Fathers' Investments of Time and Money across Residential Contexts

Marcia J. Carlson, Alicia G. VanOrman, and Kimberly J. Turner
(University of Wisconsin–Madison)

May 29, 2012

Marcia Carlson (carlson@ssc.wisc.edu) is Professor of Sociology, and Affiliate at the Center for Demography and Ecology and the Institute for Research on Poverty, at the University of Wisconsin–Madison. Alicia VanOrman (vanorman@ssc.wisc.edu) and Kimberly Turner (kturner@ssc.wyisc.edu) are doctoral students in the Department of Sociology and the Center for Demography and Ecology, at the University of Wisconsin–Madison. This research was supported by the Child Support Research Agreement between the Wisconsin Department of Children and Families and the Institute for Research on Poverty (PIs: Maria Cancian and Dan Meyer). Funding for the Fragile Families and Child Wellbeing Study was provided by the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD) (grants R01HD36916, R01HD39135, and R01HD40421), as well as a consortium of private foundations (see www.fragilefamilies.princeton.edu/funders.asp for a complete list). We thank Maria Cancian for very helpful comments. The views expressed here are those of the authors alone, and all errors of omission and commission are our own.

Abstract

Fathers' roles in family life have changed dramatically over the past fifty years. High and rising divorce rates, the growing proportion of births that occur outside of marriage, and the higher likelihood of children living with their mothers when their parents' union ends have resulted in a striking decline in the proportion of men living with their own biological children since the mid-1960s. In addition, mothers are increasingly likely to be employed outside the home, while fathers' roles have expanded from primarily that of the 'breadwinner' to include that of caregiver.

In this report, we: (1) Describe the prevalence of fathers' economic capacities and contributions and their level of direct involvement and interaction with children, comparing resident versus non-resident fathers; (2) Evaluate how fathers' economic capacities and contributions are linked to fathers' direct involvement for both resident and non-resident fathers; and (3) Analyze whether and how state-level child support effectiveness is associated with non-resident fathers' total child support payments and their direct involvement with children.

We find important differences in how fathering plays out for resident versus non-resident fathers. Resident fathers experience a trade-off between their time in the labor market and their time directly involved with children. In contrast, for non-resident fathers, greater financial capabilities and contributions 'go together' with being involved in other ways with their children. Given the low economic resources of many non-resident fathers, this circumstance may create challenges for fathers to remain actively involved in their children's lives with respect to both money and time. We found little evidence that stronger child support enforcement was linked to higher total payments. However, we believe these results should be treated as preliminary, and intend to further explore this area.

Fathers' Investments of Time and Money across Residential Contexts

INTRODUCTION

Over the past half-century, major demographic changes have fundamentally altered fathers' roles in family life. In particular, union dissolution has notably increased, owing to high and rising divorce rates and the growing proportion of births that occur outside of marriage (which are rarely followed by long-term union stability). Since children are more likely to live with their mothers when their parents' union ends (Amato 2000), fathers today are more likely to be living away from their biological children than mothers—and than were their counterparts around the middle of the 20th century. Overall, a striking decline in the proportion of men living with their own biological children has been observed between the mid-1960s and the mid-1990s (Eggebeen 2002) and likely beyond. From the perspective of children, according to recent Census data, 27 percent of all children under age 18 are currently living away from their biological father (U.S. Census Bureau 2010).

Two other important—and related—changes have occurred within the post-industrial family over the past half century, reflecting shifts in family gender roles and the division of household labor and market work. First, mothers are increasingly likely to be employed outside the home, and second, fathers' roles have expanded from primarily that of the 'breadwinner,' who provided economic support, to include that of caregiver (Lamb 2010). Fathering today often includes nurturing and providing direct care, engaging in cognitive stimulation and play activities, taking responsibility for coordinating children's care and activities, and connecting the child to his or her extended family, community members, and other resources (Cabrera, Tamis-LeMonda, Bradley, Hofferth, and Lamb 2000; Marsiglio, Amato, Day, and Lamb 2000; Palkovitz 2002).

At the intersection of the changes in family demography and the changes in the nature of fathering is the fact that there is, today, great heterogeneity in how men enact the father role. While a significant body of research has explored the nature of this 'new fatherhood' and its consequences for children (e.g., Amato and Gilbreth 1999; Lamb 2010), less well understood is how the various dimensions

of contemporary fathers' involvement may be interrelated, particularly across different residential contexts. For cohabiting and especially married men, paternal investments of money and time occur naturally within what some scholars have called the "package deal" (Furstenberg and Cherlin 1991; Townsend 2002). By contrast, non-resident fathers face both barriers and disincentives to their involvement with children, and providing economic support may be a key criterion for fathers' being involved in other ways.

In this report, we address three research questions about a contemporary cohort of (urban) fathers. First, we describe the prevalence of fathers' economic capacities and contributions and their level of direct involvement and interaction with children, comparing resident versus non-resident fathers, over nine years after a focal child's birth. Second, we evaluate how fathers' economic capacities and contributions are linked to fathers' direct involvement (across multiple measures) for both resident and non-resident fathers, using pooled data across four surveys from child ages 1 through age 9. Third, we analyze whether/how state-level child support effectiveness is associated with non-resident fathers' total child support payments and their direct involvement with children. This research provides new information about the nature of contemporary paternal involvement, a potentially important resource for children, as it unfolds in the context of high levels of family instability; this work also sheds light on how child support policy may be linked with fathers' investments of money and time.

CONCEPTUAL FRAMING AND PRIOR EMPIRICAL RESEARCH

Family scholars often point to two key domains of parental investments in children—economic resources and parental behaviors (Thomson, Hanson, and McLanahan 1994). Economic resources enable parents to provide the food, clothing, and shelter requisite for daily living, as well as the material goods and experiences that promote positive child development (Duncan and Brooks-Gunn 1997; Magnuson and Votruba-Drzal 2009). Parental behaviors encompass the wide range of interactions and activities that allow parents to provide the appropriate warmth, support, control, and monitoring that are intrinsic to high-quality (or so-called 'authoritative') parenting (Baumrind 1986; Maccoby and Martin 1983).

While early research on parenting emphasized the importance of mothers for children, the past few decades have produced a burgeoning literature on fatherhood that explores the variability in its content, context, and implications (Furstenberg 1988; LaRossa 1988; Marsiglio, Amato, Day, and Lamb 2000). There is growing evidence that fathers represent an important resource for children (Lamb 2010). For fathers living with their children, greater paternal involvement is associated with better academic outcomes and fewer behavioral problems (Amato and Rivera 1999; Harris, Furstenberg, and Marmer 1998). For non-resident fathers, child support payments and fathers' high-quality ('authoritative') parenting are linked to better behavioral outcomes for children (Amato and Gilbreth 1999; Greene and Moore 2000).

Although, as noted above, the father role has certainly expanded from its more homogenous form in the middle of the 20th century—the heyday of the breadwinner-homemaker family model (Hochschild 1988), 'breadwinning' (i.e., providing economic support) remains a key element of fathering today (Christiansen and Palkovitz 2001). With respect to the non-financial aspects of paternal involvement, one of the first and most enduring "typologies" of father involvement, developed by Lamb and colleagues, identified three key components—accessibility, engagement, and responsibility (Lamb 2010; Lamb, Pleck, Charnov, and Levine 1985). *Accessibility* (or *time*) refers to time that fathers are available to children, even if they are not directly interacting; *engagement* (or *interaction*) refers to fathers' time spent with children doing activities together that are known to contribute to healthy development (e.g., reading); and *responsibility* refers to fathers' helping to arrange resources and activities for children; although paternal responsibility has been deemed an important aspect of childrearing, it has often been neglected in surveys (Cabrera et al. 2000; Lamb 1986).

Fathering today occurs across a range of different contexts and family constellations, the most basic distinction being whether men live with or away from their (biological) children. Co-resident fathers typically spend more time with their children than non-resident fathers, simply because sharing a household affords greater opportunity for day-to-day interactions (Amato and Gilbreth 1999). As noted earlier, the so-called "package deal" (particularly within the social and legal bonds of marriage)

circumscribes men's roles as partners and parents and facilitates their greater participation in family life (Furstenberg and Cherlin 1991; Tach, Mincy, and Edin 2010; Townsend 2002).

Since time is a finite resource, time spent with children necessarily reduces fathers' time available for work in the labor market; therefore, we would expect a negative relationship between paternal involvement and employment (Coltrane 1996; Knoester and Eggebeen 2006). However, there may be important differences by fathers' residential context in how father involvement is linked to work and earnings. Most resident fathers are also living with the mother of their children, and therefore, have a second caregiver in the household with whom to jointly allocate investments in the home and the labor market. Thus, we would expect that fathers' employment and earnings would be negatively related to fathers' time involvement. For example, particularly if mothers are working more, we would expect fathers to decrease their employment in order to increase investments in the home. Or, if fathers work a lot, they are likely unavailable to provide high levels of time involvement at home. In other words, fathers' financial and time involvement would serve as substitutes that represent different types of investments in the same household (and child).

Shared custody after divorce has become increasingly common over time, and it appears to be increasing among never-married parents as well (Cancian and Meyer 1998; Brown and Cook 2011). Yet, father sole custody does not appear to be increasing (*ibid*), so fathers are more likely than mothers to be the non-resident parent after union dissolution. Living away from one's children increases the transaction costs of spending time together (Weiss and Willis 1985). Non-resident fathers have less 'automatic' access to their children, and fathers must gain the cooperation of mothers who have greater control of the child and who may act as "gatekeepers" of the father-child relationship (Allen and Hawkins 1999).

Studies of low-income non-resident fathers suggests that men's financial capabilities represent an important signal to women about their potential as a romantic partner or spouse (Edin 2000a; Edin 2000b; Wilson 1987) and as a responsible father (Johnson, Levine, and Doolittle 1999). Thus, for non-resident fathers, their higher earnings and greater work effort (in the form of hours per week or weeks per year)—and even more so, their actual contributions of child support—may give them (or the mother) a greater

sense of being a 'good' father and hence encourage their involvement in other ways (Lerman and Sorenson 2000). We would, therefore, expect that non-resident fathers' economic capacities and contributions would be positively linked to their time involvement; in other words, these two aspects of paternal involvement would serve as complements, with the former facilitating more of the latter. Indeed, studies have shown that fathers' financial support serves to increase or improve their non-monetary (i.e., time) involvement with their children (Nepomnyaschy 2007; Seltzer, Schaeffer, and Charng 1989).

With respect to public policy toward fathers and children, the child support enforcement (CSE) system has become increasingly effective at collecting child support payments from noncustodial parents (Garfinkel, Meyer, and McLanahan 1998), although there is notable heterogeneity across states. While stronger CSE would be expected to increase formal child support payments, recent research has highlighted the changing nature of unmarried fathers' connection to the child support system as couple relationships begin with "high hopes" but then quickly dissolve (McLanahan 2011). During the years when unmarried couples are romantically involved (especially if co-resident), fathers may prefer to contribute informally to their child's well-being, and only after the relationship dissolves will a formal order be put in place (Nepomnyaschy and Garfinkel 2008; Nepomnyaschy and Garfinkel 2010).[1] When considering the *total* amount of support (both formal and informal) that children receive, there is some evidence that the strength of the child support enforcement system does not, in fact, have an effect (Nepomnyaschy and Garfinkel 2010); this is likely because CSE is expected to have different effects on formal versus informal support, so the net effect may be zero.

