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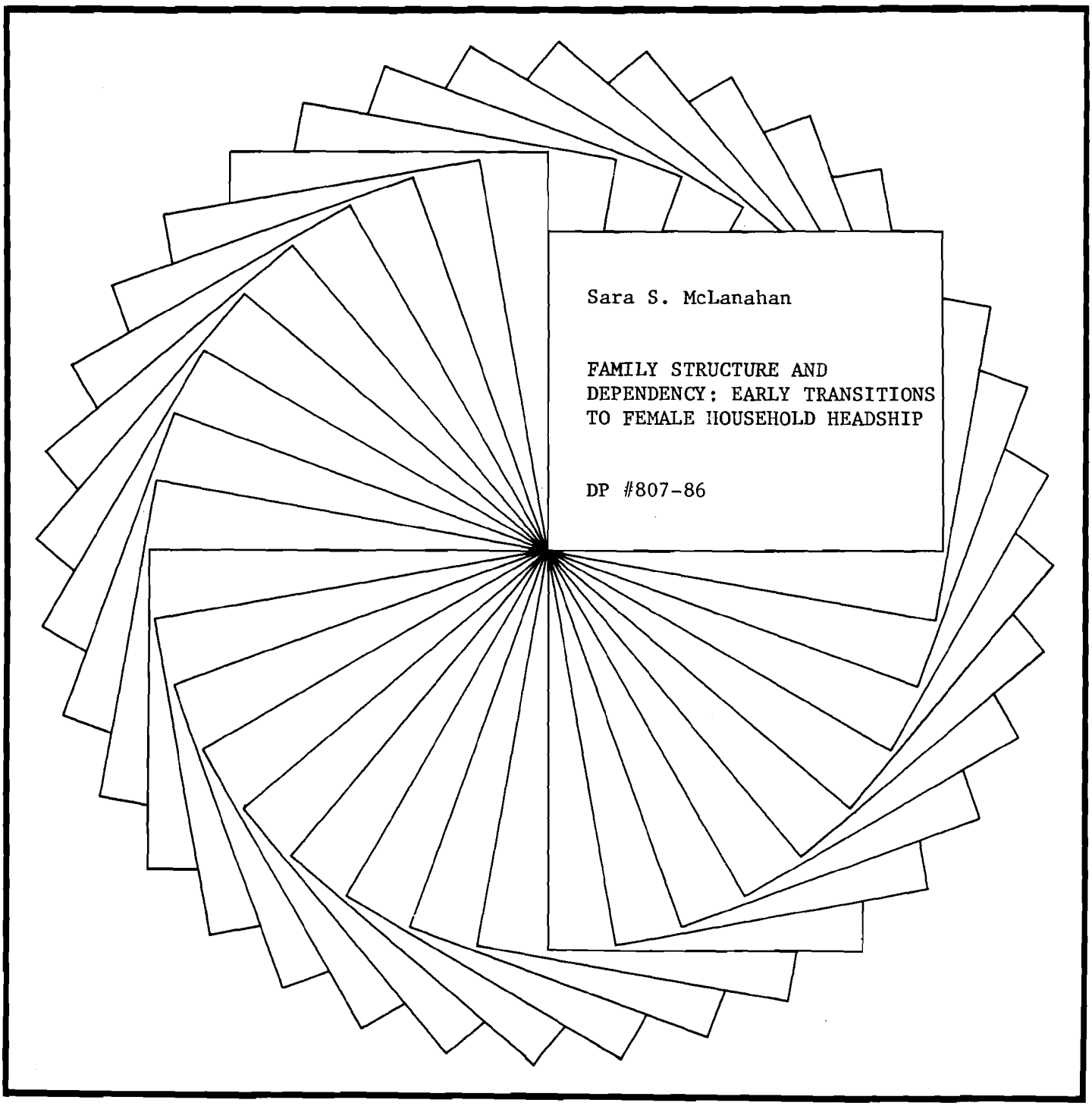

Institute for Research on Poverty
Discussion Paper no. 807-86

Family Structure and Dependency:

Early Transitions to Female Household Headship

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March 1986

This research was supported by the National Institute of Child Health and Human Development, grant #HD19375-01. Computations were performed on the VAX 11/780 at the University of Wisconsin Center for Demography and Ecology, supported by NICHD grant #HD05876-11. I am grateful to Larry Bumpass and Irwin Garfinkel for their comments on earlier drafts and to Dan Krymkowski for programming assistance. Any opinions expressed in this paper are my own and not of the sponsoring institutions or of the Institute for Research on Poverty.

Abstract

This paper looks at the effects of the single-parent family on family formation and economic dependency in subsequent generations. Three explanations for intergenerational effects are tested, including the "economic-deprivation" hypothesis, the "parent-absence" hypothesis, and the "family-stress" hypothesis. The results show that for whites as well as blacks, daughters who live in single-parent families at some point during adolescence are more likely to become female household heads themselves and to go on welfare than are offspring who continue to live in two-parent families. None of the hypotheses, however, provide a complete explanation of family structure effects. The analysis is based on data taken from the Panel Study of Income Dynamics and uses event-history analysis techniques to estimate transitions into female headship and economic dependency.

Family Structure and Dependency:
Early Transitions to Female Household Headship

The dramatic growth of female-headed families during the last decade has stimulated new interest in an old question: Does single parenthood and economic dependency in one generation lead to single parenthood and economic dependency in subsequent generations? The intergenerational transmission of family instability and dependency is of concern both to those in the academic community who are interested in the causes and consequences of marital disruption for scientific reasons, and to those in the policy-making community who are concerned with the causes and consequences of poverty and welfare dependency for more practical reasons. With respect to the latter, commentators such as George Gilder (1981) and Ken Auletta (1981) have recently argued that family disruption, and the female-headed family in particular, are responsible for intergenerational economic dependency and, more generally, for the growth of an "underclass" in America.

