

Partner predictors of marital aggression across the transition to parenthood: An I³ approach

Journal of Social and
Personal Relationships
2019, Vol. 36(5) 1491–1508

© The Author(s) 2018

Article reuse guidelines:

sagepub.com/journals-permissions

DOI: 10.1177/0265407518809538

journals.sagepub.com/home/spr



Jami Eller¹, Emma M. Marshall², W. Steven Rholes³,
Grace Vieth¹, and Jeffry A. Simpson¹

Abstract

The stress that arises during the transition to parenthood often places significant strain on marriages that can result in marital problems such as aggression victimization. In this research, we use an I³ framework to identify specific partner variables that are likely to promote physical aggression victimization across the transition to parenthood. Examining both intercepts (i.e., mean levels of aggression victimization estimated at childbirth) and slopes (e.g., changes in aggression victimization estimated over time), we find support for a three-way interaction anticipated by the I³ framework. Specifically, male partners were more likely to report being the victim of aggression at childbirth and also during the 24 months that followed when their female partner reported experiencing greater parental stress (an instigator to aggression in the I³ framework), greater relationship-specific attachment avoidance (an impellor to aggression), and lower relationship satisfaction (the lack of an inhibitor to aggression). Implications for the prevention of marital aggression associated with these I³ factors are discussed.

Keywords

Aggression, attachment, marital satisfaction, stress, transition to parenthood

¹ University of Minnesota, USA

² Deakin University, Australia

³ Texas A&M University, USA

Corresponding author:

Jami Eller, Department of Psychology, University of Minnesota, 75 East River Road, Minneapolis, MN 55455, USA.
Email: eller091@umn.edu

One of the ironies of the transition to parenthood is that new parents often experience great happiness as well as significant stress (Cowan & Cowan, 2000; Simpson & Rholes, 2019). A substantial body of research has documented that relationship satisfaction and functioning tend to decline in the months following the birth of a first child (Twenge, Campbell, & Foster, 2003). Only a handful of studies, however, have focused on a relevant and perhaps crucial relationship outcome during the transition to parenthood—marital aggression victimization, which strongly predicts both poorer relationship functioning and higher probability of dissolution (Lawrence & Bradbury, 2001).

In the current longitudinal dyadic study, we examine marital aggression victimization across the transition to parenthood through the lens of the I³ framework in order to identify key partner-based factors likely to exacerbate or inhibit *physical* aggression directed at a person by their relationship partner (cf. Finkel & Eckhardt, 2013). Aggression victimization is particularly important, given that self-reports of aggression *victimization* tend to be affected less by social desirability than self-reports of aggression *perpetration* are (Arias & Beach, 1987; Dutton & Hemphill, 1992) and, therefore, may be more accurate. This focus is important because significant variation in marital outcomes exists among couples who go through the transition to parenthood (Simpson & Rholes, 2019). Thus, research needs to determine why some partners and relationships fare better than others, so that “aggression-susceptible” couples can be identified and supported during this challenging and stressful life event.

The transition to parenthood and negative relationship outcomes

The transition to parenthood introduces major shifts in family and relationship dynamics and structures (Mattessich & Hill, 1987). Becoming a parent for the first time can generate gratification (Russell, 1974), greater meaning in life (Baumeister, 1991), and new social network opportunities (Nomaguchi & Milkie, 2003). Despite these potential positive outcomes, the transition to parenthood is also described by many new parents as a “crisis” (LeMasters, 1957). The stresses associated with becoming a new parent can also generate a host of negative personal and relationship outcomes (Pistrang & Barker, 2005). A large body of research indicates that most couples report significant declines in marital satisfaction over the transition to parenthood (Doss, Rhoades, Stanley, & Markman, 2009; Feeney, Hohaus, Noller, & Alexander, 2001; Twenge et al., 2003). Other investigations have documented declines in important relationship experiences, such as the amount of support available from partners (Simpson, Rholes, Campbell, Tran, & Wilson, 2003) and the amount of available relationship-focused leisure time (MacDermid, Huston, & McHale, 1990). We currently know little, however, about other significant relationship outcomes such as physical aggression victimization, which may be the most severe negative relationship outcome (Arriaga, Cobb, & Daly, 2018).

Aggression in marriage

Marital aggression refers to any intentionally harmful behavior perpetrated toward one’s marital partner, either directly or indirectly (Richardson, 2014). The occurrence of physical aggression in marriage is more common than many people believe. In a

nationally representative study of over 16,000 adults in America, 35% of heterosexual women and 29% of heterosexual men reported physical aggression victimization (Walters, Chen, & Breiding, 2010). Unfortunately, many couples are also prone to experiencing increases in psychological and/or physical aggression during the transition to parenthood, often in response to the added stress it places on most marriages (Jasinski, 2004). Woodin, Caldeira, Sotskova, Galaugher, and Lu (2014), for example, found that reports of physical marital aggression were as high as 30% and reports of psychological marital aggression were as high as 89% in a sample of 72 couples going through the transition to parenthood. Moreover, marital aggression often puts tremendous strain on the victim (by increasing their depressive and/or anxiety symptoms; Follingstad, 2009), the marriage (Carroll et al., 2010), and the family (e.g., the children's well-being; Carlson, 2000). The small amount of research that has been conducted on marital aggression across the transition to parenthood has limitations, with most of it being descriptive, atheoretical, or nondyadic in design. Because of this, we still do not know or fully understand the underlying variables and processes that promote or inhibit physical aggression victimization within marriages across the transition to parenthood.

Different perspectives, such as the intimate partner violence typology (Johnson, 1995) and the general aggression model (Anderson & Bushman, 2002), can be used to organize and conceptualize predictors of marital aggression. However, the I^3 framework proposed by Finkel and Eckhardt (2013) has several unique advantages because it adopts a more holistic and multifaceted approach to understanding different sources of marital aggression.

I^3 framework. Finkel and Eckhardt (2013) proposed the I^3 framework as a way of organizing and better understanding the combination of factors that can create a "perfect storm," triggering interpersonal aggression. This framework identifies specific instigating, impelling, and inhibiting factors that should statistically interact, creating a unique context in which aggression is most likely to occur.

Instigators are situational factors that increase the urge to aggress against another person (i.e., one's partner). They include situations that begin to launch an aggressive act, increasing the probability that aggression will occur. Stress commonly precedes elevated aggression (Sprague, Verona, Kalkhoof, & Kilmer, 2011; Verona & Kilmer, 2007), and high levels of chronic stress are common and salient during the transition to parenthood (Pistrang & Barker, 2005). Hence, the stress associated with having a first child (e.g., parental stress) should create an environment in which aggression is more likely to be expressed. The transition to parenthood, however, is not uniformly stressful for all couples, with some partners experiencing greater stress than others (Cowan & Cowan, 2000). If, therefore, an individual's partner experiences higher levels of parental stress, the partner should be more likely to aggress against him or her, resulting in higher or increasing self-reported aggression victimization by the individual.