It is also unclear how the strength of the CSE system would be expected to affect fathers' non-financial involvement with children if at all (Seltzer, McLanahan, and Hanson 1998); on the one hand, fathers paying more child support may wish to monitor how their money is spent (Weiss and Willis 1985), but on the other hand, fathers who are contributing financially may not feel the need (or be as

[1]It is important to note that mothers receiving public assistance from the Temporary Assistance to Needy Families (TANF) program typically do not have a choice about establishing a formal order, as fathers' payments are used to recoup welfare costs.

available) to be involved in other ways. The empirical literature suggests a mostly positive association between child support enforcement and/or fathers' payments as related to father-child contact (Nepomnyaschy 2007; Seltzer 1991; Seltzer, McLanahan, and Hanson 1998; Seltzer, Schaeffer, and Charng 1989).

In this report, we provide new information about the prevalence of fathers' involvement with children over years 1 through 9 after a focal child's birth using new data from the parents of children born 1998–2000 in large U.S. cities; we examine how fathers' economic capacities and characteristics are linked to their more direct involvement; and we explore how the effectiveness of the state child support enforcement system is associated with fathers' child support payments and their direct involvement with children.

DATA AND METHODS

We use data from the Fragile Families and Child Wellbeing Study, a longitudinal study of births (with an oversample of nonmarital births) that occurred between 1998 and 2000 in large U.S. cities. The study includes 4,897 births—3,710 unmarried and 1,187 married, and the weighted sample is representative of births in U.S. cities with populations over 200,000. Baseline interviews with mothers and fathers took place in 75 hospitals in 20 cities (in 15 states) just after the baby's birth, and follow-up interviews were conducted at about 1, 3, 5, and 9 years after the birth. Response rates at baseline were 75 percent for unmarried fathers and 89 percent for married fathers, yielding 3,830 interviewed fathers at birth. However, a number of fathers who could not be located at birth were located and interviewed at a subsequent wave, so overall, 4,331 fathers were interviewed at least once from birth through year 9. At the 1-, 3-, and 5-year follow-up surveys, the proportions of eligible unmarried (at birth) fathers interviewed were 71 percent, 69 percent, and 67 percent—and of married (at birth) fathers were 82 percent, 82 percent, and 78 percent—respectively; at the 9-year interview, 59 percent of eligible biological fathers were interviewed (official response rates at 9 years are not yet available by marital status at birth).

Analytic Sample

We limited our sample to fathers who were not interviewed in jail and to fathers whose children resided with the biological mother at least half-time; there were not enough cases of other child living arrangements for meaningful analysis. The full analytic sample for this paper consisted of 2,837 unique fathers who provided at least one interview over the 1-, 3-, 5-, and 9-year surveys and for whom information about co-residence status was reported. We pooled interviewed cases across the four survey waves, yielding 8,630 person-year observations, with a mean number of 3.04 survey waves for each father observed. In order to generalize to the 'full' samples of resident and non-resident fathers, we identified co-residence status at each wave and pooled samples across waves based on their current residence status. Thus, fathers were allowed to change categories, as they broke up with mothers (and a much smaller group lived apart and then moved in with the mother and child); resident fathers contributed 5,913 person-year observations, and non-resident fathers contributed 2,717 person-year observations. (As shown in Table 2, the weighted proportion of interviewed resident fathers declined from 88 percent at year 1 to 67 percent at year 9.) To maximize the number of observations used, we allowed the number of observations to vary across particular combinations of the independent and dependent variables in various models.

The fraction missing was 11 percent or less for every outcome variable except earnings, for which 30 percent of person-years were missing; this is primarily due to missing data at the 1-year survey, as a direct question about total earnings was not asked of all respondents (we imputed this information, as noted later). It is important to keep the analytic sample in mind when interpreting the findings, since fathers lost to attrition by the 9-year survey were more disadvantaged than those who remained. Compared to our analytic sample of fathers, those who dropped out were more likely to be black, to have dropped out of high school, and were less closely attached to the child's mother at the time of birth.

Variables

Fathers' economic characteristics. Our measures of fathers' economic characteristics (across the 1-, 3-, 5- and 9-year surveys) included the number of *hours per week* that fathers reported working, the number of *weeks per year* that fathers reported working, *total annual earnings*, and fathers' *annualized wage rate* (based on whatever unit they reported for their current wage, converted to full-time, full-year); these measures may represent different aspects of fathers' work effort and/or capacity as a provider. If the respondent reported that he did not work in the past year at a particular survey wave, work hours, work weeks, annual earnings, and the annualized wage were all coded as zero. At some waves (or if the father reported that he "didn't know" his exact earnings), respondents reported earnings as a range of values. These ranges were converted to corresponding median values within categories. As a direct question about total earnings from all jobs was not asked of all respondents at the 1-year survey, we imputed the missing observations with a series of predictor variables: currently employed, weeks worked per year, relationship status, race, education, immigrant status, and ever incarcerated. For non-resident fathers, our measures of economic characteristics also included the *total amount of child support paid per year*. This reflects the total amount of support (both formal and informal) that fathers paid since the prior interview, converted to an annualized metric.

Fathers' involvement. We used several measures of father involvement that were reported similarly across the 1-, 3-, 5- and 9-year surveys. Most measures used mothers' reports of fathers' involvement, which avoided inflated associations due to "shared method variance" by using the same individual to report on both the independent and dependent variables (Marsiglio, Amato, Day, and Lamb 2000). We also included analyses using fathers' reports for items where fathers also provided reports.

For both resident and non-resident fathers, mothers reported how often the father *spent one or more hours a day* with the child in the past month, ranging from 1 (*never*) to 5 (*every day*). Paternal *engagement in father-child activities* at years 1, 3, and 5 was the mean number of days (0–7) that the father did each of four activities with the child in the past week: singing, reading stories, telling stories,

and playing with toys. At year 9, engagement was measured by four similar items, but the response scale was changed to ask about activities in the past month, ranging from 1 (*never*) to 5 (*every day*); we assigned the 1–5 scores to 0–7 days to yield a similar range of variation as at prior waves. Fathers' *shared responsibility* for child-related tasks was based on mothers' reports about how often the father (a) "Looks after [child] when you need to do things," (b) "Runs errands like picking things up from the store," and (c) "Takes [child] places (he/she) needs to go, such as to daycare or the doctor." Response choices ranged from *never* (1) to *often* (4), with higher average scores indicating greater shared responsibility. An additional measure of fathers' time with children was available for non-resident fathers: Mothers and fathers each reported the *number of days fathers saw the child* in the past month, ranging from 0 to 30. While most of our models used individual father involvement measures, we also created a composite measure that used mothers' reports for each of the measures. This composite measure used all the individual items from the time, engagement, and responsibility measures that were common to resident and non-resident fathers (i.e., excluding the number of days that non-resident fathers saw the child in the past month); each item was standardized with a mean of zero and a standard deviation of one.

Child support enforcement policy. Our third research question considered how the state-level effectiveness of child support enforcement policy is linked to individual-level total support paid to children and our measures of direct (time) involvement. To measure the effectiveness of state child support policy, we used three measures, drawing on information from the Office of Child Support Enforcement (OCSE) Annual Reports to Congress. We assigned the relevant state-level values for each year corresponding to the mid-point of the administration of the Fragile Families 1-, 3-, 5- and 9-year survey waves, or 2000, 2002, 2004, and 2008, respectively. For our first measure, we divided total annual state collections by the total current caseload in each state to get the average state-level dollar (in $1,000s) amount of *collections per current case*. Our second measure, state *paternity establishment rates*, divided the number of paternities established each year by the number of nonmarital births in the same year (reported by the National Center for Health Statistics). Our third measure, the percent of *child support cases with an order*, divided the number of current child support orders in each state for each year by the

number of single mothers in the state for the same year, based on data from the March supplement of the Census Current Population Survey.

Covariates. In order to properly estimate the effect of fathers' economic resources on fathers' involvement, we included a number of covariates (reported by fathers unless otherwise noted) that could be related to both fathers' economic capacities/contributions and fathers' time involvement (shown in Table 1). We included marital status at birth (reported by mothers), since this was a key stratifying variable in the Fragile Families Study, and married fathers differ in many ways from their unmarried counterparts (McLanahan 2004). Fathers' age at birth was self-reported in years. Fathers' race/ethnicity was specified as non-Hispanic white (reference), non-Hispanic black, Hispanic, and non-Hispanic 'other' race. Fathers' education was specified in four categories of less than high school (reference), high school degree, some college, and bachelor's degree or higher. Immigrant status indicated that the father was born outside the United States. Fathers' family background was represented by a dichotomous variable for whether he lived with both of his biological parents at age 15.

Baseline self-reported health status ranged from *poor* (1) to *excellent* (5). Religious service attendance ranged from *never* (1) to *more than once a week* (5). Depression at baseline was the average number of days per week that fathers experienced up to seven depressive symptoms (e.g., had trouble getting to sleep, or felt lonely), based on a brief version of the Center for Epidemiologic Studies Depression Scale (CES-D) (Ross and Mirowsky 1984). A dummy variable indicated if the father had ever been incarcerated by year 1, based on mothers' and fathers' reports combined. We also included measures of father attitudes towards fathering. Fathers identified if they *strongly disagree* (1) to *strongly agree* (4) with the following statements: (a) "Being a father and raising children is one of the most fulfilling experiences a man can have"; (b) "I want people to know that I have a new child"; and (c) "Not being a part of my child's life would be one the worst things that could happen to me;" responses were averaged, and higher scores indicated more positive attitudes. The father reported the total number of biological children he has had with the focal child's mother. The mother indicated if the father had previous children with another woman (multi-partnered fertility). We included a dummy variable to indicate whether the

focal child was a boy and another dummy variable that reflected whether the child's grandmother was living with the mother and child, both reported by mothers.

We also included several time-varying variables that may have important effects on how aspects of fathers' involvement are linked (descriptives are shown in Table 2). Relationship status was represented by different binary variables for resident and non-resident fathers. If the father and mother were co-residing (based on mothers' reports), we included a variable indicating that they were legally married (as opposed to cohabiting). For non-resident fathers, we included a dummy variable indicating whether the father was in a dating relationship with the child's biological mother (versus not romantically involved), and we included a separate dummy variable indicating that the father was involved in a romantic relationship with a new partner.[2] For both resident and non-resident fathers, we also included the number of hours that the mother worked per week, based on mothers' reports.

Analytic Strategy

We first present simple descriptive means and frequencies on our economic variables and fathers' direct involvement variables, separated by fathers' residence status at each wave (Table 2). Then, in order to get a better handle on the extent to which our frequencies for resident versus non-resident fathers were due to the fact that fathers were allowed to change categories over time (mostly as co-resident couples broke up), we also present estimates for the sub-groups of fathers who were resident and non-resident, respectively over the entire 1- to 9-year period (bottom two panels of Table 2).

For our main analyses, we used two primary analytic techniques (with pooled data across the 1-, 3-, 5-, and 9-year surveys). First, we estimated random effects models to examine how fathers' economic resources were associated with fathers' involvement with respect to time, engagement and shared

[2]At year 9, unfortunately, not all non-resident fathers were asked about whether they had a current romantic partner. For those not asked this question, we determined current partnership status through the household roster: non-resident fathers who reported a co-resident partner were determined to be in a romantic relationship with a new partner. This method likely undercounts new romantic partners at this survey wave.

responsibility. These models considered variation both between and within fathers and included both time-constant and time-varying variables. Second, we estimated fixed effects models to examine how *changes* in economic characteristics among the same men over time were associated with increases or decreases in their involvement, controlling for only time-varying variables (since time-constant variables are automatically dropped). This more conservative technique reduces bias by controlling for unobserved individual time-invariant characteristics that may be associated with fathers' economic resources and involvement (Greene 2003; Snijders 2005). For example, some fathers may have personal values or skills (e.g., conscientiousness) that drive both their hard work in the labor market and their involvement with their children. Without controlling for these unobserved characteristics, one might inappropriately conclude that the economic factors were causing the time involvement—whereas both could due to a 'third factor' which cannot be measured in the data.