This paper speaks to both academic and policy concerns by looking first at the general question of whether daughters from female-headed families are more likely to become single parents themselves, and second at the more specific question of whether growing up in a female-headed family is related to welfare dependency in adulthood. Although a considerable amount of research on both topics has been carried out during the past two decades, additional work is justified on several grounds. First, there is good reason to believe that much of the information we now have may be outdated. Most of the existing studies on intergenerational marital instability rely on retrospective data collected from

adults in the sixties and early seventies. Findings are therefore based on respondents whose exposure to parent absence occurred prior to 1960. Given the dramatic growth of female-headed families in recent decades, we might expect offspring from more recent cohorts to differ from those who grew up in single-parent households in earlier times. On the one hand, the increase in prevalence should have reduced the stigma associated with single parenthood and increased the availability of support services, both of which may mitigate the negative impact of parent absence. On the other hand, changes in the composition of female-headed families--from a predominance of widowed mothers to a predominance of divorced and never-married mothers--may have increased negative effects. Most important, many past studies have such methodological problems as selective samples, crude measures of family structure and family economic status, and censored information on the dependent variables. (For reviews of research on parent absence, see Herzog and Sudia, 1973; Ross and Sawhill, 1975; Shinn, 1978; Hetherington, Camara, and Featherman, 1983; and McLanahan, 1985.) These limitations make it difficult to determine the context within which respondents were exposed to the single-parent family and to assess the full extent of family effects. New data containing more detailed information on parents' marital history and economic background have recently become available, as have new techniques for modeling such dynamic processes as marital transitions and transitions in and out of welfare dependency. These factors allow us to overcome many of the limitations of past studies and provide new opportunities for analyzing the forces underlying intergenerational instability.

The data we use are taken from the Panel Study of Income Dynamics (PSID), a longitudinal study of 5,000 American families followed since

1968. The PSID data provide information on family background, measured during adolescence, and on family formation behavior and economic status, measured during young adulthood. Because the original design of the PSID called for the oversampling of low-income families, our sample contains an unusually large number of female-headed families, including a large number of black families. Although the data are limited in certain respects (see below), they are particularly useful for assessing economic differences between one- and two-parent families as well as social and economic outcomes among the offspring of such families.

THEORETICAL ISSUES AND PAST FINDINGS

Numerous researchers have examined the effects of family structure on future family stability and socioeconomic attainment (Duncan and Duncan, 1969; Duncan, Featherman, and Duncan, 1972; Heiss, 1972; Bumpass and Sweet, 1972; Featherman and Hauser, 1976; Mueller and Pope, 1977; Michael and Tuma, 1985; Hogan and Kitagawa, 1985). For the most part these studies have reached two general conclusions: (1) growing up in a female-headed family lowers future economic status and increases future marital stability, and (2) most of these negative effects are due to lower educational attainment and early marriage.

Despite the consistency of the findings, there is no real consensus as to why these effects occur. At this time, there are three major competing explanations for the positive relationship between parent absence and lower socioeconomic attainment: the economic-deprivation hypothesis, the parent-absence hypothesis, and the family-stress hypothesis.

Economic Deprivation

This hypothesis attributes intergenerational instability to the low economic status of female-headed households. Since single mothers have substantially lower incomes than two-parent families, and since family income is related to a host of factors that increase the risk of single parenthood and economic dependency, this hypothesis is a logical explanation for intergenerational marital instability. We know, for example, that offspring from female-headed families are more likely to leave school early and to marry before age twenty, both of which increase the risk of divorce and single parenthood. These early transitions under economic hardship may reflect either attempts to improve the circumstances of the family of origin, as in cases where offspring leave school and enter the labor force for the purpose of supplementing the family income (Elder, 1974), or attempts to escape from troubled families and to gain adult status in an environment that offers few opportunities for economic advancement (Rubin, 1976).

The economic-deprivation hypothesis has rarely been tested because the information necessary for such a test is not available in most surveys. Nearly all studies of socioeconomic attainment and family formation behavior have been based on adult respondents who are asked to recall their earlier family experiences. In such studies information on parents' economic situation is either missing or unreliable. Furthermore, although researchers can control for parents' occupation and education, these variables do not capture income differences between one- and two-parent families. We rarely know whether or not the mother worked full time and, even if we did, wage differences between men and women of

similar education and occupational status would still go undetected. Thus arguments on behalf of the income hypothesis are usually based on the fact that past studies have not controlled for income rather than on direct evidence of income effects.

More recently, studies using the PSID data and data from the National Longitudinal Surveys report that income is a major factor in explaining differences in high school dropout rates among offspring in one- and two-parent families (Shaw, 1982; McLanahan, 1985; Krein and Beller, 1985). Since lower educational attainment is related to marital breakup as well as economic dependency, these findings suggest that lower income may explain much of the instability once attributed to family structure.

Parent Absence

A second explanation for intergenerational instability focuses on the effects of parent absence on the socialization and supervision of offspring. The traditional version of this explanation stresses the absence of the male role model and its consequences for psychosexual development. For sons, father absence is thought to undermine sex-role identity, and for daughters, it is thought to interfere with cross-sex relationships. While developmental theory has generally stressed the negative aspects of father absence, one could just as easily argue that the role model presented by the single mother is the critical link in intergenerational marital instability. Children of single mothers may grow up with the idea that women are independent and capable of managing a family alone.

More recently, researchers have emphasized the importance of parental supervision or monitoring in determining the behavior of offspring.

Hogan and Kitagawa (1985), for example, show that offspring in single-mother families are subject to less supervision, which is related to early pregnancy and out-of-wedlock births. Here the critical factor is probably parent absence rather than father absence, since one parent has less time, and presumably less energy, for supervision than two parents. Apart from its effect on supervision and the availability of role models, parental divorce may also increase the probability that offspring will divorce because it serves to legitimate marital dissolution. Thus when faced with a choice between an unhappy marriage and single parenthood, offspring from disrupted families may be more willing to divorce than offspring who grew up in two-parent households.

