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The Intergenerational Relationship of Welfare Participation

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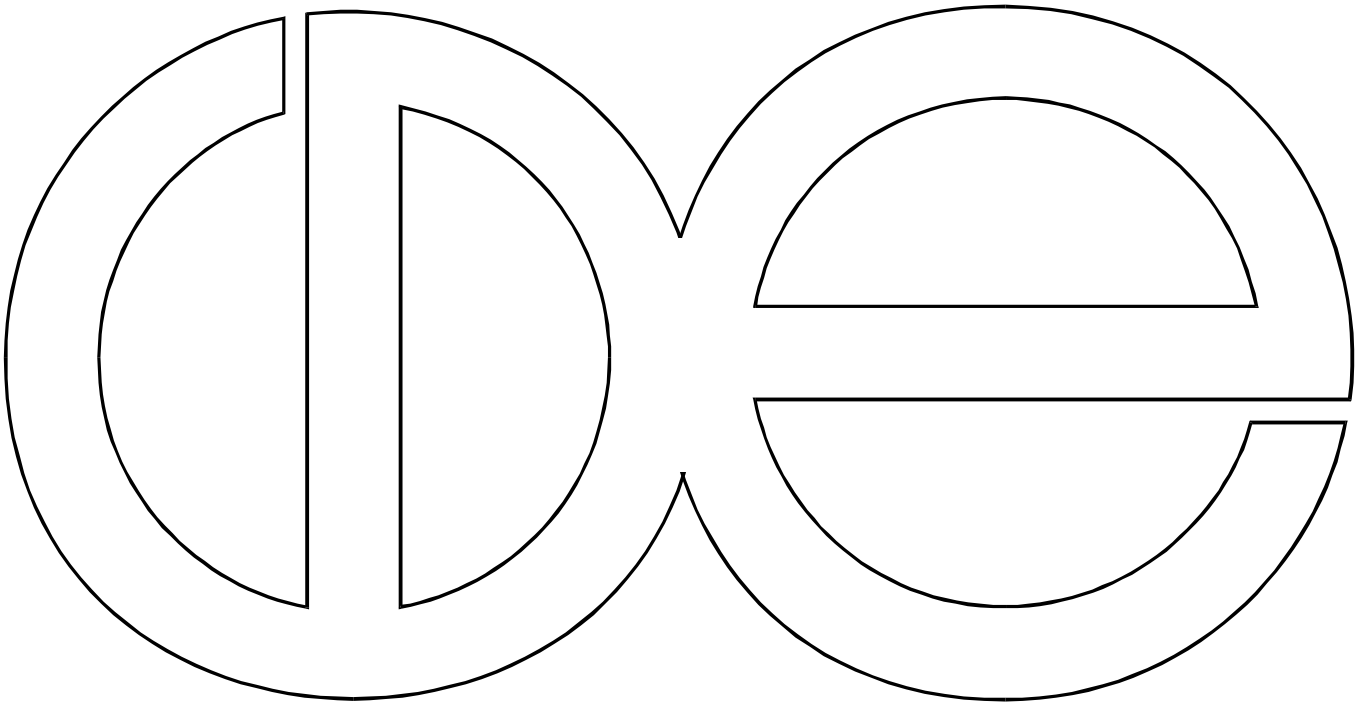

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ABSTRACT

The reasons for the intergenerational association of welfare participation are poorly understood. Past work has examined what portion of the intergenerational association of welfare participation is due to an intergenerational association of low family income. The results of this work have been contradictory and inconclusive. To test this relationship, I compare daughters from low income families who do not participate in the system with daughters from low income families who do utilize welfare. Using a sample of daughters born between 1958 and 1964 from the Panel Study of Income Dynamics, I model their participation in welfare between the ages of 23 and 27. Analyses look at the relationship of mother's and daughter's participation in Aid to Families with Dependent Children (AFDC) and a more broadly defined package of welfare benefits. Nonwhites and daughters with mothers with less than a high school diploma are more likely to participate in AFDC and welfare as adults and receive assistance for longer periods of time. Although continuous measures of family income have significant negative effects on adult participation, results indicate the relationship between mother's and daughter's welfare usage is not merely due to an intergenerational association of poverty.

THE INTERGENERATIONAL RELATIONSHIP OF WELFARE PARTICIPATION

In the debates preceding the adoption of the welfare reform legislation, the Personal Responsibility and Work Opportunity Reconciliation Act of 1996, politicians, academics and the media discussed the previous welfare system's negative consequences for American families. First, many people thought that welfare limited a woman's desire and ability to work. And second, many believed that public assistance limited the economic chances of a recipient's children. At the core of this debate was the hypothesis that welfare creates dependence within and across generations. This paper seeks to help measure and explain public assistance use across generations.

Various research has shown that a daughter of a woman who participated in welfare programs is more likely to participate in welfare programs herself as an adult than are daughters of nonwelfare mothers (Duncan, Hill and Hoffman, 1988; Solon, Corcoran and Gordon, 1988; McLanahan, 1988; Antel, 1992; Gottschalk 1990; Levine and Zimmerman, 1996). As discussed in this paper, several theories have been developed to explain this relationship. Some view this relationship as causal while others see it as spurious.

The present research tries to better model, measure and understand the intergenerational transfer of public assistance participation. I attempt to improve upon the measurement of both the mothers' and daughters' welfare participation by having longer periods of measured exposure. I try to explain the association between a mother's and daughter's welfare participation with characteristics of the daughter, her mother and her family background. Using the Panel Study of Income Dynamics, I model the probability of a daughter born between 1958 and 1964 receiving AFDC or any welfare and the length of that assistance between the ages of 23 and 27 given the characteristics of her family measured when she is between the ages of 10 and 17. In addition, the

paper attempts to determine whether this relationship is due to an intergenerational association of poverty and, thus, eligibility for social welfare programs.

This paper begins with a discussion of the various hypotheses developed to explain the relationship between mothers' and daughters' public assistance usage. I continue with a review of the previous research that has addressed this association. The data and methods section lead into the discussion of findings. And finally, I summarize the results and their implications and offer suggestions for future research.

THEORETICAL CONSIDERATIONS

Within the theoretical discussion about the relationship between mothers' and daughters' welfare participation, proposed hypotheses can be categorized into two basic groups. The first comprises those theories that perceive a mother's welfare use as a cause of her daughter's welfare use. Thus, under these hypotheses, the association between mothers' and daughters' welfare participation results from a causal relationship. The second group of hypotheses do not see a mother's welfare participation as a cause of this relationship and thus perceive the association between mothers' and daughters' welfare use as spurious. The following paragraphs outline the theories that fall into these two broad categories.

The two hypotheses that propose that a mother's welfare use causes a daughter's welfare use are (1) a welfare culture model and (2) Murray's welfare incentives model. According to the welfare culture model, a family's psychological and moral environment changes when the parents participate in welfare, especially if this participation is for long periods of time. Under this new environment, both the mother and child become more accepting of the welfare stigma and their lowly position, develop preferences for welfare versus work, feel a lack of control, become more

focused on the present than on their future, and have little motivation to improve their human capital. After developing in this culture, the mother's children are likely to repeat the cycle of welfare dependence due to these changes in their psychological expectations and culture. Of the theories reviewed here, this conservative cultural model has the most developed perspective on the intergenerational relationship of welfare (Corcoran, 1995; Duncan, Hill, and Hoffman, 1988; Corcoran and Adams, 1995; Sanders, 1990; Gottschalk, 1990; Bane and Ellwood, 1994).

Murray's incentives model emphasizes the economic benefits of welfare. According to Murray, the availability of welfare induces young fathers to shift their parenting responsibilities onto the welfare system because the previous entitlement system would provide for their children. Women could also act irresponsibly with their own fertility because the system would help support an out-of-wedlock birth. Children learn from their parents' irresponsibility and later act similarly because of the incentives and knowledge of welfare. In addition, welfare provides incentives for mothers to forego work and not improve their human capital skills. Thus, welfare causes dependency among mothers because it provides another means of economic support. Their children either learn about these economic incentives or suffer because their parents have lowered their values and human capital resources because of welfare (Murray, 1984; Corcoran and Adams, 1995; Moffitt, 1992).

Other hypotheses consider the relationship between mothers' and daughters' welfare participation as spurious and reflecting other causes of both the mothers' and daughters' welfare use. These hypotheses include the limited resources model, the correlated disadvantages model, Wilson's structural-environmental model, and the family stress model.

According to the limited resources model, both mother and daughter have few economic resources and therefore both use welfare for support. There are two possible mechanisms through

which this correlation in income results in an association of welfare participation. First, this correlation in low income could be due to merely limited socioeconomic mobility. Solon (1992) found that the correlation in long-term earnings between fathers and sons is 0.4. His finding is larger than previously estimated by Sewell and Hauser (1975) and Behrman and Taubman (1985) because of better, more representative data and corrections in measurement error. This improved estimate implies that while there exists much room for economic mobility in the United States, parents and their children have similar levels of income as adults. Therefore, low income daughters are likely to resemble their low income mothers.

Second, this correlation in income could be due to changes in the daughter's resources resulting from her parents' impoverishment. According to child development research, a family's economic deprivation causes deficiencies in children's human and social capital (Hao, 1995). These limitations, resulting from their parent's income, further inhibits a daughter's economic chances.

Under either scenario, according to the limited resources model, children of low income parents will be likely to have low income as adults and also rely on welfare. This theory is especially probable given the income eligibility requirements of public assistance programs. Under this theory, the key intergenerational association is between mothers and daughters income, not their welfare participation (Corcoran, 1995; Levine and Zimmerman, 1996; Gottschalk, 1990; McLanahan, 1988).

The correlated disadvantages model asserts that the intergenerational relationship in welfare participation derives from the fact that mothers' and daughters' other characteristics, not only their incomes, are correlated. These correlated disadvantages cause both the intergenerational correlation in low income and the relationship of welfare participation. These

disadvantaged characteristics could include, but are not limited to, lower intellect, job skills, or education. Since these other characteristics are correlated with economic success, they could explain the spurious relationship between mothers' and daughters' welfare use (Corcoran, 1995; Corcoran and Adams, 1995; Hernstein and Murray; 1994).