As noted above, we estimated separate models for resident and non-resident fathers, pooling cases based on their residence status at each wave. Given the high correlations across our measures of both economic resources and involvement, we estimated separate models for each economic characteristic predicting each involvement measure; then we also estimated models that used each economic characteristic to predict the composite measure of fathers' involvement.

For our analysis of how state-level child support enforcement policy affected fathers' total child support payments (i.e., both formal and informal support) as well as fathers' involvement with children, we estimated a series of random effects models. First we estimated the bivariate relationship between stronger enforcement and payments; then, we added all time-constant and time-varying controls, and we included each of the economic characteristics variables one at a time. Next, we estimated the bivariate relationship between child support enforcement and father involvement; then, we also added all time-constant and time-varying controls to these models.

Sample Description

Table 1 shows the time-invariant characteristics of our sample, by residence status at the 1-year survey, weighted by city sampling weights; these figures (and *N*s) represent our maximum sample, or all fathers that contributed at least one person-wave of data to (at least one of) our pooled models. About two-thirds of resident (at 1 year) fathers were married to the child's mother at the time of the birth; only 10 percent of non-resident fathers had been married at the birth. Resident fathers were about five years older than non-resident fathers at the time of their child's birth—31 years versus 26 years. Resident fathers were rather evenly divided across the major race/ethnic groups—about one-third each were white, black and Hispanic, while non-resident fathers were predominately black and Hispanic. Resident fathers were more highly educated: 22 percent had less than a high-school degree, 26 percent had a high school diploma or GED, 23 percent had some college, and 29 percent had a college degree or higher. By contrast, fully 35 percent of non-resident fathers had less than high school education, 37 percent had a high school degree, 26 percent had some college, and only 1 percent had a college degree or more. A higher fraction of resident fathers (29 percent) than non-resident fathers (12 percent) was born outside the United States.

Resident fathers were more likely to have lived with both biological parents at age 15 (63 percent versus 40 percent). Most fathers indicated that their health was *very good*, and most fathers attended church close to *several times a year*. Mean depression scores for both groups were low, but non-resident fathers were much more likely to have been incarcerated (42 percent) than resident fathers (12 percent). Attitudes toward fathering were slightly more positive among resident fathers. With respect to fertility history, non-resident fathers were much more likely to have had a child by a prior partner—40 percent, compared to 21 percent of resident fathers, while resident fathers had a slightly higher average total number of children with the focal child's mother—1.68 compared to 1.49 for non-resident fathers. For 59 percent of resident fathers, the focal child was a boy, compared to 48 percent of non-resident fathers. The

Table 1
Sample Descriptives by Fathers' Co-Residence Status at 1 Year

	Co-Residence Status			
	Resident		Non-Resident	
Background Variables	*M* or %	*(SD)*	*M* or %	*(SD)*
Father Characteristics				
Married at child's birth (mother report)	68.4%		9.9%	
Age at child's birth (Mean)	30.66	(5.95)	25.76	(9.03)
Race				
White, non-Hispanic	36.9%		10.9%	
Black, non-Hispanic	26.5%		57.8%	
Hispanic	31.3%		24.0%	
Other, non-Hispanic	5.3%		7.3%	
Education				
Less than high school	21.9%		35.0%	
High school diploma or GED	26.4%		37.4%	
Some college	22.9%		26.1%	
BA or higher	28.8%		1.4%	
Foreign born	29.0%		11.7%	
Lived with both parents at 15	63.3%		39.5%	
Physical health (Mean, range=1–5)	4.04	(.81)	4.03	(1.37)
Religious service attendance (Mean, range=1–5)	3.02	(1.25)	2.81	(1.90)
Depression symptoms (CES-D) (Mean, range=0–7)	.96	(.98)	1.48	(2.08)
Ever Incarcerated (mother report)[1]	12.3%		41.6%	
Positive fathering attitudes (Mean, range=1–4)	3.78	(.35)	3.63	(.78)
Has previous child by other partner (mother report)[a]	21%		40%	
Total number of children with child's biological mother[a]	1.68	(.82)	1.49	(1.15)
Other Characteristics				
Baby is a boy (mother report)	58.9%		48.4%	
Grandmother lived with focal child (mother report)	10.9%		33.3%	
Unweighted number of cases (*n*)	2,054		681	

Notes: Based on fathers' reports unless indicated. All figures are weighted by city sampling weights.
M = mean; *SD* = standard deviation.
[a]Reported at year-1 survey.

child's grandmother was more likely to be living with the child (and his or her mother) when the father was non-resident (33 percent) than resident (11 percent).

As noted above, the composition of resident and non-resident fathers changed over time, as an increasing number of co-resident couples broke up. Thus, changes in characteristics across waves reflect both changes in the characteristics of fathers who *remain* in a given status, as well as changes in the sample composition due to fathers moving from resident to non-resident status (and a very small number of cases moving from non-resident to resident status). For example, as shown in Table 2, at 1 year, 88 percent of all fathers co-resided with their child. We observed (in results not shown) that by year 3, 91 percent of those co-resident at year 1 were still living together, and this fraction dropped to 70 percent (of the year-1 co-resident group) by year 9. Among all fathers, 57 percent remained stably co-resident from years 1 through 9, and 31 percent transitioned from co-resident to non-resident; 9 percent of fathers were stably non-resident across years 1 through 9, while 4 percent transitioned from non-resident to resident.

Means on the time-varying control variables are also shown in Table 2, by residence status at each wave. At 1 year, 73 percent of resident fathers were married to the focal child's mother. By year 9, this fraction had increased to 91 percent, as a greater share of cohabiting than married parents broke up over time. For non-resident fathers, 19 percent were dating the focal child's mother at 1 year, declining to 9 percent by year 9; at 1 year, 32 percent of non-resident fathers were involved with a new partner, rising to 38 percent by year 9.[3] Mothers living with fathers worked an average of 24–25 hours per week, and mothers linked to non-resident fathers worked from 29–34 hours per week across waves.

RESULTS

Prevalence of Fathers' Economic Characteristics and Direct Involvement with Children

Our first research question was purely descriptive in nature; we were interested in the prevalence of fathers' economic capacities and their involvement with children over years 1 through 9 after the focal

[3]See previous footnote regarding possibly undercounting fathers' new partners at the 9-year survey.

Table 2
Means of Fathers' Economic Characteristics, Fathers' Involvement and Time-Varying Controls, by Fathers' Co-Residence Status at Survey

	1-Year		3-Year		5-Year		9-Year	
	M or %	(*SD*)	*M or %*	(*SD*)	*M or %*	(*SD*)	*M or %*	(*SD*)
Resident Fathers (%)	88.2%		83.4%		73.8%		66.5%	
Fathers' Economic Characteristics								
Annual Earnings ($ 2008)	$39,513	($18,376)	$57,007	($44,827)	$58,678	($42,498)	$64,281	($41,498)
Annualized Wage Rate ($ 2008)	$52,606	($46,766)	$56,734	($46,005)	$61,539	($42,914)	$79,168	($66,488)
Hours Worked per Week	45.56	(12.90)	45.27	(14.51)	46.09	(13.77)	43.36	(12.75)
Weeks Worked per Year	45.23	(12.67)	46.22	(11.99)	46.22	(11.26)	46.30	(11.37)
Fathers' Involvement								
Spent 1+ hours	4.81	(.49)	4.78	(.49)	4.78	(.49)	4.80	(.48)
Engagement (Mother's Report)	3.92	(1.59)	3.81	(1.65)	3.33	(1.52)	3.49	(1.19)
Engagement (Father's Report)	4.26	(1.63)	4.19	(1.60)	3.74	(1.48)	2.72	(1.12)
Responsibility	3.49	(.45)	3.52	(.43)	3.57	(.42)	3.48	(.48)
Time-Varying Controls								
Relationship with Child's Mother (%)								
Married	73.2%		79.1%		84.9%		90.9%	
Cohabiting	26.8%		20.9%		15.1%		9.1%	
Hours per week worked by mother (mother report)	24.40	(17.26)	25.51	(17.88)	24.75	(16.55)	24.40	(15.49)
Unweighted number of resident cases (*n*)	2,054		1,729		1,414		1,038	
Non-Resident Fathers (%)	11.8%		16.6%		26.2%		33.5%	
Fathers' Economic Characteristics								
Annual Earnings ($ 2008)	$22,062	($22,553)	$24,529	($26,469)	$25,919	($29,740)	$36,132	($34,033)
Annualized Wage Rate ($ 2008)	$28,668	($28,574)	$33,911	($38,972)	$33,487	($34,506)	$53,354	($65,222)
Hours Worked per Week	44.27	(28.64)	45.40	(28.14)	40.81	(25.51)	42.85	(22.84)
Weeks Worked per Year	37.31	(27.43)	39.13	(26.01)	40.27	(22.68)	41.86	(19.93)
Annualized Child Support Payment ($ 2008)	$1,832	($4,020)	$2,681	($4,580)	$2,441	($4,037)	$2,907	($5,867)
Fathers' Involvement								
Spent 1+ hours	3.37	(2.12)	2.96	(2.10)	2.77	(1.91)	2.47	(1.64)
Engagement (Mother's Report)	1.91	(2.72)	1.49	(2.46)	0.98	(1.96)	1.14	(1.67)
Engagement (Father's Report)	3.04	(2.61)	3.30	(2.42)	2.79	(2.01)	2.32	(1.55)
Responsibility	2.28	(1.37)	1.87	(1.25)	1.81	(1.12)	1.72	(1.02)
Days with Child (Mother's Report)	13.20	(16.42)	9.71	(14.59)	8.84	(12.99)	7.56	(10.36)
Days with Child (Father's Report)	17.92	(15.40)	15.76	(15.25)	15.96	(13.11)	13.46	(12.16)

(table continues)

