# How Much In-Kind Support Do Low-Income Nonresident Fathers Provide? A Mixed-Method Analysis 

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#### Abstract

Past child support research has largely focused on cash payments made through the courts (formal support) or given directly to the mother (informal support), almost to the exclusion of a third type: non-cash goods (in-kind support). Drawing on repeated, semistructured interviews with nearly 400 low-income noncustodial fathers, the authors found that in-kind support constitutes about one quarter of total support. Children in receipt of some in-kind support receive, on average, $\$ 60$ per month worth of goods. Multilevel regression analyses demonstrated that children who are younger and have more hours of visitation, as well as those whose father has a high school education and no current substance abuse problem, receive in-kind support of greater value. Yet children whose fathers lack stable employment, or are Black, receive a greater proportion of their total support in kind. A subsequent qualitative analysis revealed that fathers' logic for providing in-kind support is primarily relational, and not financial.


## Keywords

child support; family policy—child-related; low-income families; noncustodial parents

A central goal of child support policy is to reduce child poverty and its adverse effects-a goal that is shared with many social programs (Meyers, Gornick, \& Peck, 2001). Despite these priorities, fewer than half of children eligible for child support receive full payment, and many receive none (Grall, 2013). In response, both the federal government and states have stepped up their efforts by enabling and easing in-hospital and voluntary paternity establishment (a necessary precondition for a child support award), enhancing enforcement tools both within and across states, and increasing sanctions for nonpayment. Unfortunately, these efforts have yielded little in additional child support award payments (Case, Lin, \& McLanahan, 2003; Hanson, Garfinkel, McLanahan, \& Miller, 1996).

[^0]To date however, assessments of nonresident fathers' child support contributions have largely considered two forms of support: (a) formal (cash) support paid through the court system and (b) informal cash payments made directly to the mother. Yet both qualitative and quantitative research provide strong evidence that an alternate form, in-kind supportmeaning non-cash goods purchased by the father (e.g., diapers, clothing, food, and gifts) or services (e.g., as child care) that the father pays for directly-is relatively common.

Despite this fact, population-based surveys have yet to track the level, or total value, of inkind support, although some have begun to track its prevalence. This poses several limitations. Reliance on a measure of any (vs. no) in-kind support necessarily equates fathers who provide one item per year with those who provide multiple in-kind goods on a regular basis. Each scenario likely has distinct implications for children given that higher levels of child support and greater father-child involvement are generally advantageous for nonresident children (Amato \& Gilbreth, 1999). More important, without this information we have no means of knowing whether in-kind goods constitute a substantial or nontrivial amount. If these are substantial, then this would reinforce past recommendations for the child support system to recognize informal or in-kind support in some way (Waller \& Plotnick, 2001). Identifying the total value of in-kind support—and, more specifically, the total value of certain goods provided-would offer valuable insight into this question. Neither do we have a sense of the total amount of support provided to nonresident children from formal, informal, and in-kind sources. This information would be useful to ascertain whether and how in-kind support may further alleviate child poverty, above and beyond cash support, thereby reaching the goal of child support policy.

Detailed information about in-kind support would also grant new insights into two important groups: (a) low-income parents who avoid the formal system and (b) nonresident fathers who are labeled "deadbeat dads." Because states can keep most or all of Temporary Assistance for Needy Families (TANF) recipients' child support payments, low-income mothers drawing TANF stand to gain more economically by engaging in informal agreements with the father (Edin, 1995; Garfinkel, Meyer, \& McLanahan, 1998). Knowing the total value of in-kind goods, along with the level of informal cash, would reveal new knowledge as to the full extent of fathers' support. This is particularly true for the "deadbeat dads" who may only give in-kind support and therefore whose contributions remain invisible to courts and policymakers.

Because we have no sense of the total value of goods provided in kind, we also do not fully understand what barriers may prevent nonresident fathers from giving higher or lower levels in kind. For example, fathers' human capital and employment stability are positively associated with the level of formal and informal support. The extent to which these same associations would emerge for the level of in-kind support remains uncertain. Knowing more about these barriers would extend our understanding of the ways in which local conditions, social structures, and relational factors constrain the full value of nonresident fathers' child support payments.

Finally, we do not fully understand fathers' rationale for giving in kind, or what motivations undergird in-kind payment. Past work suggests that, for a variety of reasons we discuss later,
low-income parents may avoid engaging with the formal support system whenever possible. But distinct motivations may fuel the provision of informal cash versus in-kind goods. Deepening our understanding of these issues will clarify child support patterns more broadly.

In this study we drew on unique data that track the value of formal, informal, and in-kind support among a racially and ethnically heterogeneous sample of 367 low-income noncustodial fathers in three cities (Austin, TX; Philadelphia, PA; and Charleston, SC), from whom both quantitative and qualitative information was obtained over the course of several semistructured interviews. For the first time, this study estimated the total value of all child support provided-including the total value of in-kind support-and examined child and father covariates associated with the level of in-kind support. We then capitalized on rich description provided by the qualitative data to explore why in-kind support is so prevalent and what motivates fathers to give in kind. We conclude by discussing implications for child support research and policy.

## Background

## Prevalence of, and Reliance On, In-Kind Support

The first area of inquiry in this study was to assess the total value of in-kind support. Large national surveys (the Current Population Survey [CPS], Panel Study of Income DynamicsChild Support Supplement [PSID-CSS]) suggest that in-kind support is prevalent at the population level: Half of custodial parents who report some type of child support agreement, whether formal or informal, receive in-kind support (Garasky, Stewart, Gundersen, \& Lohman, 2010; Grall, 2013; Sorensen, 1997). Among low-income families, the prevalence of in-kind support is quite similar. Forty-seven percent of low-income households in the PSID-CSS report in-kind support (Garasky et al., 2010). Forty-three percent of unmarried mothers in the Fragile Families and Child Wellbeing Study (hereafter Fragile Families; www.fragilefamilies.princeton.edu/), a birth cohort survey with a large oversample of nonmarital births, who are predominately low income, received in-kind contributions from the father of the focal child when that child was 5 years old (Nepomnyaschy \& Garfinkel, 2007).

Not only is in-kind support common, but it may also be a preferred mode of support among low-income families. Analyses of Fragile Families data show that in-kind support is more frequently offered ( $43 \%-47 \%$ ) than formal ( $27 \%$ ) or informal ( $32 \%$ ) support (Nepomnyaschy \& Garfinkel, 2007). Conversely, in-kind support is offered less often than cash at the population level: Nearly three quarters of custodial parents reporting a child support agreement receive formal or informal support, whereas half receive in-kind support (Garasky et al., 2010; Grall, 2013; Sorensen, 1997). This may suggest a greater degree of reliance on in-kind support among low-income families. We tested this hypothesis by assessing the proportion of total support given in kind (in kind/formal + informal + in kind), to approximate reliance on in-kind support. Support of this hypothesis would emerge if the least advantaged fathers in our study relied more heavily on the provision of in-kind goods, relative to more advantaged fathers.

The value of in-kind support, given over a finite period of time, depends on the number and types of goods provided and the frequency with which the goods are given. Evidence from the CPS and the PSID suggest gifts are the most commonly provided in-kind good, followed by clothes, diapers, shoes, and food or groceries (Garasky et al., 2010; Grall, 2013). Because these items can be relatively expensive, we hypothesized that the total value of in-kind support will be nontrivial.

## Conceptual Framework of the Factors Associated With the Level of In-Kind Support

The second area of inquiry in this study was to identify father- and child-level factors associated with the level of in-kind support. Although we have no direct evidence about the characteristics of those who provide in-kind goods of greater or lesser value, we drew on broader theoretical and empirical child support literature to guide the development of study hypotheses.

Previous theoretical conceptualizations have proposed that a complex set of factorseconomic, relational, and social/institutional—shape preferences for paying but also constrain fathers' ability to translate preferences into payment. Perhaps the most central factor in past conceptualizations is nonresident fathers' ability to pay, which is reflected by father's human capital and employment. Poorly educated men often face structural barriers to securing and maintaining well-paying, stable employment, constraining both their ability to provide any form of child support as well as the level of payment they can consistently provide (Bartfeld, 2003; Doherty, Kouneski, \& Erickson, 1998). Indeed, among low-income populations, paternal employment, maternal home ownership (vs. renting), and the mother not drawing TANF are each associated with any (vs. no) in-kind support (Garasky et al., 2010; Nepomnyaschy \& Garfinkel, 2010). Thus, we hypothesized father's economic ability and employment stability will be positively associated with the level of in-kind support. Conversely, we expected that the least economically advantaged men will rely more so on in-kind provision than cash support.