Several hypotheses can be derived from different versions of the parent-absence explanation. First, the traditional version suggests that father absence will be more negative than mother absence and that the effects of father absence will be consistent across all types of female-headed families, including never-marrried, widowed, divorced, or separated mothers, all else being equal. It also argues that early and protracted exposure to father absence should have stronger effects on offspring than absences which occur late or which last only a brief time. (This would apply to versions stressing the positive role model of the single mother as well as to those stressing the negative aspects of the missing father.) Finally, the supervision hypothesis suggests that the absence of either the father or mother is harmful and that the consequences are most negative when parent absence occurs during adolescence, with the onset of dating and sexual activity.

Family Stress

A final explanation for intergenerational instability comes from family-stress theory, which argues that stressful events such as marital disruption produce disequilibrium in family systems that may "push" offspring out of their family of origin and into a premature assumption of adult roles such as worker, wife, or mother. In this case it is the event of family disruption rather than the state of parent absence that leads to negative consequences for offspring. According to stress theory, the impact of marital disruption is strongest and most negative immediately after the event. Thus events occurring in adolescence may be more harmful than disruptions in early childhood because they coincide with career choices and critical decisions about the continuation of schooling. Stress theory also suggests that remarriage may be just as harmful as divorce in that it also involves the reorganization of family roles and relationships.

Evidence in support of the family-stress hypothesis is indirect and comes mostly from longitudinal studies that have followed young children after divorce. Some of this research suggests that the effects of divorce subside over time and that in the absence of continued stress, children in single-parent families do just as well as children in two-parent households (Hetherington, Cox, and Cox, 1978; Hetherington, Camara, and Featherman, 1983). These studies, however, are based on children still living with their families of origin and cannot tell us very much about the long-term consequences of family stress.

In the present study, we test several of the hypotheses described above. Our information on family structure and family income is limited

to adolescent experiences, and therefore we cannot observe family disruptions that occur before age twelve. We can, however, distinguish among different types of single-parent families and among different durations of parent absence during the teenage years. Most important, our data provide excellent information on family income during adolescence, including earned income and public transfers. In the analyses below, we examine the effects of family structure on the family-formation behavior of female offspring between the ages of 17 and 26. We look first at differences in the probability of establishing a female-headed family and ask whether daughters from single-parent families are more at risk for this event than offspring from two-parent households. Next we look at family income and ask whether low income or drops in income during adolescence can account for differences in family effects. Finally, we look at the probability of going on welfare and ask whether family structure and welfare status in one generation are related to dependency in subsequent generations.

METHODOLOGY

Data

The Panel Study of Income Dynamics is a national representative survey of households conducted by the Survey Research Center at the University of Michigan. The original PSID sample of 5,000 American families was made up of approximately 2,000 low-income families drawn from the Census Bureau's Survey of Economic Opportunity (1966-67) and a fresh probability sample of approximately 3,000 additional households taken

from the Survey Research Center's national sampling frame. The oversampling of low-income families provides an unusually large sample of single-parent families and black families, which is essential to the study of intergenerational family instability and welfare dependence.

Although the panel was originally designed as a sample of households with information gathered primarily from the head of household, a limited amount of personal data is available for other members of panel families, including wives and children. Most important, children who moved out of panel families after 1968 to form independent households are included in the panel and are followed in subsequent years. As a result of this design, the PSID contains a sample of young adults who were first observed while living with their families of origin. Although the information on each respondent varies with age, it is possible to construct a sample of offspring for whom we have observations on both the socioeconomic status of the family of origin and the behavior of offspring in young adulthood. The analyses presented below are based on a sample of female offspring who were between the ages of 17 and 26 in 1982 and who were living in panel families at age 16. This sample contains approximately 1,450 respondents, including 711 whites and 739 blacks.

The PSID collects yearly information on the socioeconomic status and household composition of all panel members. These observations can be used to construct event-history information on changes in marital and parental status and changes in welfare recipiency that occur over a one-year period. Treated in this way, the data lend themselves to dynamic models of analysis; that is, they allow us to estimate the transition

probabilities of changing from one state to another over a one-year period, conditional on the respondent being at risk (i.e., capable of experiencing) of such an event.

The PSID does not provide information on the exact dates of status changes, and therefore our information is limited to changes that are observed over a one-year period. This feature raises some problems in determining the sequence of family formation events. For example, in cases where never-married respondents become divorced mothers with children during a one-year period, we cannot distinguish between premarital and postmarital pregnancies. (This occurred in about 20 percent of the white cases and about 30 percent of the black cases). Similarly, when a married women with no child becomes a female household head in the following year, we do not know for sure that the pregnancy preceded the divorce or separation. This occurs in about 20 percent of the white cases and about 10 percent of the black cases. These limitations make it difficult to model the exact process by which respondents become single parents, because it is impossible to determine who is at risk for each intervening event; e.g., marriage, childbirth, divorce. Furthermore, since becoming a female household head is a rare event--annual transition probabilities are about 1.7 percent for whites and 5.8 percent for blacks--the number of cases for which we have complete information on sequencing is very small.

Another limitation of the PSID lies in the fact that information on the marital and parental status of offspring is only available for respondents who establish independent households, that is, who live apart from their families of origin. Those respondents who have out-of-wedlock

births or who become formerly married mothers while remaining in their parental home are not observed as having become single mothers. This is not a problem to the extent that female headship, rather than single motherhood, is the outcome of interest.

Despite these limitations, we believe that an analysis based on the PSID is justifiable because of the panel's information on family income, which is so rare and so important in the interpretation of intergenerational effects. The limitations do require, however, that our analysis focus on transitions into female headship--becoming a single mother and establishing an independent household--rather than transitions into single motherhood.