Impellers are dispositional or circumstantial factors that increase the urge to aggress against others. They encompass individual differences that increase the likelihood that a person will behave aggressively, particularly in the presence of an instigator. Attachment avoidance (e.g., the desire for independence, autonomy, and lack of trust of close others) is a relevant individual difference, given the threat that having a baby can place on one's

independence and autonomy (Simpson & Rholes, 2019). Consistent with this view, avoidance is associated with more perpetration of physical aggression toward partners in general (Holtzworth-Munroe, Stuart, & Hutchinson, 1997) and with heightened risk of psychological aggression during the transition to parenthood in particular (Gou & Woodin, 2017). Attachment avoidance, therefore, should be a strong impeller, especially during the transition to parenthood. If, therefore, an individual has a highly avoidant partner who experiences high stress, the partner should be more inclined to respond with anger, hostility, and aggression toward him or her, resulting in higher or increasing self-reported aggression victimization by the individual.

Inhibitors are situational or dispositional factors that decrease or dampen the urge to aggress against others. They include factors that reduce the likelihood that an aggressive act will occur, counteracting any instigators or impellers. Relationship satisfaction (e.g., the perception that a partner/relationship sufficiently meets one's needs) should be a primary relationship-relevant inhibitor during the transition, reducing the inclination to aggress against one's partner (Gou & Woodin, 2017). Although relationship satisfaction tends to decline over the transition, some couples experience minimal declines or even increases (Belsky & Rovine, 1990). Relationships that remain satisfying despite the challenges and turbulence of becoming a new parent should temper inclinations to aggress. Accordingly, if an individual's partner experiences high parental stress and craves autonomy, yet still remains satisfied with the relationship despite these challenges, the partner should be less likely to behave aggressively, resulting in less or decreasing self-reported aggression victimization by the individual.

Change over time

Longitudinal designs are required to unravel the complex, dynamic processes underlying aggression victimization over time. During time periods that involve change, patterns of positive and negative behavior within a relationship frequently shift. How and why physical aggression victimization in relationships varies across time is not well understood (Arriaga et al., 2018), and it rarely has been examined across chronically stressful periods of life such as the transition to parenthood.

To our knowledge, only two transition studies (Gou & Woodin, 2017; Woodin, Caldeira, Sotskova, Galaugher, & Lu, 2014) have investigated marital aggression across time. Both had relatively small samples (less than 100 couples) and only two postpartum assessments (at 1 and 2 years). The current study is novel in that it examines (a) initial levels of aggression victimization (i.e., when each couple's first baby was born) and (b) how levels of aggression victimization change over five assessments during the first 2 years of the transition. Woodin et al.'s (2014) findings reveal that physical aggression is variable over the transition to parenthood. As the stress and strain of the transition mounts, new parents may begin to behave more aggressively toward each other, especially if their relationship satisfaction is low. Conversely, parents who have "relational relief" from the stress and strain of having a new baby because they are more satisfied might be able to resist behaving aggressively toward their partners. Given the limited research on this topic, we examined changes over time in aggression victimization in an exploratory manner.

Current research

In the current study, we investigated the initial mean levels (intercepts) and trajectories (slopes) of physical aggression victimization across the first 2 years of the transition to parenthood in a sample of first-time parents, all of whom were married and/or cohabitating. We examined how each participant's reports (i.e., actor reports) of being the *victim* of physical aggression were predicted by specific *partner-reported* instigating, impelling, and inhibiting factors that, together, should interact to predict higher initial levels of, as well as overtime changes in, actor-reported aggression victimization. To our knowledge, this is the first theory-based dyadic, longitudinal investigation of *physical aggression victimization* across the transition to parenthood.

Informed by the I³ framework, we hypothesized that individuals (*actors*) whose *partners* reported higher parental stress (*instigator*), higher relationship-specific avoidance (*impellor*), and lower relationship satisfaction (*inhibitor*) should report higher initial levels of aggression victimization (i.e., when their baby is born). Additionally, we conducted exploratory analyses to examine how these partner variables related to changes in aggression victimization across the transition to parenthood. We did not make any predictions about gender differences in aggression victimization, but we did test for possible gender differences in an exploratory way, given the conflicting findings on gender differences and aggression victimization. Although victims of aggression are typically thought to be female, women also engage in significant aggression perpetration in marriages (Arriaga et al., 2018). Previous research on aggression during the transition to parenthood suggests that gender differences could be found (Gou & Woodin, 2017; Woodin et al., 2014). Moreover, some broader research suggests there are gender differences in aggression victimization, with females perpetrating more physical aggression than males (Archer, 2000; Dobash, Dobash, Wilson, & Daly, 1992; Johnson, 1995). Other research, however, has not found consistent differences in aggression victimization patterns for women and men (E. A. Bates, Graham-Kevan, & Archer, 2014; Graham-Kevan & Archer, 2003).

Method

Participants

One hundred and ninety-two cohabiting heterosexual couples expecting their first child were recruited from childbirth classes in a large Southwestern city in the United States. At Time 1, there were 192 couples. Fifty-five couples dropped out of the study by Time 5 (24 months after childbirth), resulting in a final sample of 137 couples.

At the beginning of the study, 95% of the couples were married ($M = 3.30$ years; standard deviation [SD] = 2.60) and 5% were cohabitating ($M = 1.85$ years; $SD = 2.19$). On average, male partners were 28.4 years old ($SD = 4.40$) and female partners were 26.7 years old ($SD = 4.10$). Eighty-two percent were Caucasian, 9% were Asian, and 9% were Hispanic. All but 6% had some college education.

We evaluated differences between participants who completed the entire study and those who dropped out (i.e., did not complete all assessment waves). Independent samples t tests revealed the two groups differed significantly on only three of the

modeled Time 1 variables: Dropouts had higher levels of relationship-specific attachment avoidance, $t(384) = 2.42$, $d = 0.22$, $p < .05$, and aggression victimization, $t(384) = 1.96$, $d = 0.43$, $p < .05$, and lower levels of relationship satisfaction, $t(384) = 1.63$, $d = 0.20$, $p < .05$, than completers. A few demographic variables (e.g., marriage length, age, level of education, and household income) were also significantly different between the two groups (see the Online Supplemental Material or Fillo, Simpson, Rholes, & Kohn, 2015, for more details).

