

## **Correlates and Consequences of Child Care Arrangements among the Families of Teen Parents**

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Improving the outcomes of teenage parents and their children is an important policy goal in the United States today, especially given the 5% increase in the teen birth rate in 2006 and 2007 (Hamilton, Martin, and Ventura 2009). One policy measure that seems promising is child care. Many schools and programs for young mothers include onsite child care as a means of supporting both mothers and their children. But is child care effective for improving the life situations of young children and their teenage mothers, and if so, which types of care and which domains of outcomes matter? This study uses new, nationally representative longitudinal data including parent interviews and direct child assessments to address this timely issue.

We explore four primary research questions: (1) What are the most prevalent child care arrangements for children of teenage parents, from infancy through preschool? We examine child care situations at three points in time using latent class analyses, including the cost and setting of care and the relationship of the provider to the child. (2) What are the characteristics of families who have these different child care arrangements? We incorporate a wide variety of variables in descriptive and multivariate analyses. (3) How do these child care arrangements affect children's health and development? Multivariate regressions and propensity score analyses work to disentangle selection from causality and examine the cognitive, behavioral, and health domains. (4) How do these child care arrangements affect mothers' outcomes? Similar analyses predict changes in mothers' socioeconomic trajectories, mental health, parenting behaviors, and subsequent childbearing.

Understanding how child care arrangements influence the children of teenage parents and their families is important for both theory and policy. In the United States, many people assume that the best place for a young child to learn is at home with her mother, despite mounting evidence to the contrary (Belsky et al. 2004; Crosnoe 2007; NICHD Early Child Care Research Network 2002). At the same time, a life course perspective would emphasize that teenage mothers are in a life phase in which education and career development are important goals. Echoing these ideas, public discourse suggests that the best place for a teenage mother to be is in school or at work, as evidenced by the debate around welfare reform and the resulting restrictions on underage mothers' activities. Hence, parenting teens often face a normative double bind in which they are seen as failed mothers if they place their children in care, but they are seen as failed adults if they stay home instead of studying or working. By investigating which choices are best for young mothers and children, we hope to disentangle facts from stereotypes, informing policies and improving these families' outcomes.

In 2007, 56% of 3- to 5-year-olds in the U.S. were enrolled in nursery school, preschool, or kindergarten (U.S. Census Bureau via [www.kidscount.org](http://www.kidscount.org)). Even more children were in other forms of nonparental care such as paid or unpaid in-home or out-of-home babysitting. Use of child care varies across subpopulations; for instance, children of Mexican immigrants are less likely to attend preschool (Crosnoe 2007). Using recent national data, many researchers have found that child care affects children's development, although family-related factors are more important for child outcomes (Belsky et al. 2004; Crosnoe 2007; NICHD Early Child Care Research Network 2002). Most of this literature focuses on preschool, rather than earlier child care about which much less is known. The effects of child care are complicated, not least because of possible selection bias introduced by the selection of children from higher-income families or families with higher-quality parenting into higher-quality care settings (Belsky et al. 2004). On the one hand, more time spent in child care is associated with behavior problems before and after starting kindergarten (Magnuson 2007; NICHD Early Child Care Research Network 2002). On the other hand, preschool or center care is associated with short-term cognitive gains (Crosnoe 2007; Magnuson 2007) that last until the transition to formal schooling and at that point are translated into long-term

educational advantages (Entwisle 1995). Many poor and minority children benefit disproportionately from preschool (Entwisle 1995; Magnuson 2007), although less is known about the effects of noncenter care arrangements.

Given the positive cognitive effects of child care that are particularly strong for many poor children of color, it may be particularly beneficial for children of teenage mothers. Using the same nationally representative survey analyzed in this study, Mollborn and Dennis (2009) found that children of teenage parents experienced disadvantages in cognitive and behavioral development and health. Their outcomes in these domains went from a point of near convergence with same-age peers at 9 months to developmental deficits as large as two thirds of a standard deviation at age 4. Policies that intervene between these two time points may be able to prevent these disadvantages from taking root. Simultaneously, child care may benefit teenage mothers because it can facilitate their participation in schooling or paid work, minimizing disruption to their trajectories of socioeconomic attainment.

