



Published in final edited form as:

*J Marriage Fam.* 2013 August ; 75(4): 871–885. doi:10.1111/jomf.12045.

## Overnight Custody Arrangements, Attachment, and Adjustment Among Very Young Children

**Samantha L. Tornello,**

University of Virginia

**Robert Emery,**

University of Virginia

**Jenna Rowen,**

University of Virginia

**Daniel Potter,**

American Institutes for Research\*

**Bailey Ocker,** and

University of Virginia\*\*

**Yishan Xu**

University of Virginia\*\*

### Abstract

Large numbers of infants and toddlers have parents who live apart due to separation, divorce, or nonmarital/noncohabiting child-bearing, yet this important topic, especially the controversial issue of frequent overnights with nonresidential parents, is understudied. The authors analyzed data from the Fragile Families and Child Wellbeing Study, a longitudinal investigation of children born to primarily low-income, racial/ethnic minority parents that is representative of 20 U.S. cities with populations over 200,000. Among young children whose parents lived apart, 6.9% of infants (birth to age 1) and 5.3% of toddlers (ages 1 to 3) spent an average of at least 1 overnight per week with their nonresident parent. An additional 6.8% of toddlers spent 35% – 70% of overnights with nonresident parents. Frequent overnights were significantly associated with attachment insecurity among infants, but the relationship was less clear for toddlers. Attachment insecurity predicted adjustment problems at ages 3 and 5, but frequent overnights were not directly linked with adjustment problems at older ages.

### Keywords

attachment; child custody; child outcomes; divorce; Fragile Families and Child Wellbeing Study; nonresidential parents

---

Department of Psychology, University of Virginia, Charlottesville, VA 22904 (ree@virginia.edu).

\*American Institutes for Research, 1000 Thomas Jefferson St., NW, Washington, DC 20007.

\*\*Department of Psychology, University of Virginia, Charlottesville, VA 22904.

Social scientists have extensively documented demographic changes and compiled evidence on the social, psychological, and economic well-being of children who are not living with their two biological parents due to separation, divorce, or nonmarital/noncohabiting childbirth (Amato, 2010; Cherlin, 2009; Emery, 1999; McLanahan & Sandefur, 1994), yet very little research has examined the living arrangements and well-being of very young children. In this article, we operationally define *very young children* as including infants (birth – 1 year old) and toddlers (1 – 3 years old). Research on these groups is needed because, compared to older age groups, very young children (a) are likely to experience parental breakup because separation is highest during the early childhood years; (b) are potentially more vulnerable due to key socioemotional milestones, in particular the development of attachment security; and (c) present more complications for parenting plans, especially some form of joint physical custody, due to both practical reasons (e.g., expensive baby equipment, easily disrupted sleeping routines) and psychological issues (e.g., balancing the benefits of a secure attachment to one parent against the benefits of forming attachments to both parents).

Many very young children have parents who live apart. In 2008, 41% of childbirths in the United States occurred outside of marriage (Martin et al., 2010); an estimated half of these births were to noncohabiting parents (Sigle-Rushton & McLanahan, 2002). Moreover, nearly 20% of first marriages in the United States end in separation or divorce within the first 5 years (Copen, Daniels, Vespa, & Mosher, 2012). Cohabitation has an even greater likelihood of dissolution than marriage (Cherlin, 2009). Of course, dissolution during the early years of a relationship often coincides with having infants and toddlers in the family. Thus, very young children are at greater risk of first experiencing parental separation and separate parenting than are older children (Furstenberg, Nord, Peterson, & Zill, 1983).

In considering this critical yet understudied topic, we note two very different areas of concern. One is the absence of contact between very young children and their nonresidential parents, a circumstance likely to foreshadow little or no contact in the future (Cheadle, Amato, & King, 2010). The other area, our present focus, is frequent overnight contact between nonresident parents and their very young children, typically multiple overnights with fathers away from mothers.

Do many very young children spend frequent overnights with both of their parents? Surprisingly little research has attempted to answer this question. A recent report using a nationally representative sample of Australian children found that almost one quarter of very young children of divorced or separated parents spent at least one overnight with the nonresidential parent; nearly 5% spent five or more overnights every 2 weeks (McIntosh, Smyth, Kelaher, Wells, & Long, 2010). Yet Australian law encourages joint physical custody, so these estimates may not apply to the United States, for which we could find no comparable statistics. We do know that nonresident fathers in the United States see their older children more frequently. In 1976, 18% of nonresident single fathers saw their 6- to 12-year-old children at least once a week; by 2002, this number had risen to 31% (Amato, Meyers, & Emery, 2009). Similarly, a random sample of divorce settlements in 21 Wisconsin counties showed an increase in joint physical custody (defined as 30% or more of the children's time with each parent), from 2% in 1981 to 32% in 2001 (Berger, Brown, Joung, Melli, &

Wimer, 2007). Unfortunately, there are no U.S. national data on joint physical custody trends for very young children.

## Debates About Frequent Overnights and Attachment Security

The pressing need for research is not only due to demographics. In recent years, legal and scientific controversies have erupted about what constitutes the best, or least damaging, living arrangements for very young children. Using rationales based on attachment theory, some child development experts have argued that infants especially, but also toddlers, should spend limited time away from their primary attachment figure (e.g., Main, Hesse, & Hesse, 2011; Solomon & Biringen, 2001; Solomon & George, 1999a; Sroufe & McIntosh, 2011). In order to promote a secure, primary attachment and limit the risks posed by attachment insecurity for children's future mental health (Weinfeld, Sroufe, Egeland, & Carlson, 2008), these developmentalists posit that very young children should have few overnights away from the primary attachment figure until they are 3 or perhaps 4 years of age (e.g., Main et al.; Solomon & George, 1999a; Spokane County Superior Court Guardian Ad Litem Committee, 1996; Sroufe & McIntosh). Preschoolers' developing language and time perception as well as the greater likelihood of having a secure attachment to both parents make these experts more comfortable with more frequent overnights at this older age. Of course, if very young children spend the great majority of overnights with their primary attachment figure, usually the mother, this means they spend relatively few overnights with the secondary attachment figure, usually the father. As an alternative, these experts suggest that a secondary attachment can be developed and maintained through brief, frequent daytime visits, perhaps two per week (Main et al.; Sroufe & McIntosh).

Other experts highlight the importance of multiple attachment figures in child development and maintain that caretaking in multiple contexts promotes each parent's bond with his or her very young child (Kelly & Lamb, 2000; Lamb & Kelly, 2001; Warshak, 2000). These experts thus advocate for frequent contact with both parents when children are infants and toddlers, including regular overnights with each (Kelly & Lamb; Lamb & Kelly). Accordingly, a secure attachment to both parents develops in very young children when separation from either parent is limited. For example, 2-year-olds might spend no more than two consecutive overnights away from either parent, rotating between homes every one or two days (Kelly & Lamb). Only a minority of attachment researchers agree with this perspective (Sroufe & McIntosh, 2011). Nevertheless, the ideas and their implications have garnered considerable attention and influence among child custody experts (Garber, 2012; Hynan, 2012; Ludolph, 2012).