Procedure

In order to participate, both partners had to be (1) expecting their first child together and (2) married or cohabitating. There were five assessment waves: 6 weeks before each couple's anticipated due date and then approximately 6 months, 12 months, 18 months, and 24 months postpartum. At each wave, both partners were mailed a questionnaire (in separate envelopes, with separate stamped return envelopes provided) and instructed to complete and return the questionnaires independently (without consulting one another). Each couple was paid US\$50 at each of the first three assessment waves and US\$75 for completing the last two assessments. See Rholes et al. (2011) for further details.

Measures

Both partners completed the same set of self-report measures at each assessment wave. For Cronbach's α s on all scales, see the Online Supplemental Material.

Physical aggression victimization. Physical aggression victimization was assessed using the aggression victimization subscale of the Marital Satisfaction Inventory (Snyder, 1981), which assesses a person's perceptions of the physically aggressive acts that his or her partner committed against him or her *within the past 6 months* (e.g., "My partner has slapped me," "My partner has slammed things around or thrown things in anger.") Each item was answered on a dichotomous true (1)/false (0) scale. Items were summed with higher scores indicating greater physical aggression victimization.

Attachment orientations. Attachment avoidance was assessed using an adapted version of the Experience in Close Relationships Scale (Brennan, Clark, & Shaver, 1998), which measured participants' beliefs about their *current partner* (e.g., "I am nervous when my partner gets too close to me"). Each item was answered on a 5-point Likert-type scale, anchored 1 (*strongly disagree*) to 5 (*strongly agree*). Higher averaged scores indicate greater attachment avoidance.

Relationship satisfaction. Relationship satisfaction was assessed using the satisfaction subscale of the Dyadic Adjustment Scale (Spanier, 1976), which taps current satisfaction/happiness with the relationship (e.g., "In general, how often do you think that things between you and your partner/spouse are going well?" and "How often do you and your partner/spouse quarrel?"). Each item was answered on a 6-point Likert-type scale

ranging from 1 (*never*) to 6 (*all the time*). Higher summed scores indicate greater relationship satisfaction.

Parental stress. Parental stress was assessed by the Parental Stress Index (Abidin, 1983; e.g., “My baby is so demanding that it exhausts me” and “I feel trapped by my responsibilities as a parent”). Items were answered on a 5-point Likert-type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Higher average scores indicate greater parenting stress.

Data analytic method

Actor–partner moderated dyadic growth curve models (MDGCMs) were tested using multilevel (mixed) modeling for repeated measures within dyads (Kashy & Donnellan, 2008, 2012; Kenny, Kashy, & Cook, 2006). All analyses were completed using *lmer* in *R* (D. Bates, Maechler, Bolker, & Walker, 2015). As part of the MDGCM, we estimated the actor’s baseline (i.e., initial intercept) and their rate of change (i.e., slope) in aggression victimization across the transition to parenthood. Thus, the trajectory of aggression victimization is a function of each partner’s initial level of victimization and the degree that it changed from the initial level across assessments. In the current study, the intercept (Time = 0) was the date of the child’s birth and the slope was the months following the birth of the child (i.e., Time). Partners’ marital aggression scores were allowed to correlate to account for interdependence in partners’ intercepts and slopes (Kashy & Donnellan, 2008).

We examined only linear time effects because (1) we had no theoretical reason to expect nonlinear effects and (2) preliminary models assessing the quadratic effect of time did not improve model fit. Linear models were then run, adding gender as a moderator to test for potential gender differences. Because gender moderated the effect of time on aggression victimization, we also ran a dual-intercept model, which estimated separate intercepts and slopes for men and women. The dual-intercept model fits the data best and was used for all remaining analyses. Gender was coded -1 for women and 1 for men.

To test the primary hypothesis and examine how each I^3 predictor (e.g., partner parental stress, partner relationship-specific avoidance, and partner relationship satisfaction) moderated actor reports of physical aggression victimization over time, we ran a model that contained both main effects of each predictor and all possible interactions between them. As mentioned previously, the model predicted actors’ self-reported physical aggression victimization intercepts and slopes based on their partners’ parental stress, relationship-specific avoidance, and relationship satisfaction scores, for men and women separately (although a single-intercept model was also run to initially determine whether significant differences emerged between men and women). In addition, all predictor variables reported by the actors (i.e., actor parental stress, actor relationship-specific avoidance, and actor relationship satisfaction) were controlled by including them as main effects, and all predictor variables were grand mean centered (Aiken & West, 1991), allowing for *between-person* comparisons. Because all the variables are time-varying, the interactions can be interpreted as individuals scoring high

Table 1. Means and standard deviations of variables across time for men and women.

Variable	Assessment wave				
	Prenatal	6 months	12 months	18 months	24 months
Men					
Aggression victimization	1.74 (2.05)	1.71 (2.10)	1.80 (2.19)	1.59 (2.21)	1.80 (2.39)
Parental stress	2.78 (0.87)	1.85 (0.43)	1.89 (0.39)	1.82 (0.39)	1.86 (0.42)
Relationship-specific attachment avoidance	1.88 (0.88)	1.84 (0.80)	1.87 (0.93)	1.84 (0.89)	1.90 (0.92)
Relationship satisfaction	42.41 (5.29)	42.29 (4.99)	41.58 (6.83)	41.30 (6.53)	40.96 (6.86)
Women					
Aggression victimization	1.31 (1.85)	1.23 (1.55)	1.13 (1.50)	1.24 (1.75)	1.26 (1.79)
Parental stress	2.73 (0.89)	1.81 (0.35)	1.83 (0.39)	1.83 (0.35)	1.85 (0.39)
Relationship-specific attachment avoidance	1.52 (0.70)	1.53 (0.74)	1.63 (0.82)	1.68 (0.86)	1.69 (0.96)
Relationship satisfaction	42.88 (4.99)	42.29 (4.73)	42.50 (4.88)	42.41 (5.63)	41.83 (5.80)

Table 2. Correlations for variables at Time 1 (prenatally) for men and women.

Variable	1	2	3	4
1. Aggression victimization	(.35)**	-.07	.28**	-.34**
2. Parental stress	-.07	(.76)**	-.08	.10
3. Relationship-specific attachment avoidance	.34**	-.19*	(.14)	-.53**
4. Relationship satisfaction	-.35**	.10	-.58***	(.51)**

Note. Correlations among variables for men appear *below* the diagonal; those for women appear *above* the diagonal. The values on the diagonal (in parentheses) are correlations between measures collected from each partner (e.g., the correlation between husbands' and wives' relationship satisfaction).

