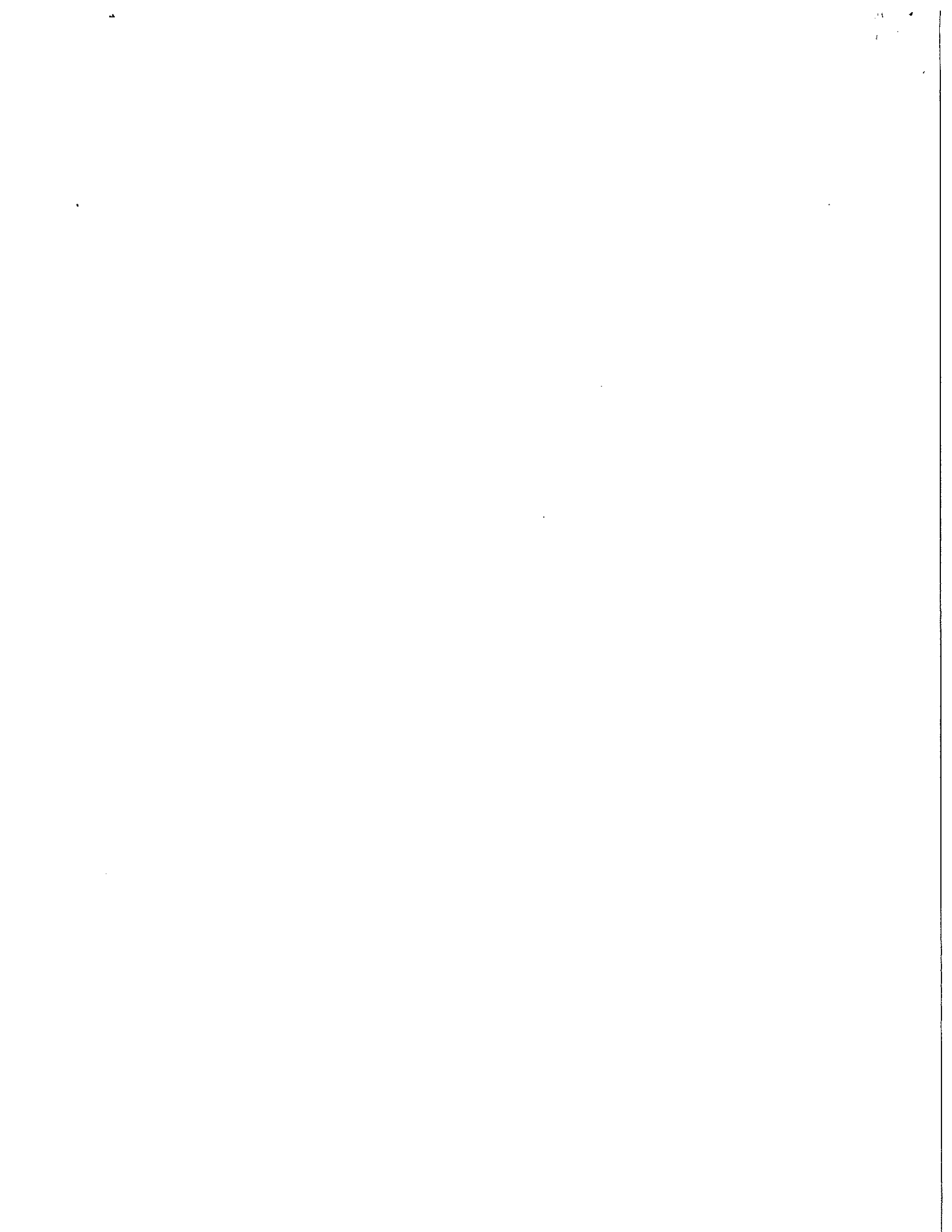


The Association Between Grandparental Co-residence and
Adolescent Childbearing

Nan Marie Astone*
Department of Population Dynamics
The Johns Hopkins School of Hygiene and Public Health

Mary L. Washington
Department of Sociology
The Johns Hopkins University

* Direct correspondence to Nan Marie Astone, Johns Hopkins School of Hygiene and Public Health, 615 North Wolfe Street, Baltimore, Maryland 21205. An earlier draft of this paper was presented to the Conference on Negotiating the Paths to Parenthood, 8 and 9 February 1993: Bethesda, Maryland. Support for the preparation of this paper was provided by a grant to the Hopkins Population Center by NIA and NICHD: #2 P30 HD06268 - 19. We are grateful to Andrew J. Cherlin and Laurie Zabin for helpful comments on an earlier draft; to David Kantor for computational assistance and to Tobey Harvey for secretarial help.