Table 2, continued

	1-Year		3-Year		5-Year		9-Year	
	M or %	(*SD*)	*M or %*	(*SD*)	*M or %*	(*SD*)	*M or %*	(*SD*)
Time-Varying Controls								
Relationship with Child's Mother (%)								
Dating	18.9%		6.6%		5.8%		8.8%	
Non-romantic	81.1%		93.4%		94.2%		91.2%	
Father had New Partner	31.5%		43.9%		40.2%		37.8%	
Hours per week worked by mother (mother report)	28.82	(27.81)	33.23	(27.27)	32.44	(24.63)	34.13	(21.22)
Unweighted number of non-resident cases (*n*)	681		835		1,005		1,007	
Overall number of unweighted cases (*n*)	2,735		2,564		2,419		2,045	
Stable Resident Fathers (%)	43.0%		46.2%		49.6%		57.0%	
Fathers' Economic Characteristics								
Annual Earnings ($ 2008)	$43,833	($16,460)	$65,451	($43,856)	$63,894	($41,435)	$67,944	($40,819)
Annualized Wage Rate ($ 2008)	$59,724	($44,726)	$63,810	($45,215)	$66,378	($42,837)	$82,212	($66,432)
Hours Worked per Week	46.50	(10.28)	46.92	(12.00)	46.08	(10.85)	44.44	(11.52)
Weeks Worked per Year	46.15	(10.59)	48.94	(7.77)	47.00	(9.33)	47.41	(9.93)
Fathers' Involvement								
Spent 1+ hours	4.77	(.47)	4.82	(.39)	4.82	(.36)	4.81	(.43)
Engagement (Mother's Report)	3.89	(1.44)	3.99	(1.56)	3.37	(1.40)	3.48	(1.14)
Engagement (Father's Report)	4.14	(1.56)	4.14	(1.56)	3.73	(1.40)	2.68	(1.11)
Responsibility	3.51	(.39)	3.55	(.38)	3.57	(.38)	3.50	(.43)
Unweighted number of stable resident cases (*n*)	845		845		845		845	
Stable Non-Resident Fathers (%)	6.5%		6.9%		7.5%		8.6%	
Fathers' Economic Characteristics								
Annual Earnings ($ 2008)	$23,618	($25,914)	$24,008	($24,990)	$27,255	($31,735)	$28,009	($27,074)
Annualized Wage Rate ($ 2008)	$27,523	($24,319)	$28,245	($25,622)	$34,315	($37,321)	$45,563	($76,269)
Hours Worked per Week	43.71	(30.08)	44.64	(30.69)	44.90	(31.40)	43.15	(26.77)
Weeks Worked per Year	37.25	(28.05)	39.24	(26.56)	38.80	(26.45)	39.83	(23.90)
Annualized Child Support Payment ($ 2008)	$1,840	($4,129)	$2,525	($4,074)	$2,030	($4,103)	$1,257	($2,911)
Fathers' Involvement								
Spent 1+ hours	3.05	(2.14)	2.57	(2.06)	2.10	(1.93)	1.88	(1.75)
Engagement (Mother's Report)	1.40	(2.31)	1.05	(2.04)	0.50	(1.59)	0.58	(1.58)
Engagement (Father's Report)	2.94	(2.69)	3.07	(2.56)	2.92	(2.53)	1.76	(1.88)
Responsibility	2.10	(1.33)	1.59	(1.11)	1.50	(1.12)	1.42	(.94)
Days with Child (Mother's Report)	10.20	(15.36)	7.15	(13.14)	5.54	(12.56)	3.97	(9.96)
Days with Child (Father's Report)	15.40	(15.46)	12.52	(14.45)	11.32	(14.25)	10.30	(13.90)
Unweighted number of stable non-resident cases (*n*)	384		384		384		384	

Note: Economic characteristics based on fathers' reports; father involvement based on mothers' reports unless otherwise noted. All figures are weighted by city sampling weights.
M = mean; *SD* = standard deviation.

child's birth, comparing resident and non-resident fathers. All results are shown in Table 2, and selected results are shown in Figures 1 through 8. On average, resident fathers had earnings of about $39,500 per year around year 1, rising to $64,000 per year around age 9 (note that all dollar figures are presented in 2008 dollars). The annualized wage rate yielded a higher amount, since not all fathers worked full-time, full-year; annualized wage rates ranged from about $53,000 to $79,000 from years 1 through 9. On average, resident fathers at each wave reported working 43–46 hours per week and 45–46 weeks per year.

Not surprisingly, given their lower levels of education, non-resident fathers had substantially lower annual earnings—from about $22,000 in year 1 to about $36,000 in year 9 (see Figure 1). The increase was partly driven by fathers moving from residence to non-residence, since the stably non-resident fathers (bottom panel of Table 2) had earnings that hovered only around $24,000 to $28,000 per year. The annualized wage rate was also higher than earnings for non-resident fathers. As shown in Figures 2 and 3, non-resident fathers worked a similar number of hours per week (41–45) as resident fathers, but they worked fewer weeks per year in the early years (37–39), rising to about 42 weeks by year 9, as formerly-resident fathers entered this group.

For the three measures of fathers' direct involvement that were available for both resident and non-resident fathers (reported by mothers), fathers who lived with their children had consistently higher levels of involvement (see Figures 4 through 6). Across years 1 through 9, the average frequency that resident fathers spent at least one or more hours with their child in the previous month was close to *every day* (4.8 on a 1-to-5 scale). Mothers reported an average level of paternal engagement in activities of nearly 4 days per week at years 1 and 3, declining slightly in years 5 and 9. Resident fathers reported a similar but slightly higher mean on engagement across the years, except that their 9-year score was lower than mother-reported paternal engagement. Sharing responsibility for child-related tasks stayed about the same over time for resident fathers, an average score of about 3.5, which falls between *sometimes* and *often*.

As we expected, non-resident fathers had notably lower involvement, compared to resident fathers, across all involvement measures. At year 1, mothers reported that non-resident fathers spent an

Figure 1. Fathers' Annual Earnings, by Father Residence at Wave

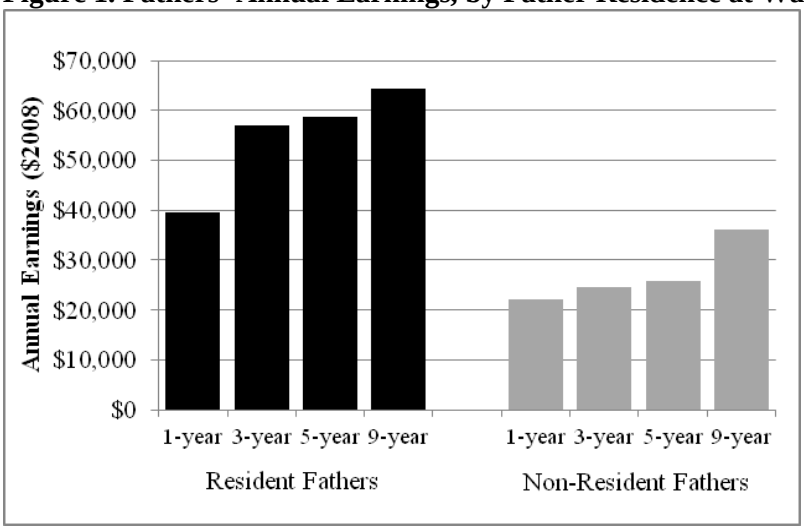


Figure 2. Fathers' Hours Worked per Week, by Father Residence at Wave

Figure 3. Fathers' Weeks Worked per Year, by Father Residence at Wave

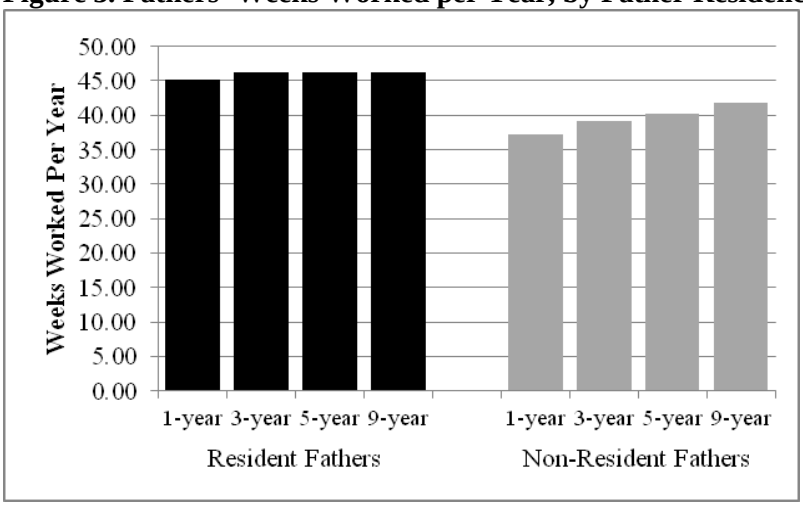


Figure 4. Average Number of Days Father Spent 1+ Hour with Child (range=1–5), by Father Residence at Wave

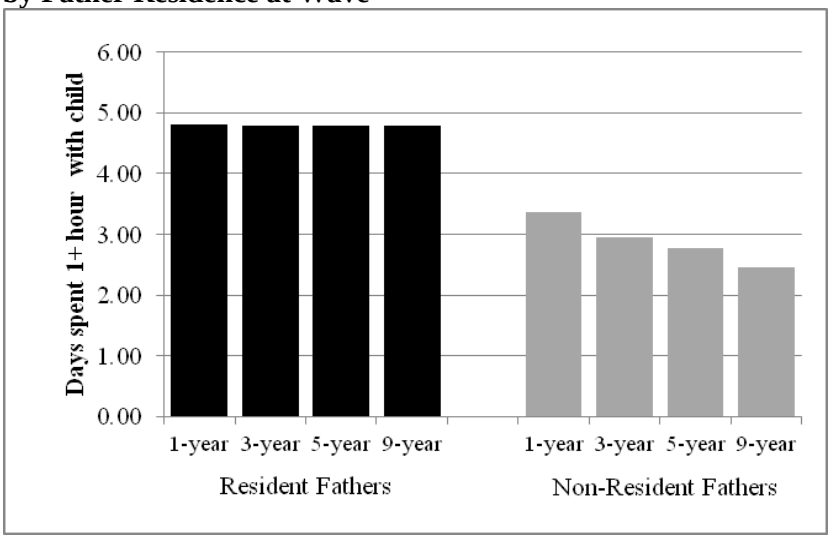


Figure 5. Father-Child Engagement (range=0–7 days/week), by Father Residence at Wave

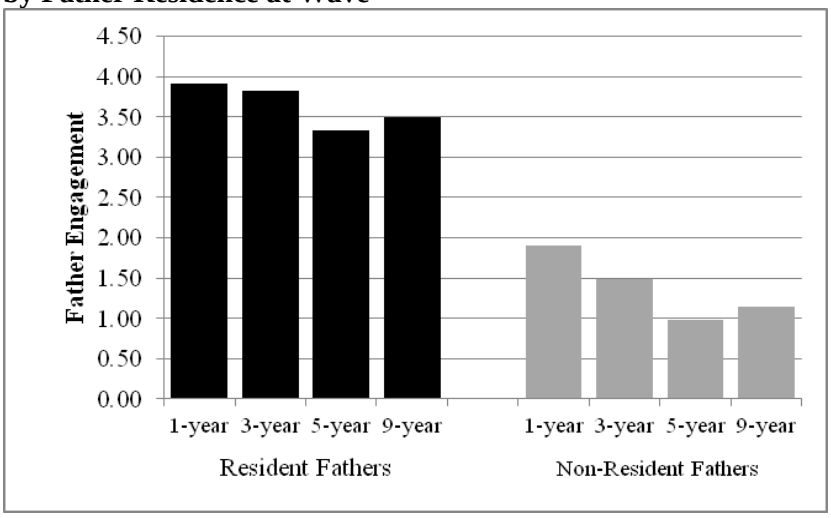


Figure 6. Fathers' Sharing Responsibility (range=1–4), by Father Residence at Wave

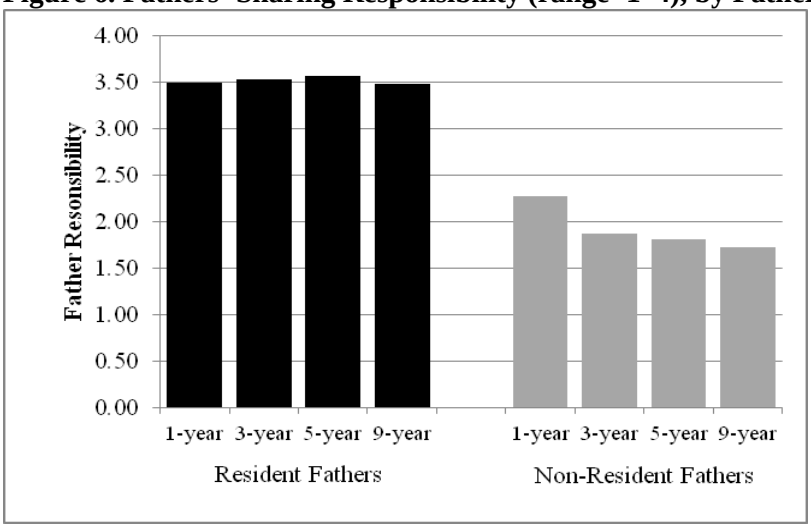


Figure 7. Days Father Saw Child Past Month (range=0–30), by Non-Resident Father Type

