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Relationship Supportiveness during the Transition to Parenting among Married and Unmarried Parents

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Synopsis

Objective—The present study examined trajectories of mothers' and fathers' ratings of the other parent's supportiveness over the first five years after the birth of a child in order to capture the ways in which relationship quality changes for married and unmarried couples during the transition to parenthood.

Design—The sample consisted of 2172 mothers and fathers, at least one of whom was experiencing a first birth. Parents were assessed at birth and again when their child was 1, 3, and 5 years old. At each assessment they reported on the emotional supportiveness they received from the other parent as well as their relationship status.

Results—Latent growth curve models revealed that for both mothers and fathers, supportiveness tended to be high at birth and decreased steadily thereafter. Furthermore, perceived supportiveness at one year was a better predictor than the same measure at birth in terms of predicting changes in supportiveness over time and whether or not the couple would break up by the child's fifth birthday. Married couples had the most positive trajectories, with higher levels of supportiveness than dating or non-romantic parents and less decline over time than cohabiting couples. Relationship supportiveness also varied by key demographic variables including parental race.

Conclusion—Reports of partner supportiveness at birth may not be a good indicator of later support or stability. However, by one year postpartum, supportiveness ratings may be more representative of the overall relationship. Family structure is also important in understanding the nature of the transition to parenting among first time parents.

The birth of a child can be a very stressful time in the parental relationship. Researchers have consistently identified small but significant declines in various indices of marital quality after the birth of a child (Altemeir & Maloney, 2007; Claxton & Perry-Jenkins, 2008; Cowan & Cowan, 1995; Lawrence, Rothman, Cobb, Rothman, & Bradbury, 2008; Schulz, Cowan, & Cowan, 2006; Shapiro, Gottman, & Carrere, 2000). However, few studies examine relationship quality among disadvantaged couples (Karney & Bradbury, 1995; Sayer & Bianchi, 2000) and even fewer among unmarried parents (Carlson, 2007; Gee, McNeerney, Reiter, & Leaman, 2007). Since the number of children born outside of marriage has been steadily increasing over the last several years (Seltzer, 2004), it is important to understand the similarities and differences in relationship processes among married and unmarried parents. The present study examined one aspect of relationship quality, namely, emotional supportiveness during the transition to parenting among both married and unmarried mothers and fathers, providing valuable insight into the functioning of relationships in diverse family structures.

The Transition to Parenthood

Recent research on the transition to parenthood has identified a number of ways that relationships change while parents adjust to the birth of a child. For example, Claxton and Perry-Jenkins (2008) examined changes in patterns of shared leisure time in the first year after the birth of a first child among dual-earning couples who were either married or cohabiting.

They found evidence for decreases in leisure time after the birth of a child, and that having more shared leisure time was positively related to feelings of love and negatively related to couple conflict.

Lawrence et al. (2008) also examined the transition to parenting during the pre-birth period through 12 months post-partum. Their sample consisted of married couples who were first time parents and had not been married previously, as well as a comparison group of childless couples. Their findings confirmed the notion that marital satisfaction declines after the birth of child, but also suggested that whether the birth was planned and the level of pre-pregnancy marital satisfaction were both associated with less steep declines over time.

Using data from the Fragile Families and Child Well-Being Study, Gee et al. (2007) examined relationship quality among adolescent and young adult mothers and fathers during the transition to parenthood. Using reports of relationship quality at birth and again at 3 years, they found that mothers' reports of relationship quality predicted father involvement, but fathers' reports did not. Their study was unique in that it examined the transition to parenthood among a high-risk group of mostly unmarried parents. Other analyses using Fragile Families data have replicated the finding that relationship quality decreases after the birth of a child and have shown that this decrease is stronger for cohabiting couples than those who were married at birth, and that it persists through the child's fifth year (Carlson, 2007).

Even though there are significant questions about how unmarried parents' relationship changes as they transition to being parents, it is well understood that the interparental relationship is important for both parenting and children's development. For example, it is well established that parental relationship difficulties can be detrimental to children's psychosocial development (Cowan, Cowan, Schulz, & Heming, 1994; Grych, Fincham, Jouriles, & McDonald, 2000), and children who experience parental break-up are at an increased risk for both internalizing and externalizing problems (Hetherington, 2005). In contrast, supportive relationships between parents have been associated with positive parenting behaviors among both married (Krishnakumar & Buehler, 2000) and unmarried parents (Carlson & McLanahan, 2006).

Antecedents of Relationship Supportiveness

A number of factors likely predict the changes in relationship quality that occur after the birth of a child. Perhaps one of the most salient of these is relationship status. Although few studies have explicitly examined relationship quality among unmarried couples, what is known about the differences between married and unmarried couples suggests that relationship quality is likely poorer among unmarried parents (Carlson, 2007; Rogers & White, 1998). In fact, couples who cohabit are more likely to experience relationship dissolution than married couples with similar levels of relationship quality (Bouchard, 2006), and non-cohabiting couples are at an even greater risk (Osborne, Manning, & Smock, 2007). These trends are particularly salient given that parental break-up is a known risk factor for later child problems (Cowan et al., 1994; Grych et al., 2000).

Another factor that may be an important influence on relationship quality as parents adjust to a new child is whether both parents are primiparous or not. Traditionally, the transition to parenthood describes the transition to first parenthood. However, with the rise in multi-partnered fertility (Carlson & Furstenberg, 2006), it is increasingly likely that, particularly among unmarried parents, one parent may be experiencing a first birth while the other parent is not. The experience of the transition to parenting may vary substantially depending on whether both parents are experiencing a first birth or whether one partner already has one or more children from a previous relationship, particularly given that support systems tend to be weaker among individuals who have children by multiple partners (Harknett & Knab, 2007).

Similarly, the length of the relationship prior to the pregnancy is likely to contribute to relationship quality during the transition to parenthood. Just as Lawrence et al. (2008) found that higher relationship quality prior to pregnancy protected against steep declines during the transition, it is likely that couples with high quality relationships have also known one other for a longer period of time. In fact, the relationship between maternal age at childbirth and relationship quality can largely be explained by length of the relationship (Bouchard, Lachance-Grzela, & Goguen, 2008), suggesting that having a longer relationship prior to having a child is associated with higher relationship quality after the birth.

In keeping with a family systems perspective (Cox & Paley, 1997), it is important to recognize the fact that child factors may influence the process of change in relationship supportiveness after the birth. Although many child characteristics, such as attachment security and temperament, are not evident immediately at birth (Calkins, 2004; Cassidy et al., 2007), other characteristics, such as the child's gender and whether or not the infant had a low birth weight are immediately evident and may impact parents early on. For example, Lundberg and Rose (2003) found that the birth of a son to unmarried parents is more likely to be associated with subsequent marriage than the birth of a daughter, suggesting that child gender may differentially impact the parental relationship. Furthermore, there is an extensive literature suggesting that mothers and fathers engage with sons and daughters in different ways (Chaplin, Cole, & Zahn-Waxler, 2005; Lundberg, McLanahan, Rose, 2007). If parents engage in different types of behaviors for sons versus daughters, then the interparental relationship may also be impacted differentially based on children's gender.