## Imperfect Evidence and Evidence-Based Decision Making

Ideally, decision making about child custody could be guided by empirical evidence establishing which practices are most beneficial (or least detrimental) to development. The best evidence in this regard would be experimental, but of course ethical considerations make random assignment to alternative custody arrangements impossible. Thus, evidence-based decision making must rely on correlational studies, where causality can always be called into question. Still, descriptive research provides parents and professionals with

potentially helpful, normative evidence. Correlational studies also can be used to test theoretical predictions about causality (e.g., infants with frequent overnights will have more insecure attachments; infants in joint physical custody will be better adjusted). The present study is an effort toward these ends, focusing on detailing the frequency of different parenting plans for very young children and associations between frequent overnights and attachment (in)security.

An empirical reason for caution about interpreting correlational studies is nonrandom selection into different arrangements. On average, fathers with joint physical custody or who otherwise maintain high levels of contact are better educated, have higher incomes, have older children at the time of separation, and have better coparenting and parent – child relationships (Bauseman, 2002; Cheadle et al., 2010; McClain, 2011). On the other hand, fathers who maintain low levels of contact are younger, less likely to be married, have younger children at the time of separation, and live further away from their children (Cheadle et al.). One can and should statistically control for factors known to affect selection, as we did in the present study. Even so, groups still may differ on some unmeasured third variable.

Yet another concern is the wide range of possible arrangements in between the debated extremes of rotating overnights every day or two versus allowing few or no overnights until the age of 4 years. As noted, one goal of the present study was to document a range of common living arrangements for very young children. Still, different custodial plans need to be grouped for the purpose of comparing children living in different circumstances. One consideration in forming groups is the concept of *joint physical custody*, commonly defined as a minimum of 25% to 35% of time with each parent (Emery, 2011). The largest study of this topic used the joint physical custody cutoff of 35% to define “frequent” overnights for children 2 years of age or older (McIntosh et al., 2010). Because *frequent* has a different psychological meaning for infants, this study used a lower threshold, an average of one overnight per week, when examining children at the age of 1. Although any cutoff is somewhat arbitrary, we used these definitions in the present study but, for descriptive purposes, we also included more finely grained breakdowns.

## A Limited Research Base

Given the prevalence, implications, and controversies, one might expect to find extensive research on alternative custody arrangements for very young children, yet we were able to locate only three investigations. Solomon and George (1999a) studied 145 infant – mother dyads recruited through newspaper advertisements and referrals from lawyers, mental health professionals, and day care centers. Using a well-established technique for assessing attachment, the strange situation (e.g., Ainsworth, Blehar, Waters, & Wall, 1978), these investigators found significantly more disorganized/unclassifiable infant – mother attachments among 44 babies who spent regular overnights (at least one per month) with their father in comparison to 52 infants from married families. Attachment security did not differ between the regular overnight group (composed of about 20% of couples who had no stable relationship at conception) and 49 infants from separated/divorced families who had only day contact with their fathers. Mothers in the overnight group whose infants exhibited

disorganized attachment reported more conflict, poorer communication, and less maternal protection compared to mothers in this group whose infants were securely attached. At a 1-year follow-up, toddlers who had overnights as infants showed more anger and inconsolable upset when reunited with their mothers in a laboratory assessment (Solomon & George, 1999b).

A 1<sup>1/2</sup>-year follow-up study of 132 families who had filed for divorce, had agreed to participate in an intervention study, and had children who were age 6 years or younger found consistent and statistically significant better adjustment among 4- to 6-year-old girls who had frequent overnights with both parents. No significant differences were found for boys. The results were inconsistent for very young children, age 0 to 3 years. More frequent overnights were associated with more behavior problems in some analyses, but the results were not statistically significant. Finally, with one exception (father-reported social problems), the better child adjustment associated with more frequent overnights was no longer statistically significant after accounting for sociodemographic and family relationship factors (Pruett, Ebling, & Insabella, 2004).

In contrast to these convenience samples, the previously mentioned Australian investigation (McIntosh et al., 2010) used a national sample and found an association between child development problems and spending frequent overnights with nonresident fathers. Specifically, among 248 infants whose parents lived apart, the 63 babies who spent one overnight or more per week with their nonresident fathers were more irritable (compared to infants with less frequent overnights) and displayed more vigilant visual monitoring of their primary parent (compared to infants with no overnights in the past year), according to parental reports. Among 587 two- to three-year-olds whose parents lived apart, the 26 who spent five or more overnights every 2 weeks with the nonresident father were less persistent and more distressed in parent – child interactions. Finally, among the 1,015 four- to five-year-olds whose parents lived apart, the 71 who spent five or more overnights every 2 weeks with the nonresident parent showed no more or fewer signs of adjustment difficulties. These relationships held after including controlling for socioeconomic status, parenting, and coparenting. Of note is that some nonsignificant associations became significant only when controls were introduced, reflecting nonrandom selection into frequent overnights (McIntosh et al.).

## The Present Study

In the present research, we analyzed data from the Fragile Families and Child Well-being Study (hereafter *Fragile Families*), a large, diverse sample of very young children representative of the population of 20 U.S. cities with populations greater than 200,000 (<http://www.fragilefamilies.princeton.edu/>). About three quarters of families in Fragile Families were unmarried; about half of parents lived apart. Direct assessments of children included a Q-sort measure of attachment completed at age 3 as well as parents' reports of child's well-being. Our two primary aims were to (a) provide descriptive evidence on the physical custody arrangements for very young children and (b) test our hypothesis that very young children who had frequent overnights with their fathers would have more insecure attachments with their mothers. Our hypothesis was based on earlier (Emery, 2004) and

current interpretations of attachment theory, the limited empirical evidence reviewed here, and our experience working with separated parents. We also explored relationships among frequent overnights, attachment insecurity, and children's psychological well-being.

## Method

The Fragile Families sample was first collected between 1998 and 2000 from 20 major U.S. cities with populations over 200,000. Families were asked to participate at the hospital, shortly after the birth of a child. Nonmarital births (and therefore predominately low-income and racial/ethnic minority families) were oversampled by a factor of three. Mothers and fathers were interviewed separately shortly after the child's birth and again when the child was 1, 3, and 5 years old. Although data were collected from both parents, we relied on mothers' responses, which were much more complete. We attempted to include fathers' responses for comparison purposes, but the sample sizes were too small. For example, for the 1,023 families in the unweighted age 1 sample described below, both mothers' and fathers' reports of the number of overnights were available for only 16 cases.