Variables

Information on the independent and dependent variables is reported in Table 1. Family structure is measured in several ways: (1) as a set of dummy variables for whether respondent lived with a single father or single mother at age 16, (2) as a set of dummy variables for marital status of family head at age 16 (never married, widowed, divorced, separated), (3) as a set of dummy variables for whether respondent lived in a single-parent family at any time between the ages of 12 and 16, (4) as a pair of dummy variables measuring exposure to parent absence during adolescence and years spent in a single-parent family, (5) as a set of dummy variables that include whether a parental remarriage occurred, and (6) as a set of dummy variables that measure age of respondent when parents' marital disruption occurred. It should be noted that we could not identify offspring who experienced an early family breakup if the mother had remarried by the time the daughter was age 12.

Table 1

Background Characteristics and Probabilities
of Becoming a Female Household Head
(Numbers in parentheses)

	Whites		Blacks	
Family Structure Variables				
Family status at 16				
Two parents	86.8	(616)	55.1	(395)
Single father	2.0	(13)	2.9	(28)
Single mother	11.2	(82)	42.0	(316)
Marital status of female head at 16				
Married	86.8	(616)	55.1	(395)
Never married	.1	(1)	4.2	(28)
Widowed	3.9	(29)	16.6	(82)
Divorced/separated	9.1	(65)	24.2	(234)
Family status at ages 12-16				
Two parents	82.0	(583)	47.8	(367)
Single father	3.2	(21)	4.2	(35)
Single mother	14.8	(107)	48.0	(337)
Age at family disruption				
Stable two-parent family	82.0	(583)	47.8	(367)
Stable one-parent family	7.7	(55)	43.6	(293)
Disruption at 13 or 14	3.9	(28)	5.0	(34)
Disruption at 15 or 16	3.4	(24)	3.6	(22)
Years spent in one-parent family during adolescence (for those who experienced parent absence)	3.6		4.2	
Other Background Characteristics				
Parent completed high school (%)	66.1		37.0	
Family welfare history (mean years for those who received welfare)	1.5		4.2	
Family economic well-being at 16 (mean)[a]	3.1		1.5	
Family economic well-being at ages 12-16 (mean)	2.9		1.4	

Table 1 (Continued)

	Whites	Blacks
Transitions		
Female headship		
Proportion experiencing event each year	.017	.058
Cumulative proportion by age 26	.158	.450
Welfare recipiency		
Proportion experiencing event each year	.015	.048
Cumulative proportion by age 26	.140	.389

Note: Proportions are based on weighted data. Numbers are unweighted.

[a]1.00 is equal to the poverty level.

Family economic status is measured as the ratio of family income to the poverty level at age 16 and as the average ratio of family income to need during adolescence. For respondents whose families broke up during adolescence, we constructed two variables measuring predisruption income and postdisruption income. Family welfare status is measured by a set of dummy variables indicating number of years family received welfare during respondent's adolescence. The control variables include age of respondent, which represents the duration of risk for becoming a female household head, parent's education, measured by a dummy variable for whether family head completed high school, and region of the country, measured as a set of dummy variables for living in the North or South. A variable for city size was included in the original models, but was later dropped because it was not statistically significant.

Analytic Techniques

As noted earlier, the PSID provides longitudinal information that allows us to analyze the dynamic process generating changes in marital status and welfare receipt. Thus, rather than focusing on whether a particular subgroup is more likely than another to occupy a given status at a particular point in time or by some point in time, we can ask whether that subgroup has a greater probability of moving into a particular status over a given period of time. This approach avoids the problem of right censoring (absence of information after a certain year) and allows us to make maximum use of the information in the survey. For example, transition probabilities for becoming a female head at age 16 can be estimated for the entire sample, since all offspring are observed at age 17. Transition probabilities at age 25, however, can only be observed

for a small subgroup of our sample; namely, those who had reached age 26 by 1982. The approach also allows us to distinguish between variation in exposure to an event and variation in transition rates.

Since information on change in status is reported annually in the PSID, the most appropriate model for estimating the occurrence of events is the discrete-time model described by Allison (1982). In this model, the dependent variable is the conditional probability that an event will occur at time t, provided that the respondent is at risk for the event at t-1. The task is to estimate how this probability depends on the time spent in the original status (time at risk) as well as on the explanatory variables of interest, in this case family structure and family economic status.

The unit of analysis in the discrete-time model is a time interval; in the case of the PSID data, it is a year. To estimate the probability of experiencing a particular event over a one-year interval, we include only those respondents who are at risk for the event. In predicting female headship, we use respondents who were not single mothers at t-1. In predicting welfare, we use respondents who were not receiving welfare at t-1.

For each year that a respondent is at risk, the dependent variable is coded 1 if the event occurs and 0 if no event occurs. In the latter case, the respondent is at risk during the following year and is included in the next set of person-year observations. This means that offspring who never experience a transition will be counted multiple times: once for each year they are at risk for an event. Risk of becoming a female household head begins at age 16 and is measured as the number of years since 16 that respondent has not been a female head.

FAMILY STRUCTURE AND TRANSITIONS INTO FEMALE HEADSHIP

We begin by looking at the effect of family structure on the probability of becoming a female head of household. In previous studies of socioeconomic attainment, family structure has been measured in one of two ways: either by a question asking whether respondent was living in a single-parent family at a particular age (e.g., at age 14 or 16) or by a question asking whether respondent lived with both parents most of the time up to a particular age. Both of these approaches misclassify some respondents. The first method fails to identify respondents who lived with a single mother who had remarried by age 14 or 16. The second method misses those who lived with a single mother for only a short time. Moreover, neither approach discriminates among different types of female-headed households. In the initial set of analyses we look at three indicators of family structure with the intention of replicating past studies and comparing the strength of different indicators.