Low birth weight may have an even more direct link to relationship supportiveness. Since low birth weight is often associated with later developmental delay (Hack, Klein, & Taylor, 1995; Reichman, 2005), and infants who have clinically low birth weight tend to be more difficult than babies of typical weight, this early characteristic likely has a significant impact on the family system. Reichman, Corman, and Noonan (2004) examined the relationship between infant medical risk and relationship status in the Fragile Families data set. They found that the infants' low birth weight was strongly associated with decreased bonds between the father and mother. Specifically, parents in these families were less likely to cohabit and more likely to break up within the first 12-18 months after the child's birth.

In order to accurately estimate the effect of relationship status, parity, length of relationship, and child factors on trajectories of relationship quality, it is important to control for a number of other variables that are known to be associated with relationship status. In particular, parental age, race, and educational attainment are important covariates in an analysis of this type. Older individuals and those who have more education are more likely to marry than younger or less educated individuals (Goldstein & Kenney, 2001; Lichter & Graefe, 2001). Conversely, African Americans tend to be less likely to marry than individuals of other races (Lichter, LeClare, & McLaughlin, 1991) and interracial couples are less likely to marry than racially homogenous couples (Goldstein & Harknett, 2006).

Present Study

Typically, studies of the transition to parenthood examine characteristics of the interparental relationship over the first year after a first birth. Although this may be the best time to view the transition period, it is important for researchers to examine longer term outcomes associated with the transitions and adjustments to parenting that occur within the first year. With this goal in mind, the present study examines relationship supportiveness at four intervals over the first five years of the child's life, at birth, 1, 3, and 5 years. Data from birth and one year help us to understand how parents transitioned to their new role, while the subsequent data points shed light on the trajectory that was set in place as a result of relationship characteristics in the first year after the child's birth.

Using the Fragile Families and Child Well-Being study, the primary purpose of the present study was to examine how the birth of a child affects relationship supportiveness among new parents as well as to understand the association between relationship supportiveness at birth, one year, and beyond. The Fragile Families dataset provides information on relationship status and supportiveness for mothers and fathers from birth through the child's fifth birthday, and is particularly well suited for answering questions regarding differences among families with varying levels of commitment between parents.

The present study had three specific goals. First, early reports of relationship supportiveness at birth and one year were examined as predictors of parental break-up. Given that previous literature suggests that break-up early in the child's life is fairly common among unmarried parents (Osborne et al., 2007), it is important to understand factors that contribute to relationship stability or dissolution. It was expected that higher levels of relationship supportiveness at both birth and one year would be negatively associated with parental break-up. Second, we evaluated trajectories of both mothers' and fathers' perspectives of partner supportiveness across four waves of data spanning the first five years of the child's life. By modeling these trajectories simultaneously, we were able to assess the reciprocal influence that new parents have on one another. We hypothesized that both initial levels of perceived supportiveness as well as changes over time would be highly correlated for mothers and fathers. Separate models compared how supportiveness at birth versus one year was related to increases or decreases in supportiveness across the 5 years following the birth of a child. These comparisons helped us to understand whether birth or one year supportiveness ratings provided more information about the parents' long term functioning as well as to identify whether different variables predicted supportiveness at birth versus one year. Finally, since the Fragile Families study includes both married and unmarried families, relationship status at baseline was used to predict parental support trajectories. Specifically, we were interested in determining whether there are differences between married, cohabiting, and other types of couples in terms of their relationship quality at birth, one year, and changes in relationship quality over time. The conceptual model for the project is illustrated in Figure 1.

Methods

Participants

Participants were drawn from the Fragile Families and Child Well-Being Study, a longitudinal, birth cohort survey of 4,898 children, with a special focus on children born to unmarried parents (76% of the total sample). Baseline interviews were conducted from 1998 to 2000 in 20 U.S. cities with populations of at least 200,000. Mothers were approached in the hospital shortly after giving birth and asked to participate in the study. Fathers were also recruited to participate, either at the hospital when they visited the mother, or through contact information provided by the mothers. Attempts were made to include fathers in subsequent waves even if they had not been interviewed at baseline, resulting in an overall response rate of 96% of married fathers and 86% of unmarried fathers who were interviewed in at least one wave of the survey. For a complete description of the sample and design, see Reichman, Teitler, Garfinkel, and McLanahan (2001). Since the present study focuses on the transition to parenting and includes both maternal and paternal perspectives about their relationship with one another, data were used for the 2172 dyads in which the father was interviewed in at least one survey wave and either the mother, the father, or both parents reported that the target child was their first.

A set of analyses was conducted to compare the analytic sample to the full sample. The two restrictions for inclusion in the analytic sample resulted in different patterns of bias. For example, restricting the sample to dyads in which at least one parent was experiencing a first birth likely accounts for the fact that parents were younger (mothers: $t(4892) = 19.1, p < .001$; fathers: $t(3828) = 19.7, p < .001$), that they reported knowing each other for less time prior to

the birth, $t(4819) = 16.2, p < .001$, and that there were fewer married couples in the analytic sample, $\chi^2(1, N=4896)=11.5, p < .01$, in comparison to the full sample. In contrast, restricting the sample to dyads in which the father participated in at least one wave of the survey likely accounts for the fact that parents in the analytic sample were more educated (mothers: $t(4896) = -3.94, p < .001$; fathers: $t(4896) = -21.1, p < .001$), and less likely to have no relationship at baseline, $\chi^2(1, N=4896)=30.5, p < .001$, than parents in the full sample. In addition, the analytic sample contained higher proportions of cohabiting, $\chi^2(1, N=4896)=23.1, p < .001$, and dating couples, $\chi^2(1, N=4896)=25.8, p < .001$, and fewer proportions of African Americans (mothers: $\chi^2(3, N=4883)=29.1, p < .01$; fathers: $\chi^2(3, N=3816)=17.6, p < .01$). Finally, parents in the analytic sample reported higher levels of supportiveness from the other parent at baseline (mothers: $t(4629) = -9.3, p < .001$; fathers: $t(3617) = -2.2, p < .001$) than those who were omitted from the analyses.

The sample of mothers ranged in age from 14 to 47 years at the time of the child's birth, with a mean age of 23.5 (SD=5.6) years. Forty-four percent were Black, 27% were Latina, 24% were White, and the remaining 5% reported other ethnicities. In terms of education level, approximately 29% had a high school diploma or equivalent, while 33% had less than a high school education. Only 12% had a college or graduate degree, and the remaining 26% had some college or technical training. The majority of mothers were primiparous (76%), but the remaining 24% of mothers had, on average, 1.6 other children (SD=1.0; range=1-8).

Fathers ranged in age from 15 to 67 at the time of the birth with a mean age of 25.8 (SD=6.4) years. Forty-four percent of fathers were Black, 27% were Latino, 24% were White, and the remaining 5% reported being of other ethnicities. Their education levels were similar to those of mothers. Thirty-two percent of fathers had a high school diploma or equivalent and 32% had less than a high school education. Just as for mothers, 12% had bachelors or graduate degrees, and the remaining 24% had some college or technical training. The majority of fathers were also first time parents (74%). The average number of other children among the remaining 26% of fathers was 1.7 (SD=1.1; range=1-12).

At the baseline interview, 21% of parents were married, 40% were cohabiting, 29% were living separately but were in a romantic relationship (termed *dating* throughout the manuscript), and 10% reported not having a relationship with each other. On average, parents reported knowing each other for approximately 3.6 (SD=3.9) years prior to the birth of the child, though this ranged considerably (from 0-31 years). Due to this large range, this variable was recoded to range from 0-10 (SD=3.34) for all analyses. Approximately one half of the children were male (53%), and 11% weighed less than 2500 grams at birth and were considered to have low birth weight.

