Causes and Effects of Welfare Dependency

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Research Honors
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Dr. Seeborg
ABSTRACT

CAUSES AND EFFECTS OF WELFARE DEPENDENCY

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The effect of welfare on work incentives has been a hotly debated topic since its inception in 1935. My research project examines the work incentive effects of an important component of the welfare system, namely Aid to Families with Dependent Children. I have done this by analyzing data drawn from a massive database of 12,800 youths called the National Longitudinal Survey of Youth.

I primarily use two theories for my analysis, the neoclassical theory of labor supply and the welfare-disincentive theory promoted by Charles Murray. These two theories allow me to formulate and test a number of hypotheses regarding the determinants of welfare dependency. The empirical part of the paper has two purposes. The first is to identify attitudes and background characteristics that are related to welfare dependency. The second purpose is to determine how AFDC dependency in the early 1980's affects labor force participation, poverty, and net income in the late 1980's.

For the most part, the results of my study reinforced my research hypotheses. For example, individuals who were AFDC dependent in the early 1980's experienced economic difficulties in the late 1980's such as, a higher incidence of poverty, lower net incomes, and fewer hours of labor supplied. The study also identified factors which make one more likely to become welfare dependent.
I. Background

The effect of welfare on the incentive to work has been a hotly debated topic since its inception in 1935. The Social Security Act of 1935 contains four income support programs that serve to help all Americans attain a reasonable standard of living. Social Security, Unemployment Compensation, Supplemental Security Income, and Aid to Families with Dependent Children comprise the major programs. The one I will primarily address is the Aid to Dependent Children, which was changed in 1962 to Aid to Families with Dependent Children or (AFDC), to reflect a new family concern. AFDC provides income support to approximately 15 million Americans in families where the father (or principal wage earner) has died, is unemployed but not receiving unemployment benefits, or is otherwise absent from the home (Peterson and Rom 1990). States set benefit levels by first calculating a needs standard, which is regarded as the amount a family needs to buy food, clothing, shelter, and necessities used to meet a reasonable standard of living. States differ in their assessment of what a family needs to meet a reasonable standard of living. They also differ in the percentage of that standard they are willing to pay to help a family meet its needs.

Social acceptance seems to be an integral factor in how to fight the poverty problem. The orientation of Americans toward the poor is ambivalent. There is willingness to help those who are unable to help themselves, but hostility towards those who are seen as too lazy to work their way to economic independence.
(Goodwin 5). Opponents of AFDC argue that the system discourages work, trapping recipients in a non-productive lifestyle. Proponents counter that AFDC does not discourage work because eligibility rules make it difficult for recipients to receive welfare when they could be working and that most AFDC recipients are mothers who need to care for their children (Durbin 11).

My project will attempt to shed light on the debate concerning whether there is a significant relationship between welfare benefits and the incentive to work. This will be important as the number of welfare caseloads continues to increase (Durbin IX).

II. Research Problem

My research project will examine the United States welfare system and its effects on an individual's willingness to work. The object of this project is two-fold. First, I will try to identify attitudes and background characteristics that suggest a person will be more inclined to become welfare dependent. Second, I will try to determine how AFDC dependency affects labor force participation and whether there are factors which make one more or less likely to escape once one is dependent. To do this, I have examined a number of different theories and studies which identify certain variables and individual characteristics that may affect the outcome of the decision of whether to go on welfare. I will attempt to formulate and test a number of hypotheses regarding variables
that might effect this choice and subsequently alter work incentives. I hope ultimately to gain a better understanding of what makes an individual more likely to go on welfare and how welfare dependency later affects the decision either to join the workforce or stay at home. Due to the fact that nearly all AFDC payments go to women, I have examined women exclusively in my study. Most of the theories and hypotheses I will use are applicable to both men and women, but because of the exclusivity of my sample I wish to caution the reader that my results should not be generalized beyond the population of young women.