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

(+1 *SD*) or low (−1 *SD*) on the predictor variables at every time point. For further details, see the Online Supplemental Material.

Results

Preliminary analyses

Means and *SDs* for all of the primary variables are presented in Table 1 for both men and women at each assessment wave. Correlations between these variables (measured prenatally at Time 1) are presented in Table 2.

I^3 and aggression victimization

To test our I^3 predictions, we modeled *actor-reported* physical aggression victimization over time as predicted by *partner-reported* parental stress, *partner-reported* relationship-specific avoidance, and *partner-reported* relationship satisfaction. We report the dual-intercept model results because (a) one significant gender difference was found with

Table 3. I³ model.

Variable	Men				Women			
	<i>b</i>	<i>SE</i>	<i>df</i>	<i>t</i>	<i>b</i>	<i>SE</i>	<i>df</i>	<i>t</i>
(Intercept)	1.76	.16	278.2	11.27**	1.40	.13	273.9	10.55**
Partner parental stress	-0.04	.18	557.3	-0.23	0.04	.15	535.1	0.26
Partner avoidance	0.18	.15	556.6	1.22	0.11	.11	522.2	1.02
Partner Parental Stress × Partner Avoidance	0.04	.17	577.9	0.25	0.25	.10	600.4	2.39*
Partner relationship satisfaction	-0.06	.02	594.6	-2.21*	-0.01	.02	596.3	-0.21
Partner Parental Stress × Partner Relationship Satisfaction	0.05	.02	586.1	2.22*	0.05	.02	554.0	2.31*
Partner Avoidance × Partner Relationship Satisfaction	-0.01	.02	627.2	-0.28	0.02	.01	589.6	1.39
Partner Parental Stress × Partner Avoidance × Partner Relationship Satisfaction	0.03	.02	622.8	1.58	-0.02	.01	593.6	-1.96*
Time (slope)	-0.01	.01	243.2	-1.76 [†]	0.00	.01	232.2	-0.06
Time × Partner Parental Stress	0.00	.01	379.8	0.10	-0.01	.01	395.5	-0.84
Time × Partner Avoidance	-0.01	.01	396.7	-1.29	0.00	.01	434.9	-0.26
Time × Partner Parental Stress × Partner Avoidance	0.01	.02	553.2	0.54	-0.01	.01	603.0	-0.53
Time × Partner Relationship Satisfaction	0.00	.00	479.6	0.48	0.00	.00	521.5	-0.23
Time × Partner Parental Stress × Partner Relationship Satisfaction	0.00	.0	517.9	-1.81 [†]	0.00	.00	550.2	-0.08
Time × Partner Avoidance × Partner Relationship Satisfaction	0.00	.00	567.1	-0.80	0.00	.00	494.9	-0.41
Time × Partner Parental Stress × Partner Avoidance × Partner Relationship Satisfaction	-0.01	.00	584.1	-2.28*	0.00	.00	662.2	-0.68

[†]*p* < .10; **p* < .05; ***p* < .001.

changes over time in aggression victimization and (b) the dual-intercept model fit the data best (see Online Supplemental Material for details). All results are shown in Table 3.¹ For brevity, we discuss only the results relevant to our primary hypothesis (i.e., the three-way interaction between partner parental stress, partner attachment avoidance, and partner marital satisfaction predicting actor physical aggression victimization; for further details, see Online Supplemental Material).

Intercept effects. The results revealed a significant three-way interaction between partner parental stress, partner relationship-specific avoidance, and partner relationship satisfaction predicting actor’s intercept levels of aggression victimization for women, *t*(593.6) = -1.96, *p* < .05, but not for men, *t*(622.8) = 1.58, *p* = .12 (see Figure 1). Men and women, however, did not differ significantly in this three-way interaction, *t*(1,177.7) = 0.61, *p* = .54. We, therefore, interpreted the interaction for both men and women.

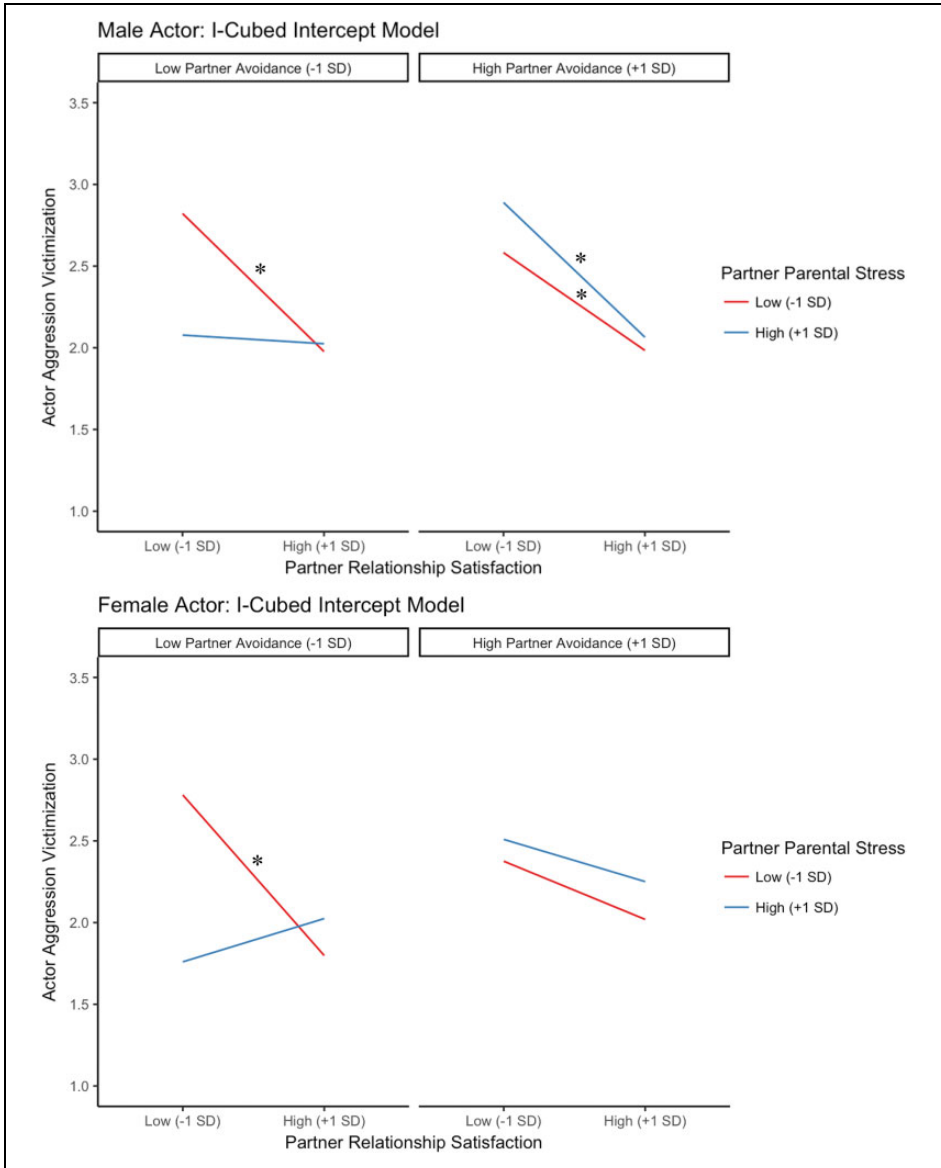


Figure 1. Three-way interaction between partner parental stress, partner avoidance, and partner relationship satisfaction on baseline intercept of actor aggression victimization. * $p < .05$.