From the total sample of 4,898 families, we constructed two primary subsamples for data analysis. For the age 1 subsample, we excluded cases if (a) the focal child's biological mother and father were living together at age 1, 3, or 5 ( $n = 3,811$ ) or (b) either parent reported that the child was living with someone other than the biological parents at age 1 or age 3 ( $n = 64$ ). The final age 1 unweighted sample consisted of 1,023 families. For the age 3 subsample, we excluded cases if (a) the focal child's biological mother and father were living together at age 3 or 5 ( $n = 3,266$ ) or (b) either parent reported that the child was living with someone other than the biological parents at age 1 or age 3 ( $n = 85$ ). The final age 3 unweighted sample consisted of 1,547 families.

We addressed missing values using multiple imputation via the ICE command (Royston, 2007) in Stata. Twenty-five data sets were imputed, using the total sample of cases as well as all the variables included in the models. Values were imputed using all variables; however, for the creation of out-contact groups, as well as for the dependent variables in our analyses, the original variables with their missingness were retained. In particular, if indicators of biological mother and biological father living situation were missing, those participants were dropped (after data imputation) to avoid misappropriating children into the frame of our study.

In order for our results to be generalized beyond the members of our sample, we also applied the replicate weighting strategy included in the Fragile Families data file. Specifically, we used the baseline city sampling weight and its 10 replicates, which adjusted the standard errors of the estimates to account for the clustered nature of the data and multistep sampling design. The results can thus be generalized to the population of the 20 cities sampled. Attempts to weight the data to make them nationally representative proved problematic, because our particular population of interest for this study (i.e., noncohabiting biological mothers and biological fathers) represented a segment of the sample that received smaller or no values on the sampling weight due to their overrepresentation in the sample, thus reducing our weighted analytic power.

## Measures

**Attachment**—Established measures of attachment security are not easy to use in large, national samples, because they are time consuming and often require specialized training to administer (Main et al., 2011). Fortunately, an established measure of attachment was adapted and used with the Fragile Families sample. The Toddler Attachment Q-sort (TAQ) consists of 39 items derived from the longer, widely used and broadly accepted Attachment Q-set (AQS; Waters, 1995). Items for the TAQ were selected on the basis of multidimensional scaling followed by facet cluster analysis of AQS data sets from around the world (Andreassen & Fletcher, 2007). Like the AQS, the TAQ is normally administered by trained, independent raters; however, this method was determined to be too expensive for Fragile Families data collection, so developmental consultants adapted it to use mothers as raters. Mothers were supervised by a trained observer and asked to sort the 39 cards into three groups: (a) frequent behavior of the focal child, (b) infrequent behavior of the focal child, and (c) neither extreme. Mothers then took the frequent and infrequent piles and subdivided them into the following categories: (a) applies mostly or (b) applies often in the frequent-occurrence group, (c) applies sometimes in the infrequent group or (d) applies rarely or hardly ever, and (e) the neither-extreme group remained the same. Security and dependency scores were then calculated using traditional AQS scoring (Waters & Deane, 1985) and, in turn, were used to classify children into attachment patterns: A high security score and low dependency score indicated a secure attachment pattern, a low security score and high dependency score indicated an insecure – ambivalent attachment pattern, and a low security score and low dependency score indicated an insecure – avoidant attachment pattern.

The adapted TAQ was administered to 2,268 mothers participating in the Fragile Families study when the focal child was 3 years of age. The results showed frequencies of attachment patterns similar to what is typically found in the general population (Prior & Glaser, 2006). A majority of the children in the Fragile Families study were classified as securely attached (75.8%) with smaller segments classified as insecure – resistant (22.1%) or insecure – avoidant (2.1%). Girls were more likely than boys to demonstrate secure attachment patterns, and children living with both parents were more likely to be classified as securely attached than those living with a single mother (Howard, Brooks-Gunn, & Lubke, 2008).

**Father – child overnights**—At age 1, mothers were asked, “Since (CHILD) was born, has (FATHER) seen (him/her)?”, and at age 3 mothers were asked, “Has (FATHER) seen (CHILD) since (his/her) first birthday?” If the mother responded “yes,” she was asked, “During the past 30 days, how many days has (FATHER) seen (CHILD)?” Mothers were then asked, “Since (CHILD’s) birth, has (CHILD) ever stayed overnight with (FATHER)?” at age 1, and at age 3 mothers were asked, “Has (CHILD) stayed overnight with (FATHER) since (his/her) first birthday?” If the mother responded “yes,” she was asked, “How many nights altogether has (CHILD) spent with (FATHER) [since (his/ her) first birthday?]”

To examine possible associations between contact and attachment/adjustment, we created categories of exposure to the nonresident parent following McIntosh et al. (2010). We generated three categories for the age 1 group analyses. *Day contact only* was coded when

mothers stated that the child had contact with the biological father, but no overnights. *Some overnights* included children who had at least one and up to 51 overnight visits during the first year. *Frequent overnights* included children who stayed with fathers between 52 times (once a week or more) and 256 times (at least 30% time with mother). We also subdivided age 1 contact groups into more refined categories purely for descriptive purposes (see Table 1).

We created four groups for the age 3 analysis on the basis of maternal responses about contact between the ages of 1 and 3. *Day contact* was defined the same as it was for age 1 for analysis of child attachment/adjustment, but we constructed different overnight categories at age 3, again following McIntosh et al. (2010). *Rare overnights* occurred between 1 and 12 times per year. *Some overnights* ranged from 13 (more than once a month) to 127 nights spent with the nonresidential parent (less than 35% time). Finally, *frequent overnights* included a range from 128 to 256. For descriptive purposes, we used the same, finely grained breakdown of these categories as for age 1, with the updated definition of the frequent overnights.

**Child adjustment**—Child behavior measures were derived from the Child Behavior Checklist (Achenbach, 1992; Achenbach, Dumenci, & Resorla, 2003) for children ages 1.5 to 5 years. These measures were administered to mothers when the focal child was age 3 and age 5. The items were scored on a 0-to-2 scale on which 0 = *not true*, 1 = *somewhat/sometimes true*, and 2 = *very true/often true*. Behavioral subscales examined at both ages 3 and 5 were Anxious/Depressed (11 items, age 3,  $\alpha = .68$ ; age 5,  $\alpha = .67$ ), Withdrawn (14 items, age 3,  $\alpha = .76$ ; nine items, age 5,  $\alpha = .58$ ), Internalizing Problems (25 items, age 3,  $\alpha = .83$ ; 22 items, age 5,  $\alpha = .75$ ), Aggression (15 items, age 3,  $\alpha = .87$ ; 20 items, age 5,  $\alpha = .86$ ), and Externalizing (22 items, age 3,  $\alpha = .89$ ; 25 items, age 5,  $\alpha = .87$ ). Attention-deficit/hyperactivity disorder (six items,  $\alpha = .74$ ) and oppositional defiant disorder (six items,  $\alpha = .79$ ) behaviors were examined at age 3 only. Attention Problems (11 items,  $\alpha = .72$ ) and Positive Behaviors (13 items,  $\alpha = .78$ ) were examined at age 5 only. A total score for each subscale was calculated by summing all items from each subscale; higher scores indicate greater expression of the behavior.