INTRODUCTION

Discussions of the growing number of women and children in the ranks of the persistently poor in the U.S. often invoke images of single teenage mothers. They are depicted as living alone with their children because of either an out-of-wedlock birth or a brief marriage. These young women's circumstances find them emotionally and financially ill-prepared for the responsibilities of parenthood; they are portrayed as unskilled; undereducated, supporting their children with public assistance and poised to pass this disadvantage on to their daughters. The latter is a critical image because it describes a reliance on the welfare system over successive generations that is sometimes referred to as the 'cycle of deprivation.' It is the idea that single teenage motherhood is an important mechanism for the intergenerational transmission of poverty that has caused it to be so strongly linked to both public and scholarly discourse on American poverty.

How accurate is this pervasive image? There is evidence that growing up in a non-intact family, poverty and economic dependence do predispose young women to marry early and to have children early and outside marriage. These research findings are particularly alarming in light of two things. First, the family characteristics which have been identified as risk factors for early and non-marital family formation often occur simultaneously. That means that many of our young women might be described as facing "double" or even "triple jeopardy." Second, the number of young women who grow up in high risk circumstances, particularly in a non-intact family, has dramatically increased in recent years due to the increased prevalence of divorce and unmarried motherhood.

In light of all this it is imperative that researchers continue to explore aspects of family structure--who a young person lives with in the household--which place young women at risk for early family formation. Some aspects of family structure have received more attention from demographic researchers than others in this context. For example, whether or not a child lives with both natural parents has been extensively investigated, as has the presence or absence of a stepparent. The influence of residence with extended kin on early family formation has received far less attention from social demographers, however. This paper makes a first step toward incorporating extended kin into models of early childbearing by investigating the association between co-residence with a grandparent and early childbearing.

BACKGROUND

Several studies have investigated the effect of growing up in different types of families on the timing and sequencing of marriage and motherhood. The most consistent finding from this research is that African-Americans who grow up in single parent families are more likely to give birth as teenagers than African-Americans who grow up in two parent families (Hogan and Kitagawa 1985; McLanahan and Bumpass 1988; Michael and Tuma 1985). McLanahan and Bumpass (1988) find that young white women who come from a single parent family are also more likely to give birth and to marry as teenagers than similar white women from two parent families. Some dispute the latter result, however, finding no significant differences in the timing of either birth or marriage between single parent and two-parent families among white women (Michael and Tuma 1985). For both African-

Americans and whites, growing up in a stepparent family is associated with early family formation (Michael and Tuma 1985).

Our understanding of the effects of family structure on early family formation is far from perfect or complete, as is suggested by the conflicting results we just cited. One way to improve it is to incorporate the insights gleaned from different methods of doing research. Social demographers and economists, who use large nationally representative databases, have taken the lead in investigating the association between family structure and outcomes for children (early family formation among others) . Their findings usually measure children's family resources in terms of the number of parents or stepparents who live with the child, and whether these parents are married to each other. Researchers who use a qualitative field studies include contribution of other members of the child's household and family as determinants of a child's well-being.

In particular, scholars employing qualitative methods identify grandparents as playing a critical role in many children's upbringing (Burton 1990; Cherlin and Furstenberg 1986; Stack 1974). It is especially important to consider the influence of co-residence with grandparents when discussing the effects of family structure on children's well-being within the African-American community in the U.S. Both demographic and ethnographic evidence suggests that African-American families are more likely to be multi-generational (Cherlin and Furstenberg 1986) and to include non-nuclear kin (Angel and Tienda 1982; Parish, Hao and Hogan 1991; Tienda and Angel 1982) than are white families.