As hypothesized, men whose female partners reported higher parental stress and higher avoidance (+1 SD) reported being the victim of more physical aggression at childbirth when their female partner also reported lower levels of relationship satisfaction (-1 SD) compared to women whose male partners reported higher relationship satisfaction

(+1 *SD*). This pattern, however, did not emerge for women (see Figure 1). In addition, actors (both men and women) whose partners reported lower stress and lower avoidance (−1 *SD*) reported lower levels of physical aggression victimization at childbirth when their partners reported higher levels of relationship satisfaction (+1 *SD*) compared to actors whose partners reported lower relationship satisfaction (−1 *SD*).

Contrary to expectations, women reported the highest levels of physical aggression victimization at childbirth when their male partners reported lower levels of stress, avoidance, and satisfaction (−1 *SD*, $\eta^2 = 2.78$). Actors (both men and women) whose partners reported higher stress (+1 *SD*) and lower avoidance (−1 *SD*) reported the same levels of physical aggression victimization at childbirth when their partners reported either higher (+1 *SD*) or lower (−1 *SD*) relationship satisfaction. Additionally, men whose female partners reported lower stress (−1 *SD*) and higher avoidance (+1 *SD*) reported lower levels of physical aggression victimization at childbirth when their female partners reported higher relationship satisfaction (+1 *SD*) compared to men whose female partners reported lower relationship satisfaction (−1 *SD*). However, this pattern did *not* emerge for women (see Figure 1).

Slope effects. The results also revealed a significant three-way interaction between partner parental stress, partner relationship-specific avoidance, and partner relationship satisfaction predicting changes in aggression victimization slopes for men, $t(584.1) = -2.28$, $p < .05$, but not women, $t(662.2) = -0.68$, $p = .50$ (see Figure 2). Men and women, however, did not differ significantly in this three-way interaction, $t(1,115.9) = 0.22$, $p = .83$. We, therefore, interpreted the interaction for both men and women. Thus, as hypothesized, men whose female partners consistently reported higher levels of parental stress and higher levels of avoidance (+1 *SD*) reported *increases* in aggression victimization over time if their female partners also reported lower levels of relationships satisfaction (−1 *SD*). This pattern did *not* emerge for women, however (see Figure 2).

Moreover, actors (both men and women) whose partners consistently reported higher levels of parental stress and avoidance (+1 *SD*) reported *decreases* in aggression victimization over time if their partners also reported higher relationship satisfaction (+1 *SD*). Actors (both men and women) whose partners consistently reported lower levels of avoidance (−1 *SD*) reported *no change* in aggression victimization over time, regardless of parental stress or relationship satisfaction levels. Actors (both men and women) whose partners consistently reported lower levels of parental stress (−1 *SD*) and higher levels of avoidance (+1 *SD*) reported *decreases* in aggression victimization over time if their partners also reported lower satisfaction (−1 *SD*). And actors (both men and women) whose partners consistently reported lower levels of parental stress (−1 *SD*) and higher levels of avoidance (+1 *SD*) reported *no change* in aggression victimization over time if their partners also reported higher relationship satisfaction (+1 *SD*).^{2,3}

Discussion

To our knowledge, this is the first longitudinal dyadic study to examine physical aggression victimization across the first 2 years of the transition to parenthood. We found that trends in individual's (*actor's*) reports of aggression victimization were moderated