Indicators of maternal depression were derived from the Composite International Diagnostic Interview Short Form, which identifies whether respondents have met the diagnostic criteria for major depressive disorder (MDD) over the past year (Kessler, Andrews, Mroczek, Ustun, & Wittchen, 1998). Participants were asked if they experienced either intense depressed mood or the inability to experience pleasure for a period of 2 weeks or more. In addition, if respondents reported that they experienced either symptom almost every day for at least half the day, they were asked about additional symptoms: trouble concentrating, feeling tired, change in weight, trouble sleeping, feeling down, loss of interest, and thoughts about death. Those who endorsed three or more additional symptoms were categorized as meeting the criteria for MDD, where 0 = *absence of MDD* and 1 = *presence of MDD*. This information was collected at both ages 1 and 3.

Finally, mothers were asked questions about coparenting and their relationship with the child's biological father. Parental conflict was measured at age 1 with the question, "How



often do you and child's father argue about things that are important to you?" and at age 3 with the question, "How often do you and father argue?" Both questions were rated on a 5-point Likert scale (1 = *always*, 2 = *often*, 3 = *sometimes*, 4 = *rarely*, and 5 = *never*). Mothers' rating of the fathers' quality of parenting was measured at age 3 with the question, "What kind of a father do you think the father is?" This question was rated on a 4-point Likert scale (1 = *excellent*, 2 = *very good*, 3 = *good*, and 4 = *not very good*). Mother's rating of the quality of her relationship with the father was measured at age 1 and age 3 with the question, "How good is your relationship with child's father?" This question was rated on a 5-point Likert scale (1 = *excellent*, 2 = *very good*, 3 = *good*, 4 = *fair*, and 5 = *poor*).

## Results

### Demographic Information

In the weighted age 1 sample, mothers and fathers had a mean age of 25.0 and 27.1 years at the birth of their child, respectively. Most mothers (61.7%) and fathers (59.7%) self-identified as Black (non-Hispanic). The educational attainment of parents was as follows: Over one third (38.9%) of mothers and 34.0% of fathers had no high school degree or GED, 43.8% of mothers and 38.9% of fathers had a high school degree or GED, 14.7% of mothers and 20.9% of fathers spent some time in college (without graduating), and 2.6% of mothers and 6.2% of fathers had a college degree. Of these families, 56 mothers were married to the child's biological father at birth, and two remained married at age 1.

The weighted age 3 sample was demographically similar. Mothers and fathers had a mean age of 25.4 and 27.5 years at the birth of their child, respectively. Most mothers (60.0%) and fathers (59.2%) self-identified as Black (non-Hispanic). Finally, the educational attainment was no high school degree or GED for 36.9% of mothers and 31.7% of fathers, high school diploma or a GED for 43.3% of mothers and 43.2% of fathers, some college for 15.6% of mothers and 19.1% of fathers, and a college degree for 4.2% of mothers and 6.0% of fathers. Of these families, 194 mothers were married to the biological father at the child's birth, and 115 were married at age 1. Of the parents who were not living together at age 3 or 5, 584 parents had been living together when the baby was 1 year old, with only 147 married at age 1.

More than half of both samples (age 1, 61.5%; age 3, 55.6%) were below the federal poverty line. The average household had two adults over age 18 and two children under age 18. About one third of mothers self-identified as Protestant (age 1, 35.6%; age 3, 36.5%) or Catholic (age 1, 29.3%; age 3, 27.0%), about one fifth reported no affiliation (age 1, 22.5%; age 3, 23.1%), and more than one tenth self-identified as some other affiliation (age 1, 12.5%; age 3, 13.4%). Fathers' self-identified religious affiliation, when available, matched closely to mothers'. In comparison to the total sample, both subsamples included significantly more families who were low income, were Black, and had less education.

### Father Contact/Overnight Frequency

We calculated frequencies of contact groupings for both the weighted and unweighted samples, because this information is of interest in its own right and helps describe the

samples. We also broke contact groupings into more finely grained categories for descriptive purposes, and we calculated changes in contact between age 1 and age 3.

At age 1, *day contact only* was the most frequent category, including 52.2% of the weighted sample (47.2% unweighted). *Some overnights* were reported for 30.6% of the weighted sample (30.7% unweighted), *frequent overnights* were reported for 7.0% of the weighted sample (9.4% unweighted), and *no contact* was reported for 10.2% of the weighted sample (12.7% unweighted). Breakdowns of these groups showed that *some overnights* primarily averaged to about one overnight a month or less, although *day contact only* was composed primarily of two subgroups: (a) those who visited their father less than once a month and (b) those who visited their father once a week or more (see Table 1).

At age 3, *day contact only* was again the largest father – child contact category, comprising 34.2% of the weighted sample (32.6% unweighted), but both overnight contact and no contact increased in frequency compared to age 1. *Rare overnights* were reported for 18.3% of the weighted sample (22.0% un-weighted), and *some overnights* were reported for 14.6% of the weighted sample (17.7% unweighted). *Frequent overnights* were found for 6.7% of the weighted sample (6.0% unweighted), a similar percentage as at age 1, but recall that *frequent* was defined differently at age 1 and age 3. *No contact* was reported for 26.3% of the age 3 weighted sample (21.8% unweighted), more than doubling the age 1 frequency. No other broad or refined contact pattern changed notably in frequency between the two years (see Table 1).

Comparisons of age 1 and age 3 frequencies can mask changes if families shift between groups (e.g., a similar number of families move from day contact to overnight contact as from overnight contact to day contact). For this reason, and because we wanted to explore whether changes in contact might be associated with child adjustment (which we discuss later), we calculated contact changes between age 1 and age 3. We observed both continuity and change. Weighted data for the age 1 no-contact group showed that 68.6% maintained no contact at age 3, 19.0% moved to day contact, and the remainder began overnights. For the age 1 day-contact-only group, 41.8% maintained day contact only, 34.5% had no contact at age 3, and the remainder began overnights (equally divided between rare and some/frequent). The age 1 some-overnights group maintained some (26.5%), rare (25.2%), or frequent (3.8%) overnights at age 3, but 24.6% moved to day contact only, and 19.8% had no contact. Finally, most of the age 1 frequent-overnight group continued with frequent (14.1%), some (32.4%), or rare (32.4%) overnights, but 12.7% moved to day contact only, and 8.5% moved to no contact (see Table 2).