Wilson's structural-environmental model stresses the importance of communities. With changes in the global economy, the movement of jobs to the suburbs, and the outmigration of working- and middle-class persons from the inner city, those persons who receive welfare live in neighborhoods with poor opportunities and role models. The environmental desolation, and not welfare, causes problems with the child's skills and attitudes which lead to their later welfare use. The attitudes and behaviors of welfare recipients' children are no different from other children's *until* they face the same economic hardships their parents faced. Even though this model resembles a cultural model, the two models differ on the causal source for changes in children's values and behavior. The structural model locates the community environment as the cause while the cultural model asserts welfare is the cause (Wilson, 1997; Wilson, 1987; Corcoran, 1995; Bane and Ellwood, 1994; Duncan, Hill and Hoffman, 1988).

Finally, the family stress model claims that events, and not states or conditions, cause both the parents and their children to utilize welfare. Events like divorce or job loss can cause a parent to go on welfare and create a disequilibrium within the family. This resulting instability can cause kids to assume adult roles, such as parenthood, at an earlier age when they are not prepared for them. For example, under this model it is the event of changing to a female-headed household, and not just the state of living in a single parent household, that causes these disruptions and negative outcomes for their children. Family stress can cause both parents and their children to use welfare and, therefore, the intergenerational relationship (McLanahan, 1988).

Most theories assert that parents' attitudes and behaviors are important for explaining the relationship of parents' and their children's welfare use. Four theories, the welfare culture, welfare as incentives, limited resources, and correlated disadvantages, propose that a mother may impart her negative characteristics, influenced by welfare or not, to her children and that these attributes affect her child's later participation. For each of these theories, the methods for passing these negative traits on include the following: 1) socialization or lack of socialization through active instruction by the parent; 2) role modeling by the parent and/or observation and internalization by the child; and 3) for the welfare culture and incentives theories, increased knowledge of the welfare system (Antel, 1992; McLanahan, 1988).

The detailed mechanisms of this transfer of traits are not well discussed by the proponents of these theories. These mechanisms need to be better developed since their formulation may make a difference in the validity of the theories. For example, a child's knowledge about the welfare system is greater for those whose mothers participate in the programs. According to the welfare culture and welfare incentives models, this increased knowledge leads to a greater likelihood that the child will participate in these programs as an adult. Knowledge about the system, however, could also deter a child's adult welfare participation. Since the process of applying and maintaining eligibility took so much time and created so much frustration for most parents, children may have disincentives, not incentives, to participate in welfare as a result of their welfare knowledge (Bane and Ellwood, 1994). Hopefully these mechanisms will be more thoroughly considered in the future.

To summarize, two general categories of theories arise to explain the relationship of mothers' and daughters' welfare participation. Under the first category, two theories assert that a mother's welfare use causes her daughter's welfare use. The second category of theories proposes

that the relationship between mothers' and daughters' welfare use is not causal. These theories will guide this research and help explain the association of mothers' and daughters' welfare use.

PREVIOUS RESEARCH

Several researchers have attempted to define and explain the intergenerational transfer of welfare participation using different data, methods and definitions of welfare. Previous research has utilized panel data and logistic models, sibling resemblance models, models with instrumental variables, and multi-stage models of the process of having an out-of-wedlock birth and receiving public assistance. The results show consistent evidence that the daughters of mothers who received welfare are more likely to receive welfare as adults than are the daughters of mothers who did not receive welfare (see Moffitt, 1992).

Research has found conflicting evidence about the effect of the length of parental welfare usage on daughter's adult welfare usage. Duncan, Hill and Hoffman (1988) compared daughters of "highly" dependent families with daughters from families who did not receive public assistance. Families are identified as "highly" dependent if they receive AFDC for all three years when the daughter is aged 13 to 15. Daughters are classified as "highly" dependent when they are adults if they receive AFDC for all three years when they are age 21 to 23. The daughters of highly welfare dependent families are twice as likely as daughters from non-welfare dependent families to be highly dependent themselves as young adults. Pepper (1995) addressed the nonlinear effects of a parent's AFDC participation on a daughter's AFDC participation by including variables indicating whether a daughter's parent received any AFDC, more than one year of AFDC, or more than three years of AFDC. Using a Tobit model, Pepper found that parental participation in

AFDC has impacts on daughters' participation but the length of parental receipt has no effect on the length of daughters' receipt.

The effects of parental welfare participation vary by race and ethnicity. McLanahan (1988) found different effects of parents' AFDC receipt for whites and blacks depending on whether participation is measured as any receipt, the number of years of receipt, or whether AFDC comprises 50 or more percent of family income. The effects of a family receiving 50 percent or more of its annual family income from AFDC on daughter's participation in AFDC is stronger for whites than for blacks. But the effects of the daughter's family receiving any welfare are stronger for blacks. For whites, the longer the family is on welfare the greater the probability that the daughter will receive welfare herself. Santiago (1995) included Latinas in her research. Using the National Longitudinal Survey of Youth, she found that parents' participation in welfare has significant positive effects on daughters' AFDC dependency for whites and blacks but not for Latinas.

To account for unmeasured heterogeneity in the relationship of mother's and daughter's welfare participation, researchers have included instrumental variables in their analyses. Antel (1992) attempted to control for both observed and unobserved heterogeneity in modeling whether a daughter receives any welfare between 1985 and 1987 given her mother's welfare status in 1978. Antel sought to remove the effects of unobserved heterogeneity by including in his models the implicit earnings tax rate for the mothers and the effective state welfare guarantee levels for both the mothers and daughters by state of residence. Significant intergenerational effects of the mother's AFDC participation remain after controlling for unobserved heterogeneity. These results imply that the intergenerational welfare association cannot be attributed to unobserved family background factors. This research faces sample and measurement limitations and

contradicts the findings of Levine and Zimmerman (1996).[1] Levine and Zimmerman (1996) used the National Longitudinal Survey of Older Women and Younger Women (NLS) data sets and the National Longitudinal Survey of Youth (NLSY) data set to model the probability of a daughter receiving AFDC in 1983. From the results of their NLSY models, they concluded that very little of the relationship between a mother's and daughter's AFDC participation can be attributed to the direct effect of a mother's AFDC receipt. Levine and Zimmerman's research also suffers from limitations and, thus, more work using the instrumental variable approach would be valuable.[2]

To help control for unmeasured family background variables, Solon, Corcoran and Gordon (1988) studied pairs of sisters in the Panel Study of Income Dynamics to model whether a sister ever receives AFDC, general assistance, food stamps, and/or Supplemental Security Income between the time that she leaves home and age 27. The measured sister resemblance grows even stronger as the definition of welfare becomes more restricted. The authors conclude that unmeasured family background characteristics affect adult welfare participation.

Finally, previous research has also attempted to account for the effect of low income separate from the effect of family welfare on a daughter's adult welfare usage. As the limited resources theoretical model explains, the intergenerational correlation in low income could explain the intergenerational relationship of welfare usage. Gottschalk (1990) sought to disentangle the

[1] Antel's sample is limited to those respondents of the NLSY who were living at home in 1978 and were between the ages of 14 and 17 in that year. He also has limited measures of welfare exposure and adult receipt. Antel only measures daughters' childhood exposure to welfare and other childhood experiences in 1978 and their adult participation between 1985 and 1987. In addition, Antel must rely on the daughter's report of family background characteristics since he utilizes individual-focused NLSY data.

[2] Levine and Zimmerman (1996) measure a daughter's childhood exposure to welfare for only three years (1968, 1970 and 1971) and her adult participation in welfare for only one year (1983). In addition, for the NLSY data, Levine and Zimmerman must rely on the daughter's report of family background experiences. Finally, they arrived at their conclusion that there is little or no direct effect of mother's welfare after calculating a 95% confidence interval around computed derivatives for the NLSY logistic regression models that included all instrumental variables. It is not clear how Levine and Zimmerman calculated these derivatives and so their results

effects of parents being eligible for welfare and the effects of parents receiving welfare. He defines parent's eligibility status by whether or not the parents have low income. Using data from the NLSY, Gottschalk found that the parents' economic situation and the parent's participation in welfare influence the probability a daughter will receive welfare herself. Levine and Zimmerman (1996) included childhood family income in their models of daughters' adult AFDC usage. They found significant negative effects of family income. Using data from the Panel Study of Income Dynamics (PSID), An, Haveman, and Wolfe (1993) modeled the probability of a teenager giving birth to a child out-of-wedlock and the subsequent probability of receiving welfare within the next three years. This sequential model reveals that the family's economic status, as measured by the average income-to-needs ratio, has a significant negative effect on the probability of daughter's welfare receipt.

In sum, studies continue to find that among blacks and whites the daughters of mothers who receive welfare are more likely to receive welfare as adults than are daughters of mothers who did not receive welfare. Results are mixed as to whether the length of parents' welfare use affects daughters' participation. Other family background variables, especially family income, are also important for explaining this relationship. In general, this research has limited measures of childhood exposure to welfare. Most studies measure the daughters' childhood family experiences for four years or less. Only An, Haveman and Wolfe (1993) look at welfare experiences of the parents for a longer period (eight years).

The present research hopes to improve upon the measurement of a daughter's exposure to welfare by looking at eight years when the child was between ages 10 and 17. With this longer

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are difficult to interpret. The authors might have arrived at different conclusions if they had relied on more common and appropriate evaluation methods, such as creating and comparing predicted probabilities.

period of measured exposure, I hope to better capture the relationship between mothers' and daughters' welfare participation. This work differs from that of An, Haveman, and Wolfe (1993) by looking at women in their mid-twenties instead of as teenagers and by not developing a sequential model.

Furthermore, this paper helps to test the proposals of Gottschalk (1990) by including interactions for family poverty with family welfare participation. This interaction seeks to better model the relationship between these two variables given the eligibility structure of the previous system. According to Gottschalk (1990) if we want to determine the effect of parents' income on daughters' adult welfare use, we need to interact income with parents' welfare participation in order to compare those families who were eligible for welfare and received aid to those families who were eligible and did not receive aid. This paper includes these suggested interactions.

DATA AND METHODS

Data

To model the relationship between mothers' and daughters' public assistance participation, I develop a sample of daughters from the Panel Study of Income Dynamics (PSID). The PSID began collecting data for a nationally representative sample of 4,800 households in 1968. The PSID oversampled low income households in the South and, as a result, black persons. Over time, the survey has been updated to make sure that it is nationally representative (Hill, 1992). One of the main strengths of the PSID is its emphasis on the dynamics of the economic and demographic character of families. This emphasis makes the PSID a better data source than the individual-focused NLS and NLSY data sets to analyze the intergenerational associations of family characteristics. An additional benefit of the PSID is that it continues to follow persons in

the sample who move out of the sample household. This allows researchers to study children when they leave their parents' home and become independent adults. It is this aspect of the PSID that enables the present research to proceed. Finally, the long history of this data set enables me to retrieve information from the parents about their experiences. Unlike in the NLSY, I do not have to rely on daughters' knowledge or recall. The parents' account of their experiences adds validity to my estimates.