There were higher rates of attrition for fathers than for mothers. Of the 2172 mothers who were interviewed at baseline, 9% were missing data at 1 year, 11% at 3 years, and 13% had missing data at 5 years. For fathers, 8% were not interviewed at baseline, 21% were missing at 1 year, 24% at 3 years, and 28% at 5 years. In follow-up analyses, mothers and fathers with complete data were compared to those who had missing data. For both mothers and fathers, those with higher educational attainment were more likely to stay over the sample across each wave (mothers: $t(2168) = -2.7; -3.6; -2.1, p < .05$; fathers: $t(1986) = -4.0; -5.3; -5.0, p < .01$). Mothers' relationship status at baseline was unrelated to attrition at 1 and 3 years, but at 5 years, those who had been cohabiting were less likely to be interviewed while those who had been dating at baseline were more likely to be interviewed, $\chi^2(3, N=2172)=19.5, p < .01$. Among fathers, those who were married at baseline were the most likely to be interviewed at each subsequent wave, while those who had been dating or not romantically involved at baseline were less likely to be assessed at 3 or 5 years, $\chi^2(3, N=2172)=58.0; 34.0; 22.9, p < .01$. For mothers, no other demographic characteristics or key study variables were related to their attrition. However, for

fathers, mother's reports of his supportiveness at birth were related to attrition. In particular, fathers who attrited were reported as being lower in emotional supportiveness to the mother at baseline than those who were interviewed at subsequent time points, $t(2068) = -5.6; -4.0; -2.7$, $p < .01$. Given the missingness that occurred throughout the course of the study, analyses were conducted using full information maximum likelihood, using all available data for each participant in the study. Additionally, maternal and paternal age, education, and race were included as covariates.

Design and Procedures

Baseline interviews were conducted with both mothers and fathers shortly after the birth of their baby, often while the mother was still in the hospital. Follow-up interviews took place when the children were 1, 3, and 5 years. Both mothers and fathers were assessed at each of these time points. The primary data that were used for the current study were drawn from the section of the interview concerning the relationship between the mother and the father. Emotional supportiveness items were assessed at each of the 4 time points, predictors and covariates were measured at baseline, and break-up was assessed at 5 years.

Measures

Emotional Supportiveness—At each assessment (baseline, 1, 3, and 5 years), mothers and fathers were asked a set of four questions originally drawn from the National Survey of Families and Households regarding their perception of the emotional supportiveness that they received from the other parent. Participants were given the prompt, *Thinking about your past relationship [with other parent], how often would you say that: (1) He/she was fair and willing to compromise when you have a disagreement; (2) He/she expressed affection or love for you; (3) He/she insulted or criticized you or your ideas; and (4) He/she encouraged or helped you to do things that were important to you.* Each of the four questions was answered on a three point scale indicating whether the statement described their partner *often* (1), *sometimes* (2), or *never* (3). The positively worded items (willing to compromise, expressed affection, and encouraged or helped) were reverse scored so that a higher score indicated a more positive relationship description. Finally, a composite score was calculated by summing the four items together (with 3 of them reverse scored), resulting in a possible range of 4–12 with higher scores indicating higher levels of supportiveness within the relationship ($\alpha = .64-.76$ for mothers and $\alpha = .61-.68$ for fathers). The emotional supportiveness composite has been used in several other studies using the Fragile Families data (cf. Mincy, Garfinkel, & Nepomnyaschy, 2005; Osborne, 2005).

Break-up—A variable was created to indicate whether or not the mother and father had ended their relationship by the time their child was 5 years old. During each follow-up interview (1, 3, and 5 years), they were asked to report whether the relationship had ended since the previous interview. These reports were compiled to indicate if the parents had ever broken up. However, since some parents got back together, the variable was adjusted based on their relationship status at each of the four assessments. For example, if they were married or cohabiting at year 5, they were considered to have not broken up, even if they had previously reported a break-up. Conversely, mothers and fathers who reported no relationship at year 5 were considered to have broken up. The break-up variable was scored as 0 or 1 indicating whether they were broken-up at 5 years (1) or not (0).

Covariates—A set of variables was included in the model as covariates. These included maternal and paternal age, and education, number of other children, whether the child was the first for both parents, how long they had known each other prior to the pregnancy, relationship status at baseline (married, cohabiting, non-resident dating relationship, or no relationship), child gender, and whether or not the child was considered to have a low birth weight (<2500

grams). Due to the high correlation between maternal and paternal race, only maternal race was included in the model with a dummy variable to indicate if parental race differed. With the exception of paternal age, race, education, and number of other children, maternal reports were used for the covariates. Information regarding all of the covariates was collected during the initial interview immediately following the child's birth.

Results

The present study utilized logistic regression and latent growth curve (LGC) modeling to examine antecedents and consequences of parental relationship supportiveness over the transition to parenting in a diverse sample of both married and unmarried parents. First, a multiple logistic regression was used to predict which couples broke up within the first five years after the child's birth based on their relationship supportiveness at birth and one year. Next, latent growth models were evaluated to examine predictors of relationship supportiveness for both mothers and fathers as well as how one parent's level of supportiveness influenced the other. An unconditional growth model was evaluated with interrelated trajectories of mothers' and fathers' reports of the other parent's supportiveness from birth to five years. The unconditional models allowed for correlations between maternal and paternal trajectories but did not include predictors. Separate models were tested with the intercept scaled to represent partner supportiveness at either birth or one year. Finally, a conditional model was tested with several predictors and covariates including the number of other children, length of relationship prior to pregnancy, and whether or not the child had a low birth weight. Again, separate models were tested with the intercept set to birth or one year.

Relationship Supportiveness

The means, standard deviations, and ranges of paternal and maternal perceived supportiveness are presented in Table 1 along with the intercorrelations among all of the supportiveness variables. At birth and when children were 1, 3, and 5 years of age, both mothers and fathers reported on the level of emotional supportiveness they received from the other parent. For both mothers and fathers, reports of supportiveness declined steadily over time, though the decrease was slightly greater among women than men. In addition, supportiveness at the time of the birth was not strongly correlated with subsequent ratings. In contrast, one year supportiveness was highly related to supportiveness at both 3 and 5 years. Correlations between mothers' and fathers' perceived partner supportiveness became stronger over time ($r=.28$ at baseline; $r=.44$ at 5 years).

Predicting Relationship Break-Up

The first analysis was conducted using multiple logistic regression in order to examine which couples ended their relationship within the first 5 years of their child's life, and what variables predicted break-up. Overall, 46% of couples had ended their relationship by the time their child was 5 years old. The regression analysis included mothers' and fathers' rating of support from the other parent at birth and one year in order to identify which time point was more salient for predicting the longevity of the parents' relationship. A set of controls were also added to the model including low birth weight, child gender, number of other children for both mom and dad, whether the birth was the first for both parents, length of relationship prior to pregnancy, relationship status at birth (dummy coded as cohabiting, dating, or no relationship, with married as the reference group), maternal race, age and education, paternal age and education, and a dummy variable indicating if paternal race differed from maternal race. The test of the full model with predictors and covariates was statistically reliable, $\chi^2(21, N=1171) = 318, p < .001$, indicating that the predictors, as a set, reliably distinguish between couples who broke up and those who did not. The total model accounted for 31.8% of the variance in breakups. Table 2 shows regression coefficients, Wald statistics, and odds ratios for each of

the four predictors. According to the Wald criterion, relationship supportiveness at 1 year predicted break-up (mothers: $z = 35.5, p < .001$; fathers: $z = 17.1, p < .001$), whereas support at birth did not. According to the odds ratios, a one unit increase in relationship supportiveness was associated with a 24% decrease in the odds of breaking up by 5 years for mothers and an 18% decrease in the odds of breaking up for fathers.