### Attachment Insecurity

Theory and research tend to focus on the difference in attachment security of very young children who experience frequent overnights versus less frequent overnights or day contact; that is, children who have no contact with their nonresident parent tend to be their own unique group; therefore, we dropped the no-contact group from all analyses of attachment security and other measures of child well-being.

For the weighted age 1 sample, we found a significant difference in attachment insecurity across the three groups with some father contact,  $\chi^2(2, N = 634) = 20.91, p = .001$ . The frequency of attachment insecurity (43%) was notably higher in the frequent-overnight group. For the weighted age 3 sample, we again found a significant difference in attachment across groups,  $\chi^2(3, N = 704) = 21.25, p = .004$ . The frequent-overnight group again showed the highest level of insecure attachment (37%; see Table 3). Note that the *N*s in Table 3 are smaller than in Table 1 because the attachment measure was collected for only 60% of the sample and we did not use the imputed data to handle missingness for our dependent measures.

As discussed, we expected selection into different overnight groups to be nonrandom, and we found evidence to support this empirically (see Table 4). To test for differences between specific contact groups and control for key demographic and family interaction variables, we conducted a series of logistic regressions predicting secure versus insecure attachment. For age 1, two dummy variables compared frequent overnights with (a) some overnights and (b) day contact only. For age 3, three dummy variables compared frequent overnights with (a) some overnights, (b) rare overnights, and (c) day contact only. We also compared three models. The first regressed the dummy variables for contact group onto attachment security alone, the second added demographic controls, and the third included measures of family relationships.

As shown in Table 5, the odds ratios predicting insecure attachment were significant for the frequent versus some overnights comparison for age 1 and remained significant in all three models. Finally, none of the control variables were significant at age 1 or age 3 when entered as a group into the logistic regression. In fact, we found only two significant bivariate correlations between the control variables and contact frequency at age 1. Fathers who saw children more frequently were rated by mothers as being better fathers ( $r = .16, n = 1,023, p < .001$ ) and as having a better relationship with the mother ( $r = .25, n = 1,023, p < .001$ ).

### Child Adjustment Measures

We ran a series of linear regressions to explore whether frequent overnights were associated with (a) any of the five child adjustment measures collected both at age 3 and age 5, (b) the two measures collected at age 3 only, and (c) the two measures collected at age 5 only. For each of the 14 dependent measures, we repeated the same variable entry procedure as described above, beginning with a baseline model that included only the set of contact-with-nonresident-parent dummy variables and then adding covariates to test the unique impact associated with contact, net of the other control variables.

None of the regressions produced statistically significant results with one exception. Age 3 contact significantly ( $p < .05$ ) predicted age 5 positive behavior. Children with frequent overnights at age 3 displayed more positive behavior at age 5 than their peers in both the day-contact-only and rare-overnights group but were no different than children in the some-overnights group. This pattern remained significant for all models (see Table 6).

In addition to the examination of these outcomes at each age, we took the five child behavior measures that were collected at both age 3 and age 5 and conducted a further set of analyses that predicted children's age 5 outcome controlling for the corresponding age 3 measure. These models provide a rather stringent test of the association between contact with nonresident parent and children's behavior outcomes by controlling for baseline behaviors and in essence estimating change in these models over the 2 years between ages 3 and 5. As might be expected given our lack of findings in the earlier regression models, these analyses did not return any significant results (results available on request).

### **Attachment, Child Adjustment, and Other Family Functioning Measures**

We computed bivariate correlations to examine whether attachment security predicted child adjustment in the present study, as has been found in other research (Weinfeld et al., 2008). Secure attachment was associated with better child adjustment for all measures assessed concurrently at age 3 and, less strongly, for several measures assessed at age 5. For example, children who were rated by their mothers as having more secure attachment were rated as having less externalizing behaviors at age 3 ( $r = -.31, n = 982, p < .001$ ), and at age 5 ( $r = -.10, n = 783, p = .004$ ).

We also computed bivariate correlations between various family interaction measures, including contact at age 1 (coded as frequent vs. some/day only for this analysis) and attachment or child adjustment. Contact was only significantly related to attachment security, consistent with earlier analyses, although many other measures of family interaction were associated with child adjustment, attachment security, or both. Maternal depression (assessed at age 1) was significantly correlated with a number of measures of child adjustment at age 3. For example, maternal depression was significantly correlated with externalizing behaviors at age 3 ( $r = .15, n = 759, p < .001$ ) and age 5 ( $r = .14, n = 714, p < .001$ ). Mothers' ratings of fathering ability, assessed at age 3, were consistently associated with their ratings of child adjustment at both assessment occasions, although, perhaps surprisingly, age 1 conflict was significantly associated with age 3 and age 5 adjustment. For example, mothers' ratings of fathering ability (at age 3) were consistently associated with their ratings of externalizing behaviors at age 3 ( $r = -.19, n = 769, p < .001$ ), and age 5 ( $r = -.14, n = 714, p < .001$ ), but age 1 conflict was significantly correlated with age 3 externalizing ( $r = -.24, n = 769, p < .001$ ), and age 5 externalizing ( $r = -.26, n = 714, p < .001$ ). Overall, the intercorrelations support the validity of the different measures.

### **Discussion**

The present study certainly does not resolve debates about frequent overnights and the well-being of very young children, but it does underscore the importance of the topic and the need for more attention to it. We found that, of children with separated parents, about 7.0% of 1-year-olds spent an average of one or more overnights with their nonresident father every week. Among 2- and 3-year-olds, 5.3% spent between one night per week and 35% of all overnights with their nonresident fathers, and an additional 6.8% of toddlers spent 35% to 70% of overnights with their nonresident fathers, an amount typically considered to be joint physical custody. These percentages are relatively small, but given the increasing

frequency of children being raised by separated parents, they represent a large and growing number of young children. Although the present estimates are not nationally representative, Fragile Families is a large and diverse sample that is generalizable to 20 U.S. cities with a population of over 200,000.

The present study is the largest investigation to date of young children's frequent overnight contact with nonresident parents and its association with attachment security. The reported findings are consistent with our hypothesis that frequent overnights away from the primary attachment figure are associated with greater attachment insecurity among infants. Based on an adaptation of the TAQ that is derived from the highly regarded AQS (Waters, 1995), we found that 43% of infants were insecurely attached to their mothers when they spent at least one night a week with their nonresident father. This contrasts with 25% of infants who had only day contact with their fathers, and 16% of infants who had at least one overnight in the last year but less than one per week. The overall comparison of these three groups was statistically significant, although logistic regression pinpointed significant differences only between the frequent-overnight and some-overnight categories. It is important to note that this last difference remained significant even when controlling for demographic background and measures of mothers' reports of parent conflict, coparenting quality, and the quality of fathering. In fact, the little evidence of selection we detected at age 1 indicated that fathers with frequent overnights were reported by mothers to be better parents and have better relationships with their child's mother. Yet, even with these positive parenting characteristics, these infants were at an increased risk for attachment insecurity. Of course, it is possible that selection based on unmeasured variables accounts for the present results.