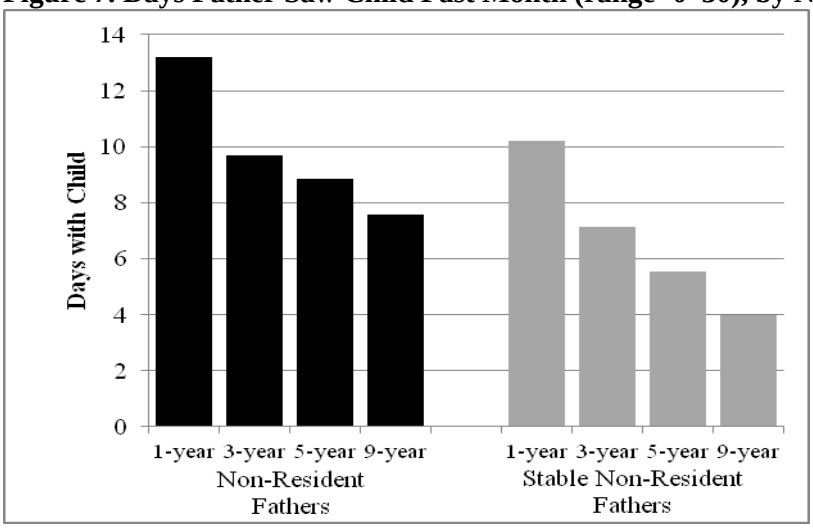
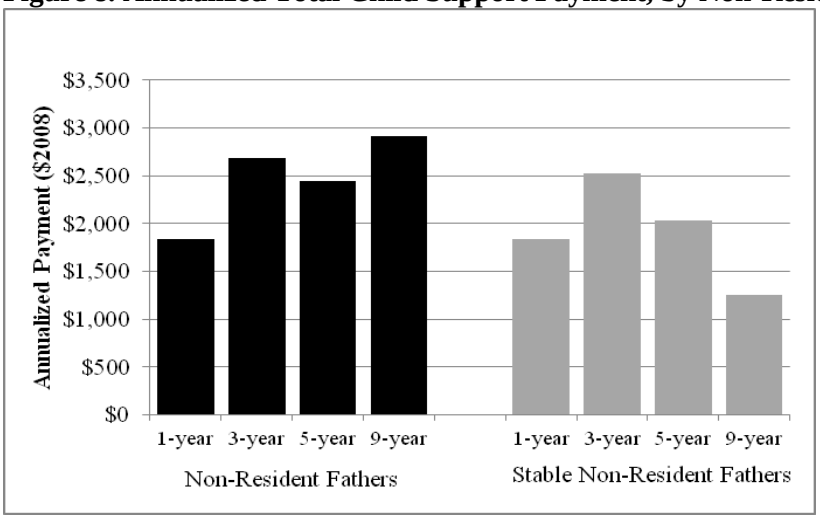


Figure 8. Annualized Total Child Support Payment, by Non-Resident Father Type



hour or more with the child at 3.4 on the 1-to-5 scale, or somewhere between *a few times per month* and *a few times per week*. However, this figure was lower at all subsequent years (see Figure 4). From mothers' perspectives, the frequency of non-resident fathers' engagement in activities was quite low—about 1.9 days per week at year 1; this declined in years 3 and 5 (to 1.5 and 1.0, respectively), but slightly rose again to about 1.1 in year 9 (again, due to resident fathers—who were more involved—moving into non-residence). Non-resident fathers themselves reported their level of engagement about one to two days per week higher than mothers reported about non-resident fathers. Shared responsibility by non-resident fathers started out moderately high in year 1 (at 2.3, or between *rarely* and *sometimes*) but declined to below *rarely* in subsequent years. In terms of the number of days that non-resident fathers saw their child in the past month, mothers reported that all non-resident fathers saw their child about 13 days per month at year 1. The number of days declined each subsequent year to 10 days at year 3, 9 days by year 5, and then to 8 days by year 9 (see left panel of Figure 7). Non-resident fathers reported that they saw their child more frequently than mothers reported such—about 5 days higher in year 1, 6 days higher in year 3, 7 days higher in year 5, and dropping to just under 6 days higher in year 9.

The figures above include all fathers, with residence status determined at each wave. We were also interested to consider the sub-sets of fathers who did not change residence statuses across waves. Stably resident fathers (third panel of Table 2) represented 43 to 57 percent (weighted) of fathers at each wave, and stably non-resident fathers represented 7 to 9 percent (weighted) of fathers at each wave.[4] The stably resident fathers had economic capacities and levels of involvement that were quite similar to the dynamic group of resident fathers; the only difference being that the stable group had slightly higher

[4]Note that the Fragile Families sample design over-sampled unmarried parents at the time the focal child's birth in order to focus on this particular sub-group. Thus, the unweighted sample sizes of resident and non-resident fathers—and the corresponding weighted percentages—appear to be mis-matched. This occurs as a result of weighting the analytic sample to reflect the actual urban population, where the majority of births would have, in fact, occurred to married parents. In other words, the Fragile Families Study sampled unmarried parents to married parents at a rate of about 3 to 1, while if a random sample had been drawn at that time, the actual proportion of unmarried parents to married parents would have been about 1 to 3; therefore, marital births are 'weighted up' to achieve the urban population that would have resulted without the deliberate over-sample.

earnings and a slightly higher wage rate. The similarity to the single-survey frequencies for resident fathers was not surprising, since few non-resident fathers moved into residence over time, so the stable group represented a large and increasing share of resident fathers over time.

Bigger differences were noted between the group of stable non-resident fathers and the single-wave estimates for non-resident fathers, particularly over time, as the proportion of all fathers who were non-resident rose from 12 percent at year 1 to 34 percent at year 9. The resident fathers who become non-resident had better economic capacities—and were more involved when living away from their children—than their counterparts who started out as non-resident, bringing up the non-resident averages of economic capacities and slowing the decline in involvement over time. As shown in Figure 8, in years 1 and 3, all non-resident fathers paid a similar amount of child support (roughly $1,800 in year 1 and $2,600 in year 3); however, as formerly resident fathers became non-resident, the amount of child support paid remained mostly stable, with a slight increase in year 9. By contrast, stably non-resident fathers paid less child support over time, declining to $2,000 in year 5 and to $1,200 by year 9. Fathers who were consistently non-resident had lower levels of involvement across all time measures than fathers who were non-resident at any given wave. As with non-resident fathers at each wave, stably non-resident fathers' reports of seeing the child in the past month were consistently higher than mothers' reports (about 5 to 6 days more per month).

Overall, we found that, as expected, resident fathers had much higher economic capacities and were much more involved than non-resident fathers, suggesting that children who lived with their fathers received consistently greater paternal investment in terms of both money and time. Levels of resident paternal involvement appeared to be quite stable over time, suggesting that when fathers live with their children, they remain highly involved, consistent with notions of the "package deal" (Furstenberg and Cherlin 1991; Townsend 2002). On average, economic resources also remained high and even increased (in terms of earnings and wage rates) over time. By contrast, children whose fathers lived away from them had access to fewer economic resources and received lower paternal time investment as well. The mean levels of economic resources and total child support payments increased across waves, largely due

to new non-resident fathers entering this sub-group, while paternal time investment tended to decrease across waves. For the stably non-resident group of fathers, child support increased and then declined, and time involvement declined more substantially, as compared to all non-resident fathers over the time period.

Economic Capacities as a Predictor of Direct Involvement

Turning to our multivariate results about how fathers' economic characteristics and direct time involvement were linked, Table 3 shows random effects regression results for all of our outcome measures for both resident and non-resident fathers. We remind the reader that for each father involvement measure (listed down the left column as panels A to G), a separate regression was estimated for each economic variable. For example, the cell in the top left corner in panel A shows that each additional $10,000 of annual earnings was associated with a statistically significant but very slightly lower score (-.0075) on the 1-to-5 measure of the resident father spending one or more hours with the child. The second cell suggests that in a separate random effects model, each additional $10,000 in annualized wage rate was also associated with a marginally significant but extremely small (-.0037) lower amount of spending time with the child. Work hours and work weeks were also significantly related to the father being less likely to spend one or more hours with the child, although the effect sizes were very small.

Turning to paternal engagement in activities (as reported by mothers), for all four economic characteristics, at higher levels of economic investment, resident fathers were significantly less likely to engage in activities with the focal child, although the magnitude of the effects remained very small. A similar—but less consistent—pattern was observed when fathers' reports of engagement were used. Shared responsibility was also lower with each higher level of all four of the economic measures. Similarly, the composite involvement measure that combined all the father involvement measures (time, engagement, and responsibility) into a single measure was strongly related to all four economic measures. A one-unit increase on each of the economic measures was significantly linked with a lower score on the

Table 3
Father's Economic Characteristics As Predictors of Fathers' Involvement, by Fathers' Residential Status: Random Effects Model