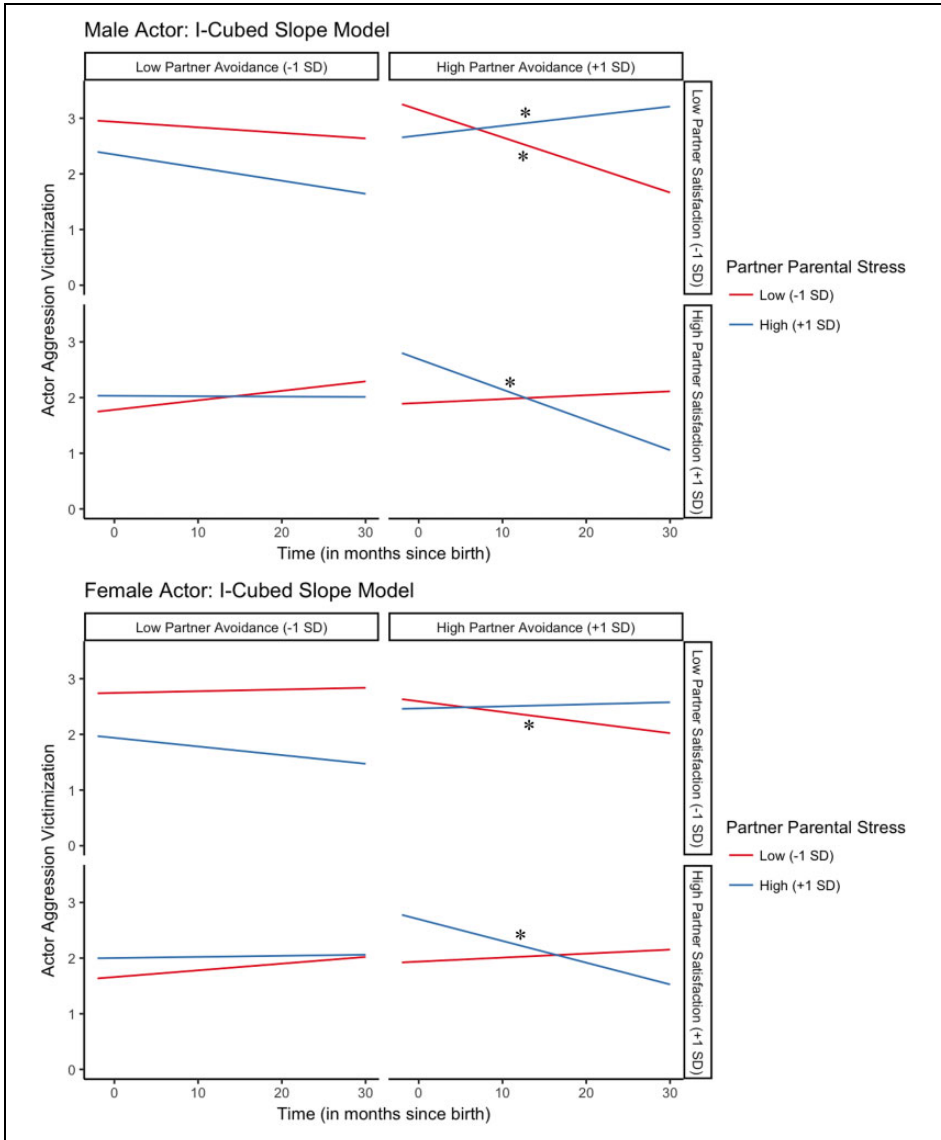


Figure 2. Three-way interaction between partner parental stress, partner avoidance, and partner relationship satisfaction on changes in slope of actor aggression victimization. * $p < .05$.

by theoretically informed *partner* variables, as anticipated by the I^3 framework (Finkel & Eckhardt, 2013). Specifically, significant three-way interactions between partner parental stress, partner attachment avoidance, and partner relationship satisfaction predicted actor's levels of aggression victimization at the birth of their first child as well as changes in aggression victimization across the first 2 years of the transition to parenthood.

Importantly, these predicted effects were found only for *female* partners who had this specific pattern of attributes.

Supporting our primary hypothesis, physical aggression victimization at childbirth was highest for men whose female partners scored higher in avoidance and parental stress and lower in relationship satisfaction. Moreover, for both male and female partners, greater relationship satisfaction appeared to inhibit aggression victimization reported by actors. Framed another way, partners who reported being more avoidant and experienced higher parenting stress were less likely to behave aggressively if they were more satisfied with their relationship, perhaps in response to the buffering effect of high satisfaction. These findings support the growing I³ literature, which highlights the broader importance of inhibiting factors in controlling aggressive behavior (Finkel, 2014). They also expand our understanding of aggression beyond individual-level factors by focusing on a key dyad-level variable, relationship satisfaction, which appears to inhibit or at least limit physical aggression between marital partners. Relationship satisfaction may, therefore, uniquely buffer against negative behavioral outcomes in relationship interactions.

Limited research has addressed aggression over time (Arriaga et al., 2018), and even less has examined aggression during the transition to parenthood (Gou & Woodin, 2017; Woodin et al., 2014). Thus, our analyses of physical aggression victimization change across the transition were exploratory. In general, people who had less avoidant partners did not experience changes in aggression victimization over time. However, those who were involved with highly avoidant and highly stressed partners reported *declines* in aggression victimization over time if their partner was more satisfied in the relationship, further illuminating the unique buffering effect of relationship satisfaction. In contrast, men involved with highly avoidant and highly stressed female partners reported *increases* in aggression victimization over time if their partner was less satisfied in the relationship. Considered as a whole, these findings support Finkel and Eckhardt's (2013) I³ model, both at a single time point (at birth) *and* across time. The later findings in particular extend the I³ framework in a novel direction by confirming the dynamic role that instigating, impelling, and inhibiting factors have on marital aggression victimization across a chronically stressful period of time.

A few unanticipated findings also emerged. For example, women whose male partners experienced lower parental stress were relatively less avoidant (i.e., more secure) and were less satisfied in the relationship reported the highest levels of aggression victimization at childbirth. These high victimization levels might be driven by the lack of inhibition provided by higher levels of relationship satisfaction. People who are more secure and less stressed, for example, may be more likely to evaluate their relationship, recognize their dissatisfaction, and realize that having a baby might further undermine it. This realization, in turn, might motivate them to react somewhat more aggressively once the baby arrives.

Additionally, only men whose female partners were higher in avoidance and stress and lower in satisfaction reported *increases* in aggression victimization over time. There were no parallel effects for women whose male partners possessed this constellation of attributes. This gender disparity could be attributable to differences in gender roles and expectations, especially during the transition to parenthood (cf. Cowan

& Cowan, 2000). During the transition, women are often expected to engage in more primary caregiving roles than men, particularly during the early stages, and they are not necessarily expected to support their male partners (Katz-Wise, Priess, & Hyde, 2010; Rossi, 1968). This may allow women to act out—sometimes aggressively—against their male partners on occasion. Men, on the other hand, are typically expected to assume an instrumental role, which includes providing social and financial support to their wives during the transition (Katz-Wise et al., 2010; Rossi, 1968). This should make men less likely to behave aggressively against their female partners, even if they are avoidant, stressed, and unsatisfied.

This study has some limitations. First, we assessed actors' reports of aggression victimization but did not assess partners' reports of aggression perpetration. Most prior research has focused on perpetrators' reports of aggression rather than victims' reports. However, assessing victim reports allowed us to examine subjective experiences of aggression victimization in a unique way. There may be more reluctance to report aggressive behavior against a partner than to report aggressive behavior against oneself. Additionally, perpetrator reports may be systematically biased by gender when reporting aggression. Women, for example, may view themselves as less aggressive, consistent with gender roles, and not recognize or interpret some of their actions as being aggressive. Asking victims what has happened to them, therefore, may result in less biased reports of actual aggressive behaviors. Second, our findings may be cultural-specific. All of our participants were living in a Western culture that may hold different expectations for parenting and social roles than is true of other cultures. Moreover, the frequency of aggression may vary between different cultures (Finkel & Eckhardt, 2013). Third, the nature of our data set and data analyses limits some of the conclusions that can be drawn. For example, our growth curve techniques modeled correlational data, so causal conclusions about our findings cannot be made.

The current research, however, also has important implications. First, understanding why and how aggression occurs across the transition to parenthood is important because it offers a more holistic view of the aggression that children may be exposed to starting early in life. It is particularly important to understand which factors increase or decrease exposure to aggression within the home early in life, given the negative effects that exposure has on children's long-term well-being (Carlson, 2000). Second, the current research may inform effective interventions designed to prevent marital aggression during the transition to parenthood. Based on our findings, interventions could focus on increasing attachment security, increasing relationship satisfaction, and/or decreasing stress in parents during the transition. In particular, it may be most impactful to increase relationship satisfaction, so it can operate as a unique buffer against other aggression-inducing factors, both at childbirth and across time.