Relational factors also play a key role. Fathers of young children are more likely to be in a romantic relationship with the mother (McLanahan, 2009). After a breakup, parents' relationships become less cooperative over time (Nepomnyaschy \& Garfinkel, 2010), which presumably encourages the mother to turn to the formal system rather than settle for an informal agreement (Bartfeld, 2003). Thus, we hypothesized that fathers who are in a romantic relationship with the mother will contribute in-kind support of greater value. Similarly, we suspected that younger children will receive higher levels of in-kind support, reflecting, at least in part, mother-father relationship status. It may also be the case that inkind goods provided uniquely to young children (diapers, formula) are relatively costly compared with items provided to children of any age (food, clothes, shoes, gifts), which would further support an inverse association between child age and level of in-kind. Likewise, we expect that nonresident fathers who visit more will contribute higher levels of in-kind support, reflecting not only the strength of the father-child bond but also how cooperative the parents are, given that arranging visitation usually requires some level of parental contact (Manning \& Smock, 2000). Alternatively, fathers of older children may rely more heavily on in-kind support. As parents' relationships become more distant, many
fathers increasingly mistrust mothers and provide in-kind goods directly to, or on behalf of, the child, in place of cash given directly to the mother (Achatz \& MacAllum, 1994).

Other relational factors may also be important. Higher fertility can lead to scarce resources being split many ways, and multiple-partner fertility can lead to weaker ties with both nonresident children and former partners (Bartfeld, 2003; Furstenberg, 1992; Manning \& Smock, 2000). Thus, we expected to find that fathers with multiple children and those who have children with more than one partner will pay lower levels of in-kind support. Each of these relational hypotheses is consistent with past research showing that younger child age, father-child visitation, closer geographic proximity of the nonresident father to the child, and the absence of multiple-partner fertility are associated with any (vs. no) in-kind support (Garasky et al., 2010; Nepomnyaschy \& Garfinkel, 2010).

Finally, social and institutional factors influence child support. Social norms for child support provision, as well as level of trust in court systems, vary by race, with Black fathers exhibiting less trust in the courts than their White counterparts (Bartfeld, 2003). Thus, we suspected that Black fathers will rely more heavily on in-kind support and contribute higher levels of it. Also, we expected that previously incarcerated fathers will provide lower levels of in-kind support given that, upon release, they often face limited employment prospects (Pearson, 2004) and have substantial amounts of child support arrears (given that arrears continue to accumulate during spells in prison or jail). These hypotheses are consistent with past research showing that fathers' Black (vs. White) race and lack of previous incarceration are associated with any (vs. no) in-kind support (Garasky et al., 2010; Nepomnyaschy \& Garfinkel, 2010).

No work of which we know has addressed the relationship between fathers' substance abuse and in-kind support, although we hypothesized that substance abuse will be inversely related to the level of in-kind support, on the basis of evidence showing a similar association with formal and informal support (Garfinkel, McLanahan, \& Hanson, 1998; Nepomnyaschy \& Garfinkel, 2010). Recent qualitative work also shows that addicted fathers may eschew any involvement with their children because of the shame they feel over their condition (Edin \& Nelson, 2013); this, in turn, may decrease the level of all forms of child support.

## Understanding Fathers' Rationale for Providing In-Kind Support

The third and final area of inquiry in this study was to understand fathers' rationale for giving in kind. Payment through the formal system is often viewed as a less attractive option for fathers and mothers who are able to craft less formal, cooperative arrangements that involve some mixture of cash and in-kind goods and services. For such parents, many of whom are low income, formal support may be viewed as a last resort when cooperative agreements break down (Edin, 1995; Edin \& Lein, 1997; Garasky et al., 2007, 2010; Nepomnyaschy \& Garfinkel, 2010; Waller \& Plotnick, 2001). Fathers who fear the mother will spend informal cash on herself rather than on the child may prefer to offer specific goods instead (Achatz \& MacAllum, 1994; Edin, 1995; Waller \& Plotnick, 2001); thus, inkind support may be preferred over informal support in some cases. Furthermore, qualitative evidence suggests that some fathers may prefer to give in-kind support because these goods are more visible to children, relative to cash given to the mother of which the child may or
may not be aware (Achatz \& MacAllum, 1994). (Note that these agreements are distinct from parenting plans, a tool used by most states to establish visitation and financial agreements between divorced couples with children.)

This provides some preliminary clues to understanding why some fathers may develop preferences for in-kind support. More work is needed to systematically understand the motivations that drive the level of in-kind support provision above and beyond the threshold of providing any/none and how fathers may successfully enact support preferences given the economic, relational, and social/institutional constraints previously described. Understanding more about these motivations may further illuminate the extent to which inkind support may or may not alleviate child poverty. For example, some in-kind items that fathers provide, such as designer shoes or clothing, may do more to enhance the father's status in the community (if his child is seen wearing name brand items) than to benefit the child (Edin, 1995; Waller \& Plotnick, 2001).

In sum, as the evidence reviewed here should make clear, the extant literature does not provide a full picture of the role of in-kind support in the overall package of support nonresident fathers provide for their children.

## Method

## Data

Data were drawn from a large-scale multi-city qualitative data collection effort that gathered repeated, systematic in-depth interviews with a nonrandom but racially and ethnically heterogeneous group of 367 lower income noncustodial fathers interviewed between 1996 and 2003 in three cities: Austin, TX; Philadelphia, PA; and Charleston, SC. (Lower income refers to individuals with formal-sector earnings over the 6 months prior to initial interview totaling less than the poverty line for a family of four in that year.) These sites were chosen because they varied in two important ways: (a) labor market strength and (b) child support stringency. Austin had a strong economy but a weak child support system, whereas in Philadelphia child support enforcement was strong but the labor market was weak. Charleston's child support regime is arguably among the most stringent in the nation (noncustodial parents are routinely jailed for nonpayment) and had a strong labor market. Although not nationally representative, these cities represent some of the range of economic and policy climates within which low-income fathers must operate.

Low-income fathers are notoriously hard to sample; a large percentage are missed by even the most carefully conducted surveys. This is both because such men are missed in large numbers (presumably because they are not stably attached to households or are in jail or prison) and because many do not admit to survey researchers that they have fathered children (Garfinkel, McLanahan, \& Hanson, 1998). Thus, rather than attempt a random sample, we selected census tract clusters within each city where at least $20 \%$ of individuals were living in poverty. We then worked through local intermediaries (nonprofits, grassroots community organizations, local employers) to identify study participants, but we included no more than five participants through any given source. Because many fathers are not connected to local institutions, we sampled in two additional ways. First, we asked each
father to refer us to one or two other fathers they thought we would not find via local intermediaries. Second, we walked the major thoroughfares of each area in varied intervals and approached men directly, asking them if they were noncustodial parents and offering them the chance to participate. In each city, our goal was to recruit 50 men of each race/ ethnicity (Blacks, Whites, and Latinos in Philadelphia and Austin; Blacks and Whites in Charleston) and to recruit even numbers of men age 30 and under and over 30 within each study cell (i.e., in each city and racial/ethnic group). The latter criterion ensured that we captured the experiences of fathers across the life course. By and large, we met these targets. (See Edin and Nelson [2013] and Augustine, Nelson, and Edin [2009] for more details on sampling.)

Each interview typically lasted between 90 minutes and 4 hours, resulting in extensive dialogue spanning numerous dimensions of the fathers' lives, including their childhood experiences, romantic relationship history, employment history, expenses and income, criminal history, current relationships with children, past and current relationships with mothers of their children, visitation, and child support. Most fathers were interviewed at least two times. One of the principal investigators (the second author) conducted almost half of the interviews and intensively trained interviewers from a variety of racial and ethnic backgrounds to interview the remainder of the sample.

There are two main advantages to these data over other data sets that capture in-kind contributions. First, the intensive, repeated interviewing offered a sufficiently detailed accounting of in-kind support provided to each noncustodial child so as to facilitate estimates of the cash value of in-kind support. No other data source we know of has this feature. Second, these data were coupled with rich qualitative narratives revealing the logic fathers use when deciding how to deploy their resources on behalf of their children, as well as the symbolic value of in-kind contributions. This symbolic value may have the power to influence future behavior, especially with regard to child support and father involvement.

In this study, we limited the analytic sample to fathers who reported monthly budget information ( $n=339$ ), had at least one child with whom they do not live ( $n=327$ ), and had a child between the ages of 6 months and 18 years $(n=313)$. (Fathers of children less than 6 months old were not included because their patterns of support and visitation were not observed across the entire sample period of 6 months prior to initial interview. Those with children between 18 and 19 were not included because they may or may not have been subject to child support requirements depending on state rules, high school enrollment status, and individual support award agreements.) The analytic sample included 313 fathers; these men reported a total of 522 children. (As we describe below, much of our analyses examined a subset of children receiving at least some in-kind support from the father: 164 fathers and 238 children.)