There are, however, drawbacks to the Panel Study of Income Dynamics regarding representativeness and nonresponse bias. First, despite the yearly updates to the sample and the introduction of a Latino sample in 1990, the PSID has not been amended to represent the immigrant and refugee populations that have entered the United States since 1968. Therefore, the results presented from this analysis cannot contribute to the question of the intergenerational relationship of welfare participation among immigrants and refugees. Second, due to the long history of the PSID many respondents have dropped out of the survey. The original 1968 response rate was 76% and in the following year the response rate was 85.5%. Since 1969 annual response rates have ranged between 96.9% and 98.5% (Hill, 1992). Thus, even with the small attrition rates for every year, total attrition adds up over time. Only 56.1% of individuals in the original 1968 sample were successfully interviewed in 1988. There have been several assessments of the PSID's data quality in light of this attrition, namely Becketti et al. (1988), Lillard and Waite (1989), Curtin, Juster and Morgan (1988) and Fitzgerald, Gottschalk and Moffitt (1998). Collectively, these research teams have found no compelling evidence that attrition out of or entry into the sample has had an effect on the representativeness of the PSID.

The present study creates a subsample of daughters in the PSID who were born between 1958 and 1964. Demographic, family, and economic characteristics of the daughter reflect her

later childhood experiences as measured between the ages of 10 and 17 and her early adulthood experiences measured in her early twenties. Appendix Table 1 demonstrates the correspondence between years and the ages of the daughters. This age range for measuring the independent, childhood variables maximizes the data available in the PSID and seeks to capture the adolescent period crucial for socialization for adult roles. The specification of the adult period allows most persons to complete their education and begin independent households before I observe their welfare participation. With these data, I model the probability of the daughter ever receiving any welfare and the probability of receiving any AFDC between the ages of 23 and 27. In addition, I model the length of a daughter's AFDC and welfare participation between these ages. The longer periods of exposure for both childhood and adult experiences will allow for a better assessment of welfare participation and the determinants of the daughter's adult receipt of public assistance.

I place several restrictions on the sample to arrive at my final data set for analysis. These restrictions allow me to better model the intergenerational association of mother's and daughter's welfare experiences. Appendix Table 2 reveals the resulting sample sizes due to these restrictions. The sample only includes daughters born between 1958 and 1964 in the original 1968 PSID families who participated in the survey all eight years when the daughters were aged 10 to 17.[3] From this point, I create three subsamples of women. These increasingly restrictive samples allow me to determine how robust my estimates are across different specifications of the population. The first sample includes women who are in the PSID for at least three years while they are between the ages 23 and 27. This sample will be referred to as the "Adult Sample." The second sample, in addition to the previous requirement, only includes women who are either a head or "wife" (legal wife or cohabitor) for at least three years while between the ages of 23 and 27. This

restriction results from data limitations of the PSID. The PSID only determines welfare receipt for persons who are the survey heads, wives or cohabiting partners. Other family members' welfare participation is grouped together. I refer to this second sample as the "Head and Wife Sample." Finally, the third sample restricts the second sample to include only women who have had a child before age 23 or, if they become a head or "wife" after age 23 and before age 26, the year before their first year as a head or "wife." I refer to this sample as the "Mother Sample." Therefore, including all these restrictions, the Adult Sample contains 944 women, the Head and Wife Sample 741, and the Mother Sample 515.

Models

First, I estimate a reduced form logit model of the daughter's welfare participation using the subsamples of daughters from the PSID. The estimated models seek to explain the total effects of a mother's welfare participation on a daughter's participation. This is not a structural or causal model where mothers' welfare participation would have both direct and indirect effects on daughters' participation. Indirect effects of welfare receipt are those that operate through the changes in a mother's behaviors and attitudes that result from her welfare participation and influence a daughter's participation. Therefore, I treat the characteristics of the daughter's family as being exogenous to her and only measure the direct effects of mother's receipt of welfare. The formal model is as follows:

$$\text{Prob}(WELFARE^d = 1) = F(\alpha + \beta WELFARE^m + \gamma Y^p + \varepsilon X^p + \delta X^d)$$

where $WELFARE^m$ indicates mother's welfare participation, Y^p is a vector of family income, X^p is a vector of family background characteristics, X^d is a vector of the daughter's adult characteristics, and $WELFARE^d$ indicates the daughter's receipt of welfare. The coefficient β

[3] Given the nature of the PSID, I have an over-representation of sisters in the final samples. This will not bias my

represents the direct effect of a mother's welfare participation on the probability of daughter's welfare participation.

The second type of models estimated are Tobit models of the length of AFDC and welfare participation while the daughter is between the ages of 23 and 27 using the same samples and independent variables as found in the logit models. A Tobit model appropriately estimates effects of independent variables on limited interval dependent variables, or, said differently, dependent variables with censored cases. The number of years of public assistance receipt is both censored from below at zero and censored from above at five, the maximum number of years I can observe a daughter's adult welfare participation. Like the logistic regression model, this is not a structural model of the daughter's welfare participation and will only reflect the direct effects of the included variables on the outcome. The formal model is as follows:

$$YEARSWELFARE^{d} = F(\alpha + \theta YEARSWELFARE^{m} + \gamma Y^{p} + \varepsilon X^{P} + \delta X^{d})$$

where the independent variable vectors Y^p, X^p, and X^d are specified identically to that of the logistic regression models. $YEARSWELFARE^d$ indicates the length of the daughter's welfare experience between the ages of 23 and 27. The coefficient θ represents the direct effect of the number of years of mother's welfare participation on the length of a daughter's welfare participation.

There are limitations and possible difficulties with both types of models. First, mother's welfare receipt may be endogenous. Or, in other words, there may be some omitted variables that are related to both the mother's and daughter's receipt of AFDC. The theories proposing that this intergenerational relationship is spurious speak to what these omitted variables might be. Second, the daughter's childhood family income could also be an endogenous explanatory

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coefficient estimates but it will underestimate the standard errors of those coefficients.

variable. To remedy this problem, I calculate models without family income. Third, there could be errors in measurement in the welfare usage and income variables. Mother's welfare participation, and, thus, daughter's exposure to welfare, could be measured with error since mothers could misreport their participation in welfare programs. Also, a daughter's adult welfare participation could be measured in error. I have two ways to help correct for this. First, I determine AFDC receipt and food stamp receipt from annual questions about the amount of income received from these sources in the past year. Respondents are more likely to remember benefits from the previous year than they are to recall assistance without reference to a particular time or assistance received further back in time. Second, I model whether the daughter receives AFDC or any welfare over at least a three year period (and at most a five year period). With multiple years of exposure, I am more likely to capture participation in welfare programs. Childhood family income data may also be an error-ridden measure of family permanent income but by averaging family income over eight years, I hope to minimize this. Finally, there could also be problems in the variables calculated as daughters' characteristics if they could result from the influence of her own adult welfare participation. To help manage this problem, the analysis will not include any changes in daughters' characteristics after age 23 or first year as a head or "wife."

Variables

This research separately models a daughter's participation in AFDC and participation in a more broadly defined measure of welfare. Thus, there are four dependent variables in this analysis: 1) the probability of AFDC participation; 2) the probability of welfare participation; 3) the length of AFDC receipt; and 4) the length of welfare receipt. Given the particular selection criteria for the different samples, the dependent variables are defined differently across samples. In the Adult Sample, I determine that the daughter received public assistance if anyone in her family received

assistance in the years she was in the sample. In both the Head and Wife Sample and the Mother Sample, I consider the daughter to have received AFDC or welfare if she is the head or "wife" in the year the head or "wife" receives assistance. The independent variables included in the analysis can be classified into three categories: demographic, family background and adult contextual variables.

Demographic characteristics included in this analysis are the daughter's year of birth, mother's year of birth, and daughter's race. Due to data limitations, I code race as "white" and "nonwhite." Over 85% of those categorized as "nonwhite" are black. I expect nonwhites, younger women and women of younger mothers to be more likely to receive assistance and receive assistance for longer periods of time.

Numerous family background indicators are included in the analysis. These variables are measured for the period when the daughter was between the ages of 10 and 17. To measure a daughter's exposure to public assistance, I calculate both her exposure to only AFDC and her exposure to a more encompassing definition of welfare. The daughter is considered to have been exposed to welfare if the head or wife of the daughter's family receives AFDC, Supplemental Security Income (SSI), food stamps, other general welfare assistance or if the family ever lived in public housing while the daughter was between the ages of 10 and 17. Family experiences with AFDC are used to predict a daughter's adult experiences with AFDC while the family experiences with the more encompassing measure of welfare are utilized to predict a daughter's adult welfare participation. Since I do not have information about the daughters' experiences before the age of 10, I could miss some years of welfare exposure. Therefore, my estimates of the effect of parent's receiving AFDC could be an underestimate. With the inclusion of more years of data, I hope to minimize this potential problem. Even with this data limitation, however, I would argue that a

family's later welfare receipt has more influence on the daughter's adult characteristics than does family experiences before age 10.

For measures of the amounts of AFDC, food stamps (included in the definition of welfare) and family income, I use the PSID's imputed values. The PSID uses data from within a current survey and previous year's surveys to determine missing values. If these methods do not help to code the missing data, the PSID utilizes the hot deck method to assign values for these cases.

As mentioned earlier, this paper primarily seeks to assess whether the relationship between mothers' and daughters' welfare participation results from the association of welfare participation with low income. I include a measure of overall family income defined as the logged average of the family's income while the daughter is between 10 and 17 adjusted for family size and inflation. I convert all family income amounts into 1976 dollars using the CPI-U. To better assess whether the family was eligible for assistance I include two measures of this construct. First, I create the following two dichotomous variables: 1) ever poor, ever received assistance and 2) ever poor, never received assistance. The omitted category contains persons whose families were never poor, as defined by the official poverty definition, while the daughter was between the ages of 10 and 17. Second, I create two count variables, (1) the number of years family was both poor and receiving aid and (2) the number of years the family was both poor and not receiving aid.[4] With these variables, I hope to determine whether persons from families who were poor, and probably

[4] Some families were both not officially poor and receiving assistance. This is more understandable for the broader definition of welfare since eligibility rules for various programs are diverse and often less strict than the cash assistance of AFDC. In the Adult Sample, 34 daughters are from families that received AFDC though they were never officially poor and 120 daughters are from families that received welfare though never officially poor. In the Head and Wife Sample, 29 daughters are from families that were not poor but received AFDC and 98 daughters are from nonpoor families who received welfare. In the Mother Sample, 24 daughters are from families that were not poor but received AFDC and 71 daughters are from families that received welfare though they were never officially poor.

eligible for assistance, are more likely to receive assistance as adults than are persons from families who were not poor, and thus not eligible.