## **METHOD**

Data. The Early Childhood Longitudinal Study-Birth Cohort (ECLS-B) followed a nationally representative sample of about 14,000 children born in 2001 from infancy through the start of kindergarten (U.S. Department of Education 2007). It is the first nationally representative survey in the U.S. to follow children in this early developmental period using parent interviews and well-reputed direct child assessments. The ECLS-B includes some of the largest samples of teenage mothers and fathers available in national surveys. This study uses all available waves of data, collected when the children were about 9 months, 24 months, and 52 months old. The primary parent, almost always the biological mother, was interviewed in person. We restricted the sample to children with completed parent interviews and child assessments at all three waves who had at least one parent under the age of 20 at the time of their birth, resulting in an analysis sample of about 750.

Child outcomes. We examined four developmental and health outcomes at Wave 3 (about age 4), drawn from face-to-face child assessments and parent interviews (see Snow et al. 2007 for more information): literacy scores, math scores, parent-reported behavior, and parent-reported child health status (dichotomized as very good/excellent versus good/fair/poor).

## **RESULTS**

Prevalent child care arrangements. All analyses were conducted on a subsample of children who were born to at least one teenage parent. We conducted latent class analysis on 15 underlying variables, for 5 possible child care situations (no child care, center-based care, center-based care with other care, no-cost care provided by a relative, and paid care outside a child care center) at 3 points in time (9 months, 24 months, and 4 years old). A clear solution of 4 latent classes emerged based on the AIC, which was identical to the 4 latent classes that also emerged when using the full ECLS-B sample. The most prevalent situation (41% of the sample), which we dub “no care,” includes children who were not in care as infants and toddlers and were split across different care situations in preschool. The other three classes each included about 20% of the sample. “Center care” contains children who were split across different care situations as infants but were in center-based care (sometimes with other care as well) as toddlers and preschoolers. “Free relative care” includes children who were cared for at no cost by a relative as infants and toddlers and were split across different care situations in preschool. “Paid noncenter care” includes children who were in paid care outside of child care centers (such as in-home group care or nannies) as infants and toddlers and were split across different care situations in preschool. Supplementary analyses find that the number, type, and prevalence of predominant child care arrangements are nearly identical between our subsample of teenage parents’ children and the larger national sample of all children.

Characteristics of families in different arrangements. Children in the “no care” arrangement are typically significantly more disadvantaged than the other latent classes. Their mothers are from lower-SES backgrounds and are currently lower-SES with a higher proportion of multiple teenage

births. The mothers are disproportionately married, White, Mexican American, and Spanish-speaking, with disproportionately low birth weight and female children. Children in the “free relative care” arrangement disproportionately have younger, unmarried teenage mothers from higher-income households (so presumably the mothers are living with parents or other adult relatives), are typically first births, male, and normal birth weight, and are disproportionately African American and English-speaking. Children in the “center-based care” arrangement tend to have older teenage mothers from more highly educated families, but currently unmarried with slightly lower household income, and are disproportionately Black and English-speaking males. Finally, children in the “paid noncenter care” also have older teenage mothers from higher-SES backgrounds, and the mothers currently have higher SES as well. The children are disproportionately boys with normal birth weight.

Associations between child care arrangements and child outcomes. Across three of the dependent variables (literacy, math, and behavior scores at age 4), our bivariate models, multivariate regression models controlling for selection factors, and preliminary propensity score analyses find that being in some form of nonparental care in early childhood is beneficial for children of teenage parents. Our fourth dependent variable, children’s health status, shows no significant associations with child care arrangements. Multivariate models find that each of the three child care arrangements is associated with higher preschool literacy scores when compared to the “no care” arrangement. The “free relative care” and “center care” arrangements are each associated with significantly higher preschool math scores than “no care.” Propensity score analyses matching children in any type of care at age 2 to otherwise similar children with no care suggest that these relationships are likely causal. Children in the “center care” arrangement have higher behavior scores than those in “no care,” but the less optimal home environments of “no care” children explain this relationship.