## Variables

Formal, informal, and in-kind support—Similar to past research, we defined formal child support as monies paid through the formal child support enforcement system and informal support as cash given directly to the mother (or child). In-kind support includes non-cash contributions made to the child's household or given directly to the child.

Consistent with the set of items commonly defined as in-kind goods (Garasky et al., 2010; Grall, 2013; Waller \& Plotnick, 2001), interviewers asked fathers to detail all in-kind contributions offered over the past 6 months, beginning with an open-ended set of questions regarding in-kind support and then probing systematically for specific contributions of the following: baby products (diapers, formula, strollers, cribs, etc.), clothing, shoes, school expenses (school trips, school uniforms, school supplies, after-school program costs), gifts (Christmas, birthday, other), food, child care tuition expenses, and "other" expenses (medical expenditures, miscellaneous items).

Interviewers asked fathers to estimate the amount they had expended on each item and how often they had provided each item over the study period. If conflicting information was offered, the interviewer was often able to clarify the information in the follow-up interviews. We created a separate quantitative database containing this information, along with other covariates, for our analysis. Fathers were able to recall this information fairly easily, perhaps because their own budgets were tight and even small contributions often required some level of sacrifice. In instances where fathers were not able to recall the cost of an item (e.g., a package of diapers), we estimated the value using prices reported by other fathers in the study for these same items. For example, on average, fathers who were able to recall a specific amount said they paid $\$ 17$ for a package of disposable diapers.

Before continuing, we should note that by assigning a dollar value to each of these items we are assuming that in-kind support is commensurate with formal and informal cash support; this presupposes that in-kind contributions are as valuable to the mother or child as is cash paid through the formal system or informal cash support. As noted above, this may not always be the case. For example, a father who buys his 5-year-old son clothing and shoes just before he begins kindergarten in the fall likely relieves the financial burden of the mother, who would otherwise have to purchase these items. However, a father who buys his 2-year old daughter an expensive pair of tennis shoes when the mother would have purchased the child a discount pair does less to relieve her financial burden and presumably provides less to benefit the child. Poor communication between the father and the mother about what the child has and needs may reduce commensurability as well. For example, one father in our sample purchased his daughter a Barbie dream house only to learn that the child had stopped playing with Barbie dolls several years ago. Because we had only fathers' and not mothers' reports, we were not able to fully gauge commensurability, and we acknowledge this as a shortcoming of our study.

Each type of support was measured as a binary outcome, whereby $0=$ no support and $1=$ providing at least some of this type of support, and as a continuous measure representing the estimated cash value. We summed the value of formal, informal, and in-kind support to create a measure of total support. We also examined the proportion of total support provided in kind to approximate fathers' reliance on in-kind support as a central means of providing for their children. Examining this proportion allowed us to approximate any reliance on inkind support above and beyond ability to pay.

Population-based surveys ask respondents to report child support provided (or received) over the past year and then analyze a monthly average. Similarly, we asked fathers to report
support (and income) over the past 6 months and then analyzed the monthly average. (Averaging over several months is useful to smooth the income and expense volatility common among low-income populations; Edin \& Lein, 1997). Tracking a shorter period of time (the past 6 months instead of a full year) may also reduce measurement error and recall bias relative to past research, but it does not always account for annual events, such as Christmas or a birthday. For that reason, we asked fathers specifically about annual events and then divided these expenses in half to provide a more accurate 6-month measure. We tracked only contributions made to nonresident children and report figures per child (as many fathers pay support for more than one child).

Child- and father-specific covariates-Child-specific covariates included hours of visitation per month between the noncustodial father and his child (averaged across the 6month study period), relationship between the father and each of his nonresident children's mothers (whether or not they were currently romantically involved), and child age. Fatherspecific covariates included several indicators of socioeconomic status: whether he had a high school diploma or GED; whether he was stably employed over the 6-month study period; and his average monthly earnings, including income earned in both the formal and informal sectors. Most surveys capture only formal-sector income. We also included several family characteristics (number of nonresident children, presence or absence of multiplepartner fertility), risky behaviors (current substance abuse, a criminal record), and sociodemographic characteristics (Black vs. non-Black race, age at interview, city of residence). (We were unable to explore differences across Hispanic, Black, and White fathers because Hispanic fathers were not interviewed in Charleston (there were too few Hispanics in that location at that time). All variables are further described in Table 1.

## Analytic Strategy

First, we examined descriptive statistics of the subsample of in-kind supporters to ascertain the prevalence and value of in-kind support, as well as specific in-kind items holding the greatest value. Second, we used one-way analyses of variance to examine how level of inkind support varies by category of study covariates. Third, we analyzed what child- and father-level characteristics were associated with higher levels of in-kind support in a multivariate context, both absolute and relative to the total amount of child support provided. Because we included information on multiple nonresident children for each father, in this part of the analysis we used hierarchical linear regression in HLM 7.0 based on the following equations (for child $i$ nested within father $j$ ):

$$
\begin{array}{cc}
\text { Level 1: } & Y_{\mathrm{ij}}=\beta_{0 j}+\sum \beta_{1-3 j} X_{\mathrm{ij}}+r_{\mathrm{ij}} \\
\text { Level 2: } & \beta_{0 j}=\gamma_{00}+\gamma_{01-11}+\mu_{0 j} \\
& \beta_{1 j}=\gamma_{10} \ldots \beta_{3 j}=\gamma_{30},
\end{array}
$$

where $\beta_{0 j}$ indicates the sum of the father-level intercept $\left(\gamma_{00}\right)$, all father-level characteristics ( $\gamma_{01-11}$ ), and a father-specific residual $\left(\mu_{0 j}\right) ; \Sigma \beta_{1-3 j} X_{\mathrm{ij}}$ indicates the sum of all child-level characteristics; and $r_{\mathrm{ij}}$ indicates a child-specific residual. Fathers within each of the three cities may share similarities that are unobserved, thereby producing correlated error terms
across fathers within cities. Estimating a three-level model can address this problem, but this is less helpful when the number of Level 3 units is small (Raudenbush \& Bryk, 2001). Thus, we present estimates from two-level models with robust standard errors, controlling for city residence as a father-level characteristic.

Fourth, we performed an inductive qualitative analysis to explore the findings that emerged from the quantitative analysis: specifically, why certain characteristics were associated with the level of in-kind support and why some fathers rely more heavily on in-kind support. Whereas some studies can only speculate on why specific quantitative findings emerge, we were able to directly explore the factors that may underlie these results and can offer hypotheses based on close, in-depth analysis of our respondents' narratives about the mechanisms and processes that may be at work. Using ATLAS.ti software, full interview transcripts were coded by topic by a team of trained coders who were closely monitored (one in three transcripts drawn at random were recoded by a coding supervisor, who then worked with each coder to correct errors and ensure consistency). Once these data were sorted into several larger codes (e.g., topics or themes), all narrative data relating to the rationale underlying patterns of support were analyzed inductively to identify common subthemes (Corbin \& Strauss, 1990).

## Sample Comparisons

To assess similarities and differences between fathers in our data and nonresident fathers nationally, we drew comparisons between our sample and a subsample of low-income, nonresident fathers $(N=133)$ from the National Survey of Family Growth (NSFG; http:// www.cdc.gov/nchs/nsfg.htm) Cycle 6-data that contain a nationally representative sample of households with an adult ages $15-44$, collected in 2002 . We defined NSFG fathers as low income if they reported an annual household income of less than $\$ 15,000$. (Our sample was limited to fathers earning less than the poverty line for a family of four in the interview year (roughly $\$ 16,000$ ) in the formal economy.)

We note a few important points here (full results available upon request). Fathers in our sample were very similar to low-income NSFG fathers with respect to age, age at first birth, and rates of employment. Our respondents reported lower rates of high school completion than fathers in the NSFG subsample ( $36 \%$ and $57 \%$, respectively) and slightly higher monthly incomes (\$888 vs. \$729). (This latter finding likely reflects the fact that our measure included income earned in both the formal and informal labor markets.) Fathers in our study reported lower rates of providing any cash support (formal or informal), although the rates we observed are very similar to those derived from the Fragile Families survey (Nepomnyaschy \& Garfinkel, 2007). The amount of formal support reported in both sources was comparable. NSFG fathers who contributed at least some support reported a median contribution of $\$ 1,000-\$ 3,000$ in formal support over the 12 months prior to the interview. The corollary in our data (multiplying our monthly average by 12) suggests that fathers who paid at least some formal support paid a median of $\$ 1,500$ and an average of $\$ 1,628$. In sum, these comparisons suggest that our sample is analogous in many ways to low-income nonresident fathers nationally.