Other family background variables include mother's education, family marital patterns, average number of children in the family, and Southern, metropolitan and high unemployment county residence. Mother's education is derived from a question specifically asking the daughter to categorize the highest level of education her mother had received. I collapse mother's education into the following three categories: less than a high school diploma, high school diploma, and more than a high school diploma. This classification helps minimize the errors in a daughter's reports. To try to capture the living arrangements and possible instability of such arrangements, I code family marital patterns into three categories. The first includes daughters who lived in a married, two-parent family for all eight years while between the ages of 10 and 17. The second category includes daughters who lived all eight years in a single parent family. Finally, the last category is comprised of daughters who spent time in both types of families during this age range and, thus, experienced some form of disruption in their family. Southern residence is determined by whether the daughter spent most of her adolescence (5 or more years) in the South.[5] Likewise, childhood metropolitan residence is based on whether the family spends five or more years in a metropolitan county. A daughter is determined to have lived in a "high" unemployment county if her family ever lived in a county with an unemployment rate of 10% or higher while she was between the ages of 10 and 17.

Finally, I create adult contextual variables from the year before the daughter's welfare characteristics are measured. The information can come from when the daughter is aged 22, 23 or 24 since for all three samples I require that the daughters only be in the PSID for at least three

years between the ages of 23 and 27. These contextual variables include the level of the daughter's completed education, whether she was employed at the time of the survey, and state of residence characteristics. Obtained from various Green Books and Statistical Abstracts, state contextual variables by year include the following: 1) the combined maximum AFDC and food stamp benefits for a family of three,[6] 2) per capita personal income in thousands of dollars, and 3) female labor force participation rate. I set the values for the maximum welfare benefits and per capita income to 1976 dollars to adjust for inflation using the CPI-U. To account for different period effects, I include dummy variables indicating the year before the daughter's welfare is measured and, thus, the year from which the adult individual- and state-level characteristics derive. The year 1980 is the omitted, comparison year.

RESULTS

Table 1 gives the weighted sample means, proportions and standard deviations for the various characteristics of the daughters by sample.[7] From this table, we can observe several things. Most noticeably, the Adult Sample members and the Head and Wife Sample members are more similar than are the Adult Sample members and the Mother Sample members. Though not presented here, I computed differences in unweighted means test statistics to compare (1) Adult Sample members and Head and Wife Sample members, (2) Adult Sample members and Mother Sample members and (3) Head and Wife Sample members and Mother Sample members. The only significant difference in the first comparison occurs for the state maximum AFDC and food

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[5] Including family income and Southern residence is important since the PSID oversampled persons with low income and those in the South.

[6] Due to information limitations, state combined maximum AFDC and food stamp benefits for 1981 have been used for 1981 and 1980 state values.

[7] For all but two daughters in the Adult Sample, the sample weights used in creating these results come from the 1985 survey since most daughters were in the PSID that survey year. For those two daughters who are not in the PSID during 1985, their 1984 weights are used to calculate the weighted statistics.

stamp benefits in the year preceding observation of the daughter's welfare. Members of the Head and Wife Sample lived in states with significantly lower benefits than did the Adult Sample members.

There are numerous differences, however, between the Adult Sample members and the Mother Sample members. Members of the Mother Sample are more likely to receive AFDC and welfare as an adolescent and as an adult, more likely to be nonwhite, have younger mothers, have longer spells of childhood poverty, live in low benefit states, and have less education. The Head and Wife Sample members and the Mother Sample members also differ along these same dimensions with the exception that they do not differ by the daughters' education levels. In addition, members of the Mother Sample are more likely to have lived in single parent families and for longer periods of time than are members of the Head and Wife Sample.

The sample differences discovered through the tests of mean comparisons are reflected in Table 1. These sample differences help speak to the question of the how endogenous having a child is to the process of receiving welfare. Those who have had a child by the years of observation, those of the Mother Sample, have more negative background characteristics than have the members of the samples that include women without children.

Looking primarily at the Adult Sample and the Head and Wife Sample in Table 1, I find that approximately 13 percent of these women receive AFDC as an adult and around 24 percent receive welfare. For those daughters who receive AFDC or welfare as an adult, they typically receive this assistance for nearly three years. Childhood family welfare use shows similar patterns. Nearly 14 percent of the daughters' families received AFDC and around 28 percent of their families received welfare. For those families that received AFDC or welfare, these families received assistance for approximately three years.

Table 1 also reveals that about seventy-five percent of the daughters lived only in two parent families while between the ages of 10 and 17. Around 6 percent lived only in single parent families and 18 percent lived in both family types. Finally, around half of the daughters are themselves married in the year before the observation of their welfare characteristics.[8]

Since the Adult Sample is larger and since there were not substantial, significant differences between the Adult Sample and the Head and Wife Sample, the weighted means and proportions for daughters' characteristics by their parent's poverty and public assistance status are reported only for the Adult Sample in Tables 2 and 3. Table 2 shows weighted means and proportions by parents' AFDC participation and Table 3 displays the weighted means and proportions by parents' welfare receipt. These two tables reveal similar patterns but the differences between the daughters whose parents were poor but did not receive aid and the daughters whose parents were poor and did receive aid are greater by parents' AFDC participation than by parents' welfare participation. This partly results from the fact that more poor families are both eligible and less stigmatized to take up the varied forms of welfare assistance than they are for the cash AFDC assistance. In general, children from families who were never poor and did not receive welfare are better off than children from families who were ever poor. Daughters whose families were never poor and did not receive welfare have less adult welfare participation, more years of completed education, higher employment rates, mothers with higher education, greater family income, fewer siblings, and are more likely to have lived in two parent, married families. Furthermore, daughters from poor families who did not receive

[8] In Tables 1 through 3, the number of children of the daughter is based on the number of children in the family when the daughter is a head or "wife" for the survey year preceding the observation of the daughter's welfare. The mean number of children for the Mother Sample is less than one because the reported number derives from the survey question asked in the spring while the Mother Sample is defined on the basis of comparing her year of birth

governmental assistance are better off than are daughters from poor families who did by these same characteristics. In addition, daughters from families that received assistance are more likely to be nonwhite and have more children.

The model results are presented in Tables 4 through 9. Table 4 reveals the significant results from multivariate logit models predicting whether a daughter receives AFDC as an adult. Table 5 reports on models predicting the same outcome but also includes the interaction variables for childhood family poverty and AFDC participation. Tables 6 and 7 repeat the models of Tables 4 and 5 but to predict a daughter's adult welfare usage. Tables 8 and 9 present the results from the Tobit models of the length of adult public assistance usage. Table 8 presents the results for the length of AFDC receipt and Table 9 presents the results for the length of welfare receipt.[9]

Across all tables, Models A and D include the daughter's demographic and family background characteristics minus family income. Models B and E add family income to the previous models. Models C and F add the daughter's adult personal and state characteristics in the year preceding observation and fixed year effects. Models G through J include better measures of parents' eligibility and, thus, the interactions for parent's welfare participation and poverty status. Models G and I include all demographic and family background variables. Models H and J build upon these by including the daughter's characteristics in the year before observation and the fixed year effects. The difference between each of the pairings described above (i.e., A and D, C and F,

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with the birth of her child and adult family living arrangements. Many members of the Mother Sample have their children in the appropriate age year, but not before the appropriate survey year.

[9] Some cases have missing data on the adult AFDC dependent variables. In the Adult Sample, twenty cases have missing data on the dependent variable. The Head and Wife Sample and the Mother Sample each have five cases with missing data. These cases with missing data have been dropped. The results from mean comparison tests within samples between the cases with missing data and those without prove that there are not substantial differences between these groups. In the Adult Sample, the cases with missing data are significantly more likely to be younger, nonwhite and live in states with higher per capita income and female labor force participation rates in the year before observation. In the both the Head and Wife Sample and the Mother Sample, those with missing

G and I) is that the first model listed in the pair measures parents' public assistance as a dichotomous variable (whether they received aid or not) and the second model listed measures public assistance as a continuous variable (the number of years aid was received).

For several reasons, all presented model results are for the Head and Wife Sample. First, for the Head and Wife Sample and the Mother Sample I can determine whether the daughter or her spouse personally receive public assistance as adults. Second, the Adult Sample and the Head and Wife Sample do not show many significant differences.

Third, the Mother Sample may suffer from problems of endogeneity. There are at least two ways of looking at the relationship between mothers' and daughters' welfare participation. First, one could only look at adult daughters eligible to receive assistance and, thus, only those who have had a child. Second, one could consider having a child as part of the process of receiving welfare. Therefore, one would not want to separate daughters who have had a child from those who have not. It is this second perspective that considers the birth of a child as endogenous to receiving welfare. Given these two considerations, I have calculated results for both the Head and Wife Sample and the Mother Sample. But given the potential problem of endogeneity, I only report the results for the Head and Wife Sample.

Finally, the patterns of results are generally similar across all samples. The signs and patterns of coefficients are the same across samples. As expected, the largest sample, the Adult Sample, has more significant variables and the smallest sample, the Mother Sample, has the fewest significant variables. The two exceptions to this pattern involve the daughter's year of birth and the year fixed effect variables. The models for the Head and Wife Sample and the Mother Sample

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data are significantly more likely to be younger. And finally, in the Head and Wife Sample women with missing data are more likely to live in states with higher female labor force participation rates.

are more likely to find daughter's year of birth and the year fixed effect variables statistically significant than are the models for the Adult Sample.

Only variables that proved statistically significant at some point in the process of elaborating the model are presented in the Tables 4 through 9. Some consistent results emerge across the different models. First and foremost, a parent's receipt of AFDC remains consistently significant and positively related to a daughter's adult AFDC participation across all specifications. Second, the coefficients for parental welfare usage become insignificant with the addition of childhood family income and adult contextual variables when the poverty-welfare interactions are not included. Third, the coefficients for the direct effect of parents' welfare attenuate with the addition of other covariates, especially with the addition of family income. Fourth, the continuous measure of family income has strong negative and significant effects for both types of welfare receipt in all specifications of models. Fifth, nonwhites are consistently and significantly more likely to receive either form of assistance and to receive it for longer periods of time, even after controlling for all covariates. Finally, in all but one model for one sample, the variables indicating that a family was poor and did not receive assistance are not significant.