Estimates of family effects were obtained by estimating the following equation:

$$\ln[P_t/(1-P_t)] = at + B_1X_1 + B_2X_2 + e,$$

where P_t is the probability that an individual will become a female household head at time t, given that she is still at risk of an event at time t, at represents duration of exposure treated as a linear function of age, X_1 represents family structure, and X_2 represents a vector of control variables. Family structure is measured as: (1) a set of dummy variables indicating whether respondent was living with a single mother or single father at age 16, (2) a set of dummy variables indicating the

marital status of the family head when respondent was age 16, and (3) a set of dummy variables indicating whether respondent lived with a single father or mother at some point during adolescence.

Panel A of Table 2 reports the effect of family structure measured at age 16. Respondents who lived with single mothers at age 16 are more likely to become female household heads than those who lived in two-parent families. This finding holds for both whites and blacks. The estimates also show that living with a single father at age 16 increases this likelihood considerably for black offspring and is insignificant for the few white cases in this category. Translated into probability terms, the coefficients indicate that living with a single mother at age 16 increases the yearly probability of becoming a female household head by .011 (or 65 percent) for whites and by .062 (or 107 percent) for blacks. Living with a single father increases the annual probability for blacks by .092 (or 159 percent).[1]

Panel B reports the effect of family structure broken down by the marital status of the custodial parent when the respondent was 16. In the past, a few researchers have found variation across different types of single-parent families. Households headed by widows generally have fewer negative effects on offspring, whereas households headed by separated mothers show more negative consequences (Zill, 1981). The coefficients in panel B are consistent with these earlier results. Living with a widowed mother is substantially less negative (i.e., lessens the likelihood of becoming a female household head) for blacks than living with a divorced or separated mother, and for whites it is actually positive, though not statistically significant. The consequen-

Table 2

Effects of Family Structure in Adolescence on Transition to Female Household Headship

	Whites	Blacks
A. Family Status at Age 16		
Single-father family	-.41 (.86)	.96** (.40)
Single-mother family	.54* (.32)	.70** (.14)
-2 log likelihood	669.8	1763.0
df	3774	3624
B. Marital Status of Family Head at 16		
Never married	[a]	.24 (.46)
Widowed	-2.55 (1.75)	.47** (.19)
Divorced/separated	1.13** (.33)	.94** (.16)
-2 log likelihood	615.5	1756.0
df	3642	3623
C. Family Status during Adolescence[b]		
Single-father family	.93* (.50)	.59 (.35)
Single-mother family	.87** (.31)	.69** (.14)
-2 log likelihood	654.4	1766.0
df	3573	3624

Note: Standard errors are reported in parentheses. Control variables are age of respondent, region, and whether parent completed high school.

*p < .10.

**p < .05.

[a]Too few cases to estimate parameter.

[b]Refers to experience of single parenthood at any time during ages 12-16. Widowed families are omitted from white sample.

ces for blacks of living with a never-married mother are also less negative than those of living with a separated or divorced mother and are not statistically significant.

Panel C reports the coefficients for exposure to parent absence at any time during adolescence rather than only at age 16. Offspring living with widowed mothers were excluded from the white sample, since the effect of widowhood appears to be quite different from that of other single-mother categories. For blacks, the single-parent variables include all marital status groups: never married, widowed, divorced and separated. The estimates in panel C differ from the previous indicators in that they are based on five years of information rather than one year. Thus, they pick up additional respondents who were exposed to parent absence at some point during adolescence but whose mothers (or fathers) had remarried by the time respondents were 16. This increased the proportion of those who had had a single-parent experience by about a third for whites, but by only a tenth for blacks, reflecting the much higher remarriage rate for whites.

Does it matter whether we look at one year (panel A) or all five years (panel C) of adolescence? The coefficients for exposure during adolescence indicate that the five-year variable is similar to the single-year indicator in some respects and quite different in others. For blacks, the two coefficients are identical for single-mother families, but different for single-father households. For whites, the single-mother effect is more negative than it was in panel A and the single-father effect is also negative and significant. The number of single-father families is quite small, 21 for whites and 35 for blacks,

and therefore the estimates must be interpreted with caution. However, given the size of the coefficients and the consistency between blacks and whites in panel C, we conclude that parent absence is probably the critical factor rather than father absence per se.

Since the coefficients for whites in panels C and A are based on different samples--panel A contains all single-parent families whereas panel C excludes widows-- the two sets of estimates are not really comparable. However, when we estimated the parameters using similar samples, the same patterns appeared. In panel C the single-father coefficient is significant, whether or not we exclude widows, and the single mother coefficient is larger than it was in panel A.

The similarities between the coefficients in panels A and C are reassuring in that they suggest that family status at age 16 is a fairly reliable indicator of adolescent exposure to father absence. They are disturbing in that they also suggest that studies which rely on questions about cumulative experience prior to a particular age (e.g., whether respondent lived with both parents most of the time up until age 14) may underestimate the effects of short-term or late disruptions. In our sample, 46 of the 142 white offspring who lived in a single-parent family during adolescence did so for two years or less, which means that many disruptions have been ignored in previous studies.

Economic Deprivation and Transitions into Female Headship

Having replicated the results of past studies and compared the different indicators of family structure, we next tested the various explanations for intergenerational marital instability. We began by examining

the economic-deprivation hypothesis, which argues that differences in the family formation behavior of offspring are due to differences in the incomes of one- and two-parent families. This is an issue over which there is considerable debate, and it is also the question which motivates our use of the PSID data. To test the economic explanation, we added a variable for family economic well-being to the previous models. Well-being was measured at age 16 and as an average during adolescence. The well-being variable, or Orshansky ratio, as it is more often called, measures income in relation to needs and is a better measure of economic status than family income alone because it adjusts for family size and age of family members. The results obtained from the new models are reported in Table 3.