## Results

## Rate, Level, and Most Common Types of In-Kind Support

Nearly half ( $46 \%$ ) of all fathers in the analytic sample ( 313 fathers of 522 children) contributed in-kind support to a nonresident child over the study period; one quarter contributed formally ( $23 \%$ ) or informally ( $28 \%$; results not shown).

The first row of Table 2 shows the level of in-kind, formal, and informal support received for each nonresident child, as well as the proportion of total support provided in kind and the average value of each in-kind good. Among children who received any in-kind support ( $n=$ 238), the average value of the in-kind contribution was $\$ 60$ per month. Formal and informal support were of less value, on average: $\$ 53$ and $\$ 40$ per month, respectively. Taken together, clothing and shoes (\$19) and gifts (\$13) constituted just over half of the total value of in-kind goods, with food items (\$8), child care expenses (\$7), and baby products (\$6) making up most of the rest.

In supplementary analyses we examined the value of in-kind support provided by fathers who avoid cash payments altogether. This subgroup ( 66 dads of 95 children) paid $\$ 63$ per child per month. Second, these analyses identified the total value of support provided by fathers avoiding the formal system by paying informal and/or in-kind support ( 54 dads of 76 children): $\$ 175$ per child per month.

The remainder of the data in Table 2 compare each measure of support across various child and father characteristics. At the bivariate level, total monthly in-kind support differs by level of visitation: Fathers who did not visit their child contributed goods worth \$48, on average, to that child, whereas those who visited $10+$ hours per month offered in-kind goods worth nearly twice as much (\$84). The proportion of total support provided in kind was also highest among those who visited $10+$ hours $(44 \%)$. Among nonvisiting fathers, the value of in-kind goods stemmed mostly from clothes and shoes (\$20) and miscellaneous items (\$16), whereas the value of in-kind goods for fathers who visited 10+ hours were drawn from a wide variety of items: clothes and shoes (\$25), food (\$16), gifts (\$14), child care expenses (\$13), and baby products (\$10). It is interesting that fathers with intermediate levels of visitation (1-9 hours) contribute lower levels of in-kind support (\$35) than nonvisiting fathers. A number of nonvisitors faced geographical constraints but were nonetheless motivated to remain involved, and they demonstrated this through in-kind contributions. On the whole, we found evidence that visiting and paying in-kind support go together.

Total monthly in-kind support did not vary significantly by mother-father relationship status, but the percentage of total support given in kind did: Fathers who were romantically involved with the mother offered $52 \%$ of their total support from in-kind sources, relative to $36 \%$ among non-romantically involved fathers. The value of in-kind support varied by child age: On average, younger children received higher levels of in-kind support than older children ( $\$ 78$ for children under age 5 vs. $\$ 51$ for children ages $5-9$, and $\$ 41$ for children ages 10 and older). For children under 5, clothing and shoes (\$23), baby products (\$14), and child care expenses (\$13) accounted for most of the value of in-kind contributions. For older
children, clothing and shoes ( $\$ 21$ for children $5-9$, and $\$ 11$ for those 10 and older) and gifts (around $\$ 15$ for children in both older age categories) constituted most of the value.

In-kind support of greater value was observed among fathers with a high school diploma or GED and higher monthly earnings, relative to those who lacked such advantages. On the contrary, a lower proportion of total support offered in kind was observed among fathers with higher monthly earnings and stable employment. Clothing, shoes, and gifts constituted most of the value of these contributions across both advantaged and disadvantaged fathers.

Total in-kind support was lower among fathers with more nonresident children (\$49 among fathers with three or more nonresident children vs. $\$ 80$ among fathers with one nonresident child) and among fathers who exhibited multiple-partner fertility (\$49) relative to those who did not (\$64). Again, clothing, shoes, and gifts made up most of the value in all cases.

The value of in-kind support was lower among fathers age 30 or older and among those exhibiting risky behaviors-either current drug or alcohol abuse or a criminal record. The total value of in-kind support did not vary by race (Black vs. non-Black), but the proportion of total support offered in kind was higher among Black fathers (44\%) than non-Black fathers ( $35 \%$ ). Fathers who resided in Charleston-located in a state with more stringent child support enforcement policies compared to the other locations in this sample (Office of Child Support Enforcement, 2003)—provided higher levels of in-kind support than fathers in Philadelphia or Austin. This association may reflect mothers' leverage over nonresident fathers, which may be greater in a more stringent child support regime; that is, fathers may be more likely to give in-kind support in order to stave off the threat of a formal support order, which is more credible in a stringent regime (Edin, 1995).

In sum, Table 2 shows that the greatest value of in-kind support was observed among children under age 5 and children whose fathers visited 10+ hours per month, were more advantaged (had a high school diploma or GED, earned more), did not exhibit multiplepartner fertility, and did not engage in risky behaviors (no current substance abuse, no criminal record).

Analyses that examined the proportion of total support given in kind, however, showed a markedly different pattern of results. Here, on several critical measures, the men who were the most disadvantaged—without a steady job or with low earnings for example-offered a higher proportion of total support in kind, as did Black fathers.

## Child- and Father-Level Covariates of In-Kind Support Within a Multivariate Framework

The data in Table 3 examine these associations within a multivariate framework. Model 1 presents results from the regression model predicting total value of monthly in-kind support. The findings suggest that children who spend more hours visiting with their father, are younger in age, have a father who graduated from high school, and whose father is not abusing drugs or alcohol tend to receive higher levels of in-kind support. Each additional hour of visitation was associated with an increase of nearly $\$ 1$ of in-kind support per month ( $b=0.81, p<.01$ ), whereas each additional year of child age was associated with a decline of around $\$ 2(b=-2.03, p<.01)$.

Although these effects may seem small, consider the following example. On average, each child in this subsample spent 17 hours per month visiting with their father, with a standard deviation of 23 . Thus, a child who visited for 40 hours, which is equal to $1 S D$ above the average, received $\$ 32$ per month in kind $(0.81 \times 40)$, whereas a child who visited the average amount, 17 hours, received nearly $\$ 14$ per month $(0.81 \times 17)$. Rounded to the nearest dollar, this translates to a difference of $\$ 18$ per month, or $\$ 216$ per year, net of covariates.

Children whose father had a high school education or who were not abusing drugs or alcohol received an extra $\$ 38$ and $\$ 40$ per month (respectively), which is fairly substantial when compounded over the course of a given year: roughly $\$ 450$ annually. These contributions are especially valuable given the very low earnings of many of these children's mothers.

Model 2 presents results from the regression model predicting the proportion of total support given in kind. Younger children netted a smaller proportion of support in kind ( $b=-0.74, p$ $<.10$ ), but, consistent with the bivariate results, those whose fathers lacked stable employment (vs. have stable employment) and children of Black (versus non-Black) fathers received a larger proportion of total support through in-kind than other means. Children whose fathers did not have a steady job garnered 14 percentage points more of their total support in kind $(b=-13.82, p<.05)$ than their counterparts whose fathers were stably employed, and children of Black fathers garnered 12 percentage points more support through in-kind sources $(b=12.20, p<.10)$ than their White counterparts, all else equal. (Supplementary analyses replicated this model, controlling for the amount of formal and informal support received by children, but findings did not change.)

In sum, the multivariate analyses showed that younger children, those with more hours of visitation, and those whose fathers had more human capital, received higher levels of in-kind support. In addition, children of socioeconomically disadvantaged fathers, such as those without stable employment, and children of Black men, receive a greater proportion of total support in kind, suggesting that their fathers may rely more heavily on in-kind over other forms of support.

## In-Kind Support From a Qualitative Perspective

Why do many low-income fathers give in kind? Qualitative analysis of what men say about this issue points to one general conclusion: Overwhelmingly, fathers think of their contributions in relational, rather than financial, terms. In other words, they are less concerned about paying their fair share of the expenses the mother incurs for food, shelter, and other household needs and more concerned with the bond their contributions can forge with their noncustodial children. Given the fairly precarious economic situations of the men in this sample and other sources of instability of their lives, their primary concern in providing for their children is to repair, bolster, sustain, and ensure the future of their connections to their children. This fundamental priority shapes both the form of support they provide as well as the content of their in-kind contributions. This logic is in play from the time their children are babies but is especially evident during middle childhood and the adolescent years. Next, we provide evidence for this general conclusion while contextualizing in-kind trends related to relational factors (child age and visitation, which
are related to mother-father relationship status), economic ability (father's human capital and employment stability), and social/institutional factors (father's drug and alcohol abuse).