In order to test whether baseline supportiveness on its own would have predicted break-up, a second model was tested without the one year supportiveness scores. This model (see Table 2) was also statistically reliable, $\chi^2 (19, N=1668)=475, p < .001$, and accounted for 33.1% of the variance in break-ups. However, only mothers rating of partner supportiveness was a significant predictor of break-up, $z = 10.8, p < .01$. A one unit increase in mothers' perceived support at baseline was associated with a 14% decrease in the odds that the couple would break up by 5 years.

Overview of Latent Growth Curve Modeling

LGC modeling is an approach that is well-suited for answering questions about how processes change over time by integrating hierarchical linear modeling and structural equation modeling (SEM; Willett & Sayer, 1994). LGC modeling provides estimates the average starting point for all individuals (intercept) and the average rate of change (slope). Estimates of covariance structure indicate the degree of variability around the intercepts and slopes. Significant variability around the average values for these factors suggest that it is appropriate to examine variables which might explain the individual differences in initial status and pattern of change (Bollen & Curran, 2006).

Because LGC utilizes structural equation modeling techniques, it is possible to estimate the latent growth curves of two related processes and relate these processes to one another in one model; this is called a multivariate latent curve model (Bollen & Curran, 2006). Other benefits of growth curve analysis in an SEM framework include the ability to evaluate the overall fit of the model, to account for measurement error, and to address missing data. In the Mplus modeling program (Muthen & Muthen, 2001), there is an option for Full Information Maximum Likelihood (FIML) estimation, which computes the likelihood function for each case utilizing all data available for that case (Bollen & Curran, 2006). Thus, if a participant has any data available, the model can be estimated as if the data were complete.

Evaluating model fit—Models were evaluated in terms of measures of goodness of fit, parameter estimates and standard errors using Mplus (Muthen & Muthen, 2001). Three fit indices were examined to identify the goodness of fit of the models. The comparative fit index (CFI) is a measure of model fit that provides reliable estimates regardless of sample size. For a good fit, CFI scores should be close to 1, and at least .90 (Bentler, 1990). The root mean square error of approximation (RMSEA) indicates a good fitting model with a value less than or equal to .08 (MacCallum, Browne, & Sugawara, 1996). Likewise, the standardized root mean square residual (SRMR) indicates a good fitting model with values at or below .08 (Hu & Bentler, 1999). In addition, significant parameter estimates and small standard errors are also indicators of good fit.

The primary goal of the study was to identify predictors of mothers' and fathers' supportiveness that they received from the other parent following the transition to parenting. In order to examine trajectories of supportiveness, the present study utilized LGC modeling to investigate changes in paternal and maternal supportiveness during the first several years after the birth of a new child, with a special emphasis on the importance of the child's first year. An unconditional multivariate LGC model was evaluated for mothers and fathers that did not include any covariates. After confirming the fit of this model, predictors (whether or not the child had low birth weight, whether the child was the first for both parents, number of other

children that mom and dad had, respectively, length of relationship prior to the pregnancy, and relationship status at birth) were added to the models. A set of covariates were also included, accounting for child gender as well as mothers' and fathers' age, and education level, maternal race, and a dummy variable indicating whether the father's race differed from mother's.

Growth Curve Models

Unconditional multivariate LGC models—First, an unconditional growth model of maternal and paternal support was examined that specified linear growth over time. In this model, the latent intercept and slope were indicated by relationship supportiveness at birth, 1, 3, and 5 years for mothers and fathers, respectively. The factor loadings for the intercept factor were all set to 1. The loadings for the slope factor were fixed at 0, 1, 3, and 5, specifying the intercept to be at birth. Error variances were allowed to correlate within time for mothers and fathers. No covariates or predictors were included in the unconditional model. This model (Model 1) displayed adequate fit, CFI = .911; RMSEA = .085; SRMR = .086. The presence of significant (negative) parameter estimates for the slope indicated that, on average, mothers and fathers relationship supportiveness was decreasing over time. There was also significant variability around the mean intercept and mean slope, suggesting that there were individual differences in initial supportiveness levels and change in supportiveness over time.

Since maternal and paternal trajectories were modeled simultaneously in the unconditional model, the intercepts and slopes of relationship supportiveness were allowed to freely correlate across mothers and fathers. There were several significant correlations among factors. The coefficients for all correlations are reported in Table 3. All factors were significantly correlated except for fathers' intercept and fathers' slope, suggesting that fathers' reports of supportiveness from the mother at baseline were unrelated to change in supportiveness over time.

In order to examine whether one year relationship supportiveness was a better indicator of the couples' supportiveness trajectory, the unconditional model was repeated with the intercept rescaled to represent one year supportiveness. Loadings for the intercept factor were still set to 1, but loadings for the slope factor were fixed at -1, 0, 2, and 4, to indicate that the intercept was set at one year. Changing the scaling of the growth model does not impact the fit of the model; it only changes the interpretation of the intercept parameters. Just as in the original model with the intercept set at birth, intercepts and slopes were positively correlated for mothers and fathers. However, in the model with the intercept set at one year (Model 2), there were significant positive correlations among all other combinations of parameters as well (see Table 3). Relationship supportiveness at one year (intercept) was positively related to change over time for both mothers and fathers. More specifically, there were significant relationship between mothers' intercept and slope ($\beta = .47, p < .01$), fathers' intercept and slope ($\beta = .31, p < .01$), mothers' intercept and fathers' slope ($\beta = .34, p < .01$), and fathers' intercept and mothers' slope ($\beta = .29, p < .01$). The comparison of the two models that differed only in the scaling of intercept suggests that ratings of partner supportiveness at one year were more informative about the overall early supportiveness between new parents than were their reports of supportiveness immediately following the child's birth. There were, however, still significant amounts of unexplained variance for all latent factors, suggesting that adding predictors to the model might help to explain these individual differences.

Conditional multivariate LGC models—Finally, a set of predictors was added to the model to help explain sources of individual variation in relationship supportiveness trajectories for mothers and fathers, these included whether or not the child had low birth weight, number of other children (for both mom and dad), whether the child was the first for both parents, how long they had known each other prior to pregnancy, and relationship status at baseline. Additionally, covariates were added to the model to control for parents' age and education,

children's gender, maternal race, and whether fathers' race differed from mothers'. Low birth weight, relationship status, and child gender were dummy coded to indicate low birth weight (1), and male (1). Relationship status included three dummy variables indicating cohabiting, dating, or no relationship at birth. Maternal race included three dummy codes indicating Black, Latina, and other race, and another dummy code was added to indicate if parents' race differed (1). The reference group was White married couples whose children were female and had normative weight at birth.