In conclusion, the transition to parenthood is a common, joyous, and often chronically stressful period in people's lives during which negative behaviors, such as marital aggression victimization, are more likely to arise. The current research suggests that parental stress, attachment avoidance, and relationship satisfaction are key variables in predicting initial levels of, as well as changes over time in, marital aggression victimization across the transition to parenthood. Understanding the situational (instigating), individual (impelling), and relational (inhibiting) antecedents of marital aggression

across the transition is important for explaining why some partners and relationships are more versus less susceptible to enacting or being the victim of marital aggression. Future research should continue to investigate the key sources of marital aggression across the transition to parenthood using dyadic and longitudinal data in order to identify and help “aggression-susceptible” couples during this challenging period of life.

Authors’ note

The content of this article is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This study was supported by the National Institute of Mental Health of the National Institutes of Health under Award Number MH49599 to Jeffrey A. Simpson and W. Steven Rholes.

Open research statement

This research was not pre-registered. The data and materials used in the research are available upon request by emailing simps108@umn.edu.

Supplemental material

Supplemental material for this article is available online.

Notes

1. Table 3 reports estimates of the fixed effects (b), t values (t), and estimated p values. We used R ’s *lmerTest* method for estimated degrees of freedom to determine the p values given the controversy surrounding the calculation of degrees of freedom and accompanying use of p values when interpreting longitudinal data (Long, 2012; Weiss, 2005).
2. Given the skewness of the physical aggression victimization variable, we t -transformed this variable and conducted the same set of analyses. All analyses with the transformed physical aggression victimization variable produced the same pattern of results and remained statistically significant.
3. In order to replicate and validate our findings, we also ran these same models predicting verbal aggression as the outcome. We found comparable (although not identical) results using this conceptually related measure. The main difference was the emergence of a few additional gender differences. In general, however, the verbal aggression results increase our confidence in the robustness of our three-way interaction effects involving physical aggression.

References

- Abidin, R. R. (1983). *Parenting stress index: Manual, administration booklet, and research update*. Charlottesville, VA: Pediatric Psychology Press.
- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: SAGE.
- Anderson, C. A., & Bushman, B. J. (2002). Human aggression. *Annual Review of Psychology*, *53*, 27–51. doi:10.1146/annurev.psych.53.100901.135231

- Archer, J. (2000). Sex differences in physical aggression to partners: A reply to Frieze (2000), O'Leary (2000), and White, Smith, Koss, and Figueredo (2000). *Psychological Bulletin*, *126*, 697–702. doi:10.1037/0033-2909.126.5.697
- Arias, I., & Beach, S. R. (1987). Validity of self-reports of marital violence. *Journal of Family Violence*, *2*, 139–149. doi:10.1007/BF00977038
- Arriaga, X. B., Cobb, R. J., & Daly, C. A. (2018). *Aggression and violence in romantic relationships*. In A. Vangelisti & D. Perlman (Eds.), *The Cambridge handbook of personal relationships* (2nd ed., pp. 365–377). Cambridge, UK: Cambridge University Press.
- Bates, E. A., Graham-Kevan, N., & Archer, J. (2014). Testing predictions from the male control theory of men's partner violence. *Aggressive Behavior*, *40*, 42–55. doi:10.1002/ab.21499
- Bates, D., Maechler, M., Bolker, B., & Walker, S. (2015). Fitting linear mixed-effects models using lme4. *Journal of Statistical Software*, *67*, 1–48. doi:10.18637/jss.v067.i01
- Baumeister, R. F. (1991). *Meaning of life*. New York, NY: The Guilford Press.
- Belsky, J., & Rovine, M. (1990). Patterns of marital change across the transition to parenthood: Pregnancy to three years postpartum. *Journal of Marriage and Family*, *52*, 5–19. doi:10.2307/352833
- Brennan, K. A., Clark, C. L., & Shaver, P. R. (1998). *Self-report measurement of adult attachment: An integrative overview*. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 46–76). New York, NY: Guilford Press.
- Carlson, B. E. (2000). Children exposed to intimate partner violence. *Trauma, Violence, & Abuse*, *1*, 321–342. doi:10.1177/152483800001004002
- Carroll, J. S., Nelson, D. A., Yorgason, J. B., Harper, J. M., Hagmann Ashton, R., & Jensen, A. C. (2010). Relational aggression in marriage. *Aggressive Behavior*, *36*, 315–329. doi:10.1002/ab.20349
- Cowan, C. P., & Cowan, P. A. (2000). *When partners become parents: The big life change for couples*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Dobash, R. P., Dobash, R. E., Wilson, M., & Daly, M. (1992). The myth of sexual symmetry in marital violence. *Social Problems*, *39*, 71–91. doi:10.2307/3096914
- Doss, B. D., Rhoades, G. K., Stanley, S. M., & Markman, H. J. (2009). The effect of the transition to parenthood on relationship quality: An 8-year prospective study. *Journal of Personality and Social Psychology*, *96*, 601–619. doi:10.1037/a0013969
- Dutton, D. G., & Hemphill, K. J. (1992). Patterns of socially desirable responding among perpetrators and victims of wife assault. *Violence and Victims*, *7*, 29–39.
- Feeney, J., Hohaus, L., Noller, P., & Alexander, R. (2001). Attachment style and coping resources as predictors of coping strategies in the transition to parenthood. *Personal Relationships*, *8*, 137–152. doi:10.1111/j.1475-6811.2001.tb00032.x
- Fillo, J., Simpson, J. A., Rholes, S. W., & Kohn, J. L. (2015). Dads doing diapers: Individual and relational outcomes associated with the division of childcare across the transition to parenthood. *Journal of Personality and Social Psychology*, *108*, 298–316. doi:10.1037/a0038572
- Finkel, E. J. (2014). *The I3 model: Metatheory, theory, and evidence*. In M. P. Zanna & J. M. Olson (Eds.), *Advances in experimental social psychology* (Vol. 49, pp. 1–104). Waltham, MA: Academic Press.