Relational factors-Fathers with very young children often took pride in assuming responsibility for providing specific items, usually diapers and formula. One young father noted,

I am in charge of the Pampers [and] the [formula not covered by the Women, Infants, and Children program]. With $\$ 100$ [per month] I could basically cover that. The Pampers are usually $\$ 17$ for forty-eight. The formula-the one with iron added, Enfamil-it depends on where you go, because if you go to the pharmacy it could be $\$ 5$ but if you go to the supermarket it could cost you like $\$ 3$. I usually get him six or seven of them [every] two weeks. He will drink them up.

The strong tendency of fathers with a very young child to assume responsibility for specific items a child clearly needs-and relatively expensive items from the mother's point of view -that are required on a daily basis may partially explain why younger children often receive greater amounts of in-kind support than older children do.

Often, diapers and formula were provided as a result of a mutual agreement made with the mother, but this also reflects widely held community norms about the items even very young or very disadvantaged fathers ought to provide at minimum. Supplying Pampers and formula can be an informal mechanism in low-income communities for claiming paternity of a child (Edin, 1995). The qualitative narratives in our study revealed that fathers of very young children were often performing for two distinct "audiences" when they shouldered the responsibility for what are arguably the two most basic items a baby could require. One audience is the couple's extended family and the community at large. A man who reliably provides Pampers and formula demonstrates to skeptical observers, who may question his willingness to assume his new responsibilities as a father, that he is determined to "do right" by his child.

The second audience is the child's mother, and this holds true regardless of whether they are together. If they are together, buying diapers and formula can function as down payment on the more generous financial contributions the father hopes to make when his economic circumstances improve. Fathers who are not romantically involved with the mother have additional motivation: They know full well that mothers can, and often do, act as powerful gatekeepers who determine if, when, and on what terms fathers can have contact with their child (Edin, Tach, \& Mincy, 2009; Tach, Mincy, \& Edin, 2010). But if fathers "come by" on a routine basis to deliver the goods on which mothers rely, they can purchase regular access to the child.

Fathers' logic alters somewhat as children age, as does their perceived audience when providing support. Relationships between unmarried parents seldom remain intact; most will fail by the time their child turns 5 (Bendheim-Thoman Center for Research on Child Wellbeing, 2007). Animosity in the aftermath of breakup can present a formidable barrier to visitation (in extreme cases, fathers said their child's mother took out restraining orders on them, or even moved abruptly without leaving a forwarding address). Yet by late elementary
school and into middle school the strength of the child's desire to see his or her father can play a key role in preserving or even reestablishing access. By the time children approach middle childhood, their preferences often count more in the mother's decisions regarding access, and these children are also less dependent on their mothers as a conduit for staying in touch with their fathers. At this age, children can make and receive phone calls and engage in other forms of communication, or even independently arrange visitation-sometimes behind the mother's back. A number of fathers reported that, to get around the gatekeeping of the mother, they met their children surreptitiously after school and treated them to a fast food meal before their children made their way home. Thus, in order to facilitate sustained contact, fathers often believe it is imperative to remain in their children's good graces.

Fathers of somewhat older children tend to place high value on providing food treats such as a trip to McDonald's, but also designer sneaks; expensive jeans; and special, sometimes costly, toys. From the mother's point of view, the value of these purchases is often less than their cost (Edin \& Kefalas, 2005). Yet in springing for such seemingly frivolous items, which are often beyond the mothers' means, fathers are intentionally seeking to score points with their child and not their child's mother. By purchasing the highly prized "Jordans" or other "extras" a child might desire, fathers often acknowledge that they are courting their children and explicitly attempting to forge a bond that is not contingent upon the mother's cooperation. To secure ongoing access, these fathers feel it is imperative to deploy their scarce resources to stoke their children's desires to spend time with them, regardless of the mother's desires. In-kind contributions can be repositories of paternal sentiment, and it is for this reason that the items selected are often highly visible, especially the expensive items of clothing that are favorite wardrobe items. These serve both as a frequent reminder to the child and a powerful symbol to the community at large of a father's provision and care.

One father who was living in a halfway house after his release from prison spent his meager resources to purchase a pair of $\$ 40$ Lugz boots for the 3-year-old son he had sired shortly before he was reincarcerated for a parole violation. The boy's mother deemed the gift frivolous, especially for a child whose feet were still growing so quickly, but the father saw it as an investment in his son's continuing affection and loyalty, a partial compensation for not being able to be part of the boy's life until relatively recently. Such assessments might not be too far off target: One father told us that he wrote his own father off for good over a bargain-basement pair of off-brand tennis shoes:

He tried to take me and my brother to go get us some sneakers, and he took us in JC Penney's somewhere in the basement, in the bargain section, and tried to get me and my brother some corny sneakers. I think they was like $\$ 11$ or something. And we let him get them for us but we ain't never wear them and I ain't mess with him after that. I ain't mess with him ever since that day.

Though many men made both cash and in-kind contributions, some explicitly resisted paying cash because they did not trust the mothers to spend the money on the children-a finding that has been documented in past work (Weiss \& Willis, 1993). One father said,

Let me tell you something: The average dollar that those females get does not go to that child....Where it's going is on their dresses. It's going on their jewelry, their
drinks, their habits and every damn thing else. The average dollar is not going on the child like it was supposed to.

Although we don't take accounts such as these at face value (this scenario is unlikely given the low earnings of most of the mothers; see Edin\& Kefalas, 2005), the fact that such fears are so commonly expressed is one marker of the paucity of trust between men and their expartners.

Even in cases where fathers feel their ex-partners can be trusted to spend the money wisely, they may fear that such contributions will earn them little or nothing in the eyes of their children; this is of special concern to the most economically disadvantaged men, who sometimes fear that their children will think less of them because of their lack of a steady job. Cash contributions to the mother may simply be absorbed into the overall household expenditures without a child's knowledge. Even if the mother does take pains to credit the father for the importance of his contribution to the household budget, the relational impact is unlikely the same. It is unlikely that knowing your father paid part of the light bill has the same emotional resonance as delighting in a video game your father chose for you, or arriving at school in that prized pair of Jordans.

Of note is that only a few fathers in the sample described a scenario in which his ex-partner had managed to both ensure commensurability (that he would provide what she thought the child really needed) and still give the father credit for those contributions. Fred, a 29 yearold Black father of two daughters, had graduated from high school and was halfway through a technical degree in welding when his girlfriend informed him that she was almost 6 months pregnant; upon hearing the news, he dropped out of the program to find work. The two subsequently had a second child but then broke up. At the time of his interview, Fred worked through a temporary agency as a general laborer, bringing home only about $\$ 250$ each week, on average. He gives no cash to the girls' mother, but is willing to contribute in kind. In order to encourage him to do so in a way that fit with her notion of what his daughters most need, his ex-partner buys all of the girls' clothing in three or four annual shopping trips. Typically, she pays half, putting the items on layaway for Fred to retrieve and present to the girls. He describes their arrangement this way:

Well this is how me and her mom work: Her mom might say "Well I just laid them some clothes away and I put such and such on it, could you pay off the rest?" I like that because I ain't really got it like that-she got a $\$ 300$ layaway, I got to work a week and a half to get that. So she will put $\$ 150$ down or she might put $\$ 100$ and I might just go ahead and [say] "Hell, it is for my kids," and I go ahead and put the rest down [and bring it over].

Fathers also said that giving in-kind support can help to create a repository of memoriesspecial times on which they hope their children can draw as a reminder that Dad really cares. One father made it a point to stop by his ex's home each day to take his younger daughter out for a treat. For an entire summer, the two searched the streets of Philadelphia for "the perfect water ice," delighting in the task of comparing various flavors and brands. In part, his actions were driven by the behavior of his middle child, who would no longer agree to leave her friends for the weekend to spend time with him. He didn't want this to happen with
his younger daughter. Another father lived next door to a toy store and told us he could not resist stopping in to buy "little girl things" for the daughter he visited daily. One very young father relished the chance to relate the following: "Every time I go there [to visit] I take her [out for] something to eat... and I bring her a dress or something!" The pleasure of treating a child to water ice, seeing one's daughter in a new dress, or the simple pleasure of being able to spend a little quality time with the child when treating him or her to a Happy Meal at McDonald's is considerable. For example, we asked one father of a 6-year-old daughter about his financial arrangement with her mother:

Well, [her mother and I] split [the clothes]. I give her half on everything.... We'll pay right there [at the store]. I want to be there to make sure that it fit her and she's comfortable with it and if she like it. [Then] time permitting, [her mother will] go [home] and then I'll carry [my daughter] with me and I'll take her to eat some ice cream...you know? A little quality time with her you know, before she go back home.... We might eat a slice of pizza or, you know, just do something [together].

Similarly, an unemployed father of a teenage son explained, "[When I have money I] try to help him buy some shoes or take him out to eat somewhere, depending on how much money I make. [I] buy him a pizza and just talk, you know."