Tables 4 and 5 present model estimates of the effects of selected variables on the probability a daughter will receive AFDC as an adult between the ages of 23 and 27. Table 4 includes the continuous measure of income and both the dichotomous and continuous measure of parents' AFDC usage. Similar patterns develop with both the dichotomous and continuous measures. Therefore, the results do not appear sensitive to the specification of family welfare use. In both Models A and D, family AFDC participation, being nonwhite, and having a mother with less than a high school diploma have significant positive effects on the probability a daughter receives AFDC. Also in Models A and D, living the majority of one's youth in the South has

significant negative effects on this probability. With the addition of family income to the models, parent's AFDC usage, being nonwhite and living in the South remain significant and with the same direction. Also, family income, daughter's year of birth, and living the majority of one's youth in an urban county become significant and negatively related to daughter's AFDC participation, as shown in Models B and E. Models C and F show the results after adding covariates measured in the year before the first observation of a daughter as an adult. Living in the South and living in a metropolitan area falls out of the models, while the coefficient for living in both family types becomes significant and larger. Daughter's adult education and employment and a fixed effect for the year 1987 are significant. Possible reasons for the significance of the year 1987 include the increases in AFDC caseload around that period, the federal discussion and passage of the welfare reform legislation, the Family Support Act of 1988, and the beginning of a major recession when marginal workers would face job loss.

Table 5 includes variables to estimate the effect of eligibility on the likelihood a daughter will receive AFDC as an adult. Whether eligibility is measured by the two dummy variables or by the two count variables, the interaction variables indicating the family was poor but did not receive aid are not significant. The variables indicating that the family was both poor and received assistance, however, are consistently significant and positive. In Models G and I, being nonwhite, having a mother with less than a high school diploma, living in both family types, and living in the South has significant effects on the probability that a daughter receives AFDC as an adult. With the addition of variables measured in the year before observation, most variables remain significant. Mother's low education and living in the South, however, become statistically insignificant. As in Table 4, daughter's education and employment and the fixed effect of the year

1987 have significant effects on the outcome. Thus the overall results of Tables 4 and 5 parallel each other.

Tables 6 and 7 report the effects of different variables on the likelihood a daughter will receive welfare as an adult. In Table 6, the top and bottom panels show similar patterns and, thus, the results do not show much sensitivity to the measurement of parent's welfare. In Models A and D, family welfare receipt, daughter's year of birth, being nonwhite, and having a mother with less than a high school diploma increases the probability that the daughter will receive welfare. Having a mother with greater than a high school diploma significantly decreases this probability. In Model A, but not Model D, the average number of children is significantly related to an increased likelihood of receiving welfare. In both Models B and E, results show that only daughter's year of birth, being nonwhite and mother's lower education remain significant with the addition of family income. Noticeably, parent's welfare usage become insignificant. Also, living the majority of one's youth in the South and living as a youth in a metropolitan area become significant and more negatively related to daughter's adult welfare use with the addition of family income. After adding the daughter's adult personal and environmental characteristics, only family income and being nonwhite remain significant. Daughter's adult education and employment are also significant.

Table 7 attempts to account for the effects of family eligibility on a daughter's adult welfare use by including the interaction variables for family poverty and welfare use. As seen in Models G and I, the coefficients for parent's poverty and lack of welfare continue to be statistically insignificant. For Model G for the Mother Sample, however, this interaction is significant. It is only for that model and sample that an interaction for poverty without welfare is ever significant. Also in Models G and I, being ever poor and receiving welfare, being nonwhite,

the daughter's year of birth, and having a mother with less than a high school diploma are significantly and positively related to the outcome. Having a mother with more than a high school diploma is negatively related to the outcome in Models G and I. For Model I, living in both family types has a significant, positive effect on a daughter's receiving welfare as an adult. In Models H and J, where daughter's adult characteristics are added, only living in a family that was both poor and receiving aid, being nonwhite, and daughter's education and employment remain significant.

Comparing the results found for predicting any adult AFDC receipt and those found for predicting any adult welfare receipt helps to improve our understanding about the similarities and differences in the intergenerational relationships of public assistance use for different types of assistance. In contrasting the results predicting AFDC in Table 4 with those predicting welfare in Table 6, the most striking difference involves the significance of a parent ever receiving aid on the likelihood a daughter receives the same aid as an adult. Parents' AFDC participation remains significant throughout Table 4 while parents' welfare participation becomes statistically insignificant with the addition of family income. Family receipt of the income maintenance cash assistance of AFDC may have stronger impacts on adult participation than other programs do. These differences could reflect the different nature and political histories of the programs.

More comparisons between the two dependent variables can be drawn. Having a mother with more than a high school diploma has significant negative effects on a daughter's adult welfare use but not on adult AFDC use. Living in the South and living in a metropolitan county as a child has consistent, significant effects on both daughter's AFDC and welfare participation. Comparing Tables 5 and 7, I find that living outside the South during one's youth is a significant predictor of AFDC participation but not welfare participation. Daughter's year of birth has

significant effects on adult welfare usage, but this is not the case for adult AFDC usage. Across all tables, living in both family types is always a significant predictor of adult AFDC participation but never a significant predictor of welfare participation. Furthermore, the fixed effect for 1987 is consistently and significantly associated with adult AFDC participation but never for welfare. Finally, family childhood income decreases the likelihood that a daughter receives either AFDC or welfare, but the coefficients for family income are stronger for reducing the likelihood of adult welfare. In general, variables related to the eligibility for AFDC and AFDC policy changes, such as family type and the year 1987, have more significance for adult AFDC participation, while stratification variables, such as mother's education and family income, have stronger effects for adult welfare use.

Table 8 reports the Tobit estimates of the effects of certain variables on the length of time a daughter receives AFDC. In the top panel, a continuous measure of family income is included. Across Models D through F, the more years the daughter's family receives AFDC the more years the daughter will receive AFDC as an adult. Before including family income, the number of years of family AFDC receipt, being nonwhite, having a mother with less than a high school diploma and living outside the South increase the number of years of adult AFDC receipt. After including family income, these variables remain significant and in the same directions. In addition, family income, the average number of children in the family, and living the majority of one's youth in a metropolitan area become significant and negatively related to increased years of adult AFDC receipt. The daughter's year of birth also becomes significant but it is positively related to increased AFDC usage. Finally, after including daughter's adult characteristics in the years preceding observation, the years of family welfare receipt, family income, daughter's year of birth and being nonwhite remain significant with the same signs. Daughter's education and

employment are negatively related to increased years of receipt, as are the period effects for 1983, 1984 and 1986 (relative to 1980). The period effect for 1987 is positively related to increased years of AFDC receipt.

The significance of 1983 and 1984 for predicting the length of both AFDC and welfare receipt could be due to the passage of the Omnibus Budget Reconciliation Act (OBRA) in 1981 which lead to significant reductions in caseloads, especially among working recipients, for the following years. The significance of the later year, 1988, could be related to increases in AFDC caseload, the passage of the Family Support Act in 1988, or the beginning of an economic recession.

In the bottom panel of Table 8, models include the number of years the family was poor by AFDC receipt. Increased years of poverty with AFDC significantly increases the years of adult AFDC participation. But increased years of family poverty without AFDC is not significantly related to increased years of adult AFDC receipt. Other significant variables in Model I include being nonwhite, low mother's education, living in both family types, and living the majority of one's youth in the South. After adding the adult characteristics, the coefficient for living in the South becomes statistically insignificant while the other variables remain significant. The same adult personal and contextual variables are significant in Model I as were in Model F and in the same directions.

Table 9 presents Tobit results for predicting the years of adult welfare participation. Similar patterns are found in these series of models as were found in Table 8. In Model D, the years of welfare receipt, daughter's year of birth, being nonwhite, having a mother with low education, and living outside the South significantly increase the number of years a daughter receives welfare as an adult. After including family income in Model E, most of these variables

remain significant. Years of mother's welfare, however, becomes statistically insignificant. Family income and living in a metropolitan area as a child are negatively related to increased years of welfare and become significant with the addition of family income to the model. Finally, once the daughter's adult characteristics are included in Model F, being nonwhite and having a mother with less than a high school diploma have significant, positive effects on the number of years the daughter receives welfare. Family income, daughter's adult education and employment, and period effects for 1983, 1984 and 1988 have significant negative effects on the number of years of welfare receipt.

Models I and J include interactions for poverty and welfare receipt as counts of the number of years for these joint experiences. Again, increases in the number of years one's family was both poor and not receiving aid is not significantly related to the number of years a daughter receives welfare. Increased years of poverty with aid, daughter's year of birth, being nonwhite, and living the outside the South significantly increases the years of welfare use. Once adult characteristics are controlled, the same variables are related to increased years of adult receipt and in the same directions as found in the top panel of Table 9. Namely, being white, having a mother with at least a high school diploma, daughter's years of education and employment, and period effects for 1983, 1984 and 1988 decrease the number of years of adult welfare use.

Comparing Tables 8 and 9, I again find that parents' welfare participation, here measured in years, becomes statistically insignificant with the addition of family income. The years of parents' AFDC receipt remains significant throughout the models in Table 8. The average number of kids in the daughter's family, living in both family types as a child, and living in a metropolitan county as an adult are never significant predictors of increased adult welfare usage but are significant for predicting years of AFDC receipt. There are more similarities than

differences, however. Most notably, for predicting both the years of welfare use and years of AFDC use, all significant variables have the same direction on both outcomes. This suggests that the control variables have nearly consistent effects on adult public assistance participation regardless of type. It's important to note that for predicting increased years of a daughter's adult AFDC and welfare use, mother's education remains significant even after controlling for daughter's adult characteristics. This was not the case in predicting the probability of a daughter ever receiving AFDC or welfare between the ages 23 and 27. Similar year fixed effects are found for both welfare and AFDC. From these comparisons, it appears that characteristics influencing eligibility and stratification processes have similar effects for both the length of AFDC and the length of welfare participation.

CONCLUSIONS

I began this research trying to better estimate daughter's exposure to both her family's participation in governmental assistance programs and her adult participation by expanding the years of observation. Also, I tried to determine whether eligibility or the actual receipt of welfare explains the strong relationship between mother's and daughter's welfare participation. The results are generally consistent across different measurements of parents' AFDC and welfare use for each dependent variable. The results from the present research suggest that, in general, experiencing welfare as a child increases the likelihood of receiving aid. The effects of a family receiving AFDC appear to consistently and significantly relate to increases in the likelihood and length of a daughter's adult AFDC use. This is not true for parental welfare usage. Parent's welfare participation and the length of that participation often become insignificant with the

addition of family income. Even so, these research findings support the causal theories of the effect of parental public assistance receipt on daughter's adult participation.