The table contains two sets of estimates: one which measures the effect of parent absence during adolescence and a second which distinguishes among different types of single-parent families at age 16. For each racial group, the first column reports the coefficients taken directly from panels B and C of Table 2, and the second column reports family effects with income in the models. The estimates presented in Table 3 indicate that some, but not all, of the family effect is due to income differences between one- and two-parent families. For whites, income accounts for about 10 percent of the absent-parent effect and about 28 percent of the effect of living with a divorced or separated mother. For blacks, it accounts for about 28 percent of the absent-parent effect and for about 36 percent and 20 percent of the effects of living with a widowed mother or divorced/separated mother. When income is added to the model, the widowed-mother effect becomes even more posi-

Table 3

Effects of Family Structure and Economic Status on Likelihood of Becoming a Female Household Head

	Whites		Blacks	
	Family Effects Alone	Effects of Income Included	Family Effects Alone	Effects of Income Included
A. Effect of Parent Absence during Adolescence[a]	.87** (.31)	.77** (.31)	.69**(.14)	.49**(.15)
Control Variables:				
Age of respondent	.11** (.05)	.12** (.05)	.22**(.03)	.22**(.03)
Parent's education	-1.17** (.26)	-.91** (.27)	-.47**(.16)	-.24 (.17)
North	-.42 (.30)	-.59* (.30)	.76**(.19)	.66**(.19)
South	-.31 (.34)	-.39** (.11)	-.52**(.16)	-.68* (.17)
Economic well-being		-.39** (.11)		-.40**(.11)
-2 log likelihood	614.7	598.7	1,767.0	1,752.0
df	3,502	3,501	3,625	3,624
B. Effect of Marital Status of Family Head at 16				
Never married	[b]	[b]	.24 (.46)	-.03 (.46)
Widowed	-2.55 (1.75)	-2.78 (1.74)	.47**(.19)	.30 (.19)
Divorced/separated	1.13** (.33)	.81** (.34)	.94**(.16)	.75**(.17)
Control Variables:				
Age of respondent	.11** (.05)	.11** (.05)	.23**(.03)	.22**(.03)
Parent's education	-1.23** (.26)	-.93** (.27)	-.37**(.16)	-.19 (.17)
North	-.48 (.30)	-.59* (.30)	.78**(.19)	.68**(.20)
South	-.31 (.33)	-.42 (.34)	-.41**(.17)	-.53**(.17)
Economic well-being		-.37** (.11)		-.31**(.09)
-2 log likelihood	615.5	602.0	1,756.0	1,742.0
df	3,642	3,641	3,623	3,622

Note: Standard errors reported in parentheses. Control variables are age of respondent, region, and whether parent completed high school.
*significant at the .10 level.
**significant at the .05 level or below.
[a]Widowed families are excluded from white sample.
[b]Too few cases to estimate parameter.

tive for whites and insignificant for blacks. We should point out that none of the changes in coefficients are statistically significant even though in some instances the declines are fairly substantial.[2]

The results reported in Table 3 indicate that although parents' economic status is significantly related to future family experience, it does not explain the intergenerational transmission of female headship: the parent-absence coefficient remains large and statistically significant even after income is included in the model.[3] This finding is different from previous research which showed that income could explain most of the relationship between family structure and dropping out of high school (McLanahan, 1985; Shaw, 1982; Krein and Beller, 1985). Despite the inconsistency, the results reported here are not so surprising. We would expect family structure to have a stronger impact on family-formation behavior than on other outcomes because of role modeling or legitimation effects. Offspring from single-parent families are more likely to view female headship as a viable alternative to an unsatisfactory marriage than offspring who grew up in two-parent households. For this reason alone, and apart from any speculation about psychological maladjustment, we would expect to find a positive relationship between mothers' behavior and daughters' behavior.

Parent Absence and Transitions into Female Headship

Several hypotheses were derived from the absent-parent theory, including the hypotheses that (1) father absence has more negative consequences than mother absence, (2) the effects of father absence are consistent across different types of female-headed families, other things being equal, (3) early absences are more negative than late absences, and

(4) absences of long duration are more harmful than short-term absences. The first two hypotheses have already been tested and the results are reported in Table 2. These estimates show that living with a single father has equal effects as does living with a single mother (panel C). Offspring who live with widowed mothers, however, are less likely to form female-headed families than offspring who live with divorced or separated mothers (panel B). Moreover, black offspring who live with never-married mothers, and who presumably have had the least exposure to their fathers, are better off than offspring from other types of single-mother families. These results indicate that not all types of parent absence lead to negative outcomes (in this case, female household headship) and that mother absence may be just as damaging as some forms of father absence.

To test for the effects of timing and duration (hypotheses 3 and 4), we estimated two additional equations, one containing a pair of variables for exposure to and duration of parent absence, and one containing a set of dummy variables measuring the timing of exposure. These results are reported in Table 4.

Panel A contains the coefficients for exposure to and duration of parent absence. Panel B reports the coefficients for the timing of parent absence, as measured by a set of dummy variables that represent the age of respondent at the time of parents' marital disruption. The first coefficient represents the effect of disruptions that occur prior to adolescence (respondent was living in a single-parent family at age 12, when the first observation was taken), the second coefficient is the effect of disruptions that occur at ages 13 or 14, and the final coefficient represents the effect of disruptions that occur at ages 15 or 16.

Table 4

Timing and Duration of Parent Absence: Effects on Likelihood that Daughter Will Become a Female Household Head

	Whites[a]	Blacks
A. Exposure to Parent Absence		
Whether exposed	.89* (.64)	.99* (.32)
Duration of exposure	-.02 (.17)	-.12 (.07)
-2 log likelihood	605.5	1749
df	3502	3623
B. Age at Disruption		
Age 12 or younger	1.01* (.39)	.68* (.16)
Age 13-14	.13 (.71)	.70* (.29)
Age 15-16	1.40* (.55)	1.47* (.26)
-2 log likelihood	613.4	1739
df	3500	3622
C. Divorce or Remarriage		
Age 12 or younger	1.02* (.46)	.65* (.15)
Age 13-14	.09 (.83)	.75* (.29)
Age 15-16	1.39* (.54)	1.50* (.27)
Remarriage	.36 (.66)	-.34 (.32)
-2 log likelihood	605.5	1748
df	3501	3622

Note: Standard errors are in parentheses. Control variables are age of respondent, region, and whether parent completed high school.
*significant at .05 level or below.
[a]Widowed families are excluded from white sample.