Each of the predictors and covariates were entered into the model as predictors of all latent factors (slope and intercept for mother and father). Separate models were tested with the intercept set at birth (Model 3) and one year (Model 4). Since the only difference between these two models was the scale of the intercept factor, the model fit was the same for both models: RMSEA = .042; CFI = .904; SRMR=.030. Model fit statistics and correlations among factors can be found in Table 3. Table 4 contains coefficients for all the predictors and covariates in the models. For Model 3, mothers' intercept was correlated with fathers' intercept ($\beta=.19, p<.01$) and fathers' slope was correlated with mothers' intercept ($\beta=.13, p<.05$) and slope ($\beta=.52, p<.01$). In this model, mothers' intercept was predicted by her age, ($\beta= -.09, p<.05$) and education ($\beta=.08, p<.05$), and relationship status at baseline (dating, $\beta=-.24, p<.01$; no relationship, $\beta=-.55, p<.01$). In particular, emotional supportiveness from the other parent was higher at birth if mothers were older and more educated, and if the couple was married (relative to dating or not romantically involved). Fathers' relationship supportiveness at birth was also higher for married fathers relative to those who were dating ($\beta= -.12, p<.05$) or had no relationship with the mother ($\beta= -.34, p<.01$) and if they had known each other for longer ($\beta=.08, p<.05$). Fathers' ratings at birth were also higher if fathers were younger ($\beta= -.11, p<.05$), and if mothers were White (relative to Black, $\beta=-.12, p<.01$).

For Model 4, as in Model 2, both of which had the intercept set at one year, all of the latent factors were significantly correlated ($p<.001$ for all). In addition, mothers' reports of fathers' supportiveness at one year were predicted by how long they had known each other prior to pregnancy, $\beta=.07, p<.05$, relationship status (dating, $\beta= -.24, p<.01$; no relationship, $\beta= -.49, p<.01$), higher paternal education ($\beta=.07, p<.05$), and parents being of the same race ($\beta= -.06, p<.05$). Fathers' reports of maternal supportiveness at one year was predicted by how long they had known each other ($\beta=.10, p<.01$), relationship status at birth (dating, $\beta=-.12, p<.01$; no relationship, $\beta= -.28, p<.01$), and fathers' age ($\beta= -.11, p<.01$). In addition, families in which the mother was Black ($\beta= -.08, p<.05$), and parents differed in their racial background ($\beta= -.06, p<.05$) had lower average scores for fathers' perceptions of supportiveness at one year. For both mothers and fathers, having a longer relationship prior to pregnancy and being married were associated with higher levels of supportiveness. Predictors of the slope factors were the same for Models 3 and 4. Mothers' slopes were less negative if the couple had known each other for longer prior to the birth ($\beta=.11, p<.01$), and if she was older ($\beta=.15, p<.01$), and non-White (Black, $\beta=.08, p<.05$; Latina, $\beta=.09, p<.05$; Other Race, $\beta=.07, p<.05$). In contrast, mothers' slopes were more negative if they were cohabiting (as opposed to married; $\beta=-.10, p<.05$), if fathers were older ($\beta= -.11, p<.05$), and if parents had different racial backgrounds ($\beta= -.09, p<.01$). Fathers' reports of mothers' supportiveness declined more steeply if his child had low birth weight ($\beta=-.10, p<.05$) and if his race was different than his child's mother's ($\beta= -.10, p<.05$), but was less negative if he was not romantically involved with the mother at baseline (relative to married couples; $\beta= .18, p<.01$) and if he had known the mother for longer prior to the pregnancy ($\beta=.10, p<.05$).

Overall, it was found that relationship supportiveness at one year was more informative about the overall interparental relationship than were ratings of supportiveness at birth. Lower levels of emotional supportiveness at one year significantly increased the chances that the couple would end the relationship by the time their child was five years old. Emotional supportiveness

at one year was also strongly correlated with overall change over time, such that higher support at one year was associated with slower declines over time for both mothers and fathers. This correlation was not significant for supportiveness at birth. Several variables were shown to predict each parent's report of perceived supportiveness. Relationship status at birth was strongly related to one year supportiveness as well as to changes that occurred over time. Dating couples and those who were not romantically involved at the time of the birth reported lower levels of supportiveness than married or cohabiting couples, but cohabiters experienced sharper declines in supportiveness than married couples, particularly among mothers. Couples who had known each other for longer periods of time prior to pregnancy reported higher levels of relationship supportiveness at one year, and less steep declines in supportiveness over time (for both mothers and fathers). Fathers' reports of mothers' supportiveness declined at a faster rate if his child had low birth weight. There were also differences in relationship supportiveness trajectories by race. Mothers' slopes were less negative for Blacks, Latinos, and women of other ethnicities (relative to Whites). Furthermore, couples in interracial relationships reported lower levels of supportiveness at one year and steeper declines over time than same race couples.

Discussion

Using the Fragile Families and Child Well-Being study to examine relationship supportiveness across the transition to parenting among both married and unmarried parents, the present study contributes to the literature in two important ways: by shedding light on the timing of effects surrounding the transition to parenthood as well as by exploring these processes in multiple family contexts for both mothers and fathers. First, we employed a long lens with which to examine the transition to parenthood, comparing reports of relationship supportiveness at birth and one year. Furthermore, we examined a trajectory of supportiveness that lasted over the first five years after the birth of the child, the point at which many children are experiencing their first major transition to school. Although most studies of the transition to parenthood primarily focus on the first months after the birth, it is important to consider longer term implications of these early experiences. By examining a 5 year trajectory, we were able to identify how measures of supportiveness at birth and one year foreshadowed later supportiveness and even whether or not the parents were likely to end their relationship. Second, the present study allows for important insights into the transition to parenthood across different family contexts, including married, cohabiting, dating, and nonromantic coparents, while also providing information about the role of fathers in non-traditional families. Furthermore, by including first time parents whose partners already had one or more children, the present study broadens our understanding of the transition to parenthood as it simultaneously relates to the processes associated with multi-partnered fertility. Finally, the use of the Fragile Families data allowed for the examination of both mother and father reports of relationship satisfaction, shedding light on the transition to parenting among fathers in non-traditional families.

With regard to the first contribution, that of timing, we showed that reports of relationship supportiveness immediately following the birth of the child are not as predictive of later relationship supportiveness and subsequent break-up as reports of supportiveness one year post-partum, particularly for fathers. In general, mothers and fathers reported high levels of supportiveness immediately following the birth, but relationship supportiveness declined steadily over time. In addition, one year ratings of supportiveness were more strongly correlated to changes in the relationship over time than were ratings taken at birth. The finding that reports of relationship supportiveness collected at birth do not predict later outcomes is surprising and suggests that there is something unique about the way that parents evaluate their relationship directly following the birth of a child. Since the transition to parenting involves a reorganization of the family system, and this process of adaptation to new roles unfolds over time (Cox &

Paley, 1997), it may be that typically protective processes (i.e. high levels of relationship supportiveness) do not function in expected ways during this period of high change (Smith, Howard, & the Centers for the Prevention of Child Neglect, 2008). It is likely that parents experience a type of euphoria in the early days after the birth of a child that may positively color their appraisal of their relationship with the partner as well. Researchers have termed this period, the “magical moment” in part because of the heightened positive emotions that are experienced after the birth (Knab & McLanahan, 2006; Reichman et al., 2001). In contrast, by the time the child is a year old, parents have adapted to the daily reality of what it means to have a child (Cox & Paley, 1997) and may be able to more realistically assess the quality of the inter-parental relationship.