Economic, social, and institutional factors-As the quantitative results indicate, fathers with unstable employment may relied most heavily on in-kind support by providing a greater proportion of total support in kind. Sam, who is 32 and Black, offered a good example of a fairly disadvantaged father who consciously used his in-kind support to bond with his 12-year-old daughter, Nicole. Sam was 19 when his girlfriend became pregnant. Although he had dealt drugs as a teenager, he had a steady job installing carpet and an apartment of his own at the time. Sam claimed he was really looking forward to becoming a father, but his past was not ready to let him go. Not only had he developed a drug addiction while working as a dealer, but a pending court case from those days finally worked its way through the system, and he found himself facing a 3 -year sentence (he served 18 months) when his daughter was just an infant.

After Sam was incarcerated, his daughter was removed from her mother's home because of neglect (the mother was also addicted) and, at Sam's urging, was placed with Sam's father. Upon release, Sam reengaged with Nicole to some degree, but he spent years struggling to get and stay clean. "I went back and forth with the addiction for about the next eight to nine years or so stopping and starting [using drugs] again, but the whole time all of this was happening I still kept in contact with my daughter," he said. Ten years after his release, Sam has a job as a computer technician at a drug rehabilitation center. He also moonlights as a handyman. He says he has stayed clean and steadily employed for nearly a year, and Nicole spends every other weekend with him. Regarding child support, Sam says,

As far as giving [my father] money..., I know he would do the right thing with the money, but I feel better getting Nicole what she needs when she's here rather than just handing him the money. It's more personal. You know, instead of just saying, "Okay, I am paying my child support, now here's this much for the month." [My father] would rather me do it that way, but it's more personal for me [to give things
to her directly] and I think it's more bonding for her and I. When the money's sent ... she doesn't see it so she wouldn't remember it. [But when I buy her things], I feel like there's a bond there when I when I do that. I only get her every other weekend, so I know that I'm going to spend that [money]. I always buy her something.

To the greatest degree possible, fathers like Sam wanted to leverage their contributions in the service of a continued connection to their children.

## Discussion

Low rates and levels of child support payments are common, although child support research and policy have primarily focused on formal and informal support, almost to the exclusion of a third type: in-kind support. Little is known about the full range and amount of child support provided in kind. This begs the question, are we appropriately assessing fathers' economic support and involvement, especially among low-income noncustodial fathers, a group that is often difficult to track in population-based surveys? We analyzed unique data-in-depth, repeated interviews with nearly 400 low-income noncustodial fathers in three U.S. cities-to descriptively address this question. Our study contributes several new findings and has implications for policy.

First, this study addressed whether or not past research has given us a good grip on understanding the full range and amount of child support provided by low-income fathers while discounting the value of in-kind support. Evidence presented here suggests that this is not the case. The rates of in-kind, informal, and formal support in this study are consistent with those previously documented among low-income parents in population-based samples (Garasky et al., 2010; Grall, 2013; Nepomnyaschy \& Garfinkel, 2007; Rangarajan \& Gleason, 1998), yet this study's findings show, for the first time, that the total value of inkind support provided by fathers to their nonresident children is substantial. Children who received at least some in-kind support garnered nearly $\$ 60$ per month in in-kind goods. This was more than these men provided via informal (\$40 per month per child) or formal (\$53) cash payments. Also, in-kind support represented a sizable proportion-more than one quarter-of support provided; thus, it constituted a nontrivial portion of total support provided to nonresident children. Although these in-kind contributions likely do not lift poor children out of poverty, this evidence does suggest that the value of in-kind support should not be ignored.

Furthermore, fathers who avoided cash payments but instead supported their children in kind, a group that may be derided as "deadbeat dads," provided $\$ 63$ per month per child; fathers who avoided the formal system altogether expended $\$ 175$ per month per child, on average, through a combination of informal cash and in-kind goods. This suggests two important points. First, at least some allegedly "deadbeat dads" are involved in their children's lives in nontrivial ways that currently remain undetected in government statistics and most population-based surveys. Second, low-income children whose parents successfully avoid the court systems stand to gain a substantial amount economically, either directly via goods or indirectly via cash provided to the household. (Successful avoidance is
not likely the cause of this economic gain, but it plausibly reflects other factors, e.g., parental cooperativeness.) Overall, this study's results estimated the value of this economic gain for the first time, paving the way for future research in this area.

We also analyzed what items made up the greatest share of the overall value of in-kind contributions. Most of the value came from items that could be offered directly to the child, such as food treats, or highly visible items, such as clothing, shoes, and special toys. These purchases were often quite costly-designer jeans, expensive tennis shoes, or a pricey video game, for example. This pattern was salient regardless of the child's or father's characteristics, or even the state of the mother-father relationship. Past research has shown that clothes, shoes, and gifts are the most common items provided in kind by noncustodial fathers (Garasky et al., 2010; Grall, 2013); this study expands this literature by showing that these items also constitute the greatest value. In addition to clothes, shoes, and gifts, men with very young children also contributed in-kind support of notable value through diapers and formula, or payments to a child care provider.

Second, the present results showed that economic ability, relational factors, and social/ institutional factors are each related to the level of in-kind support. Among children who received any in-kind support, children whose father had completed high school (relative to not completing high school) received higher levels of support in kind. This suggests that economic conditions, such as local labor markets, likely constrain poorly educated fathers ability to provide high levels of support in kind, just as is the case with other forms of support (Garasky et al., 2010; Nepomnyaschy \& Garfinkel, 2010). In addition, children whose father did not abuse alcohol or drugs received in-kind items of greater value, perhaps reflecting past research indicating that addicted fathers often feel shame over their condition, eschewing involvement with their children (Edin \& Nelson, 2013). We also detected an age pattern consistent with that observed among informal support provision (Nepomnyaschy \& Garfinkel, 2010): Children who were younger in age received in-kind support of greater value. Thus, some of the well-established barriers to nonresident fathers' informal support provision related to children growing older and the deterioration of parental relationships (i.e., parental uncooperativeness, mistrust of the mother, inconsistent visitation with the child) may play a role in constraining fathers' ability to provide in kind. Along these same lines, children with more hours of father-child visitation received higher levels of in-kind support, likely reflecting the fact that paying in-kind support and visiting are positively related (Garasky et al., 2010).

However, when we examined the child and father characteristics associated with the proportion of total support provided in kind—a rough proxy for a father's reliance on in-kind over other forms of support, above and beyond his ability to pay—we found that children whose fathers were Black, and especially those whose fathers lacked stable employment, received a greater proportion of their support in kind. This is consistent with our hypothesis that the least advantaged men in our sample of low-income fathers may rely most heavily on in-kind support, perhaps because financial constraints prevent these men from providing consistent cash support (within or outside the courts) and/or because the level of trust in the court system is lower among Blacks than Whites (Bartfeld, 2003).

In this study we then went one step further, to explore these findings and potential explanations through qualitative analyses. We found that what underlies the high prevalence of, and reliance on, in-kind support, as well as the specific items provided, is the following: The fathers in this study exercised a relational rather than a financial logic when deploying their scarce resources on behalf of their children; this was especially true of our most disadvantaged fathers. These men often explicitly tried to use their in-kind contributions to repair, bolster, and ensure the future of their connections to their children. They attempted to marshal their resources to build bonds that could be sustained even if the mother did not choose to facilitate ongoing involvement. Thus, fathers' motivation to provide in kind goes well beyond mistrust of the mother.

If future research replicates these findings among low-income noncustodial fathers nationwide, this would reveal a considerable disconnect between the intentions of the father and those of the state, whose primary goal is to increase the amount of cash flowing to the mother and child (or, in the case of welfare recipients, back to the taxpayer), not to strengthen the father-child bond. Such evidence would suggest that child support policy's current goals may be short sighted: If fathers can successfully gain improved relationships with their children through the provision of in-kind goods, then it may be in the best interests of the child, the child's mother, and the state to credit in-kind payments so as to keep fathers engaged over the longer course, even though these contributions may not be fully commensurate with formal support.

Demonstrations could be mounted that offer a treatment group the option of meeting at least a portion of their child support obligations through in-kind provision, so long as the mother agrees. This approach is somewhat similar to the Teen Alternative Parenting Program, which gives "credits" to fathers who visit their children regularly, attend parenting classes, and further their education (Pirog-Good, 1993). We suggest demonstrations that credit inkind goods, and requiring the agreement of the mother, which would increase commensurability.