III. Methodology

The neoclassical theory of labor supply provides the basis for my analysis. Within the neoclassical framework, Charles Murray develops his welfare-disincentive theory. Much of Murray's theory centers around how social policy interacts with the ways humans behave under different environmental and economic conditions. Two premises of popular wisdom regarding human behavior are paramount to Murray's beliefs.

Premise 1: People respond to incentives and disincentives. Sticks and carrots work.

Premise 2: People are not inherently hard working or moral. In the absence of countervailing influences, people will avoid work and be amoral.

Murray believes that a growing number of individuals are becoming welfare dependent because of social policies that both directly and indirectly change incentives and preferences. This increasing dependence has created structural problems in
society that impedes mobility and further decreases the chance for one to rise out of the lower class. In particular, he believes that welfare creates disincentives to work.

He draws evidence of these disincentive effects from four Negative Income Tax (NIT) experiments sponsored by the federal government in various parts of the nation. In each site, a sample of low-income persons was selected and randomly split into two groups: the "experimental" group and the "control" group. The members of the experimental group were told that for a specified number of years (usually 3, 5, or 10 year periods) they would have a floor put under their incomes. This floor was usually at or near the poverty line. The benefits varied among participants, to test the sensitivity of the results to the generosity of the guaranteed income (Murray 148).

The results more or less went along with Murray's two premises of popular wisdom. The NIT was found to reduce "desired hours of work" by 9 percent for husbands, 20 percent for wives, and 47 percent for young males who were not yet heads of households. These results were in comparison to the desired hours of work recorded by the control group of poor people. The effect was also stronger in the longer studies than for the shorter ones. Periods of unemployment also increased by nine weeks for husbands and fifty weeks for wives (Murray 148-153). Since the estimates of desired hours of work and periods of unemployment were much more substantial for
women in the NIT studies, it follows that my results are likely to show significant welfare disincentive effects on labor supply because only women are included in my survey.

By examining the National Longitudinal Survey of Youth database I will be able to test a number of hypotheses concerning the causes and effects of welfare dependency. The version of the neoclassical theory to be employed here is drawn from Ehrenberg and Smith (1991). This theory is useful because it allows me to identify some potential causes of welfare dependency. It also allows me to identify the effects that different levels of welfare support have on welfare dependence, labor force participation, and hours worked.

IV. Theoretical Model

Before detailing my methodology I must first give a general explanation of the neoclassical model. The major workings of this model are the budget constraint curve and indifference curves which are illustrated in Figure 1. A brief explanation of these two curves is that any point on the budget constraint represents the amount of income an individual would receive for a given number of hours of work and a given wage. Points on any given indifference curve represent combinations of income and leisure which generate equal amounts of satisfaction. Higher indifference curves provide higher levels of satisfaction than indifference curves which are closer to the origin. For a given budget constraint, the optimal combination of leisure and income is found where the budget
constraint is tangent to an indifference curve. It is important to note that these curves are not static and will be different for every person, since people differ in preferences and earnings (Ehrenberg and Smith, Chap 6).

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is available to an individual (i.e. welfare benefits, child support, etc.) and through changes in the slope of the budget constraint. Later I will make some initial hypotheses concerning factors which I believe will cause changes in the budget constraint curve. I will also try to determine what effects these changes have once they have occurred.

Figure 1 graphically shows how welfare benefits, through changes in the budget constraint curve, effect a person's choice of work or leisure. I will initially use a budget constraint without welfare benefits and proceed to show the possible consequences of adding welfare benefits to this level. It needs to be noted that the slope of the indifference curve will not always be the same as in my model, but may be more or less elastic depending on attitudes towards work and leisure. For instance, if a person's indifference curve was highly inelastic that individual would be willing to give up a relatively large amount of income in exchange for more leisure time. On the other hand, if a person had a very elastic indifference curve he would be willing to give up a large amount of leisure time for a small increase in income.

Murray's ideas can also be represented in the framework of indifference curves. He believes that preferences (indifference curves) can change over time as an individual's priorities change. This will have substantial consequences on the way in which the budget constraint and indifference curves interact because as the slope changes so will the point of
tangency between the two curves. This may create a new combination of work and leisure where a person is able to maximize his or her well-being.