	Resident				Non-Resident			
	β	(SE)	*N* Obs.	*N* Cases	B	*(SE)*	*N* Obs.	*N* Cases
A. Spent 1+ hours (Mother's Report, range=1–5)								
Annual Earnings ($ 2008) ($10000s)	-.0075*	(.00)	5,626	2,254	.0278*	(.01)	2,307	1,252
Annualized Wage Rate ($ 2008) ($10000s)	-.0037+	(.00)	5,597	2,222	-.0019	(.01)	2,436	1,275
Hours Worked per Week (10 hours)	-.0179***	(.00)	5,881	2,268	.0218	(.01)	2,536	1,310
Weeks Worked per Year (10 weeks)	-.0144*	(.01)	5,799	2,266	.0586***	(.02)	2,471	1,297
Annualized Child Support Payment ($ 2008) ($1000s)					.0453***	(.01)	2,257	1,230
B. Engagement (Mother's Report, range=0–7)								
Annual Earnings ($ 2008) ($10000s)	-.0570***	(.01)	5,615	2,247	-.0078	(.02)	2,154	1,216
Annualized Wage Rate ($ 2008) ($10000s)	-.0283**	(.01)	5,585	2,216	-.0116	(.01)	2,280	1,240
Hours Worked per Week (10 hours)	-.0634***	(.01)	5,869	2,261	-.0092	(.02)	2,369	1,272
Weeks Worked per Year (10 weeks)	-.0872***	(.02)	5,787	2,259	.0205	(.02)	2,309	1,260
Annualized Child Support Payment ($ 2008) ($1000s)					.0431***	(.01)	2,108	1,192
C. Engagement (Father's Report, range=0–7)								
Annual Earnings ($ 2008) ($10000s)	-.0520***	(.01)	5,600	2,241	.0055	(.02)	2,065	1,178
Annualized Wage Rate ($ 2008) ($10000s)	-.0251***	(.01)	5,571	2,208	.0021	(.01)	2,159	1,191
Hours Worked per Week (10 hours)	-.0272*	(.01)	5,857	2,255	.0072	(.02)	2,252	1,225
Weeks Worked per Year (10 weeks)	-.0186	(.02)	5,773	2,252	.0271	(.02)	2,190	1,211
Annualized Child Support Payment ($ 2008) ($1000s)					-.0171	(.01)	2,028	1,145
D. Responsibility (Mother's Report, range=1–4)								
Annual Earnings ($ 2008) ($10000s)	-.0068*	(.00)	5,382	2,201	.0020	(.01)	2,357	1,261
Annualized Wage Rate ($ 2008) ($10000s)	-.0047*	(.00)	5,361	2,170	-.0054	(.01)	2,488	1,283
Hours Worked per Week (10 hours)	-.0150***	(.00)	5,640	2,221	.0158+	(.01)	2,592	1,317
Weeks Worked per Year (10 weeks)	-.0112*	(.00)	5,563	2,219	.0295**	(.01)	2,524	1,304
Annualized Child Support Payment ($ 2008) ($1000s)					.0263***	(.01)	2,302	1,229
E. Father Involvement Composite (Mother's Report)								
Annual Earnings ($ 2008) ($10000s)	-.0112***	(.00)	5,629	2,254	.0161*	(.01)	2,428	1,278
Annualized Wage Rate ($ 2008) ($10000s)	-.0068***	(.00)	5,599	2,222	.0051	(.00)	2,557	1,298
Hours Worked per Week (10 hours)	-.0236***	(.00)	5,885	2,268	.0028	(.01)	2,667	1,333
Weeks Worked per Year (10 weeks)	-.0232***	(.00)	5,802	2,266	.0157+	(.01)	2,596	1,320
Annualized Child Support Payment ($ 2008) ($1000s)					.0251***	(.01)	2,372	1,249
F. Days Spent with Child Past Month (Mother's Report, range=0–30)								
Annual Earnings ($ 2008) ($10000s)					.1729+	(.10)	2,373	1,265
Annualized Wage Rate ($ 2008) ($10000s)					-.0406	(.06)	2,490	1,285
Hours Worked per Week (10 hours)					.0990	(.10)	2,599	1,318
Weeks Worked per Year (10 weeks)					.3823**	(.11)	2,530	1,307
Annualized Child Support Payment ($ 2008) ($1000s)					.2312***	(.06)	2,319	1,237
G. Days Spent with Child Past Month (Father's Report, range=0–30)								
Annual Earnings ($ 2008) ($10000s)					.1180	(.10)	2,390	1,268
Annualized Wage Rate ($ 2008) ($10000s)					-.0192	(.05)	2,511	1,287
Hours Worked per Week (10 hours)					.1863+	(.10)	2,618	1,321
Weeks Worked per Year (10 weeks)					.4076***	(.11)	2,551	1,310
Annualized Child Support Payment ($ 2008) ($1000s)					.1104+	(.06)	2,333	1,237

Note: Each cell represents a separate regression model and includes all time-constant covariates shown in Table 1 and time-varying covariates in Table 2.
+ p < .01. *p < .05. **p < .01. ***p < .001.

composite measure from -.007 to -.024 of a standard deviation—again, extremely small effects. Taken together, these results suggest that for resident fathers, greater investment in the labor market is associated with significantly lower—though very modest in size—levels of paternal involvement; therefore, for resident fathers, investments in breadwinning and in more direct involvement with the child appear to operate as substitutes.

For non-resident fathers, the pattern of results was entirely different. Higher levels of earnings, weeks worked per year and especially child support payments were significantly and positively associated with the father being *more* likely to spend one or more hours with the child in the past week. For engagement in activities, there was no significant association between earnings, wage rate, hours or weeks worked, regardless of whether mothers' or fathers' reports of engagement were used. The only significant association was with child support payments (for engagement reported by mothers—but not fathers); for each greater $1,000 that the father paid in total child support in a year, he was likely to be involved an additional .04 days in the past week (again, an incredibly small effect size, since the standard deviation on mothers' reports of engagement ranged from 1.7 to 2.7 across surveys).

Shared responsibility was also significantly higher for non-resident fathers who worked more weeks in the past year and who paid a higher amount of child support in the past year. The composite measure of fathers' involvement was significantly higher with higher annual earnings and higher annualized child support. With respect to the number of days the father saw the child in the past month, using mothers' reports, number of weeks worked per year and child support payments were both positively related to the father seeing the child a greater number of days in the past month. Using fathers' reports, number of weeks worked was positively related to father-child contact, whereas the payment of child support was only marginally statistically significant.

Our next step was to estimate fixed effects estimates—that rely only on within-father change and hence are more conservative with respect to causal inference; these results are shown in Table 4. For resident fathers, the results for spending one or more hours in the past week and sharing responsibility with the mother were no longer statistically significant; yet, the results for paternal engagement in

Table 4
Father's Economic Characteristics as Predictors of Fathers' Involvement, by Fathers' Residential Status: Fixed Effects Model

	Resident				Non-Resident			
	β	(SE)	*N* obs.	*N* cases	β	*(SE)*	*N* obs.	*N* cases
A. Spent 1+ hours (Mother's Report, range=1–5)								
Annual Earnings ($ 2008) ($10000s)	-.0063	(.00)	5,626	2,254	.0224	(.02)	2,307	1,252
Annualized Wage Rate ($ 2008) ($10000s)	-.0020	(.00)	5,597	2,222	.0019	(.01)	2,436	1,275
Hours Worked per Week (10 hours)	-.0109+	(.01)	5,881	2,268	.0158	(.02)	2,536	1,310
Weeks Worked per Year (10 weeks)	-.0130+	(.01)	5,799	2,266	.0447*	(.02)	2,471	1,297
Annualized Child Support Payment ($ 2008) ($1000s)					.0333	(.01)	2,257	1,230
B. Engagement (Mother's Report, range=0–7)								
Annual Earnings ($ 2008) ($10000s)	-.0556***	(.01)	5,615	2,247	-.0312	(.03)	2,154	1,216
Annualized Wage Rate ($ 2008) ($10000s)	-.0288***	(.01)	5,585	2,216	-.0046	(.01)	2,280	1,240
Hours Worked per Week (10 hours)	-.0501**	(.02)	5,869	2,261	-.0037	(.02)	2,369	1,272
Weeks Worked per Year (10 weeks)	-.0659**	(.02)	5,787	2,259	.0200	(.03)	2,309	1,260
Annualized Child Support Payment ($ 2008) ($1000s)					.0473**	(.02)	2,108	1,192
C. Engagement (Father's Report, range=0–7)								
Annual Earnings ($ 2008) ($10000s)	-.0583***	(.01)	5,589	2,241	-.0158	(.03)	2,065	1,178
Annualized Wage Rate ($ 2008) ($10000s)	-.0258***	(.01)	5,558	2,208	-.0130	(.02)	2,159	1,191
Hours Worked per Week (10 hours)	-.0198	(.02)	5,844	2,255	.0128	(.03)	2,252	1,225
Weeks Worked per Year (10 weeks)	-.0234	(.02)	5,761	2,252	.0610+	(.03)	2,190	1,211
Annualized Child Support Payment ($ 2008) ($1000s)					.0057	(.02)	2,028	1,145
D. Responsibility (Mother's Report, range=1–4)								
Annual Earnings ($ 2008) ($10000s)	-.0046	(.00)	5,382	2,201	-.0005	(.01)	2,357	1,261
Annualized Wage Rate ($ 2008) ($10000s)	-.0032	(.00)	5,361	2,170	.0005	(.01)	2,488	1,283
Hours Worked per Week (10 hours)	-.0072	(.01)	5,640	2,221	.0275	(.01)	2,592	1,317
Weeks Worked per Year (10 weeks)	-.0113+	(.01)	5,563	2,219	.0310*	(.01)	2,524	1,304
Annualized Child Support Payment ($ 2008) ($1000s)					.0202*	(.01)	2,302	1,229
E. Father Involvement Composite (Mother's Report)								
Annual Earnings ($ 2008) ($10000s)	-.0089**	(.00)	5,629	2,254	.0188	(.01)	2,428	1,278
Annualized Wage Rate ($ 2008) ($10000s)	-.0056*	(.00)	5,599	2,222	.0093+	(.01)	2,557	1,298
Hours Worked per Week (10 hours)	-.0188***	(.00)	5,885	2,268	.0047	(.01)	2,667	1,333
Weeks Worked per Year (10 weeks)	-.0199**	(.01)	5,802	2,266	.0085	(.01)	2,596	1,320
Annualized Child Support Payment ($ 2008) ($1000s)					.0176*	(.01)	2,372	1,249
F. Days Spent with Child Past Month (Mother's Report, range=0–30)								
Annual Earnings ($ 2008) ($10000s)					.2925+	(.15)	2,373	1,265
Annualized Wage Rate ($ 2008) ($10000s)					-.0074	(.07)	2,490	1,285
Hours Worked per Week (10 hours)					.1648	(.13)	2,599	1,318
Weeks Worked per Year (10 weeks)					.4378**	(.15)	2,530	1,307
Annualized Child Support Payment ($ 2008) ($1000s)					.2671*	(.09)	2,319	1,237
G. Days Spent with Child Past Month (Father's Report, range=0–30)								
Annual Earnings ($ 2008) ($10000s)					.1447	(.15)	2,390	1,268
Annualized Wage Rate ($ 2008) ($10000s)					-.0068	(.07)	2,511	1,287
Hours Worked per Week (10 hours)					.1980	(.13)	2,618	1,321
Weeks Worked per Year (10 weeks)					.5339**	(.16)	2,551	1,310
Annualized Child Support Payment ($ 2008) ($1000s)					.1200	(.10)	2,333	1,237

Note: Each cell represents a separate regression model and includes all time-constant covariates shown in Table 1 and time-varying covariates in Table 2.
+ p < .01. *p < .05. **p < .01. ***p < .001.

activities and the composite father involvement measure remained highly significant (though again, the magnitudes were very small). This provides greater evidence that fathers' investments in breadwinning and time investment are substitutes—as the same resident fathers increase their earnings, wages, and time in the labor market over time, they also decrease their engagement and overall involvement with the focal child.

For non-resident fathers, some of the fixed effects estimates were also statistically significant, suggesting that the associations in the random effects models were not entirely due to differences in characteristics *between* fathers. When fathers reported working more weeks per year, mothers reported fathers spending more time with their child, sharing more responsibility, and seeing the child more days in the past month; fathers' report of the number of days he saw the child in the past month was also statistically significant. In addition, the average annual total child support payment was significantly associated with father-child engagement (based on mothers' reports), sharing responsibility for the child, the composite father involvement measure, and spending a greater number of days in the past month (based on mothers' reports). These results suggest that as the same non-resident fathers increase their work weeks and/or their financial contributions to children, their time involvement—across several measures—also increases.

In results not shown, we also replicated all of the above results for the two groups of stable fathers—those who were resident with the child over all of years 1 through 9, and those who never lived with the child over the entire time period. The results were remarkably similar—in both size and significance—to those results for the full, dynamic groups of resident and non-resident fathers, suggesting that the substantive conclusions are not being driven by the changing composition of the groups, as fathers (primarily) move out of the child's household over time.