Again the estimates reported in Table 4 are inconsistent with the traditional version of the absent-parent hypothesis. The coefficients for duration indicate that likelihood of female headship does not increase with years of exposure. In fact, the sign of the duration coefficient goes in the opposite direction from that predicted by the hypothesis. Similarly, the coefficients for timing of divorce indicate that early disruptions (those occurring prior to age 12) are actually less negative than disruptions occurring later in adolescence, at ages 15 or 16.

Although none of the results in Table 4 are consistent with the father-absence or early-absence hypotheses, we should emphasize that our information is very limited with respect to family experiences prior to age 12 in that we only capture early disruptions not followed by remarriage. Most developmental theories stress the harmful effects of early childhood exposure versus later exposure, and since we have very little information on the early years, our tests must be viewed as rather weak. At this stage we can only say that we find no evidence that living with a nonmarried mother is more harmful than living with a nonmarried father and no evidence that the consequences of parent absence increase with length of that absence during adolescence.

Family Stress and Transitions into Female Headship

The final explanation to be tested is taken from stress theory, which argues that it is the event of family disruption that is harmful for offspring rather than the state of single parenthood itself. According to this theory, when parents divorce (or perhaps remarry), the family undergoes considerable trauma and reorganization which may result in

antisocial or simply nonrational behavior among offspring. In many cases, behavioral problems tend to subside within a year or two, as the family establishes a new equilibrium and offspring adjust to a new organization.

Although some have argued that divorce is more stressful for young children, who are more dependent on their family of origin and have less access to outside support, we believe that the consequences may be longer lasting for adolescents. When a parental divorce occurs at offspring's age 16, behavioral reactions may include such events as dropping out of school or becoming sexually active. Thus, although the stress itself may decline over time (and although it may actually be weaker for adolescents than youger children) the events precipitated by the initial trauma may be less reversible for adolescents than for younger children.

The test for the stress hypothesis is based on the same results discussed above with respect to the absent-parent argument--age at which the disruption occurs. However, the stress argument predicts that the consequences of family disruption will be greater for late disruptions than for early disruptions. To some extent, this is what we found in the middle panel of Table 4. Divorces that occur when daughters are age 15 or 16 have more negative effects than disruptions occurring at a younger age, although the effects are still negative for the latter group.

To carry the analysis one step further, we added a dummy variable for whether a respondent's parent had remarried during adolescence. The new results, reported in the bottom of Table 4, indicate that remarriage had no significant effect on whether daughters became female household heads, which suggests that it is marital disruption rather than family reorganization in general that may lead to early pregnancy and female headship.

FAMILY STRUCTURE AND WELFARE DEPENDENCY

Having determined that daughters in single-parent families are themselves more likely to head families, we next addressed the question of whether that family structure is associated with intergenerational welfare dependency.

Table 5 reports the coefficients for a model that treats transitions onto welfare as a function of family structure, family economic status including welfare status, and the set of control variables used in the previous analyses. Family structure is measured as whether respondent lived in a single-parent family between the ages of 12 and 16. Economic status is measured as average economic well-being during adolescence. Welfare status is measured by a set of dummy variables measuring number of years, during the respondent's adolescence, that the family received AFDC.[4]

The coefficients in column 1 indicate that family structure is associated with welfare dependency for whites as well as blacks. For whites the estimates indicate that coming from a single-parent family increases the probability of going on welfare by about 300 percent, from 1 in 100 to 3 in 100 (measured at the mean). For blacks, the effects are about the same. Parental absence increases the probability of going on welfare each year from 5 in 100 to 14 in 100 (measured at the mean). For higher-risk groups, the increase would be even greater.

These results are not surprising, given that living in a single-parent family is a good indicator of low economic status, which in turn is a good indicator of welfare receipt. Yet when income is added to the model (column 2), the welfare coefficient drops about 20 percent for

Table 5

Effects of Family Structure and Parent's Welfare Use on Likelihood that Daughter Will Head AFDC Household

	Family Status[a] (1)	Economic Status[b] (2)	Economic Status and Welfare Use[c] (3)
A. Whites[d]			
Parental absence ages 12-16	.70* (.38)	.68* (.39)	.63 (.41)
Family economic status		-.53** (.17)	-.51** (.18)
Family welfare use 12-16			1.28** (.60)
Years on welfare			-.26 (.20)
Age of respondent	.10 (.06)	.10 (.06)	.10 (.06)
North	.01 (.03)	-.15 (.33)	-.26 (.34)
South	-.73 (.47)	-.90* (.47)	-.89* (.47)
Parent's education	-1.53**(.32)	-1.19** (.33)	-1.13** (.34)
-2 log likelihood	441.4	429.3	425.6
df	2872	2871	2869
B. Blacks			
Parent absence	1.04**(.17)	.84** (.18)	.62** (.19)
Family economic status		-.46** (.13)	-.28** (.06)
Family welfare use			1.71** (.26)
Years on welfare			-.28** (.06)
Age of respondent	.18**(.03)	.18** (.03)	.18** (.03)
North	.62**(.21)	.48** (.22)	.48** (.22)
South	-.59**(.19)	-.76** (.20)	-.88** (.21)
Parent's education	-.01 (.18)	.22 (.19)	.14 (.19)
-2 log likelihood	1323	1310	1263
df	3071	3070	3068

Note: Standard errors reported in parentheses. Control variables are age of respondent, region, and whether parent completed high school.
*significant at the .10 level.
**significant at the .05 level or below.
[a]Effect of living in single-parent family between ages 12 and 16.
[b]Additional effect of family income during adolescence.
[c]Additional effect of living in welfare family during adolescence.
[d]Widowed families excluded from white sample.