- Finkel, E. J., & Eckhardt, C. I. (2013). *Intimate partner violence*. In J. A. Simpson, L. Campbell, J. A. Simpson, & L. Campbell (Eds.), *The Oxford handbook of close relationships* (pp. 452–474). New York, NY: Oxford University Press.
- Follingstad, D. R. (2009). The impact of psychological aggression on women's mental health and behavior. *Trauma, Violence, & Abuse, 10*, 271–289. doi:10.1177/1524838009334453
- Gou, L. H., & Woodin, E. M. (2017). Relationship dissatisfaction as a mediator for the link between attachment insecurity and psychological aggression over the transition to parenthood. *Couple and Family Psychology: Research and Practice, 6*, 1–17. doi:10.1037/cfp0000072
- Graham-Kevan, N., & Archer, J. (2003). Physical aggression and control in heterosexual relationships: The effect of sampling. *Violence and Victims, 18*, 181–196. doi:10.1891/vivi.2003.18.2.181
- Holtzworth-Munroe, A., Stuart, G. L., & Hutchinson, G. (1997). Violent versus nonviolent husbands: Differences in attachment patterns, dependency, and jealousy. *Journal of Family Psychology, 11*, 314–331. doi:10.1037/0893-3200.11.3.314
- Jasinski, J. L. (2004). Pregnancy and domestic violence. *Trauma, Violence, & Abuse, 5*, 47–64. doi:10.1177/1524838003259322
- Johnson, M. P. (1995). Patriarchal terrorism and common couple violence: Two forms of violence against women. *Journal of Marriage and Family, 57*, 283–294. doi:10.2307/353683
- Kashy, D. A., & Donnellan, M. B. (2008). *Comparing MLM and SEM approaches to analyzing developmental dyadic data: Growth curve models of hostility in families*. In N. A. Card, J. P. Selig, & T. D. Little (Eds.), *Modeling dyadic and interdependent data in the developmental and behavioral sciences* (pp. 165–190). New York, NY: Routledge.
- Kashy, D. A., & Donnellan, M. B. (2012). *Conceptual and methodological issues in the analysis of data from dyads and groups*. In K. Deaux & M. Snyder (Eds.), *The Oxford handbook of personality and social psychology* (pp. 209–238). New York, NY: Oxford University Press.
- Katz-Wise, S. L., Priess, H. A., & Hyde, J. S. (2010). Gender-role attitudes and behavior across the transition to parenthood. *Developmental Psychology, 46*, 18–28. doi:10.1037/a0017820
- Kenny, D. A., Kashy, D. A., & Cook, W. L. (2006). *Analysis of dyadic data*. New York, NY: Guilford Press.
- Lawrence, E., & Bradbury, T. N. (2001). Physical aggression and marital dysfunction: A longitudinal analysis. *Journal of Family Psychology, 15*, 135–154. doi:10.1037//0893-3200.15.1.135
- LeMasters, E. E. (1957). Parenthood as crisis. *Marriage and Family Living, 19*, 352–355. doi:10.2307/347802.
- Long, J. D. (2012). *Longitudinal data analysis for the behavioral sciences using R*. Thousand Oaks, CA: SAGE.
- MacDermid, S. M., Huston, T. L., & McHale, S. M. (1990). Changes in marriage associated with the transition to parenthood: Individual differences as a function of sex-role attitude and changes in the division of household labor. *Journal of Marriage and Family, 52*, 475–486. doi:10.2307/353041
- Mattessich, P., & Hill, R. (1987). *Life cycle and family development*. In M. B. Sussman & S. K. Steinmetz (Eds.), *Handbook of marriage and the family* (pp. 437–469). New York, NY: Plenum Press.

- Nomaguchi, K. M., & Milkie, M. A. (2003). Costs and rewards of children: The effects of becoming a parent on adults' lives. *Journal of Marriage and Family, 65*, 356–374. doi:10.1111/j.1741-3737.2003.00356.x
- Pistrang, N., & Barker, C. (2005). *How partners talk in times of stress: A process analysis approach*. In T. A. Recenson, K. Kayser, & G. Bodenmann (Eds.), *Couples coping with stress: Emerging perspective on dyadic coping* (pp. 97–119). Washington, DC: American Psychological Association.
- Rholes, W. S., Simpson, J. A., Kohn, J. L., Wilson, C. L., Martin, A. M., Tran, S., & Kashy, D. A. (2011). Attachment orientations and depression: A longitudinal study of new parents. *Journal of Personality and Social Psychology, 100*, 567–586. doi:10.1037/a0022802
- Richardson, D. S. (2014). Everyday aggression takes many forms. *Current Directions in Psychological Science, 23*, 220–224. doi:10.1177/0963721414530143
- Rossi, A. S. (1968). Transition to parenthood. *Journal of Marriage and the Family, 30*, 26–39. doi:10.2307/350219
- Russell, C. S. (1974). Transition to parenthood: Problems and gratifications. *Journal of Marriage and Family, 36*, 294–302. doi:10.2307/351155
- Simpson, J. A., & Rholes, W. S. (2019). Adult attachment orientations and well-being during the transition to parenthood. *Current Opinion in Psychology, 25*, 47–52. doi:10.1016/j.copsyc.2018.02.019
- Simpson, J. A., Rholes, W. S., Campbell, L., Tran, S., & Wilson, C. L. (2003). Adult attachment, the transition to parenthood, and depressive symptoms. *Journal of Personality and Social Psychology, 84*, 1172–1187. doi:10.1037/0022-3514.84.6.1172
- Snyder, D. K. (1981). *Marital Satisfaction Inventory (MSI) manual*. Los Angeles, CA: Western Psychological Services.
- Spanier, G. (1976). Measuring dyadic adjustment: New scales for assessing the quality of marriage and similar dyads. *Journal of Marriage and Family, 38*, 15–28. doi:10.2307/350547
- Sprague, J., Verona, E., Kalkhoof, W., & Kilmer, A. (2011). Moderators and mediators of the stress-aggression relationship: Executive function and state anger. *Emotion, 11*, 61–73. doi:10.1037/a0021788
- Twenge, J. M., Campbell, K. W., & Foster, C. A. (2003). Parenthood and marital satisfaction: A meta-analytic review. *Journal of Marriage and Family, 65*, 574–583. doi:10.1111/j.1741-3737.2003.00574.x
- Verona, E., & Kilmer, A. (2007). Stress exposure and affective modulation of aggressive behavior in men and women. *Journal of Abnormal Psychology, 116*, 410–421. doi:10.1037/0021-843X.116.2.410
- Walters, M. L., Chen, J., & Breiding, M. J. (2010). *National intimate partner and sexual violence survey (NISVS): 2010 findings on victimization by sexual orientation*. Retrieved from <https://www.ncjrs.gov/App/Publications/abstract.aspx?%20ID=263171>
- Weiss, R. E. (2005). *Modeling longitudinal data*. New York, NY: Springer.
- Woodin, E. M., Caldeira, V., Sotskova, A., Galaugher, T., & Lu, M. (2014). Harmful alcohol use as a predictor of intimate partner violence during the transition to parenthood: Interdependent and interactive effects. *Addictive Behaviors, 39*, 1890–1897. doi:10.1016/j.addbeh.2014.07.033