Most studies of grandparental coresidence focus on social-psychological outcomes in young children. Investigators in an intensive, longitudinal community study, found that

mother-grandmother families were almost as effective as two-parent families in fostering primary school-age children's social adaptation and psychological well-being (Kellam, Ensminger and Turner 1977). A logical explanation for this finding is that it is the ratio of adults to children in families which accounts for the negative outcomes observed among the children of non-intact families. This hypothesis is consistent with the findings that associate early childbearing with poor adult supervision (Abrahamse, Morrison and Waite 1988; Hogan and Kitagawa 1985). However evidence that the children in stepparent families do not do as well as children from two-parent families undermines the validity of this explanation, since a stepparent also increases the adult/child ratio in a family. It could be that grandparents provide affective, rather than instrumental assistance to children when they live with them. There is some evidence that suggests this: grandparents sometimes help ease the strain in divorcing families for both their grandchildren (Cherlin and Furstenberg 1986) and their children (Johnson 1988).

To complicate matters, another line of research suggests a completely different situation: namely that grandparental co-residence has negative effects on children. Chase-Lansdale and her colleagues (1992) using the intensive observational studies typical of developmental psychology, find that co-residence with grandparents among the offspring of African-American teenage mothers has negative consequences for the quality of adult-child interaction for both the mother and the grandmother.

The observation of a negative effect of grandparental co-residence on children might be caused by the selection of high risk families into multigenerational living. Compositional studies of household heads and the prevalence of household headship among

different groups suggest that adults in the U.S. of all races and ethnic groups exhibit a strong preference for heading their own households, alone or in partnership with a spouse (Santi 1988; 1990; Wojtkiewicz, McLanahan and Garfinkel 1990). A hypothesis generated from these studies is that parents and grandparents only co-reside in cases of stress, economic deprivation or both and thus co-residence serves as a marker for conditions which do not enhance children's well-being or positive adult-child interaction within families. This suggestion is in line with the observation that active assistance to grown children and grandchildren is something modern American grandparents typically provide only in times of stress for a limited duration (Cherlin and Furstenberg 1986).

In this paper we make a first step toward incorporating grandparental co-residence into models predicting children's well-being. We ask the question: Is there a significant association, either positive or negative, between living with a grandparent and early childbearing--both in general and outside marriage? Our results are necessarily preliminary, because of our relatively crude measure of grandparental co-residence, because we focus on an isolated outcome--early childbearing--as opposed to a range of indicators of child and adolescent well-being and because we make no attempt to correct for selection bias.

DATA AND METHODS

Data

We use data from the High School and Beyond study (HSB). Respondents to HSB were randomly selected members of either the sophomore or senior class at one of a nationally representative sample of over 1,000 U.S. high schools in 1980. A subsample of respondents was surveyed again in 1982, 1984, and 1986. For this analysis we include female respondents, who were sophomores in 1980, who participated in all waves of data collection, who were either white (not Hispanic) or African-American¹ and who had not given birth before November of 1980². These selections resulted in a sample of 4,786 cases.

Variables

DEPENDENT VARIABLES We are concerned with two outcome variables. The first is a dummy variable scored 1 if the respondent gave birth before her twentieth birthday³ and 0 otherwise. A great deal of interest has been expressed about early childbearing which occurs outside marriage, therefore we also looked at a second dependent outcome. This is also a dummy, scored 1 if the respondent gave birth out-of-wedlock and before her twentieth birthday and 0 otherwise.

INDEPENDENT VARIABLES There are three principal independent variables in the analysis. The first is family type which distinguishes between four types of family arrangements: respondent lives with (1) both natural parents, (2) one natural parent and no stepparent, (3) one natural parent and a stepparent, or (4) neither parent. The second

independent variable is grandparental co-residence which is a dummy variable scored 1 if the respondent reported that she or he lived with a grandparent in both 1980 and 1982⁴. The third is race (white, African-American).