In sum, these findings suggest that the question of whether or not in-kind support, above and beyond cash support, further alleviates child poverty is logical but may be misdirected. Future research and policy efforts that recognize the critical role and strong symbolic value of in-kind support could ensure that child support of any form benefits children not only financially but also socially and psychologically (Argys, Peters, Brooks-Gunn, \& Smith, 1998; Furstenberg, Morgan, \& Allison, 1987; King, 1994; McLanahan \& Sandefur, 1994; McLanahan, Seltzer, Hanson, \& Thomson, 1994; Nepomnyaschy \& Garfinkel, 2011; Nepomnyaschy, Magnuson, \& Berger, 2012).

There are several limitations to our study. This heterogeneous, nonrandom sample of lowincome noncustodial fathers provide rich descriptive data that inform our understanding of not only how much, but when and why, in-kind support is provided and preferred. These men represent a proportion of the population for which survey data have yet to provide much reliable information at all, because of serious underrepresentation (Garfinkel, McLanahan, \& McLanahan, 1998). Yet we cannot know how generalizable our results are. It is possible that the fathers in this study were in some (unobserved) way atypical. Another
limitation is that our data reflect only the father's perspective and not that of the mother. Fathers may report slightly higher estimates of child support than mothers (Veum, 1993), reflecting some degree of measurement error. This mismatch may be higher among mothers and fathers with high-conflict relationships (Coley \& Morris, 2002), although some studies have found no statistically significant differences between mother and father reports (Smock \& Manning, 1997). It may also be the case that mothers are not aware of the full range or amount of in-kind support provided, as goods may be given directly to the child (Edin \& Nelson, 2013; Nepomnyaschy \& Garfinkel, 2010). Thus, bias may have operated in either direction. Future research should collect data on the value of in-kind support from both mothers and fathers to evaluate these issues. A longitudinal survey design could also explore bidirectional effects between in-kind support and visitation, as has been shown in past research between informal support and visitation (Nepomnyaschy, 2007), or the extent to which a father's stated intent of in-kind support successfully procures a positive relationship with his nonresident child, as his efforts may be hampered by circumstances outside of his control.

This study paves the way for future research to assess the economic, social, and psychological benefits of in-kind support to children, as well as to assess the extent to which in-kind support provision, and the logic that drives it, may be in conflict with the current goals of child support policy. The nontrivial proportion of total support stemming from inkind sources, the substantial value of in-kind goods provided, and the stronger reliance on this type of support among economically disadvantaged men and Black fathers suggests that policymakers may need to rethink how they conceptualize, value, and give recognition to inkind support. Failure to do so may represent a lost opportunity to put more meaningful support into the hands of America's needy children and facilitate vital father-child bonds.

## Acknowledgments

This research received support from the Russell Sage Foundation and the Eunice Kennedy Shriver National Institute of Child Health and Human Development (K99 HD075860, Jennifer B. Kane, Principal Investigator) and benefited from National Institute of Child Health and Human Development support awarded to the University of North Carolina's Carolina Population Center (T32 HD007168, Carolyn T. Halpern, Principal Investigator; R24 HD050924, S. Philip Morgan, Principal Investigator) and Pennsylvania State University's Population Research Institute (T32 HD007514, Valarie King, Principal Investigator; 2R24 HD041025-11, Jennifer Van Hook, Principal Investigator). The opinions expressed in this article reflect those of the authors and not necessarily those of the granting agencies.

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Table 1
Descriptive Statistics of Fathers Providing, and Children Receiving, In-Kind Support

| Variable | M | SD | Range |
| :---: | :---: | :---: | :---: |
| Monthly value of in-kind support (in dollars) | 59.97 | 76.89 | 1.39-650 |
| Percentage of total support received through in-kind sources | 58.95 | 38.32 | 0.36-100 |
| Child-specific characteristics |  |  |  |
| Hours of visitation | 17.16 | 22.67 | 0-110 |
| None | . 17 |  | 0-1 |
| 1-9 hours | . 37 |  | 0-1 |
| 10+ hours | . 46 |  | 0-1 |
| Mother-father relationship ( $0=$ romantically involved; $1=$ not ) | . 83 |  | 0-1 |
| Age (in years) | 6.69 | 4.61 | 0.5-17 |
| Under 5 years old | . 40 |  | 0-1 |
| 5-9 years old | . 33 |  | 0-1 |
| 10+ years old | . 28 |  | 0-1 |
| Father-specific characteristics |  |  |  |
| Socioeconomic status |  |  |  |
| High school education or GED ( $0=$ no, $1=$ yes $)$ | . 32 |  | 0-1 |
| Stable job ( $0=$ no, $1=$ yes ) | . 37 |  | 0-1 |
| Monthly earnings, formal and informal employment (in dollars) | 972.20 | 806.8 | 0-6204 |
| < \$600 | . 37 |  | 0-1 |
| \$600-\$1,199 | . 28 |  | $0-1$ |
| \$1,200+ | . 35 |  | 0-1 |
| Family characteristics |  |  |  |
| Number of nonresident children | 1.95 | 1.01 | 1-5 |
| 1 nonresident child | . 40 |  | 0-1 |
| 2 nonresident children | . 36 |  | 0-1 |
| $3+$ nonresident children | . 25 |  | $0-1$ |
| Has children with only one mother ( $0=$ no, $1=$ yes) | . 70 |  | 0-1 |
| Risky behaviors |  |  |  |
| Currently abusing drugs/alcohol ( $0=$ no, $1=$ yes) | . 14 |  | 0-1 |
| Criminal record ( $0=$ no, $1=$ yes) | . 53 |  | 0-1 |
| Sociodemographic characteristics |  |  |  |
| Age at interview (in years) | 31.82 | 8.12 | 17-53 |
| Less than 30 years old | . 44 |  | 0-1 |
| $30+$ years old | . 56 |  | 0-1 |
| Race/ethnicity (ref. = non-Black) |  |  |  |
| Black | . 44 |  | $0-1$ |
| City of residence (ref. = Austin) |  |  |  |
| Philadelphia | . 49 |  | 0-1 |


| Variable | $\boldsymbol{M}$ | $\boldsymbol{S D}$ | Range |
| :---: | :---: | :---: | :---: |
| Charleston | .17 |  | $0-1$ |

Note. Child-specific characteristics describe 238 children receiving in-kind support. Father-specific characteristics describe 164 fathers providing in-kind support.

| Characteristic | Total monthly in-kind support | Total monthly formal support | Total monthly informal support | \% of <br> Total support from in-kind support | Total monthly in-kind support, by type |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Baby products | School supplies | Clothes and shoes | Food | Gifts | Child care expenses | Other |
| Children receiving in-kind support | \$60 | \$53 | \$40 | 39\% | \$6 | \$2 | \$19 | \$8 | \$13 | \$7 | \$5 |
| Characteristics of children receiving inkind support |  |  |  |  |  |  |  |  |  |  |  |
| Hours of visitation ${ }^{d, b}$ |  |  |  |  |  |  |  |  |  |  |  |
| None | \$48 | \$72 | \$16 | 35\% | \$1 | \$4 | \$20 | \$1 | \$5 | \$0 | \$16 |
| 1-9 hours | \$35 | \$37 | \$45 | 30\% | \$3 | \$0 | \$11 | \$1 | \$16 | \$2 | \$1 |
| 10+ hours | \$84 | \$60 | \$46 | 44\% | \$10 | \$2 | \$25 | \$16 | \$14 | \$13 | \$5 |
| Mother-father relationship status ${ }^{n s,} b$ |  |  |  |  |  |  |  |  |  |  |  |
| Some current romantic involvement | \$75 | \$30 | \$38 | 52\% | \$16 | \$3 | \$33 | \$8 | \$2 | \$14 | \$0 |
| No current romantic involvement | \$56 | \$58 | \$41 | 36\% | \$4 | \$1 | \$16 | \$8 | \$16 | \$5 | \$6 |
| Child age ${ }^{c, n s}$ |  |  |  |  |  |  |  |  |  |  |  |
| Under 5 years old | \$78 | \$62 | \$55 | 40\% | \$14 | \$0 | \$23 | \$11 | \$11 | \$13 | \$6 |
| 5-9 years old | \$51 | \$42 | \$25 | 43\% | \$0 | \$2 | \$21 | \$7 | \$15 | \$3 | \$2 |
| 10+ years old | \$41 | \$53 | \$37 | 31\% | \$0 | \$3 | \$11 | \$5 | \$15 | \$1 | \$7 |
| Characteristics of fathers providing inkind support |  |  |  |  |  |  |  |  |  |  |  |
| Socioeconomic status |  |  |  |  |  |  |  |  |  |  |  |
| Education ${ }{ }^{\text {n }}$ s |  |  |  |  |  |  |  |  |  |  |  |
| No high school degree or GED | \$50 | \$40 | \$38 | 39\% | \$4 | \$1 | \$15 | \$7 | \$15 | \$7 | \$1 |
| High school degree or GED | \$80 | \$82 | \$46 | 38\% | \$10 | \$2 | \$28 | \$11 | \$9 | \$7 | \$13 |
| Employment ${ }^{n s, C}$ |  |  |  |  |  |  |  |  |  |  |  |
| No steady job | \$53 | \$32 | \$40 | 42\% | \$6 | \$2 | \$18 | \$7 | \$9 | \$8 | \$3 |
| Steady job | \$71 | \$90 | \$41 | 35\% | \$6 | \$1 | \$21 | \$10 | \$20 | \$4 | \$8 |