The continuous measure of family income has strong negative and significant effects on both types of welfare receipt for all specifications of the models. This finding lends some support for the limited resources model. This theory is not well supported when I try to capture the effects of family eligibility on adult welfare participation. Except for one instance, the variables indicating the family was poor and did not receive welfare were not significant predictors of a daughter receiving assistance or the number of years of her assistance. This suggests that either eligibility may need to be better specified or that the effects of family income do not concentrate around the poverty line but throughout the income distribution. Another possible categorization of public assistance eligibility is to designate all families with income below 125% (or other similar level) of the poverty line as eligible. This could be a more appropriate cutoff for eligibility since some welfare programs allow for families to have income above the official poverty line.

Other demographic and family background characteristics have significant relationships with daughter's adult welfare. Nonwhites are consistently and significantly more likely to receive either form of assistance and to receive it for longer periods of time, even after controlling for all other variables. A mother's lower education does not appear to have a direct effect of the likelihood of a daughter receiving aid as an adult once the daughter's adult characteristics are controlled. Thus, the effect of mother's education seems to operate through the daughter's characteristics. There does, however, seem to be a direct effect of having a mother with less than a high school diploma on the number of years a daughter receives either AFDC or welfare. Together these findings add validity to the correlated disadvantages model. Living in both two-parent and single parent families as a child is frequently related to an increased likelihood of

participation and longer periods of participation, especially for adult AFDC usage. These findings bolster the family stress theoretical model. Finally, childhood residence characteristics, such as living in the South and living in a metropolitan area, generally have negative relationships with daughters' adult welfare participation. These results give some credence to the effects of environmental factors on later welfare participation, but they do not capture the qualities described in Wilson's structural-environmental model.

My research helps speak to the theoretical questions and bolster the research effort in this area. Even so, I have further plans for improving this research. In the future, I hope to experiment with various definitions of eligibility and include instrumental variables. The inclusion of instrumental variables would control for unobserved heterogeneity in the models estimating the effects of mother's welfare characteristics on daughter's welfare. The inclusion of instrumental variables will help to ensure that the coefficients of the variables in the models are not biased.

One of the main reasons for continuing this research lies with the present welfare policy context. This research and these findings are especially relevant given today's new welfare system. The welfare reform legislation of 1996 placed 5-year time limits on the period a mother can receive TANF assistance, or aid from the block grant program that replaced AFDC. The results of this research suggest that the length of parental assistance does influence later adult welfare participation, especially for monetary aid to families with dependent children. Since it will be years before this welfare policy change can be evaluated in light of this intergenerational relationship, it is important to proceed with research that seeks to understand the relationship between mothers' and daughters' welfare use under the previous welfare system. With this knowledge, we can better anticipate the effects of the latest welfare reform and better understand mobility in the United States.

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Table 1

Weighted Statistics for Daughters in the Adult Final Samples

	Adult Sample		Head and Wife Sample		Mother Sample	
	Mean or Proportion	St. Dev.	Mean or Proportion	St. Dev.	Mean or Proportion	St. Dev.
Daughter's Characteristics						
Year of birth	1960.920	8.476	1960.890	8.678	1961.150	8.118
Nonwhite	0.215		0.202		0.259	
Received AFDC between ages 23 and 27[a]	0.129		0.140		0.176	
For those with AFDC, number of years of AFDC	2.774	4.852	2.823	5.041	3.040	4.885
Received welfare between ages 23 and 27[b]	0.244		0.248		0.317	
For those with welfare, number of years of welfare	2.780	5.298	2.756	5.410	2.852	5.382
Characteristics in Year Before Observation						
Years of completed education	12.545	6.869	12.525	7.018	12.265	6.606
Marital status						
Married	0.552		0.552		0.529	
Single, never married	0.376		0.376		0.392	
Single, ever married	0.072		0.072		0.079	
Number of children	0.590	3.325	0.590	3.325	0.866	3.263
Employed	0.632		0.646		0.551	
Metropolitan residence	0.618		0.601		0.576	
Southern region residence	0.286		0.309		0.340	
Mother's Characteristics						
Year of birth	1933.660	26.198	1933.830	26.714	1934.520	24.836
Education						
Less than a high school diploma	0.269		0.277		0.317	
Received high school diploma	0.438		0.436		0.390	
Greater than a high school diploma	0.293		0.288		0.293	
Family Characteristics While Aged 10 to 17						
Income Characteristics						
Received AFDC	0.135		0.136		0.176	
For those with AFDC, number of years of AFDC	3.183	6.036	3.124	6.342	3.164	5.983
Received welfare[a]	0.281		0.287		0.334	
For those with welfare, number of years of welfare	3.522	8.501	3.476	8.876	3.715	8.644
Adjusted, average family income (in 1976 $)	4,242.18	14,553.30	4,219.95	15,109.63	4,247.11	15,695.50
Log of average family income (in 1976 $)	8.079	3.211	8.074	3.263	8.043	3.277
Number of Years (Poor and received AFDC)	0.273	4.211	0.262	4.196	0.320	4.269
Number of Years (Poor and no AFDC)	0.497	5.304	0.476	5.239	0.566	5.408
Number of Years (Poor and received Welfare)	0.507	6.416	0.491	6.419	0.623	6.677
Number of Years (Poor and no Welfare)	0.263	3.236	0.247	3.100	0.263	3.004
Family Characteristics						
Average number of children	3.268	6.833	3.262	6.762	3.382	6.620
Parents' Marital Status						
Only Married during ages 10-17	0.757		0.750		0.707	
Only Single during ages 10-17	0.064		0.060		0.072	
In both family types during ages 10-17	0.179		0.190		0.221	
Residence Characteristics						
Majority of years in Metropolitan county	0.395		0.424		0.432	
Majority of years in Southern region	0.254		0.268		0.295	
Ever lived in a high unemployment county[c]	0.369		0.360		0.346	

Source: Author's computations from the 1968-1992 waves of the Panel Study of Income Dynamics

a: For Adult Sample, receipt of AFDC is defined by whether anyone in the daughter's family received AFDC during those ages. For the Head and Wife Sample and the Mother Sample, receipt of AFDC is defined by whether the daughter or her spouse received AFDC.

b: Indicates whether the daughter ever received AFDC, SSI, food stamps, other forms of general welfare assistance, or lived in public housing between ages 23 and 27 as an adult or as a daughter in a family while between the ages of 10 and 17.

c: A county is considered to have high unemployment if it is 10% or higher

Table 2

Weighted Statistics for Daughters in the Adult Sample, by Parents' Poverty and AFDC Recipiency

	Family Never Poor		Family Ever Poor			
	Did Not Receive AFDC (N = 525)		Did Not Receive AFDC (N = 179)		Received AFDC (N = 206)	
	Mean or Proportion	St. Dev.	Mean or Proportion	St. Dev.	Mean or Proportion	St. Dev.
Daughter's Characteristics						
Year of birth	1960.920	9.996	1961.000	5.911	1960.860	6.245
Nonwhite	0.116		0.382		0.685	
Received AFDC between ages 23 and 27[a]	0.068		0.211		0.428	
Received welfare between ages 23 and 27[b]	0.153		0.371		0.710	
Characteristics in Year Before Observation						
Years of completed education	12.838	7.278	12.186	5.493	11.297	5.381
Marital status						
Married	0.580		0.534		0.411	
Single, never married	0.365		0.293		0.543	
Single, ever married	0.056		0.173		0.046	
Number of children	0.403	3.152	1.076	3.234	1.098	2.791
Employed	0.677		0.583		0.426	
Metropolitan residence	0.617		0.524		0.665	
Southern region residence	0.256		0.412		0.400	
Mother's Characteristics						
Year of birth	1933.350	29.380	1934.500		1934.680	20.777
Education						
Less than a high school diploma	0.186		0.481		0.658	
Received high school diploma	0.474		0.406		0.241	
Greater than a high school diploma	0.341		0.114		0.101	
Family Characteristics While Aged 10 to 17						
Income Characteristics						
Adjusted, average family income (in 1976 $)	4,975.13	17,365.55	2,487.03	7,185.76	1,221.71	2,198.63
Log of average family income (in 1976 $)	8.322	2.983	7.566	2.167	6.960	1.612
Family Characteristics						
Average number of children	3.043	7.211	3.744	5.541	4.452	5.791
Parents' Marital Status						
Only Married during ages 10-17	0.850		0.609		0.339	
Only Single during ages 10-17	0.021		0.111		0.256	
In both family types during ages 10-17	0.129		0.280		0.405	
Residence Characteristics						
Majority of years in Metropolitan county	0.376		0.496		0.464	
Majority of years in Southern region	0.219		0.411		0.360	
Ever lived in a high unemployment county[c]	0.358		0.305		0.484	

Source: Author's computations from the 1968-1992 waves of the Panel Study of Income Dynamics

Note: These statistics are based on the Adult Sample. There are 34 daughters whose family received AFDC but were not poor.

a: Receipt of AFDC is defined by whether anyone in the daughter's family received AFDC during those ages.

b: Indicates whether the daughter ever received AFDC, SSI, food stamps, other forms of general welfare assistance, or lived in public housing between ages 23 and 27 as an adult or as a daughter in a family while between the ages of 10 and 17.

c: A county is considered to have high unemployment if it is 10% or higher

Table 3

Weighted Statistics for Daughters in the Adult Sample, by Parents' Poverty and Welfare Recipiency