Not surprisingly, break-up was predicted by relationship supportiveness at one year as well as a number of demographic characteristics that were measured at birth. Similar to our results, Osborne et al. (2007) also found that non-married couples in the Fragile Families dataset were at an increased risk for relationship dissolution. For white children in particular, parental age, education, and number of children from previous relationships were strongly related to parental break-up. Conversely, Carlson, McLanahan, and England (2004) found that higher levels of relationship supportiveness were associated with both marriage and cohabitation.

With regard to the second contribution, that of family context, we found that relationship status at birth was a significant predictor of relationship trajectories, and that although some predictors worked the same for both parents, others were unique to either mothers or fathers. As expected, married couples reported the most optimal trajectories of supportiveness, reflecting greater levels of instability in non-marital relationships (Osborne et al., 2007). There were also instances in which unmarried couples were not different from married couples. For example, relationship supportiveness at birth and one year was not significantly different for married and cohabiting parents, though the decline over time was more marked for cohabiters, particularly among women. Also of interest was the comparison between married couples and those who reported no relationship at birth. In particular, although relationship supportiveness was lower at both birth and one year for couples reporting no relationship at birth, fathers in this category actually had more positive change over time than married fathers. However, given the much lower intercept scores for this group, even at one year, increases in relationship supportiveness over time do not yield scores that are higher than couples in more committed relationships. It is also important to keep in mind that this is a very select group of men who are not romantically involved with the mother at birth yet continue to participate in the survey (4% of fathers in the sample). Future research should more closely examine this group in order to better understand their personal characteristics as well as the ways that they choose to be involved with their children over time.

Whether or not both parents were experiencing their first birth was marginally related to relationship supportiveness as well, though only for mothers and particularly for ratings of supportiveness at birth. Previous research using the Fragile Families data has pointed out a link between children from other relationships and relationship transitions (Waller & McLanahan, 2005). In particular, couples were less likely to marry if parents had children from previous relationships. The occurrence of multipartnered fertility, or having children with multiple partners, has been increasing over the last several years and is a significant risk factor for future parental break-up (Guzzo & Furstenberg, 2007), and may be an indicator of weak social support networks for mothers (Harknett & Knab, 2007). That it was a more salient predictor for mothers than fathers may speak to the fact that multipartnered fertility is much more common among men than woman (Guzzo & Furstenberg, 2007).

The length of the relationship prior to pregnancy was a more salient predictor of relationship supportiveness for both mothers and fathers than whether both parents were experiencing the

birth of their first child. Longer relationships predicted higher levels of supportiveness as reported by both mothers and fathers at one year. Additionally, it was a positive predictor of slopes. Parents reported less decline in supportiveness over time if they had known each other for a longer period of time prior to becoming pregnant. This is consistent with previous literature showing a strong link between length of relationship and quality after the birth, even among young mothers (Bouchard et al., 2008).

The other predictor of relationship supportiveness was whether or not the infant had low birth weight. This was a significant predictor for fathers only such that fathers whose children had low birth weight experienced steeper declines in relationship supportiveness than fathers whose children had a birth weight within the normal range. Previous research has linked low birth weight to parental relationship dissolution and father absence (Reichman et al., 2004). Having a child with low birth weight may heighten the stress experienced by new parents. Particularly for a mother who may have extra care giving responsibilities associated with a medically fragile infant, she may be less likely to be emotionally supportive toward her partner. The child's gender was not, however, a predictor of relationship supportiveness in any of the models. Although research suggests that parenting behaviors may be different for sons versus daughters (Chaplin et al., 2005; Lundberg et al., 2007), the gender of the child does not appear to have an independent effect on the quality of the parents' relationship.

There were also interesting differences in relationship supportiveness trajectories and the likelihood of break-ups based on parental race. For example, if the mother was Black, then fathers reported lower perceived supportiveness at birth and one year, however, non-white mothers reported fewer declines in supportiveness over time. Perhaps the most notable pattern was that interracial couples reported lower supportiveness at one year (no difference at baseline) that declined at faster rates than racially homogenous couples. Interracial couples were also significantly more likely to break up by 5 years than their racially homogenous counterparts. These findings are consistent with Goldstein and Harknett (2006) who identified lower odds of marriage and higher odds of relationship dissolution for racially heterogenous couples. Taken together, these studies suggest that interracial couples may face unique stresses as they transition to parenting, though further research is needed in order to understand the unique risk and protective processes at work in interracial families.

Finally, the findings of the present study have implications for interventions with high-risk families. It is important to keep in mind that relationship supportiveness at the time of the birth is not the best indicator of the way that mothers and fathers will adjust to their co-parenting relationship. Screening couples on the basis of their early ratings of relationship supportiveness may miss couples who are still at high risk for later problems. Marriage promotion programs that focus primarily on new parents' relationship quality also may not be particularly effective in the early stages after the birth. Further research is needed to determine exactly when the bubble bursts for these new families and their relationship supportiveness becomes more indicative of their overall relationship. The present study suggests that by one year, this transition has occurred, but it remains unclear whether it happens in the first several weeks after the birth, or whether it is a gradual transition over the first year.

The present study was not without limitations. First, we used a 4-item, self-report measure of relationship supportiveness. A longer, more standardized instrument of relationship quality may have yielded stronger findings. However, the relationship supportiveness measure had adequate internal consistencies for both mothers and fathers and was related in hypothesized ways to other study variables. Additionally, perceptions of support may be more important for predicting parental functioning and parenting quality than actual instrumental support received or observational ratings of relationship quality. Second, the sample in the present study did differ significantly from the full Fragile Families sample on key demographic variables, which

could potential limiting the generalizability of the findings. However, the pattern of differences between the current sample and the full sample were such that both lower and higher-risk families were included (more young, unmarried couples, but they had higher levels of education and relationship supportiveness). Third, fathers' attrition was related to maternal reports of his supportiveness at baseline such that fathers who were rated as being less supportive at birth were less likely to be interviewed in subsequent waves than those who were higher in supportiveness. These fathers were also more likely to be dating or have no relationship with the mother at baseline and represent the most difficult group of fathers to study because of their relatively weaker ties to their child's mother. Additional research is needed that will focus specifically on this group of men in order to better understand who they are and the nature of their involvement in family life. Finally, the present study only examined relationship supportiveness at birth and 1, 3 and 5 years postpartum. Future research should examine more frequent assessments of relationship characteristics within the first year in order to gain a more nuanced perspective regarding when couples adjust to their new parenting roles.

In conclusion, the present study demonstrated that both married and unmarried parents experience declines in their relationship supportiveness over time. Although supportiveness is generally lower for dating couples or parents not in a relationship at birth, their patterns of change over time were similar. For mothers, change in supportiveness over time was more negative for cohabiters than married parents, but the pattern of change did not differ among the other groups. For fathers, relationship supportiveness declined similarly regardless of whether the father was married, cohabiting, or dating, but the pattern of change was less negative among fathers who were not in a relationship with the child's mother. Having a more clear understanding of the interparental relationship over the transition to parenting is the first step in understanding ways in which mothers and fathers in combination influence their family and their child's development.