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| Characteristic | Total monthly in-kind support | Total monthly formalsupport | Total monthly informal support | \% of <br> Total support from in-kind support | Total monthly in-kind support, by type |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Baby products | School supplies | Clothes and shoes | Food | Gifts | Child care expenses | Other |
| Monthly earnings ${ }^{\text {a }}$, ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |
| < \$600 | \$44 | \$16 | \$39 | 44\% | \$7 | \$1 | \$15 | \$5 | \$10 | \$6 | \$0 |
| \$600-\$1,199 | \$66 | \$61 | \$28 | 43\% | \$6 | \$1 | \$19 | \$12 | \$13 | \$8 | \$7 |
| \$1,200+ | \$71 | \$86 | \$51 | 34\% | \$5 | \$2 | \$24 | \$8 | \$17 | \$6 | \$8 |
| Family characteristics |  |  |  |  |  |  |  |  |  |  |  |
| Number of nonresident kids $a^{\text {a }}$, s |  |  |  |  |  |  |  |  |  |  |  |
| 1 nonresident child | \$80 | \$86 | \$55 | 36\% | \$9 | \$2 | \$22 | \$10 | \$16 | \$10 | \$11 |
| 2 nonresident children | \$45 | \$22 | \$30 | 46\% | \$6 | \$1 | \$10 | \$8 | \$14 | \$3 | \$3 |
| $3+$ nonresident children | \$49 | \$45 | \$33 | 39\% | \$1 | \$1 | \$27 | \$5 | \$7 | \$7 | \$1 |
| Multiple-partner fertility $a^{\text {, } n s}$ |  |  |  |  |  |  |  |  |  |  |  |
| Has children with 1 mother | \$64 | \$61 | \$41 | 39\% | \$7 | \$2 | \$22 | \$8 | \$11 | \$7 | \$7 |
| Has children with 2+ mothers | \$49 | \$34 | \$38 | 40\% | \$4 | \$1 | \$14 | \$8 | \$18 | \$5 | \$0 |
| Risky behaviors |  |  |  |  |  |  |  |  |  |  |  |
| Substance abuse ${ }^{\text {b, } n s}$ |  |  |  |  |  |  |  |  |  |  |  |
| No current drug/alcohol abuse | \$65 | \$57 | \$41 | 40\% | \$7 | \$2 | \$20 | \$9 | \$14 | \$7 | \$6 |
| Currently abusing drugs/alcohol | \$28 | \$29 | \$39 | 29\% | \$0 | \$0 | \$13 | \$3 | \$8 | \$2 | \$0 |
| Criminal record status ${ }^{\text {a, } n s}$ |  |  |  |  |  |  |  |  |  |  |  |
| No criminal record | \$69 | \$61 | \$44 | 40\% | \$10 | \$2 | \$22 | \$8 | \$12 | \$6 | \$10 |
| Criminal record | \$51 | \$46 | \$37 | 38\% | \$2 | \$1 | \$17 | \$8 | \$14 | \$7 | \$1 |
| Sociodemographic characteristics |  |  |  |  |  |  |  |  |  |  |  |
| Age ${ }^{\text {b, ns }}$ |  |  |  |  |  |  |  |  |  |  |  |
| < 30 years old | \$79 | \$62 | \$42 | 43\% | \$10 | \$1 | \$29 | \$10 | \$13 | \$10 | \$6 |
| $30+$ years old | \$45 | \$46 | \$39 | 35\% | \$3 | \$2 | \$12 | \$6 | \$14 | \$4 | \$5 |
| Race/ethnicity ${ }^{\text {ns, }} a$ |  |  |  |  |  |  |  |  |  |  |  |
| Black | \$67 | \$44 | \$41 | 44\% | \$9 | \$2 | \$23 | \$6 | \$10 | \$10 | \$7 |

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| Characteristic | Total monthly in-kind support | Total monthly formal support | Total monthly informal support | \% of <br> Total support from in-kind support | Total monthly in-kind support, by type |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Baby products | School supplies | Clothes and shoes | Food | Gifts | Child care expenses | Other |
| Non-Black | \$54 | \$60 | \$40 | 35\% | \$4 | \$2 | \$16 | \$10 | \$16 | \$4 | \$4 |
| City of residence ${ }^{\text {a,ns }}$ |  |  |  |  |  |  |  |  |  |  |  |
| Philadelphia | \$62 | \$38 | \$43 | 43\% | \$5 | \$2 | \$20 | \$12 | \$16 | \$7 | \$0 |
| Charleston | \$83 | \$71 | \$61 | 39\% | \$9 | \$2 | \$29 | \$2 | \$9 | \$4 | \$28 |
| Austin | \$44 | \$66 | \$26 | 32\% | \$5 | \$1 | \$13 | \$6 | \$11 | \$7 | \$1 |

Note. Figures for characteristics of children receiving in-kind support are based on a child-level data set ( $n=238$ ). Those for characteristics of fathers providing in-kind support are based on a father-level data set $(n=164)$. The two superscripts denote signific
characteristics based on one-way analyses of variance.
$a_{p<10}$,
$b_{p<.05}$,
All children, including those who received and did not receive in-kind support ( $n=522$ ), received an average of $\$ 27$ per month in in-kind support, $\$ 38$ per month in formal support, $\$ 30$ per month in informal support; $28 \%$ of total support stems from in-kind sources. By type, they received $\$ 3$ in baby products, $\$ 1$ in school supplies, $\$ 9$ in clothes and shoes, $\$ 4$ in food, $\$ 6$ in gifts, $\$ 3$ in child care expenses, and $\$ 2$ in "other" goods).

Table 3
Results From Multilevel Linear Regression Models Predicting Total Monthly In-Kind Support (Model 1) and Total Monthly In-Kind Support as a Percentage of Total Support (Model 2)

| Predictor | Model 1: Total in-kind support | Model 2: Percentage in-kind support |
| :---: | :---: | :---: |
| Child-level covariates |  |  |
| Hours of visitation | 0.81 ** | -0.05 |
|  | (0.26) | (0.13) |
| Mother-father relationship ( 1 = no current romantic involvement) | 8.57 | -14.14 |
|  | (18.97) | (8.67) |
| Child age | $-2.03^{* *}$ | $-0.74{ }^{\dagger}$ |
|  | (0.69) | (0.45) |
| Father-level covariates |  |  |
| Socioeconomic status |  |  |
| High school education/GED ( $1=$ yes) | 37.51* | -0.67 |
|  | (14.91) | $(6.81)$ |
| Stable job ( $1=$ yes $)$ | -6.28 | -13.82 * |
|  | (14.61) | (6.69) |
| (Log) Monthly earnings | 0.34 | -0.87 |
|  | (3.16) | (1.44) |
| Family characteristics |  |  |
| Number of nonresident children | -8.70 | 4.65 |
|  | (8.82) | (4.01) |
| Has children with only one mother (1= yes) | -0.89 | 2.89 |
|  | (17.98) | (8.19) |
| Risky behaviors |  |  |
| Currently abusing drugs/alcohol ( $1=$ yes $)$ | -40.24* | 10.43 |
|  | (19.85) | (9.08) |
| Criminal record (1 = yes) | -4.33 | -1.02 |
|  | (13.43) | (6.17) |
| Sociodemographic characteristics |  |  |
| Age | -0.58 | $-0.20$ |
|  | (1.01) | (0.47) |
| Race/ethnicity (ref. = non-Black) |  |  |
| Black | -8.21 | $12.20^{\dagger}$ |
|  | (14.50) | (6.63) |
| City of residence (ref. = Austin) |  |  |
| Philadelphia | 12.00 | 3.19 |


| Predictor | Model 1: Total in-kind <br> support | Model 2: Percentage in-kind <br> support |
| :--- | :---: | :---: |
| Charleston | $(14.97)$ | $(6.85)$ |
|  | 30.64 | -7.20 |
| Intercept | $(20.77)$ | $(9.50)$ |

Note. Numbers in parentheses are standard errors. $N=238$ children nested within 164 fathers. ref. $=$ reference category.
${ }^{\dagger} p<.10$.

* $p<.05$.
${ }^{* *} p<.01$ (two-tailed)


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