Child Support Enforcement as a Predictor of Child Support Payments and Involvement

Our final research question explored how the effectiveness of state-level child support enforcement (CSE) policy was linked to fathers' total child support payments (including both formal and

informal support) and fathers' direct involvement (time, engagement, and shared responsibility). We measured CSE effectiveness using three measures: 1) the average collection amount per case (in $1,000s), 2) the paternity establishment rate for nonmarital births, and 3) the percentage of single-mother families with a child support order.[5] Overall, as shown in Table 5, we found that state-level child support enforcement does not appear to be associated with greater total child support payments, regardless of which measure we use. Fathers' economic capacity, however, is consistently and positively associated with child support payments, regardless of which economic measure is used. For example, fathers who had higher annual earnings or fathers who worked more weeks of the year tended to pay more total child support. The magnitude of the effect, however, was small; a $10,000 increase in annual earnings was associated with an increased annual child support payment of just over $300, whereas working an additional 10 weeks was associated with an additional $200 of child support payment. These results are consistent with the results found by Nepomnyaschy and Garfinkel (2010) using the Fragile Families data through child age 5 (which we discuss further in the Discussion section).

Finally, we examined how child support enforcement was linked to fathers' direct involvement. In the bivariate models (Model 1), we observed different results, depending on which measure of child support effectiveness was used. Higher levels of child support enforcement were associated with lower levels of fathers' involvement using collections per case and with higher levels of fathers' involvement using the paternity establishment rate (across all time, engagement, and responsibility measures), while there was no association observed using the percent of single mothers in the state with a child support order. The patterns were mostly very similar once all individual-level father characteristics were included in Model 2. The variability in our results highlights the challenge of capturing the effectiveness of the child support enforcement system with any individual measure, and suggests caution in interpreting these

[5]We thank Dan Meyer and Maria Cancian for suggestions about which measures to use and Lenna Nepomnyaschy for guidance about constructing them.

Table 5
Child Support Enforcement As a Predictor of Fathers' Payment of Child Support and Time Involvement: Random Effects Models

	State Level Child Support Enforcement: Collections/Case				State Level Child Support Enforcement: Paternity Establishment Rate				State Level Child Support Enforcement: Percent with Order			
	Model 1 (Bivariate)		Model 2 (w/ Controls)^		Model 1 (Bivariate)		Model 2 (w/ Controls)^		Model 1 (Bivariate)		Model 2 (w/ Controls)^	
	β	(SE)	β	(SE)	β	(SE)	β	(SE)	β	(SE)	β	(SE)
Predicting Annualized Child Support Payment ($ 2008) ($1000s)												
State Level Child Support Enforcement	.1135	(.15)	.0364	(.14)	-.1597	(.25)	-.2030	(.24)	-.4105*	(.20)	-.1416	(.19)
State Level Child Support Enforcement			.0051	(.14)			-.1944	(.25)			-.2227	(.20)
Annual Earnings ($ 2008) ($10000s)			.3205***	(.03)			.3196***	(.03)			.3209***	(.03)
State Level Child Support Enforcement			.0082	(.14)			-.1947	(.25)			-.1402	(.20)
Annualized Wage Rate ($ 2008) ($10000s)			.0903***	(.02)			.0898***	(.02)			.0905***	(.02)
State Level Child Support Enforcement			.0699	(.14)			-.2049	(.24)			-.1294	(.19)
Hours Worked per Week (10 hours)			.0987**	(.03)			.0988***	(.03)			.0976**	(.03)
State Level Child Support Enforcement			.0086	(.14)			-.2009	(.25)			-.1447	(.20)
Weeks Worked per Year (10 weeks)			.2126***	(.04)			.2125***	(.04)			.2126***	(.04)
Predicting Father Involvement Measures	State Level Child Support Enforcement				State Level Child Support Enforcement				State Level Child Support Enforcement			
Spent 1+ Hours	-.2936***	(.06)	-.2414***	(.06)	.3471**	(.11)	.1842+	(.10)	.0629	(.08)	.1008	(.08)
Engagement (Mother's Report)	-.3114***	(.07)	-.2710***	(.07)	.4255**	(.13)	.2837*	(.13)	.0607	(.10)	.0780	(.10)
Engagement (Father's Report)	-.3040***	(.08)	-.3096***	(.07)	.3387*	(.13)	.3141*	(.13)	-.0960	(.10)	-.1511	(.10)
Responsibility (Mother's Report)	-.1949***	(.04)	-.1493***	(.04)	.2199**	(.07)	.0851	(.07)	.0513	(.06)	.0165	(.06)
Father Involvement Composite (Mother's Report)	.0017	(.04)	.0243	(.03)	-.0025	(.06)	-.0841	(.06)	-.0152	(.05)	-.0101	(.05)
Days Spent with Child Past Month (Mother's Report)	-1.7551***	(.44)	-1.3150**	(.41)	3.2078***	(.75)	1.9735**	(.71)	.9344	(.60)	.9124	(.58)
Days Spent with Child Past Month (Father's Report)	-1.7901***	(.43)	-1.3907**	(.41)	3.3951***	(.74)	2.5584***	(.72)	.3071	(.59)	.2613	(.58)

^Note: Models include all time-constant and time-varying covariates shown in Tables 1 and 2. Numbers of unweighted cases (n) range from 1,050 to 1,472.
Each cell or cell-pair represents a separate regression model.

estimates of how state-level child support effectiveness may affect fathers' involvement with children. Further investigation is certainly warranted.

DISCUSSION

In this report, we have presented new information about the levels and interrelationships of aspects of fathers' involvement among a contemporary cohort of fathers over child ages 1 through 9. As with prior research, we found that resident fathers had much higher economic capacities than non-resident fathers and that resident fathers displayed much higher levels of spending time with children, engaging in activities, and sharing responsibility with mothers for coordinating children's care (Amato 1998). Also, resident father involvement does not appear to notably decline as children grow from infancy through middle childhood. By contrast, non-resident fathers had much lower economic resources, and they spent much less time with children, engaged in fewer activities, and shared responsibilities less frequently with mothers. While overall, the prevalence of non-resident father involvement only declined slightly over time, this is due to the shifting composition of this group, as formerly-resident fathers broke up from the focal child's mother and became non-resident.

Our main multivariate analyses explored how fathers' economic contributions were linked to fathers' direct involvement, comparing resident and non-resident fathers. Taken together, our results suggest that economic capacities and contributions operate quite differently as linked to other aspects of involvement for resident versus non-resident fathers. For resident fathers, there appears to be a trade-off between investments in market work and time spent in more direct aspects of involvement and care—they operate as substitutes. At higher levels of earnings, wages, hours worked, and weeks worked, resident fathers displayed significantly lower levels of time spent with children, engagement in activities, and shared responsibility for childrearing. Therefore, it appears that resident fathers are able to coordinate with (co-resident) mothers about their investments in market versus home production and to adjust their allocation of each accordingly. As such, fathers' investments in financial provision appear to 'count' as investments in children as collective goods, consistent with the notion of the "package deal," where

marriage, fathering, and employment all go together as part of men's roles in family life (Furstenberg and Cherlin 1991; Townsend 2002).

The fixed effects results for resident fathers suggested that the results for time and shared responsibility may be due to unobserved heterogeneity, since these estimates were not significant when fixed effects are included. In other words, resident fathers may have certain attributes (such as internal drive and motivation) that lead them to both work hard in the labor market and spend time with their child and share childrearing responsibilities with mothers. The engagement results remain strong, indicating that when (the same) fathers work and earn more, they appear to pull back on their engagement with the focal child. The fact that engagement is the only outcome with significant effects in the fixed effects models may reflect that this type of father involvement requires a higher level of active energy (e.g., to read stories or play with the child) than simply spending time together (which could occur in a passive activity, e.g., watching TV).

For non-resident fathers, across all the pairwise combinations of economic resource measures and the non-financial aspects of involvement, there was no evidence that financial investment and time involvement appeared to operate as substitutes, even though greater time in the labor market necessarily means that fathers have less available time for other activities (including parenting). The estimates that were significant suggest that greater economic capacity and contributions by non-resident fathers instead "go together" with being involved in other ways with their children (spending time, engaging in activities, and sharing responsibility). In the random effects models, we found evidence that earnings, weeks worked, and particularly child support payments were positively related to fathers' time involvement. Therefore, these two aspects of involvement (money and time) appear to operate as complements for non-resident fathers, as they do "double duty" to remain involved with their children.

The fixed effects results cast some doubt on the causal interpretation of some of these results; however, a number of the estimates remained statistically significant. Increasing the number of weeks worked is linked to the (same) father increasing the time he spends with his child (measured as both spending an hour or more in the past week as well as the number of days in the past month). Also, the

father's increasing his total child support payments is associated with increasing his levels of involvement with respect to father-child engagement, shared responsibility with mothers, and days spent in the past month (mothers' report). It is important to note that we cannot identify the direction of this association in this research, although prior research that has explicitly considered the directionality suggests that payments typically enhance father-contact more than contact enhances payments (Nepomnyaschy 2007).

With respect to our child support enforcement results, we found little evidence (using any of our three child support effectiveness measures) that stronger enforcement was linked to higher total payments. However, we believe these results should be treated as preliminary, and we intend to further explore this question with additional measures of enforcement. To the extent that our results do suggest that CSE has no effect on payments, this may be because we were using a combined measure of formal plus informal payments, which Nepomnyaschy and Garfinkel (2010) also found was not related to the strength of the child support enforcement system across states. As they note, this is because, as unmarried relationships break up over time, informal payments decline, while formal payments increase, so the total amount of support may not change much—and may thus be impervious to child support enforcement in the early years after a birth. They suggest that stronger CSE may only show an impact over time, or only when formal payments alone are considered. For these reasons, we urge interpretation of our child support effectiveness results with caution, and future work can better illuminate differences between informal and formal payments over time and use additional measures of CSE effectiveness.

While we believe our research provides a useful extension to the literature, we also acknowledge several limitations to our study. First, our data come from a sample of urban births, so our results are only relevant to families of children born in cities of population 200,000 or more.

Second, as with all quantitative surveys, one must be mindful of concerns about response rates and attrition. By using a hospital-based design, the Fragile Families Study was able to attain higher response rates than other studies of fathers, who are typically underrepresented in national surveys (Garfinkel, McLanahan, and Hanson 1998; Nelson 2004). At the same time, about one-quarter of fathers were not interviewed at the 1-year survey, and of those that were interviewed, about one-third were lost to

attrition by the 9-year survey. We know that attrition is not random, and those who dropped out were more likely to be racial/ethnic minorities and have lower socioeconomic resources than those who remained in the study. Therefore, our results cannot be generalized to fathers who had the lowest levels of economic resources and, we suspect, were least involved with their children. At the same time, since at least part of our research is about the interrelationships of aspects of *involvement*, our research is not salient to fathers who were not involved with their child(ren) at all.

Third, we evaluated economic contributions along with three key domains of fathers non-financial involvement that have been identified as important in the prior literature—time, engagement, and responsibility (Lamb et al. 1985), but we recognize that fathers may be involved in other ways that we are not measuring here. For example, for non-resident fathers, we did not measure any communication from afar such as telephone calls, cards/letters, or email.

A fourth limitation concerns our use of mothers' reports of fathers' involvement with children. We used mothers' reports in many of our analyses to avoid using the same reporter for both the independent and dependent variables, but we recognize that mothers may not have accurate information about the frequency and content of fathers' involvement, especially for non-resident fathers (Coley and Morris 2002; Seltzer and Brandreth 1995). Our mostly similar findings when using measures based on fathers' reports reassured us that our other results were not solely driven by the use of maternal reports.

Fifth, while our longitudinal data with multiple measures of father' economic contributions and direct involvement over time allowed us to use methods that better accounted for unobserved heterogeneity across individuals, our results could still be biased by unobserved differences across individuals and families. Even in our fixed effects models that rely on within-person and family change, we cannot account for time-varying variables that may also be changing over the observation period.