Attachment security may be a particularly sensitive measure for detecting problems among very young children, or attachment insecurity may be especially reactive to frequent overnights, consistent with theoretical predictions (Main et al., 2011; Solomon & Biringen, 2001; Solomon & George, 1999a; Sroufe & McIntosh, 2011). Whatever the case, we did find that attachment security predicted child adjustment concurrently and prospectively, as it has in many other studies (Weinfeld et al., 2008).

Among toddlers, we also found that the rate of attachment insecurity was highest with frequent overnights (37%), but the percentage was similar for those with rare overnights (33%) and lower for some overnights (22%) and day contact only (18%). It is important to note, however, that none of the direct comparisons of groups was statistically significant in the logistic regressions. With one exception, we found no significant relationships between frequent overnights and multiple measures of children's adjustment as rated by mothers when children were 3 and 5 years old.

The one exception was that more frequent overnights among toddlers, but not infants, predicted more positive behavior at age 5. Although we do not want to dismiss this result, we also do not want to overinterpret it. We are cautious about the possibility of chance results, because we did not predict this result, and only one of 28 regressions for child adjustment measures (other than attachment security) was statistically significant.

This consideration leads us to a more general issue, one that applies to the frequent-overnights-and-attachment controversy and to many other social science controversies: What is the null hypothesis—or, to state the issue differently, who assumes the burden of proof? There is no neutral null hypothesis in the present debate. Do we assume that frequent overnights are harmful until proven otherwise, or do we assume that frequent overnights are beneficial until proven otherwise? Advocates often try to shift the burden of proof onto their opponents (e.g., “There is absolutely no credible evidence that frequent overnights cause insecure attachment”), but this is a rhetorical tactic, not a scientific one.

We do not know where the burden of proof should lie in the present debate, but we do think it is important to call attention to this general issue as well as the box score. To date, we know of no research showing that frequent overnights are associated with better adjustment among very young children (under age 4) other than one result we report here. On the other hand, the present investigation is the third of four studies of the topic that show some evidence of increased insecurity among very young children who have frequent overnights, perhaps particularly in the face of parental conflict (McIntosh et al., 2010; Solomon & George, 1999a). Although no study, including this one, has shown that frequent overnights with the nonresident parent causes greater attachment insecurity, the onus for showing otherwise may be shifting with growing empirical findings.

Several limitations of the present study should be noted. First, the Fragile Families sample is large and diverse, but not nationally representative, and thus the results may not generalize to other children and families. Second, the study used an adapted measure of attachment security that can be called into question. Perhaps the two most important limitations of the adapted measure are that (a) it may fail to detect true effects due to poor reliability or validity or (b) the maternal ratings of attachment are potentially biased (Teti & McGourty, 1996). The former issue perhaps suggests that our positive results are actually a relatively conservative estimation, and future studies with better measures are the only way to challenge that limitation. The latter issue cannot be ruled out and perhaps is especially important because mothers were reporting on their children’s attachment to them. Nevertheless, one would need to explain why rater bias produced an association between attachment insecurity and overnight ratings provided 2 years earlier (age 1) but not between attachment security and overnight ratings provided simultaneously (both at age 3).

Despite its limitations, the present study contributes to the small yet important literature on the debated influence of frequent overnights on very young children’s development. First, in a large, diverse U.S. sample, we found frequent overnights to be uncommon, but hardly nonexistent. Second, we found that frequent infant overnights were significantly related to attachment insecurity assessed at age 3. Third, we found that, with one exception, frequent overnights were not related to better or worse child adjustment measured at ages 3 and 5, a null finding that we expect will be interpreted differently by advocates who want to shift the burden of proof onto their opponents.

## Acknowledgments

This research was supported in part by a grant from the National Institute of Child Health and Human Development to Robert Emery (1R01HD056354-01).

## References

- Achenbach, TM. Manual for the Child Behavior Checklist/2 – 3 and 1992 Profile. Burlington: University of Vermont Department of Psychiatry; 1992.
- Achenbach TM, Dumenci L, Rescorla LA. DSM-oriented and empirically based approaches to constructing scales from the same item pools. *Journal of Clinical Child and Adolescent Psychology*. 2003; 32:328–340.10.1207/S15374424JCCP3203\_02 [PubMed: 12881022]
- Ainsworth, MDS.; Blehar, MC.; Waters, E.; Wall, S. Patterns of attachment: A psychological study of the strange situation. Mahwah, NJ: Erlbaum; 1978.
- Amato PR. Research on divorce: Continuing trends and new developments. *Journal of Marriage and Family*. 2010; 72:650–666.10.1111/j.1741-3737.2010.00723.x
- Amato PR, Meyers CE, Emery RE. Changes in nonresident father – child contact from 1976 to 2002. *Family Relations*. 2009; 58:41–53.10.1111/j.1741-3729.2008.00533.x
- Andreassen, C.; Fletcher, P. Early Childhood Longitudinal Study, Birth Cohort (ECLS – B) psychometric report for the 2-year data collection. 2007. (Publication No. NCES 2007084). Retrieved from <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2007084>
- Bauserman R. Child adjustment in joint-custody versus sole-custody arrangements: A meta-analytic review. *Journal of Family Psychology*. 2002; 16:91–102.10.1037/0893-3200.16.1.91 [PubMed: 11915414]
- Berger, LM.; Brown, PR.; Joung, E.; Melli, MS.; Wimer, L. The stability of shared care physical placements in recent cohorts of divorced Wisconsin families. Madison, WI: Institute for Research on Poverty; 2007.
- Cheadle JE, Amato PR, King V. Patterns of nonresident father contact. *Demography*. 2010; 47:205–225. [PubMed: 20355691]
- Cherlin, AJ. The marriage-go-round: The state of marriage and the family in America today. New York: Knopf; 2009.
- Copen CE, Daniels K, Vespa J, Mosher WE. First marriages in the United States: Data from the 2006–2010 National Survey of Family Growth. *National Health Statistics Reports*. 2012; 49:1–21. [PubMed: 22803221]
- Emery, RE. Marriage, divorce, and children’s adjustment. 2. Thousand Oaks, CA: Sage; 1999.
- Emery, RE. The truth about children and divorce: Dealing with the emotions so you and your children can thrive. New York: Viking/Penguin; 2004.
- Emery, RE. Renegotiating family relationships: Divorce, child custody, and mediation. 5. New York: Guilford Press; 2011.
- Furstenberg FF Jr, Nord CW, Peterson JL, Zill N. The life course of children of divorce: Marital disruption and parental contact. *American Sociological Review*. 1983; 48:656–668.10.2307/2094925
- Garber BD. Security by association? Mapping attachment theory onto family law practice. *Family Court Review*. 2012; 50:467–470.10.1111/j.1744-1617.2012.01461.x
- Howard, KS.; Brooks-Gunn, J.; Lubke, GH. Mother – child attachment relationships in Fragile Families. Poster presented at the Annual Meeting of the Population Association of America; New Orleans, LA. 2008 Apr. Abstract retrieved from <http://paa2008.princeton.edu/abstractviewer.aspx?submissionid=81524>
- Hynan DJ. Young children, attachment security, and parenting schedules. *Family Court Review*. 2012; 50:471–480.10.1111/j.1744-1617.2012.01462.x
- Kelly JB, Lamb ME. Using child development research to make appropriate custody and access decisions for young children. *Family Court Review*. 2000; 38:297–311.10.1111/j.174-1617.2000.tb00577.x
- Kessler RC, Andrews G, Mroczek D, Ustun TB, Wittchen HU. The World Health Organization Composite International Diagnostic Interview – Short Form (CIDI – SF). *International Journal of Methods in Psychiatric Research*. 1998; 7:171–185.10.1002/mpr.47
- Lamb ME, Kelly JB. Using the empirical literature to guide the development of parenting plans for young children. *Family Court Review*. 2001; 39:365–371.10.1111/j.174-1617.2001.tb00618.x