	Family Never Poor		Family Ever Poor			
	Did Not Receive Welfare (N = 439)		Did Not Receive Welfare (N = 57)		Received Welfare (N = 328)	
	Mean or Proportion	St. Dev.	Mean or Proportion	St. Dev.	Mean or Proportion	St. Dev.
Daughter's Characteristics						
Year of birth	1960.970	10.238	1961.280	7.580	1960.810	5.762
Nonwhite	0.111		0.268		0.630	
Received AFDC between ages 23 and 27[a]	0.063		0.170		0.374	
Received welfare between ages 23 and 27[b]	0.143		0.223		0.655	
Characteristics in Year Before Observation						
Years of completed education	12.898	7.605	12.475	8.366	11.473	4.773
Marital status						
Married	0.593		0.516		0.458	
Single, never married	0.360		0.303		0.459	
Single, ever married	0.047		0.181		0.084	
Number of children	0.393	3.142	1.016	4.184	1.113	2.739
Employed	0.678		0.654		0.449	
Metropolitan residence	0.614		0.508		0.626	
Southern region residence	0.254		0.290		0.447	
Mother's Characteristics						
Year of birth	1933.160	30.253	1935.580	30.336	1934.190	19.437
Education						
Less than a high school diploma	0.148		0.290		0.673	
Received high school diploma	0.485		0.515		0.252	
Greater than a high school diploma	0.367		0.196		0.075	
Family Characteristics While Aged 10 to 17						
Income Characteristics						
Adjusted, average family income (in 1976 $)	5,238.14	18,254.75	3,265.87	11,538.62	1,348.20	2,219.09
Log of average family income (in 1976 $)	8.382	2.978	7.831	2.915	7.058	1.574
Family Characteristics						
Average number of children	2.973	7.183	3.541	7.499	4.301	5.318
Parents' Marital Status						
Only Married during ages 10-17	0.857		0.586		0.431	
Only Single during ages 10-17	0.020		0.114		0.210	
In both family types during ages 10-17	0.123		0.300		0.359	
Residence Characteristics						
Majority of years in Metropolitan county	0.371		0.498		0.494	
Majority of years in Southern region	0.219		0.293		0.417	
Ever lived in a high unemployment county[c]	0.350		0.218		0.458	

Source: Author's computations from the 1968-1992 waves of the Panel Study of Income Dynamics

Note: These statistics are based on the Adult Sample. There were 120 daughters whose families received welfare but were not poor.

a: Receipt of AFDC is defined by whether anyone in the daughter's family received AFDC during those ages.

b: Indicates whether the daughter ever received AFDC, SSI, food stamps, other forms of general welfare assistance, or lived in public housing between ages 23 and 27 as an adult or as a daughter in a family while between the ages of 10 and 17.

c: A county is considered to have high unemployment if it is 10% or higher

Table 4

Logistic Regression Estimates of the Effect of Selected Variables on the Likelihood of a Daughter Receiving AFDC as an Adult between ages 23 and 27 (N=736)

	Model A		Model B		Model C	
	β	St. Err.	β	St. Err.	β	St. Err.
Family Received AFDC	1.183	0.249 [a]	0.838	0.270 [a]	0.525	0.314 [c]
Log avg. adj. family income (in 1976 $)			-0.810	0.255 [a]	-0.717	0.300 [b]
Daughter's year of birth	0.067	0.055	0.196	0.070 [a]	0.534	0.286 [c]
Nonwhite	1.177	0.018 [a]	0.990	0.282 [a]	1.002	0.329 [a]
Mother's Education: Less than H.S. diploma	0.466	0.245 [c]	0.374	0.248	0.022	0.292
Parent's Marital Status: Both family types	0.391	0.267	0.321	0.272	0.537	0.314 [c]
Majority of youth in Metropolitan county	-0.389	0.246	-0.562	0.254 [b]	-0.444	0.323
Majority of youth in Southern region	-0.472	0.237 [c]	-0.680	0.249 [a]	-0.192	0.601
Adult years of completed education					-0.534	0.101 [a]
Adult Employed					-1.686	0.263 [a]
Year before observation: 1987					1.719	0.778 [b]
Intercept	-136.7	103.2	-390.4	131.8 [a]	-1034.7	552.6 [c]
-2 Log Likelihood	616.325		605.916		479.850	
AIC	646.325		639.916		547.850	

	Model D		Model E		Model F	
	β	St. Err.	β	St. Err.	β	St. Err.
Years Family Received AFDC	0.264	0.058 [a]	0.180	0.064 [a]	0.185	0.077 [b]
Log avg. adj. family income (in 1976 $)			-0.809	0.258 [a]	-0.584	0.309 [c]
Daughter's year of birth	0.064	0.055	0.195	0.070 [a]	0.533	0.287 [c]
Nonwhite	1.360	0.268 [a]	1.124	0.280 [a]	1.096	0.328 [a]
Mother's Education: Less than H.S. diploma	0.457	0.245 [c]	0.370	0.248	0.010	0.292
Parent's Marital Status: Both family types	0.423	0.265	0.356	0.270	0.483	0.316 [c]
Majority of youth in Metropolitan county	-0.247	0.243	-0.460	0.254 [c]	-0.374	0.323
Majority of youth in Southern region	-0.502	0.236 [b]	-0.705	0.248 [a]	-0.173	0.592
Adult years of completed education					-0.546	0.102 [a]
Adult Employed					-1.716	0.264 [a]
Year before observation: 1987					1.732	0.771 [b]
Intercept	-128.7	103.5	-385.9	133.2 [a]	-1031.9	555.7 [c]
-2 Log Likelihood	617.509		607.405		476.722	
AIC	647.509		641.405		544.722	

Source: Author's computations from the 1968-1992 waves of the Panel Study of Income Dynamics

Significance levels - [a]: $p < 0.01$; [b]: $p < 0.05$; [c]: $p < 0.10$

Results presented are for the Head and Wife Sample. Variables and their coefficients not presented here proved statistically insignificant.

The flag for mother's year of birth was positive and significant in Models A, B, D, E, and F. All other flags were not significant.

Table 5

Logistic Regression Estimates of the Effect of Selected Variables, including Parents' AFDC Eligibility, on the Likelihood of a Daughter Receiving AFDC as an Adult between ages 23 and 27 (N=736)

	Model G		Model H	
	β	St. Err.	β	St. Err.
Ever Poor, Family Received AFDC	1.030	0.298 [a]	0.638	0.357 [c]
Ever Poor, Family Never Received AFDC	-0.022	0.312	-0.225	0.352
Nonwhite	1.329	0.273 [a]	1.270	0.319 [a]
Mother's Education: Less than H.S. diploma	0.462	0.245 [c]	0.116	0.287
Parent's Marital Status: Both family types	0.480	0.264 [c]	0.654	0.315 [b]
Majority of youth in Southern region	-0.553	0.237 [b]	0.054	0.590
Adult years of completed education			-0.579	0.101 [a]
Adult Employed			-1.667	0.259 [a]
Year before observation: 1987			1.648	0.756 [b]
Intercept	-140.7	102.5	-836.6	545.4
-2 Log Likelihood	622.720		487.584	
AIC	654.720		553.584	

	Model I		Model J	
	β	St. Err.	β	St. Err.
Years (Poor and Received AFDC)	0.243	0.069 [a]	0.244	0.084 [a]
Years (Poor and Did Not Receive AFDC)	-0.009	0.060	-0.078	0.071
Nonwhite	1.504	0.272 [a]	1.479	0.325 [a]
Mother's Education: Less than H.S. diploma	0.475	0.244 [c]	0.089	0.287
Parent's Marital Status: Both family types	0.547	0.260 [b]	0.624	0.311 [b]
Majority of youth in Southern region	-0.648	0.241 [a]	-0.149	0.316
Adult years of completed education			-0.594	0.101 [a]
Adult Employed			-1.716	0.262 [a]
Year before observation: 1987			1.645	0.761 [b]
Intercept	-118.1	102.8	-902.7	553.0 [c]
-2 Log Likelihood	625.200		482.016	
AIC	657.200		548.016	

Source: Author's computations from the 1968-1992 waves of the Panel Study of Income Dynamics

Significance levels - [a]: $p < 0.01$; [b]: $p < 0.05$; [c]: $p < 0.10$

Results presented are for the Head and Wife Sample. Variables and their coefficients not presented here proved statistically insignificant.

The flag for mother's year of birth was positive and significant in Model G. All other flags were not significant.

Table 6

Logistic Regression Estimates of the Effect of Selected Variables on the Likelihood of a Daughter Receiving Welfare as an Adult between ages 23 and 27 (N=741)

	Model A		Model B		Model C	
	β	St. Err.	β	St. Err.	β	St. Err.
Family Received Welfare	0.778	0.208 [a]	0.257	0.239	0.153	0.264
Log avg. adj. family income (in 1976 $)			-1.045	0.236 [a]	-0.905	0.262 [a]
Daughter's year of birth	0.122	0.048 [b]	0.275	0.063 [a]	0.287	0.208
Nonwhite	1.144	0.216 [a]	0.901	0.224 [a]	1.082	0.258 [a]
Mother's Education: Less than H.S. diploma	0.502	0.206 [b]	0.446	0.219 [b]	0.157	0.233
Mother's Education: Greater than H.S. diploma	-0.442	0.261 [c]	-0.226	0.270	-0.068	0.297
Average number of kids in childhood family	0.108	0.059 [c]	-0.064	0.071	-0.073	0.077
Majority of youth in Metropolitan county	-0.154	0.196	-0.343	0.205 [c]	-0.403	0.255
Majority of youth in Southern region	-0.195	0.203	-0.403	0.213 [c]	-0.363	0.488
Adult years of completed education					-0.432	0.085 [a]
Adult Employed					-1.154	0.201 [a]
Intercept	-229.0	89.0 [b]	-547.4	119.2 [a]	-547.2	404.0
-2 Log Likelihood	796.238		770.129		675.881	
AIC	826.238		804.129		745.881	

	Model D		Model E		Model F	
	β	St. Err.	β	St. Err.	β	St. Err.
Years Family Received Welfare	0.165	0.042 [a]	0.027	0.053	0.038	0.058
Log avg. adj. family income (in 1976 $)			-1.083	0.260 [a]	-0.861	0.289 [a]
Daughter's year of birth	0.105	0.048 [b]	0.278	0.067 [a]	0.286	0.209
Nonwhite	1.107	0.218 [a]	0.918	0.224 [a]	1.083	0.258 [a]
Mother's Education: Less than H.S. diploma	0.519	0.206 [b]	0.464	0.211 [b]	0.161	0.233
Mother's Education: Greater than H.S. diploma	-0.443	0.259 [c]	-0.226	0.270	-0.070	0.297
Average number of kids in childhood family	0.083	0.061	-0.067	0.071	-0.073	0.077
Majority of youth in Metropolitan county	-0.189	0.197	-0.349	0.204 [c]	-0.401	0.255
Majority of youth in Southern region	-0.202	0.203	-0.410	0.214 [c]	-0.355	0.489
Adult years of completed education					-0.436	0.085 [a]
Adult Employed					-1.150	0.201 [a]
Intercept	-203.3	89.1 [b]	-555.3	127.0 [a]	-545.9	403.9
-2 Log Likelihood	794.423		771.015		675.780	
AIC	824.423		805.015		745.780	

Source: Author's computations from the 1968-1992 waves of the Panel Study of Income Dynamics

Significance levels - [a]: $p < 0.01$; [b]: $p < 0.05$; [c]: $p < 0.10$

Results presented are for the Head and Wife Sample. Variables and their coefficients not presented here proved statistically insignificant.