blacks but hardly at all for whites. This indicates that the family structure effect (becoming a single mother) is due to something other than low economic status. In column 3 both income and welfare status are in the model, and now the family structure variable is reduced by about 40 percent for blacks and by about 10 percent for whites. Again, although income is important, it does not fully account for the family structure or welfare effect. According to the coefficients in column 3, coming from a single-parent family that received welfare increases the probability of becoming a welfare recipient each year from 1.5 percent to 10 percent for whites (about 6 times greater) and from 4.8 percent to 49 percent for blacks (about 10 times greater). A noteworthy finding in column 3 is the coefficient for number of years on welfare during adolescence. This variable is negative for both races, and for blacks it is statistically significant. This means that although being on welfare during adolescence is associated with being on welfare in adulthood, the relationship is weaker the longer the family received welfare. To examine the duration effect more closely, we treated years on welfare as a set of dummy variables and reestimated the model for blacks. The coefficients were 1.17 (standard error = .24) for one or two years on welfare, 1.49 (standard error = .27) for three or four years on welfare, and -.13 (standard error = .32) for five years, which means that the negative coefficient for the duration variable reported in Table 5 results from the absence of an effect in the five-year group.

These results indicate that the most dependent families (those on welfare for all five adolescent years) are <u>not</u> those most likely to reproduce female-headed families, which runs counter to the prediction of most theories of intergenerational dependency. Again, we should note

that the outcome variable is female headship, not simply single motherhood (which would include young mothers who remain in their parental home), and it is possible that long-term dependency is related to the latter though not the former.

CONCLUSIONS

The question of whether daughters from single-parent families are more likely to form single-parent families themselves has been of interest to researchers for some time. This study provides information on the causes of both intergenerational female headship and intergenerational economic dependency.

The analysis began by looking at the relationship between parents' marital experience during daughter's adolescence and family formation behavior in young adulthood. We found that female offspring who live in single-parent families at some point between the ages of 12 and 16 are twice as likely to form single-mother households in early adulthood as are their counterparts from two-parent families. This relationship holds for both blacks and whites and is true for those who were still living with single parents at age 16 as well as for those whose single mothers had remarried.

Having identified a relationship between family structure and behavior of offspring, in subsequent analyses we examined the relative merit of several different explanations for family effects, including the economic-deprivation hypothesis, the parent-absence hypothesis, and the family-stress hypothesis. We found that none of these arguments was totally satisfactory as an explanation for intergenerational female

headship and welfare dependency. Family economic status is significantly related--i.e., contributes in some measure--to becoming a female household head, but it is not the full explanation for the higher incidence of female headship among daughters of single mothers, for when we controlled for economic well-being, daughters of single mothers were still more likely to become female household heads themselves than were daughters from two-parent households.

The family-stress hypothesis received some support. Family disruptions occurring in late adolescence, for example, are more likely to result in female headship among offspring than are disruptions occurring earlier in adolescence. However, earlier disruptions (i.e., those occurring before age 13) also lead to female headship, which suggests that family disorganization is only partly responsible for premature transitions to adulthood. Moreover, contrary to our original hypothesis, parental remarriage did not have an independent effect on offspring behavior, which indicates that not all kinds of family reorganization are associated with negative outcomes for offspring.

Last, there was some support for the parent-absence hypothesis, but not for the more traditional version which emphasizes the importance of the absence of the male role model and absences in early childhood. Our findings show that mother absence is just as harmful as father absence and that absences occurring in late adolescence are somewhat more harmful than absences occurring before age 15. Most important, perhaps, we found that parent absence does not always lead to negative outcomes. Living with a widowed mother is no different from living in a two-parent family for whites, and for blacks the effects of living with a widowed mother or never-married mother are much weaker than those of living with a divorced

or separated mother. These findings indicate that something other than parent absence per se is responsible for the intergenerational association we observe.

Finally, we found that for whites as well as blacks, living in a welfare family increases the probability of receiving welfare as an adult, but not entirely as theory has predicted. Long-term dependency (five years or more of family welfare receipt during adolescence) is not associated with welfare use during adulthood, whereas shorter spells of dependency (one to four years) have a strong effect. These results are inconsistent with traditional theories about welfare dependency, which attribute intergenerational use to differences in cultural norms--if culture were the explanation, the effect should be strongest among offspring who are exposed the longest, which is not what we find in these results.

In conclusion, we stress the need for additional studies using different data sets that can (1) identify the exact timing and duration of living in a single-mother family during childhood as well as adolescence, (2) distinguish among different types of parent absence, especially between widows and other types of single mothers, and (3) provide information on a wider range of outcomes by including single mothers who live in the parental home as well as those who head households.

Notes

[1]The probability estimates are based on the population means for whites and blacks. For higher-risk groups, the probability estimates would be even larger.

[2]The control variables, which are reported in Table 3, show that the age of the respondent is very important in predicting transitions into female headship. Older respondents are much more likely than younger adults to become female heads during the following year. Parent's education is also important for whites as well as blacks. Having a family head who has completed high school reduces the probability of becoming a female household head by about 2 percent per year or about 20 percent by age 26. Region of the country is also important, especially for blacks. Young black women who live in the North are much more likely to become female heads than young women in other parts of the country, whereas young women in the South are much less likely to do so.

[3]In addition to controlling for level of economic well-being during adolescence, we also looked at the effects of income drops on offspring behavior. Some have argued that it is the income drop associated with marital disruption rather than absolute income that leads to negative consequences for offspring. The coefficients were not significant for black or whites, suggesting that the income level rather than the drop in income is the critical factor.

[4]The dependent variable in this set of analyses is defined as being on welfare and having established an independent household. Information on the welfare receipt of offspring still living at home is not available.

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