Associations between child care arrangements and maternal outcomes. As we found for child outcomes, a lack of child care also appears to disadvantage young mothers in important ways. Mothers whose children are in the “no care” arrangement have lower gains in educational attainment than other mothers between 9 months and 4 years postpartum, gain less household income, are less likely to attend school or work for pay, and are more likely to have a subsequent birth. “No care” mothers start out with lower household savings and less food security, but their gains are not significantly different from others’. There are no significant differences for depressive symptoms. Our multivariate analyses controlling for a variety of selection factors find that mothers with “free relative care” experience significantly greater educational gains than those with “no care.” Interaction models find that “free relative care” and “center-based care” are disproportionately beneficial for the educational gains of teenage mothers who start out with lower levels of education. All three care arrangements are associated with greater gains in household income than the “no care” arrangement. “Free relative care” predicts a lower likelihood of a subsequent birth compared to “no care.” We will estimate propensity score models for these relationships in the future.

Explaining why staying at home is problematic for mothers and children. The preponderance of evidence suggests that having child care is beneficial for both mothers and children as compared to parental care. Why is this the case? We tested several possible explanations. Except for the behavior scores described above, underlying differences in home environment or parenting skills did not mediate the relationship between child care arrangements and children’s outcomes. Positive changes to mothers’ life situations do not explain these relationships either: In multivariate models controlling for changes in mothers’ outcomes, the significant association between child care arrangements and children’s outcomes still remain. These findings suggest that in the cognitive domain, something about child care arrangements themselves, and not just factors influencing selection into care arrangements or the benefits that child care confers on mothers, is positively affecting children of teenage parents. With regards to center-based care, these results are not surprising given similar findings among national samples of children (Belsky et al. 2004; Crosnoe 2007; NICHD Early Child Care Research Network 2002).

Evidence on the benefits of free relative care or paid noncenter care is more limited, as is information on care before preschool.

Qualitative data from interviews with 76 teenage mothers and fathers in the Denver area in 2008-2009 may shed further light on why child care is so beneficial for teenage mothers and their children. With very few exceptions, young mothers articulated clear and reasonable plans for furthering their education and/or work experience. They were aware that child care was critical to attaining these goals. Those in school or working cited available care or its lack as an important reason why they were able to work towards building a better life for themselves and their families. Those who were at home with their children typically expressed that this was a situation of last resort because affordable child care options were not available. The *type* of child care was usually less important to teenage mothers than its availability and affordability.

## **DISCUSSION**

Summary. Using longitudinal data collected from a national sample of teenage parents and their children, we identified four latent classes representing predominant child care situations from 9 months to 4 years of age. Children who were not receiving care from anyone other than a parent at 9 months and 2 years (41% of the sample) typically came from more disadvantaged backgrounds than children in the other three latent classes, who principally received free relative care, paid noncenter care, and center-based care, respectively. After working to reduce selection bias through multivariate regressions and propensity score analyses, we found that children of teenage parents who were in the “no care” class exhibited compromised cognitive and behavioral development at age 4. The behavioral findings were explained by differences in home environment, but the boosts in math and literacy scores appeared to be an effect of child care. Mothers also benefited from child care in terms of gains in education and household income and reduced repeated childbearing between 9 months and 4 years postpartum. Supplemental qualitative findings suggest that most teenage mothers are aware that child care would help them and their children, but cost and availability compel many to stay at home.

Theoretical implications. Traditional parenting norms in the U.S. suggest that to be a “good mother” and raise “good children,” women should stay home with their children rather than placing them in child care. Evidence from our study shows that conforming to these norms may not be the most beneficial course of action for teenage mothers. This situation is associated with compromised outcomes for young mothers and their children across a variety of domains. Many people also assume that families choose freely among several available child care options. Our qualitative data suggest that only very limited and often very expensive options are available to most teenage mothers, and those who stay at home may not be actively choosing to do so. Given the extremely high costs of child care (often rivaling or exceeding the cost of sending a child to college), this may be true for many lower-income families and not just teenage mothers. Future research should focus on the issue of having a *choice* among child care arrangements (including parental care) as being potentially beneficial for families. Finally, future research needs to better acknowledge that child care arrangements have important effects for mothers, and not just children.

Policy implications. Nonparental care appears to be beneficial to both teenage mothers and their children, suggesting that the provision of child care is a promising route for policy. The *type* of care provided is less relevant, so a variety of policy solutions could work. While there is considerable policy attention on preschool enrollment, we find that child care in early childhood is also important for understanding children’s and mothers’ outcomes. This suggests that programs like Early Head Start, and not just pre-kindergarten programs like Head Start, may help teenage mothers and their children.

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