Sixth, as noted above, our analyses cannot determine the direction of association between the different aspects of fathers' involvement. Understanding the direction of the relationship would be a useful topic for future investigation, replicating prior work that found that payments lead to contact but not the reverse during children's infancy and preschool years (Nepomnyaschy 2007).

CONCLUSION

Overall, this report has provided new information about fathers' involvement in children's lives. We find important differences in how fathering plays out for resident versus non-resident fathers. While resident fathers experience a trade-off between their time in the labor market and their time directly involved with children, non-resident fathers' contributions appear to 'go together' such that financial capabilities and contributions serve to increase other aspects of involvement. Given the low economic resources of many non-resident fathers, this circumstance may create challenges for fathers to remain actively involved in their children's lives with respect to both money and time.

REFERENCES

Allen, Sarah M. and Alan J. Hawkins. 1999. “Maternal Gatekeeping: Mothers’ Beliefs and Behaviors That Inhibit Greater Involvement in Family Work.” *Journal of Marriage and Family* 61:199–212.

Amato, Paul. 1998. “More than Money? Men’s Contributions to Their Children’s Lives.” Pp. 241–278 in *Men in Families: When Do They Get Involved? What Difference Does It Make?*, edited by A. Booth and A. C. Crouter. Mahwah, NJ: Lawrence Erlbaum.

Amato, Paul R. 2000. “The Consequences of Divorce for Adults and Children.” *Journal of Marriage and Family* 62:1269–1287.

Amato, Paul R. and Joan G. Gilbreth. 1999. “Nonresident Fathers and Children’s Well-Being: A Meta-Analysis.” *Journal of Marriage and the Family* 61:557–573.

Amato, Paul R. and Fernando Rivera. 1999. “Paternal Involvement and Children’s Behavior Problems.” *Journal of Marriage and the Family* 61:375–384.

Baumrind, Diana. 1966. “Effects of Authoritative Parental Control on Child Behavior.” *Child Development* 37:887–907.

————. 1986. “Authoritarian versus Authoritative Parental Control.” *Adolescence* 3:255–272.

Brown, Patricia and Steven T. Cook. 2011. “Children’s Placement Arrangements in Divorce and Paternity Cases in Wisconsin.” Paper prepared under the Child Support Research Agreement between the Wisconsin Department of Children and Families and the Institute for Research on Poverty.

Cabrera, Natasha J., Catherine S. Tamis-LeMonda, Robert H. Bradley, Sandra L. Hofferth, and Michael E. Lamb. 2000. “Fatherhood in the Twenty-First Century.” *Child Development* 71:127–136.

Cancian, Maria and Daniel R. Meyer. 1998. “Who Gets Custody?” *Demography* 35:147–157.

Christiansen, Shawn L. and Rob Palkovitz. 2001. “Why the “Good Provider” Role Still Matters: Providing as a Form of Paternal Involvement.” *Journal of Family Issues* 22:84–106.

Coley, Rebekah Levine and J. E. Morris. 2002. “Comparing Father and Mother Reports of Father Involvement among Low-Income Minority Fathers.” *Journal of Marriage and Family* 64:982–997.

Coltrane, Scott 1996. *Family Man: Fatherhood, Housework, and Gender Equity*. New York: Oxford University Press.

Duncan, Greg J. and Jeanne Brooks-Gunn. 1997. “The Consequences of Growing Up Poor.” New York: Russell Sage Foundation.

Edin, Kathryn. 2000a. “Few Good Men: Why Poor Mothers Don’t Marry or Remarry.” *The American Prospect* Jan.3:26–31.

————. 2000b. “What Do Low-Income Single Mothers Say about Marriage?” *Social Problems* 47:112–133.

Eggebeen, David J. 2002. “The Changing Course of Fatherhood: Men’s Experiences with Children in Demographic Perspective.” *Journal of Family Issues* 23:486–506.

Furstenberg, Frank F. and Andrew Cherlin. 1991. *Divided Families: What Happens to Children When Parents Part*. Cambridge: Harvard University Press.

Furstenberg, Frank F., Jr. 1988. “Good Dads—Bad Dads: Two Faces of Fatherhood.” Pp. 193–209 in *The Changing American Family and Public Policy*, edited by A. J. Cherlin. Washington, D.C.: The Urban Institute.

Garfinkel, Irwin, Sara S. McLanahan, and Thomas L. Hanson. 1998. “A Patchwork Portrait of Nonresident Fathers.” in *Fathers under Fire: The Revolution in Child Support Enforcement*, edited by I. Garfinkel, S. S. McLanahan, D. R. Meyer, and J. A. Seltzer. New York: Russell Sage Foundation.

Garfinkel, Irwin, Daniel R. Meyer, and Sara S. McLanahan. 1998. “A Brief History of Child Support Policies in the United States.” in *Fathers under Fire: The Revolution in Child Support Enforcement*, edited by I. Garfinkel, S. S. McLanahan, D. R. Meyer, and J. A. Seltzer. New York: Russell Sage Foundation.

Greene, Angela Dungee and Kristin Anderson Moore. 2000. “Nonresident Father Involvement and Child Well-Being Among Young Children in Families on Welfare.” *Marriage & Family Review* 29:159–180.

Greene, William H. 2003. *Econometric Analysis*. Upper Saddle River, NJ: Prentice Hall.

Harris, Kathleen Mullan, Frank F. Furstenberg, Jr., and Jeremy K. Marmer. 1998. “Paternal Involvement with Adolescents in Intact Families: The Influence of Fathers over the Life Course.” *Demography* 35:201–216.

Hochschild, Arlie Russell. 1988. *The Second Shift*. New York: Penguin.

Johnson, E., A. Levine, and F. Doolittle. 1999. *Fathers’ Fair Share: Helping Poor Men Manage Child Support and Fatherhood*. New York: Russell Sage Foundation.

Knoester, Chris and David J. Eggebeen. 2006. “The Effects of the Transition to Parenthood and Subsequent Children on Men’s Well-Being and Social Participation.” *Journal of Family Issues* 27:1532–1560.

Lamb, Michael E. 1986. *The Fathers’ Role: Applied Perspectives*. New York: Wiley.

————. 2010. *The Role of the Father in Child Development*. New York: John Wiley & Sons, Inc.

Lamb, Michael E., Joseph H. Pleck, Eric L. Charnov, and James A. Levine. 1985. “Paternal Behavior in Humans.” *American Zoologist* 25:883–894.

LaRossa, Ralph. 1988. “Fatherhood and Social Change.” *Family Relations* 37:451–457.

Lerman, Robert and Elaine Sorenson. 2000. “Father Involvement with Their Nonmarital Children: Patterns, Determinants, and Effects on Their Earnings.” *Marriage and Family Review* 29:137–158.

Maccoby, Eleanor E. and J. A. Martin. 1983. “Socialization in the Context of the Family: Parent-Child Interaction.” Pp. 1–101 in *Handbook of Child Psychology*, vol. 4, edited by E. M. Hetherington. New York: Wiley.

Magnuson, Katherine and Elizabeth Votruba-Drzal. 2009. “Enduring Influences of Poverty.” in *Changing Poverty, Changing Policies*, edited by M. Cancian and S. Danziger. New York: Russell Sage.

Marsiglio, William, Paul Amato, Randal D. Day, and Michael E. Lamb. 2000. “Scholarship on Fatherhood in the 1990s and beyond.” *Journal of Marriage and the Family* 62:1173–1191.

McLanahan, Sara. 2004. “Fragile Families and the Marriage Agenda.” Pp. 1–22 in *Fragile Families and the Marriage Agenda*, edited by L. Kowaleski-Jones and N. Wolfinger. New York: Springer.

————. 2011. “Family Instability and Complexity after a Nonmarital Birth: Outcomes for Children in Fragile Families “ Pp. 108–133 in *Social Class and Changing Families in an Unequal America*, edited by M. J. Carlson and P. England. Stanford: Stanford University Press.

Nelson, Timothy J. 2004. “Low-Income Fathers.” *Annual Review of Sociology* 30:427–451.

Nepomnyaschy, Lenna. 2007. “Child Support and Father-Child Contact: Testing Reciprocal Pathways.” *Demography* 44:93–112.

Nepomnyaschy, Lenna and Irwin Garfinkel. 2008. “Child Support, Fatherhood, and Marriage: Findings from the First Five Years of the Fragile Families and Child Wellbeing Study.” *Asian Social Work and Policy Review* 1:1–20.

————. 2010. “Child Support Enforcement and Fathers’ Contributions to Their Nonmarital Children.” *Social Service Review* 84:341–380.

Palkovitz, Rob. 2002. “Involved Fathering and Child Development: Advancing Our Understanding of Good Fathering.” Pp. 33–64 in *Handbook of Father Involvement*, edited by C. S. Tamis-LeMonda and N. J. Cabrera. Mahwah, NJ: Erlbaum.

Ross, Catherine E. and John Mirowsky. 1984. “Components of Depressed Mood in Married Men and Women: The Center for Epidemiologic Studies’ Depression Scale.” *American Journal of Epidemiology* 119:997–1004.

Seltzer, Judith A. 1991. “Relationships between Fathers and Children Who Live Apart: The Father’s Role after Separation.” *Journal of Marriage and the Family* 53:79–101.

Seltzer, Judith A. and Yvonne Brandreth. 1995. “What Fathers Say about Involvement with Children after Separation.” Pp. 166–192 in *Fatherhood: Contemporary Theory, Research and Social Policy*, edited by W. Marsiglio. Thousand Oaks, CA: Sage Publications.

Seltzer, Judith A., Sara S. McLanahan, and Thomas L. Hanson. 1998. “Will Child Support Enforcement Increase Father-Child Contact and Parental Conflict after Separation?” Pp. 157–190 in *Fathers under Fire: The Revolution in Child Support Enforcement*, edited by I. Garfinkel, S. S. McLanahan, D. R. Meyer, and J. A. Seltzer. New York: Russell Sage Foundation.

Seltzer, Judith A., Nora Cate Schaeffer, and Hong-Wen Charng. 1989. “Family Ties after Divorce: The Relationship between Visiting and Paying Child Support.” *Journal of Marriage and the Family* 51:1013–1031.

Snijders, Tom A.B. 2005. “Fixed and Random Effects.” Pp. 664–665 in *Encyclopedia of Statistics in Behavioral Science*, vol. 2, edited by B. S. Everitt and D. C. Howell. Chicester: Wiley.

Tach, Laura, Ronald Mincy, and Kathryn Edin. 2010. “Parenting as a Package Deal: Relationships, Fertility, and Nonresident Father Involvement among Unmarried Parents.” *Demography* 47:181–204.

Thomson, Elizabeth, Thomas L. Hanson, and Sara S. McLanahan. 1994. “Family Structure and Child Well-Being: Economic Resources vs. Parental Behaviors.” *Social Forces* 73:221–242.

Townsend, Nicholas W. 2002. *The Package Deal: Marriage, Work and Fatherhood in Men’s Lives*. Philadelphia: Temple University Press.

U.S. Census Bureau. 2010. “Current Population Survey, 2009 Annual Social and Economic Supplement.” (Internet release date: January 2010).

Weiss, Yoram and Robert J. Willis. 1985. “Children as Collective Goods and Divorce Settlements.” *Journal of Labor Economics* 3:268–292.

Wilson, William J. 1987. *The Truly Disadvantaged: The Inner City, the Underclass, and Public Policy*. Chicago: University of Chicago Press.