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References

- Altmaier E, Maloney R. An initial evaluation of a mindful parenting program. *Journal of Clinical Psychology* 2007;63:1231–1238. [PubMed: 17972292]
- Bollen, KA.; Curran, PJ. Latent curve models: A structural equation perspective. Hoboken, NJ: John Wiley & Sons, Inc.; 2006.
- Bentler PM. Fit indexes, lagrange multipliers, constraint changes and incomplete data in structural models. *Multivariate Behavioral Research* 1990;25:163–172.
- Bouchard G. Cohabitation versus marriage: The role of dyadic adjustment in relationship dissolution. *Journal of Divorce and Remarriage* 2006;46:107–117.
- Bouchard G, Lachance-Grzela M, Goguen A. Timing of the transition to motherhood and union quality: The moderator role of union length. *Personal Relationships* 2008;15:71–80.
- Calkins, SD. Temperament and emotion regulation: Multiple models of early development. In: Beauregard, M., editor. *Consciousness, emotional self-regulation and the brain*. Amsterdam: John Benjamins Publishing Company; 2004. p. 35–60.
- Carlson, MJ. Trajectories of couple relationship quality after childbirth: Does marriage matter?. 2007 Apr. Retrieved June 17, 2008, from <http://crcw.princeton.edu/workingpapers/WP07-11-FF.pdf>
- Carlson MJ, Furstenberg FF. The prevalence and correlates of multipartnered fertility among urban U. S. parents. *Journal of Marriage and Family* 2006;68:718–732.
- Carlson MJ, McLanahan SS. Strengthening unmarried families: Could enhancing couple relationships also improve parenting? *Social Service Review* 2006;80:297–321.

- Carlson M, McLanahan S, England P. Union formation in fragile families. *Demography* 2004;41:237–261. [PubMed: 15209039]
- Cassidy, J.; Woodhouse, SS.; Cooper, G.; Hoffman, K.; Powell, B.; Rodenberg, M. Examination of the precursors of infant attachment security: Implications for early intervention and intervention research. In: Berlin, LJ.; Ziv, Y.; Amaya-Jackson, L.; Greenberg, MT., editors. *Enhancing early attachments: Theory, research, intervention, and policy*. New York: Guilford; 2007. p. 34-60.
- Chaplin TM, Cole PM, Zahn-Waxler C. Parental socialization of emotion expression: Gender differences and relations to child adjustment. *Emotion* 2005;5:80–88. [PubMed: 15755221]
- Claxton A, Perry-Jenkins M. No fun anymore: Leisure and marital quality across the transition to parenthood. *Journal of Marriage and Family* 2008;70:28–43. [PubMed: 20224746]
- Cowan CP, Cowan PA. Interventions to ease the transition to parenthood: Why they are needed and what they can do. *Family Relations* 1995;44:412–423.
- Cowan, PA.; Cowan, CP.; Schulz, MS.; Heming, G. Prebirth to preschool family factors predicting children's adaptation to kindergarten. In: Parke, RD.; Kellam, SG., editors. *Exploring family relationships with other social contexts*. Hillsdale, NJ: Erlbaum; 1994. p. 75-114.
- Cox MJ, Paley B. Families as systems. *Annual Review of Psychology* 1997;48:243–267.
- Gee CB, McNeerney CM, Reiter MJ, Leaman SC. Adolescent and young adult mothers' relationship quality during the transition to parenthood: Associations with father involvement in fragile families. *Journal of Youth and Adolescence* 2007;36:213–224.
- Goldstein JR, Harknett K. Parenting across racial and class lines: Assortative mating patterns of new parents who are married, cohabiting, dating or no longer romantically involved. *Social Forces* 2006;85:121–143.
- Goldstein JR, Kenney CT. Marriage delayed or marriage forgone? New cohort forecasts of first marriage for U. S. women. *American Sociological Review* 2001;66:506–519.
- Grych JH, Fincham FD, Jouriles EN, McDonald R. Interparental conflict and child adjustment: Testing the mediational role of appraisals in the cognitive-contextual framework. *Child Development* 2000;71:1648–1661. [PubMed: 11194263]
- Guzzo KB, Furstenberg FF. Multipartnered fertility among American men. *Demography* 2007;44:583–601. [PubMed: 17913012]
- Hack M, Klein NK, Taylor HG. Long-term developmental outcomes of low birth weight infants. *The Future of Children* 1995;5:176–96. [PubMed: 7543353]
- Harknett K, Knab J. More kin, less support: Multipartnered fertility and perceptions of support among mothers. *Journal of Marriage and Family* 2007;69:237–253.
- Hetherington EM. Divorce and the adjustment of children. *Pediatrics in Review* 2005;26:163–169. [PubMed: 15863626]
- Hu L, Bentler P. Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling* 1999;6:1–55.
- Karney BR, Bradbury TN. The longitudinal course of marital quality and stability: A review of theory, method, and research. *Psychological Bulletin* 1995;118:3–34. [PubMed: 7644604]
- Knab, JT.; McLanahan, S. Measuring cohabitation: Does how, when, and who you ask matter?. In: Hofferth, SL.; Casper, LM., editors. *Handbook of measurement issues in family research*. Mahwah, NJ: Erlbaum; 2006. p. 19-34.
- Krishnakumar A, Buehler C. Interparental conflict and parenting practices: A meta-analysis. *Family Relations* 2000;49:25–44.
- Lawrence E, Rothman AD, Cobb RJ, Rothman MT, Bradbury TN. Marital satisfactions across the transition to parenthood. *Journal of Family Psychology* 2008;22:41–50. [PubMed: 18266531]
- Lichter, DT.; Graefe, DR. Finding a mate? The marital and cohabitation histories of unwed mothers. In: Wu, LL.; Wolfe, B., editors. *Out of wedlock: Causes and consequences of nonmarital fertility*. New York: Russell Sage Foundation; 2001.
- Lichter DT, LeClare FB, McLaughlin DK. Local marriage markets and the marital behavior of black and white women. *American Journal of Sociology* 1991;94:843–867.
- Lundberg S, Rose E. Child gender and the transition to marriage. *Demography* 2003;40:333–349. [PubMed: 12846135]