The flag for family income was positive and significant in Models B and F. All other flags were not significant.

Table 7

Logistic Regression Estimates of the Effect of Selected Variables, including Parents' Welfare Eligibility, on the Likelihood of a Daughter Receiving Welfare as an Adult between ages 23 and 27 (N=741)

	Model G		Model H	
	β	St. Err.	β	St. Err.
Ever Poor, Family Received Welfare	0.834	0.233 [a]	0.666	0.265 [b]
Ever Poor, Family Never Received Welfare	0.585	0.356	0.602	0.387
Daughter's year of birth	0.112	0.047 [b]	0.183	0.204
Nonwhite	1.151	0.217 [a]	1.314	0.251 [a]
Mother's Education: Less than H.S. diploma	0.510	0.206 [b]	0.183	0.229
Mother's Education: Greater than H.S. diploma	-0.446	0.260 [c]	-0.232	0.289
Parent's Marital Status: Both family types	0.337	0.230	0.331	0.255
Adult years of completed education			-0.473	0.084 [a]
Adult Employed			-1.169	0.198 [a]
Intercept	-217.6	88.6 [b]	-332.7	395.5
-2 Log Likelihood	796.758		689.922	
AIC	828.758		757.922	

	Model I		Model J	
	β	St. Err.	β	St. Err.
Years (Poor and Received Welfare)	0.154	0.052 [a]	0.143	0.058 [b]
Years (Poor and Did Not Receive Welfare)	0.040	0.086	-0.033	0.095
Daughter's year of birth	0.103	0.048 [b]	0.183	0.205
Nonwhite	1.225	0.214 [a]	1.374	0.250 [a]
Mother's Education: Less than H.S. diploma	0.553	0.205 [a]	0.202	0.229
Mother's Education: Greater than H.S. diploma	-0.442	0.257 [c]	-0.224	0.288
Parent's Marital Status: Both family types	0.376	0.229 [c]	0.368	0.254
Adult years of completed education			-0.488	0.084 [a]
Adult Employed			-1.152	0.198 [a]
Intercept	-203.8	89.2 [b]	-332.1	396.4
-2 Log Likelihood	800.837		690.393	
AIC	832.837		758.393	

Source: Author's computations from the 1968-1992 waves of the Panel Study of Income Dynamics

Significance levels - [a]: $p < 0.01$; [b]: $p < 0.05$; [c]: $p < 0.10$

Results presented are for the Head and Wife Sample. Variables and their coefficients not presented here proved statistically insignificant.

All other flags were not significant.

Table 8

Tobit Estimates of the Effect of Selected Variables, including Parents' AFDC Eligibility, on the Number of Years a Daughter Receives AFDC as an Adult between ages 23 and 27 (N=741)

	Model D		Model E		Model F	
	β	St. Err.	β	St. Err.	β	St. Err.
Years Family Received AFDC	0.800	0.174 [a]	0.518	0.183 [a]	0.330	0.155 [b]
Log avg. adj. family income (in 1976 $)			-2.600	0.756 [a]	-1.404	0.647 [b]
Daughter's year of birth	0.022	0.051	0.604	0.199 [a]	1.589	0.605 [a]
Nonwhite	4.272	0.807 [a]	3.485	0.810 [a]	2.847	0.696 [a]
Mother's Education: Less than H.S. diploma	1.486	0.705 [b]	1.173	0.700 [c]	0.160	0.598
Parent's Marital Status: Both family types	1.023	0.776	0.791	0.763	1.033	0.646
Average number of children	-0.008	0.193	-0.423	0.226 [c]	-0.221	0.190
Majority of youth in Metropolitan county	-0.609	0.682	-1.234	0.705 [c]	-0.411	0.675
Majority of youth in Southern region	-1.789	0.676 [a]	-2.423	0.705 [a]	-0.326	1.304
Adult years of completed education					-1.070	0.199 [a]
Adult Employed					-4.300	0.605 [a]
Adult metropolitan residence					1.308	0.689 [c]
Year before observation: 1983					-3.918	2.057 [c]
Year before observation: 1984					-4.867	2.592 [c]
Year before observation: 1986					-6.514	3.808 [c]
Year before observation: 1987					3.280	1.620 [b]
Intercept	-428.9	295.9	-1228.1	378.8 [a]	-3087.093	1169.5 [c]
-2 Log Likelihood	-583.757		-577.298		-501.869	

	Model I		Model J	
	β	St. Err.	β	St. Err.
Years (Poor and Received AFDC)	0.743	0.205 [a]	0.481	0.168 [a]
Years (Poor and Did Not Receive AFDC)	0.131	0.179	-0.052	0.152
Daughter's year of birth	0.162	0.161	1.403	0.612 [b]
Nonwhite	4.745	0.842 [a]	3.639	0.712 [a]
Mother's Education: Less than H.S. diploma	1.541	0.719 [b]	0.300	0.605
Parent's Marital Status: Both family types	1.335	0.776 [c]	1.231	0.651 [c]
Majority of youth in Metropolitan county	-0.734	0.709	0.000	0.675
Majority of youth in Southern region	-2.385	0.718 [a]	-0.111	1.326
Adult years of completed education			-1.183	0.202 [a]
Adult Employed			-4.358	0.616 [a]
Adult metropolitan residence			1.344	0.696 [c]
Year before observation: 1983			-3.968	2.088 [c]
Year before observation: 1984			-5.052	2.637 [c]
Year before observation: 1986			-6.697	3.869 [c]
Year before observation: 1987			3.232	1.643 [b]
Intercept	-395.4	300.9	-2751.9	1183.5 [a]
-2 Log Likelihood	-588.290		-506.151	

Source: Author's computations from the 1968-1992 waves of the Panel Study of Income Dynamics

Significance levels - [a]: $p < 0.01$; [b]: $p < 0.05$; [c]: $p < 0.10$

Results presented are for the Head and Wife Sample. Variables and their coefficients not presented here proved statistically insignificant.

The flag for mother's year of birth was positive and significant in Models D and E. All other flags were not significant.

Table 9

Tobit Estimates of the Effect of Selected Variables, including Parents' Welfare Eligibility, on the Number of Years a Daughter Receives Welfare as an Adult between ages 23 and 27 (N=741)

	Model D		Model E		Model F	
	β	St. Err.	β	St. Err.	β	St. Err.
Years Family Received Welfare	0.388	0.088 [a]	0.092	0.107	0.088	0.094
Log avg. adj. family income (in 1976 $)			-2.353	0.543 [a]	-1.406	0.475 [a]
Daughter's year of birth	0.189	0.100 [c]	0.564	0.136 [a]	0.950	0.350 [a]
Nonwhite	2.816	0.492 [a]	2.355	0.491 [a]	2.256	0.437 [a]
Mother's Education: Less than H.S. diploma	1.476	0.442 [a]	1.306	0.439 [a]	0.479	0.381
Majority of youth in Metropolitan county	-0.477	0.417	-0.785	0.420 [c]	-0.545	0.418
Majority of youth in Southern region	-0.811	0.423 [c]	-1.275	0.436 [a]	-0.396	0.801
Adult years of completed education					-0.803	0.128 [a]
Adult Employed					-2.540	0.346 [a]
Year before observation: 1983					-2.452	1.211 [b]
Year before observation: 1984					-2.979	1.517 [b]
Year before observation: 1988					-3.155	1.811 [c]
Intercept	-427.0	186.7	-1177.3	259.6 [a]	-1880.933	678.6 [a]
-2 Log Likelihood	-891.134		-880.354		-805.136	

	Model I		Model J	
	β	St. Err.	β	St. Err.
Years (Poor and Received Welfare)	0.319	0.104 [a]	0.208	0.089 [b]
Years (Poor and Did Not Receive Welfare)	0.230	0.184	0.027	0.160
Daughter's year of birth	0.194	0.101 [c]	0.791	0.349 [b]
Nonwhite	3.167	0.491 [a]	2.790	0.433 [a]
Mother's Education: Less than H.S. diploma	1.539	0.447 [a]	0.561	0.384
Majority of youth in Metropolitan county	-0.468	0.422	-0.315	0.415 [c]
Majority of youth in Southern region	-1.054	0.438 [b]	-0.229	0.800 [a]
Adult years of completed education			-0.882	0.129 [a]
Adult Employed			-2.562	0.348 [a]
Year before observation: 1983			-2.636	1.223 [b]
Year before observation: 1984			-3.236	1.530 [b]
Year before observation: 1986			-3.864	2.268 [c]
Intercept	-449.3	189.9 [b]	-1565.4	675.7 [b]
-2 Log Likelihood	-895.933		-813.081	

Source: Author's computations from the 1968-1992 waves of the Panel Study of Income Dynamics

Significance levels - [a]: $p < 0.01$; [b]: $p < 0.05$; [c]: $p < 0.10$

Results presented are for the Head and Wife Sample. Variables and their coefficients not presented here proved statistically insignificant.

The flag for mother's year of birth was positive and significant in Model E. All other flags were not significant.

Appendix Table 1

Year and Age Sequence of Sample Data

Year Born	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
1958	10	11	12	13	14	15	16	17						23	24	25	26	27							
1959		10	11	12	13	14	15	16	17						23	24	25	26	27						
1960			10	11	12	13	14	15	16	17						23	24	25	26	27					
1961				10	11	12	13	14	15	16	17						23	24	25	26	27				
1962					10	11	12	13	14	15	16	17						23	24	25	26	27			
1963						10	11	12	13	14	15	16	17						23	24	25	26	27		
1964							10	11	12	13	14	15	16	17						23	24	25	26	27	

Appendix Table 2

Final Samples and their Sizes and Restrictions

	Number of Daughters	Sample
Sample member females	18,678	
Born 1958 to 1964	1,574	
"Daughter" or missing while aged 10-17	1,493	
Family in PSID all 8 years while aged 10-17	975	
Daughter in PSID all 5 years while aged 23-27	-	
Daughter in PSID at least 3 years while aged 23-27	944	Adult Sample
Daughter is head or "wife" at least 3 years while an adult	741	Head and Wife Sample
Had a child before age 23 OR first time as head or "wife"	515	Mother Sample

Source: Author's computations from the 1968-1992 waves of the Panel Study of Income Dynamics

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