	.014	-.004	.006	.001	.009	-.009	.004*	-.012	.006*
Cohabitation ^a	-.229	.110*	-.573	.208**	-.124	.063	.224	.130	.103	.043*	.277	.083***
# of children < 18	-.005	.033	.090	.058	-.035	.019	-.103	.036**	.058	.014***	.075	.024**
Child health	.293	.121	.214	.095	-.060	.025*	-.063	.033	-.037	.048	-.035	.033
Fathers' age	-.026	.009**			-.017	.005***			.003	.003		
Fathers' race ^a												
Black	-.295	.146*			-.112	.084			-.089	.059		
Hispanic	-.462	.143**			-.375	.079***			-.029	.054		

Other race	-.690	.231**			-.308	.134*			.157	.093		
Fathers' education ^a												
< High school	-.116	.153			-.155	.086			-.043	.059		
Some College	.257	.144			.015	.082			-.027	.057		
College degree	.322	.165			-.239	.094*			.084	.065		
W4	-.661	.041***	-.712	.049***	-.140	.025***	-.089	.031**	-.077	.016***	-.069	.020***

* $p < .05$; ** $p < .01$; *** $p < .001$

Notes: ^aOmitted reference categories include: full-time employed, no WFC, married, White, and high-school diploma.

Table 3. Coefficients from Random-Effects and Fixed-Effects Models for Fathers' Parenting Among Married or Cohabiting Parents (N = 1,112; 2,224 person-years)

	Father engagement				Father spanking				Father Stress			
	Model 1		Model 2		Model 1		Model 2		Model 1		Model 2	
	Random Effects		Fixed Effects		Random Effects		Fixed Effects		Random Effects		Fixed Effects	
	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>
Fathers' aggression	-1.100	.220***	-.271	.337	.071	.116	.286	.182	.321	.079***	.330	.118**
Mothers' aggression	-.296	.210	-.556	.298	.326	.102**	.230	.161	.358	.071***	.153	.106
Fathers' employment												
Unemployed ^a	.236	.147	.360	.200	.060	.077	.074	.116	.108	.052*	.074	.071
Employed part-time	-.584	.139***	-.726	.194***	.167	.075*	.114	.118	-.074	.049	-.081	.064
Employed full-time+	-.288	.077***	-.356	.098***	-.062	.041	-.158	.054**	.000	.027	.018	.036
Overworked	.199	.112	.345	.146*	.065	.056	.065	.081	.057	.039	.095	.052
WFC some ^a	-.045	.082	-.020	.102	.003	.041	-.033	.068	.101	.027***	.071	.035*
WFC a lot	-.137	.119	-.189	.140	.181	.053***	.154	.084	.258	.035***	.168	.048***
Mothers' employment												
Unemployed ^a	.016	.132	.116	.191	-.148	.064*	-.166	.101	.019	.048	-.039	.059
Employed part-time	-.289	.148	-.374	.199	-.337	.062***	-.483	.095***	-.106	.052	-.174	.062**
Overworked	.414	.145**	.646	.196**	.052	.105	.260	.124*	-.003	.071	.037	.096
WFC some ^a	.312	.099**	.437	.116***	-.035	.055	-.036	.069	-.098	.035**	-.131	.044**
WFC a lot	.230	.140	.399	.185*	-.143	.073	-.089	.104	.031	.050	.009	.078
Father ever in jail	-.068	.138	-.193	.390	.078	.071	-.525	.225*	.068	.050	-.209	.154
Income-to-poverty ratio	-.006	.011	.003	.016	-.006	.006	.004	.009	-.003	.004	-.004	.006
Cohabitation ^a	-.316	.127*	-.971	.232***	-.147	.062*	-.056	.132	.002	.043	-.116	.081
# of children < 18	-.102	.037**	.025	.068	.038	.018*	.063	.035	.044	.013***	.048	.023*
Child health	.398	.106**	.365	.115*	.070	.034	.083	.034*	-.012	.018	-.011	.020
Fathers' age	-.020	.012			-.017	.004***			-.002	.003		
Fathers' race ^a												
Black	.014	.162			-.096	.079			-.074	.059		
Hispanic	-.347	.159*			-.208	.074**			-.169	.059**		

Other race	-.426	.261			-.341	.121**			.169	.099		
Fathers' education ^a												
< High school	-.169	.170			-.321	.080***			.033	.061		
Some College	.126	.169			.057	.077			-.116	.059*		
College degree	.382	.196			-.122	.087			.069	.068		
W4	-.559	.059***	-.608	.062***	-.251	.025***	-.233	.032***	-.108	.017***	-.112	.021***

* $p < .05$; ** $p < .01$; *** $p < .001$

Note: Omitted reference categories include: full-time employed, no WFC, married, White, and high-school diploma.