- Ludolph PS. Overreaching theory and data. *Family Court Review*. 2012; 50:486–495.10.1111/j.1744-1617.2012.01464.x
- Main M, Hesse E, Hesse S. Attachment theory and research: Overview with suggested applications to child custody. *Family Court Review*. 2011; 49:426–463.10.1111/j.1744-1617.2011.01383.x
- Martin JA, Hamilton BE, Sutton PD, Ventura SJ, Mathews TJ, Osterman MJK. Births: Final data for 2008. *National Vital Statistics Reports*. 2010; 59:3–71.
- McClain LR. Better parents, more stable partners: Union transitions among cohabiting parents. *Journal of Marriage and Family*. 2011; 73:889–901.10.1111/j.1741-3737.2011.00859.x
- McIntosh, J.; Smyth, B.; Kelaher, M.; Wells, Y.; Long, C. Post-separation parenting arrangements and developmental outcomes for infants and children. Canberra, Australia: Attorney General's Department; 2010.
- McLanahan, S.; Sandefur, GD. Growing up with a single parent: What hurts? What helps?. Cambridge, MA: Harvard University Press; 1994.
- Prior, V.; Glaser, D. Understanding attachment and attachment disorders: Theory, evidence and practice. London: Jessica Kingsley; 2006.
- Pruett MK, Ebling R, Insabella G. Critical aspects of parenting plans for young children: Interjecting data into the debate about overnights. *Family Court Review*. 2004; 42:39–59.10.1177/1531244504421004
- Royston P. Multiple imputation of missing values: Further update of ICE, with an emphasis on interval censoring. *Stata Journal*. 2007; 7:445–464.
- Sigle-Rushton W, McLanahan S. The living arrangements of new unmarried mothers. *Demography*. 2002; 39:415–433.10.1353/dem.2002.0032 [PubMed: 12205750]
- Solomon J, Biringen Z. Another look at the developmental research: Commentary on Kelly and Lamb's "Using Child Development Research to Make Appropriate Custody and Access Decisions for Young Children. *Family Court Review*. 2001; 39:355–364.
- Solomon J, George C. The development of attachment in separated and divorced families: Effects of overnight visitation, parent and couple variables. *Attachment & Human Development*. 1999a; 1:2–33.10.1080/14616739900134011 [PubMed: 11707881]
- Solomon, J.; George, C. The effects of overnight visitation in divorced and separated families: A longitudinal follow-up. In: Solomon, J.; George, C., editors. *Attachment disorganization*. New York: Guilford Press; 1999b. p. 243-264.
- Spokane County Superior Court Guardian Ad Litem Committee. *Child-centered residential schedules*. Spokane, WA: Spokane County Bar Association; 1996.
- Sroufe A, McIntosh J. Divorce and attachment relationships: The longitudinal journey. *Family Court Review*. 2011; 49:464–473.10.1111/j.1744-1617.2011.01384.x
- Teti DM, McGourty S. Using mothers versus trained observers in assessing children's secure base behavior: Theoretical and methodological considerations. *Child Development*. 1996; 67:597–605.10.1111/j.1467-8624.1996.tb01753.x [PubMed: 8625730]
- Warshak RA. Blanket restrictions: Overnight contact between parents and young children. *Family Court Review*. 2000; 38:422–445.10.1111/j.174-1617.2000.tb00583.x
- Waters E. Appendix A: The Attachment Q-Set (Version 3). *Monographs of the Society for Research in Child Development*. 1995; 60:234–246.10.1111/j.15405834.1995.tb00214.x
- Waters E, Deane K. Defining and assessing individual differences in attachment relationships: Q-methodology and the organization of behavior in infancy and early childhood. *Monographs of the Society for Research in Child Development*. 1985; 50:41–55.
- Weinfield, NS.; Sroufe, LA.; Egeland, B.; Carlson, E. Individual differences in infant – caregiver attachment: Conceptual and empirical aspects of security. In: Cassidy, J.; Shaver, PR., editors. *Handbook of attachment: Theory, research, and clinical applications*. 2. New York: Guilford Press; 2008. p. 78-101.



**Table 1**

## Contact Groups Based on Child's Frequency of Contact With His or Her Biological Father, Weighted Sample

Amount/Type of Contact	Definition(s)	<i>n</i>	%
Age 1 ( <i>n</i> = 1,023)			
No contact	No contact, day or overnight	105	10.3
Day contact only	Less than once per month	245	23.9
	Once per month but less than every 2 weeks	52	5.1
	Once every 2 weeks but less than once a week	65	6.3
	Once a week or more	172	16.8
Some overnights	Less than once per month	249	24.3
	Once per month but less than once every 2 weeks	35	3.4
	Once every 2 weeks but less than once a week	29	2.8
Frequent overnights	More than once a week	71	6.9
Age 3 ( <i>n</i> = 1,542)			
No contact	No contact, day or overnight	406	26.3
Day contact only	Less than once per month	250	16.2
	Once per month but less than every 2 weeks	46	3.0
	Once every 2 weeks but less than once a week	57	3.7
	Once a week or more	175	11.3
Rare overnights	Less than one night per month	281	18.2
Some overnights	Once per month but less than once every 2 weeks	83	5.4
	Once every 2 weeks but less than once a week	59	3.8
	Once a week but less than 35% of time	82	5.3
Frequent overnights	35% of the time to 70% of the time	103	6.8

*Note:* Percentages may not total 100 due to rounding.