CONTROL VARIABLES There are many background variables which past research has identified as exhibiting important effects on the probability of giving birth as a teenager that we included in the analysis as controls. They are: region (northeast, north central, south, west); size of place of residence⁵ (urban, suburban, city); number of siblings, and socioeconomic status score⁶.

Table 1 contains descriptive statistics for all the variables in the analysis.

(Table 1 about here)

Analysis

The dependent outcomes in the analysis are dichotomous. Therefore, we used logistic regression techniques to estimate the effects of the independent and control variables on early childbearing. Preliminary analysis included an extensive check for interaction effects between the independent and control variables. We found one significant interaction--between growing up in a single parent family and being African-American--and we report on it below.

RESULTS

In order to answer the question: Is there an association between grandparental co-residence and early childbearing we regressed our two outcomes on our indicator of grandparental co-residence and the other independent and control variables. The important results concerning family structure are contained in Table 2; Table A1 presents the results of the full model.

(Table 2 about here)

Table 2 suggests that co-residence with a grandparent might be associated with delaying a birth beyond the teenage years. This is evident from the fact that the negative coefficient for birth before 19 (in general) on grandparental co-residence is significant at the .10 level. The magnitude of the negative coefficient for grandparental co-residence in the model of out-of-wedlock teenage childbearing is similar, but it fails to reach statistical significance. Checks for interactions among the independent variables indicated that the effect of grandparental co-residence does not vary by race, nor does it vary by family type.

The other results in Table 2 confirm those of past research. African-Americans are not more likely than whites to give birth as teenagers in general, although they are more likely to give birth as teenage outside marriage. Among African-Americans, young women from single parent families are more likely than those from two-parent families to give birth as teenagers in general and outside marriage. This effect does not exist for whites.⁷

DISCUSSION

Our aim in this paper was to make a first step toward expanding discussion of the effects of family structure--which family members live with a child--on children's well-being. We have accomplished this by examining the association between living with a grandparent and early childbearing. We found that there is a negative association between grandparental co-residence and teenage childbearing in general and outside marriage, although this effect only reaches statistical significance in models of early childbearing in general.

Given the crudeness of our indicator of grandparental co-residence, the marginal significance levels of our coefficients and our failure to deal with selectivity, we must regard these results as preliminary. They do suggest, however, that demographic studies of the effects of family structure on the well-being of children begin to pay attention to the presence of grandparents in the home, as well as to children's co-residence with other kin.

A finding of interest in our results brings us back to our discussion of the growing number of women and children in the ranks of the persistently poor in the U.S. and the image of the single teenage mother. What accounts for the fact that growing up in a single parent family affects African-American females such that they are more likely to give birth early than their counterparts in two-parent families? Perhaps growing up with a never-married mother is associated with an early transition to motherhood but not growing up with a divorced mother. If this is so, the greater likelihood that African-American single mothers are never-married mothers than white single mothers, might be responsible for the racial difference in the effect of single parenthood. Unfortunately, HSB does not allow us to

differentiate between divorced and never-married single mothers, but other data does and this possibility should be pursued in order for us to continue to complete our understanding of the effects of family structure on early family formation.

1. We choose not to include hispanics in our analysis because the issue of grandparental co-residence for groups with a great many immigrant members is a very different one from that of groups without many immigrants. Grandparental co-residence among immigrant groups will be profoundly affected by whether or not the grandparent immigrated with the family. Subsequent analyses will focus on the effect of grandparental co-residence on hispanics with the inclusion of controls for immigrant status.
2. The first HSB survey was administered in February 1980. By eliminating all respondents who gave birth in or before November 1980, we are eliminating all respondents who were pregnant or who were mothers at the time of the baseline survey, when the independent variables are measured.
3. Relatively few women in this sample gave birth before their eighteenth birthday necessitating the focus on teenage, rather than adolescent motherhood.
4. There were two reasons for insisting that the respondent report living with her grandparent in both 1980 and 1982. First, by requiring that anyone coded as living with a grandparent have done so in 1980, we clarify the causal ordering of grandparental co-residence and early childbearing. Since we excluded anyone who was pregnant or a mother at the base year survey, we know that grandparental co-residence preceded an early birth. Second, by requiring that the respondent live with a grandparent at both times, we eliminate categorizing families as co-resident when the grandparent is only there temporarily (eg. while he or she recuperates from surgery). As is shown in Table 1 only three percent of our respondents lived with a grandparent in both years, while almost seven percent lived with a

grandparent in the base year survey. This discrepancy suggests that there is a good deal of temporary co-residence.