- Lundberg S, McLanahan S, Rose E. Child gender and father involvement in fragile families. *Demography* 2007;44:79–92. [PubMed: 17461337]
- MacCallum RC, Browne MW, Sugawara HM. Power analysis and determination of sample size for covariance structure modeling. *Psychological Methods* 1996;1:130–149.
- Muthen, LK.; Muthen, BO. *Mplus user's guide*. 2nd. Los Angeles: Muthen & Muthen; 2001.
- Mincy R, Garfinkel I, Nepomnyaschy L. In-hospital paternity establishment and father involvement in fragile families. *Journal of Marriage and Family* 2005;67:611–626.
- Osborne C. Marriage following the birth of a child among cohabiting and visiting parents. *Journal of Marriage and Family* 2005;67:14–26.
- Osborne C, Manning WD, Smock PJ. Married and cohabiting parents' relationship stability: A focus on race and ethnicity. *Journal of Marriage and Family* 2007;69:1345–1366.
- Reichman NE. Low birth weight and school readiness. *The Future of Children* 2005;15:91–116. [PubMed: 16130543]
- Reichman NE, Corman H, Noonan K. Effects of child health on parents' relationship status. *Demography* 2004;41:569–584. [PubMed: 15461015]
- Reichman NE, Teitler JO, Garfinkel I, McLanahan SS. Fragile Families: Sample and design. *Children and Youth Services Review* 2001;23:303–326.
- Rogers SJ, White LK. Satisfaction with parenting: The role of marital happiness, family structure, and parents' gender. *Journal of Marriage and the Family* 1998;60:293–308.
- Sayer LC, Bianchi SM. Women's economic independence and the probability of divorce. *Journal of Family Issues* 2000;21:906–943.
- Schulz MS, Cowan CP, Cowan PA. Promoting healthy beginnings: A randomized controlled trial of a preventive intervention to preserve marital quality during the transition to parenthood. *Journal of Consulting and Clinical Psychology* 2006;74:20–31. [PubMed: 16551140]
- Seltzer JA. Cohabitation in the United States and Britain: Demography, kinship, and the future. *Journal of Marriage and the Family* 2004;66:921–928.
- Shapiro AF, Gottman JM, Carrere S. The baby and the marriage: Identifying factors that buffer against decline in marital satisfaction after the first baby. *Journal of Family Psychology* 2000;14:59–70. [PubMed: 10740682]
- Smith LE, Howard KS, Centers for the Prevention of Child Neglect. Continuity of paternal social support and depression among new mothers. *Journal of Family Psychology* 2008;22:763–773. [PubMed: 18855512]
- Waller MR, McLanahan SS. “His” and “her” marriage expectations: Determinants and consequences. *Journal of Marriage and Family* 2005;67:53–67.
- Willet JB, Sayer AG. Using covariance structure analysis to detect correlates and predictors of individual change over time. *Psychological Bulletin* 1994;116:363–381.

Figure 1. Multivariate latent growth curve model of the transition to parenting among mothers and fathers

Table 1
Descriptive information and correlations among relationship supportiveness variables

	Mother					Father				
	Birth	Year 1	Year 3	Year 5	Birth	Year 1	Year 3	Year 5	Birth	Year 1
<i>Mean (SD)</i>	10.703 (1.48)	10.007 (1.88)	9.452 (2.16)	9.461 (2.19)	10.618 (1.48)	10.010 (1.71)	9.853 (1.82)	9.699 (1.89)		
<i>Mother</i>										
<i>Birth</i>	--									
<i>Year 1</i>	0.373	--								
<i>Year 3</i>	0.352	0.524	--							
<i>Year 5</i>	0.296	0.414	0.559	--						
<i>Father</i>										
<i>Birth</i>	0.283	0.155	0.114	0.106	--					
<i>Year 1</i>	0.171	0.348	0.241	0.199	0.375	--				
<i>Year 3</i>	0.153	0.266	0.413	0.317	0.292	0.455	--			
<i>Year 5</i>	0.126	0.227	0.302	0.438	0.288	0.394	0.520	--		

Note: All correlations are significant at $p < .01$.

Table 2
Logistic Regression Analyses Predicting Breakup by 5 Years

	B	S.E.	Wald Test (z-ratio)	Odds Ratio
<i>Model 1</i>				
Mother Baseline	.029	.062	.215	1.029
Father Baseline	.083	.056	2.226	1.087
Mother 1 Year ***	-.269	.045	35.545	0.764
Father 1 Year ***	-.196	.047	17.145	0.822
Cohabiting **	.565	.214	6.991	1.759
Dating ***	.960	.244	15.504	2.613
No relationship *	1.423	.598	5.661	4.148
Maternal Age **	-.074	.023	10.415	.928
Paternal Education *	-.101	.048	4.515	.904
Mom is Black *	.488	.189	6.707	1.630
Mom is Latina *	-.401	.194	4.283	.670
Mom is other ethnicity *	-1.034	.409	6.388	.356
Parental race differs *	.512	.199	6.612	1.669
Length of Relationship	-.025	.026	.871	.976
<i>Model 2</i>				
Mother Baseline **	-.155	.047	10.812	0.857
Father Baseline	-.063	.043	2.146	0.939
Cohabiting ***	.757	.185	16.800	2.132
Dating ***	1.549	.207	56.000	4.706
No relationship ***	2.483	.344	52.128	11.975
Maternal Age **	-.048	.018	7.260	.953
Paternal Education	-.064	.039	2.656	.938
Mom is Black **	.517	.159	10.608	1.677
Mom is Latina *	-.392	.164	5.688	.676
Mom is other ethnicity *	-.774	.317	5.958	.461
Parental race differs ***	.668	.162	17.111	1.951
Length of Relationship *	-.048	.022	4.769	.954

* $p < .05$;

** $p < .01$;

*** $p < .001$

Note: Only covariates that were significant in either model are shown in the table. Models 1 and 2 also include controls for child gender, low birth weight, fathers' age, maternal educational attainment, first birth for both parents, and each parent's number of other children.

Table 3
Fit Indices and Correlations among Latent Variables for All Models

	Model 1	Model 2	Model 3	Model 4
CFI		0.911		0.904
RMSEA		0.085		0.042
SRMR		0.086		0.030
MI with MS	.174 [*]	.467 ^{**}	.091	.397 ^{**}
MI with FI	.346 ^{**}	.424 ^{**}	.191 ^{**}	.275 ^{**}
MI with FS	.170 [*]	.336 ^{**}	.134 [*]	.298 ^{**}
FI with FS	.056	.314 ^{**}	.057	.291 ^{**}
FI with MS	.138 [*]	.286 ^{**}	.077	.213 ^{**}
FS with MS	.592 ^{**}	.592 ^{**}	.520 ^{**}	.520 ^{**}

^{**}
 $p < .01$;

^{*}
 $p < .05$;

⁺
 $p < .10$

NOTE: MI=Mothers' Intercept; MS=Mothers' Slope; FI=Fathers' Intercept; FS=Fathers' Slope

Table 4
Predictors of Mothers' and Fathers' Relationship Supportiveness Trajectories

	Model 3			Model 4		
	MI	FI	MS	FS	MI	FI
Low birth weight	-.014	.033	.022	-.103*	-.006	.005
First Birth for Both	.072 ⁺	.007	-.042	.045	.053	.019
Length of relationship	.072	.075*	.111***	.104*	.066*	.100**
Mom's Other Children	.028	-.053	-.032	-.034	.015	-.060
Dad's Other Children	-.010	.011	-.032	.012	-.020	.014
Cohabiting	-.042	.005	-.104*	-.087	-.074	-.018
Dating	-.239***	-.117*	-.051	-.027	-.239**	-.120**
No relationship	-.551***	-.339***	.074 ⁺	.180**	-.486***	-.280***
Child is Male	-.007	.013	-.012	.008	-.010	.015
Mom's age	-.094*	.042	.146**	.103	-.038	.069
Dad's age	.049	-.110*	-.113*	.078	.007	-.086*
Mom's education	.080*	.078 ⁺	-.057	-.074	.055 ⁺	.056
Dad's education	.067 ⁺	.033	.031	-.098 ⁺	.072*	.006
Mom – Black	.006	-.177**	.084*	.110*	.034	-.084*
Mom – Latina	.001	.011	.090*	.084	.031	.033
Mom – Other Race	-.038	-.035	.074*	.048	-.011	-.021
Parental race differs	-.026	-.035	-.091**	-.097*	-.055*	-.060*

 $p < .001$;

**
 $p < .01$;

*
 $p < .05$;

+
 $p < .10$