**Table 2**

Change in Contact From Age 1 to Age 3

	Age 3											
	No Contact		Day Contact		Rare Overnight		Some Overnight		Frequent Overnight		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Age 1												
No contact	72	68.6	20	19.0	5	4.8	6	5.7	2	2.0	105	
Day contact only	184	34.5	223	41.8	73	13.7	42	7.9	11	2.1	534	
Some overnights	62	19.8	77	24.6	79	25.2	83	26.5	12	3.8	313	
Frequent overnights	6	8.5	9	12.7	23	32.4	23	32.4	10	14.1	71	
Total <i>n</i>	324		329		180		154		35		1,023	

Note: Percentages indicate change or consistency across contact groups from age 1 to age 3 (calculated per row); they may not total 100 due to rounding.

**Table 3**

**Attachment Security by Contact Group**

Amount/Type of Contact	Insecure		Secure		Total
	n	%	n	%	
<i>Age 1</i>					
Day contact only	90	25	274	75	364
Some overnights	34	16	185	84	219
Frequent overnights	22	43	29	57	51
Total <i>n</i>	146		488		634
<i>Age 3</i>					
Day contact only	58	18	262	82	320
Rare overnights	56	33	115	67	171
Some overnights	23	22	83	78	106
Frequent overnights	22	37	38	63	60
Total <i>n</i>	169		535		703

*Note:* Percentages may not total 100 due to rounding.

**Table 4**  
 Weighted Means and Percentage Distributions on Independent Variables by Child's Frequency of Contact With Biological Father at Age 1

Variable	Father Contact at Age 1					Total <i>M</i> ( <i>SD</i> ) or %
	No Contact <i>M</i> ( <i>SD</i> ) or %	Day Contact <i>M</i> ( <i>SD</i> ) or %	Some Overnight <i>M</i> ( <i>SD</i> ) or %	Frequent Overnight or %	Total <i>M</i> ( <i>SD</i> ) or %	
Mother age (years)	25.41 (4.93)	25.09 (6.18)	24.70 (6.04)	24.99 (5.70)	25.00 (5.99)	
Child age (months)	14.88 (3.92)	14.79 (3.45)	15.27 (3.77)	15.28 (3.71)	14.98 (3.62)	
Number of adults in household	2.66 (1.19)	2.07 (1.28)	1.92 (0.93)	2.03 (1.27)	2.08 (1.19)	
Father parenting quality <sup>a</sup>	1.61 (1.03)	1.54 (0.90)	1.91 (1.08)	2.02 (1.17)	1.70 (1.01)	
Coparenting quality <sup>b</sup>	2.07 (1.13)	2.07 (1.09)	2.66 (1.32)	3.01 (1.38)	2.32 (1.23)	
Parent conflict <sup>c</sup>	3.47 (1.19)	2.68 (1.29)	2.97 (1.10)	3.13 (1.08)	2.88 (1.24)	
Mother meets depression criteria	20.0	16.3	11.5	12.9	14.9	
Mother's race (ref.: Black)	46.3	58.6	70.9	67.6	59.7	
Mother's education (ref.: less than high school)	48.3	35.6	41.8	37.5	38.9	
Mother's poverty (ref.: below poverty)	72.4	59.8	63.1	51.8	61.5	
Child gender (ref.: male)	50.9	46.4	57.2	54.4	50.7	
Total (%)	10.3	52.1	30.5	6.9		
Weighted <i>n</i>	105	533	314	71	1,023	

Note: Percentages may not total 100 due to rounding. ref. = reference category.

<sup>a</sup>Range: 1 (excellent) to 4 (not very good).

<sup>b</sup>Range: 1 (excellent) to 5 (poor).

<sup>c</sup>Range: 1 (always) to 5 (never).

**Table 5**

Predicting Attachment Insecurity: Odds Ratios

Variable	Age 1 Contact			Age 3 Contact		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Contact (ref.: frequent)						
Some overnights	4.32*	5.63*	5.62*	2.19	1.75	1.84
Rare overnights				1.29	1.13	1.42
Day only, no overnights	2.41	2.38	3.20	2.84	2.05	3.23
Mother Black (ref.: non-Black)		0.59	0.48		0.64	0.51
Mother education (ref.: high school or greater)		0.64	0.66		0.63	0.57
Mother poverty (1,3)		1.10	1.17		1.26	1.26
Mother age		0.99	0.95		1.01	1.00
Child gender		2.19	2.04		1.68	1.76
Child age		1.04	1.03		1.02	1.03
Number adults in household (1,3)			0.68			0.78
Mother depression (ref.: no depression; 1,3)			0.47			0.70
Father parenting quality (3) <sup>a</sup>			1.31			1.59
Parent conflict (1,3) <sup>b</sup>			0.90			0.81
Coparenting quality (1,3) <sup>c</sup>			1.05			1.03

Note: Numbers in parentheses indicate the child's age(s) when the variable was measured. ref. = reference category.

<sup>a</sup> Range: 1 (excellent) to 4 (not very good).

<sup>b</sup> Range: 1 (always) to 5 (never).

<sup>c</sup> Range: 1 (excellent) to 5 (poor).

\*  $p < .05$ .

**Table 6**

Regression Predicting Prosocial Behavior at Age 5: Age 3 Sample

Variable	Model 1			Model 2			Model 3		
	B	SE	t	B	SE	t	B	SE	t
Contact (ref.: frequent)									
Some overnights	-0.80	0.65	-1.23	-0.91	0.63	-1.45	-0.92	0.60	-1.54
Rare overnights	-1.56	0.52	-3.01*	-1.48	0.47	-3.15*	-1.48	0.43	-3.41*
Day only, no overnights	-1.35	0.38	-3.54*	-1.52	0.37	-4.11*	-1.47	0.39	-3.73*
Mother Black (ref.: non-Black)				-0.56	0.33	-1.71	-0.61	0.32	-1.88
Mother education (ref.: high school or greater)				-0.84	0.45	-1.86	-0.82	0.43	-1.93
Mother poverty (3)				0.15	0.11	1.30	0.15	0.11	1.41
Mother age				-0.05	0.03	-1.64	-0.06	0.03	-1.99
Child gender				0.65	0.40	1.64	0.65	0.39	1.68
Child age (5)				0.12	0.08	1.46	0.13	0.09	1.45
Number adults in household (3)							0.01	0.22	0.05
Mother depression (ref.: no depression; 3)							-0.73	0.55	-1.33
Father parenting quality (3) <sup>a</sup>							0.15	0.21	0.70
Parent conflict (3) <sup>b</sup>							-0.26	0.26	-0.98
Coparenting quality (3) <sup>c</sup>							-0.04	0.24	-0.16

Note: Numbers in parentheses indicate the child's age(s) when the variable was measured. ref. = reference category.

<sup>a</sup> Range: 1 (*excellent*) to 4 (*not very good*).

<sup>b</sup> Range: 1 (*always*) to 5 (*never*).

<sup>c</sup> Range: 1 (*excellent*) to 5 (*poor*).

\*  $p < .05$ .

\*\*  $p < .01$ .