5. This is actually an indicator of the size of place of the school the respondent attends.

6. Unfortunately, HSB's measure of family income is poor--30 percent of the cases lack income data. This is a common situation when relying on interviews with adolescents who are often unaware of the total money income of the family. Rather than use this measure of the family's economic well-being, we use a composite measure of family socioeconomic status. This variable is a z-score of the sum of five items from the HSB questionnaire: mother's education, father's education, father's occupation, family income, and household possessions. Preliminary analysis indicated that the effects of socioeconomic status was linear, so the variable was entered as a continuous variable.

7. In the model presented here, the interaction term fails to reach statistical significance. However in tabulations that are not shown in which the models were run separately by race, growing up in a single parent family had a positive effect on out-of-wedlock teenage motherhood for African-Americans, but not for whites.

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Table 1. Univariate statistics for variables in the analysis. High School and Beyond Sophomore Cohort, 1986.

<u>Variable</u>	
Birth at 19 or before	%
yes	13.9
n	4669
OW birth at 19 or before	%
yes	6.7
n	4673
Grandparent in household	%
yes	3.2
n	4786
Race	%
African-American	18.1
white	81.9
n	4786
Region	%
northeast	24.9
north central	32.9
south	30.3
west	12.3
n	4786
Residence	%
urban	20.7
suburban	51.3
rural	28.0
n	4786
Family Type	%
two parent	67.4
single parent	18.3
stepparent	10.9
no parent	3.4
n	4778
Socioeconomic Status	
mean	-0.041
standard deviation	0.721
n	4617
Number of siblings	
mean	2.9
standard deviation	1.7
n	4389

Table 2. Logit coefficients for early childbearing on family type and race. High School and Beyond Sophomore Cohort, white or African-American young women who participated in all four waves of data collection.

<u>Variable</u>	<u>Outcome</u>	Birth at 19 or before	OW Birth at 19 or before
Grandparental Co-residence		-.53†	-.54
Family type			
single parent		-.07	.31
stepparent		.30*	.40*
no parent		1.01***	.63*
African-American		-.09	1.16***
African-American and single parent		.85***	.45

Note: Effects reported are net of region, residence, socioeconomic status and number of siblings. Reference category for family type is two-parent.

- † $p \leq 0.10$
- * $p \leq 0.05$
- ** $p \leq 0.01$
- *** $p \leq 0.001$

Table A1. Logit coefficients for teenage childbearing on grandparental co-residence, family type, race, region, residence, socioeconomic status, and number of siblings. High School and Beyond Sophomore Cohort, 1986.

<u>Outcome</u>	Birth at 19 or before	OW Birth at 19 or before
<u>Variable</u>		
Grandparent in household	-.53†	-.54
Family type		
single parent	-.07	.31
stepparent	.30*	.40*
no parent	1.01***	.63*
family type missing	-3.84	-3.75
African-American	-.09	1.16***
African-American and single parent	.85***	.45
Region		
north central	.43***	.27
south	.76***	.13
west	.77***	.42†
Residence		
urban	.12	.19
rural	.32**	.07
Socioeconomic Status	-.76***	-.70***
Socioeconomic Status missing	.75***	.70**
Number of siblings	.13***	.11**
Number of siblings missing	.03	.35†
Constant	-3.12***	-3.99
-2 log likelihood	3400.69	1970.84
Model Chi-Square	371.19	326.34
degrees of freedom	16	16
n	4669	4642

Note: Reference category for region is northeast, residence is suburban and family type is two parent.

† p ≤ 0.10 * p ≤ 0.05 ** p ≤ 0.01 *** p ≤ 0.001