Prior to the welfare benefits, a family had a budget constraint of AD. Assuming this same family applied for welfare and was eligible, a welfare worker follows federal and state guidelines to determine the needed income for this family to maintain a decent standard of living. Family earnings are, for the most part, subtracted dollar for dollar from the needed level, and a check is received each month for the difference. Subsidization creates a budget constraint of ABCD, where total income equals $Y_n$ (the needed income) even when the person works zero hours. This, in effect, serves to increase the income of welfare recipients and shifts the budget constraint outward. With the new constraint, recipients have little incentive to work because there is a zero real wage (segment BC) over most normal hours of work. In the example shown in Figure 1, a corner solution is created at point B because this is where a person can attain the highest indifference curve (Ehrenberg and Smith). Therefore, increases in welfare increase the likelihood of a person supplying zero hours of labor.

Moving the budget constraint out from AD to ABCD due to welfare benefits, creates both an income effect and a substitution effect. These two effects comprise the major motivations for an individual to decrease labor supplied. The income effect reduces labor supplied from point E to point F.
and the substitution effect decreases labor supplied from point F to point B. The income effect occurs because now people can reach a higher indifference curve while working less. The substitution effect results from reducing benefits dollar for dollar with earnings. The substitution effect causes some people to substitute leisure for work, which moves their labor supply preference to point B.

I would also like to point out that the slope of the budget constraint curve is different for all individuals and can change throughout one's life. The most common way for this curve to change is through investments in human capital. By investing in human capital through additional education, training, etc., the budget constraint curve rotates up and the slope increases. In terms of figure 1, this means that the vertical intercept will be higher and point C would be farther to the right. This decreases the chance of a corner solution and increases the probability that the highest indifference curve passes above point B.

Examples of factors that tend to add to human capital and thus increase the slope of the budget constraint are growing up in a traditional family, going to school (with higher levels of education leading to higher wages), and parents' education levels.

Growing up in a traditional family will increase the slope of the budget constraint because two parents are able to impart more knowledge and experience. They will also be more capable
of financing activities that contribute to the education and overall well-roundedness of the individual.

Going to school will increase the slope of the budget constraint curve because an individual should be able to earn more as education increases. This will allow him or her to enter better jobs.

Parents' education will also increase the slope of the budget constraint because of a trickle down effect. This trickle down occurs as parents are better equipped to lend guidance and provide information in which a child can raise his or her level of human capital and subsequently increase income potential.

An extension of the labor-supply model is implied in the welfare-disincentive theory of Murray. Murray's theory, as outlined in Losing Ground (1984), concerns the welfare disincentive hypothesis. According to my interpretation of Murray's theory, the welfare system negatively alters preferences (indifference curves) towards work, marriage, training, education, etc. This impedes mobility out of the lower class and should make one more likely to stay impoverished, remain on welfare, decrease number of hours worked, and decrease net family income.

Murray also believes that social policy has ignored the fact that different economic classes possess different time frames in which they must make decisions. For instance, poor people cannot wait as long for results as middle to upper class individuals.
because they lack resources to fall back on. Because of this, poor people must take more of a short-term approach when they make decisions. Murray argues that policy makers have created much of the mess we are in by forming policy without regard to the time frames possessed by those affected. He contends that the problems that cropped up such as increased dropout from the labor force, higher rates of illegitimacy, and increased welfare dependence were not necessarily the right responses by individuals from a societal perspective, but they were rational individual responses to increasing government involvement in welfare (Murray Chap. 12).

This short-term perspective can have many consequences. Possibilities include dropping out of school to pursue a job, getting involved in underclass activities such as crime and gangs, and going on welfare. These are all short-term responses that provide a quick-fix but decrease one's ability to rise out of the lower class. Quick-fixes such as these do little to increase human capital and hence, earning potential.

In addition to Murray's welfare disincentive theory, two other theories I have used in my analysis come from Elizabeth Durbin and William Julius Wilson. Elizabeth Durbin, in Welfare Income and Unemployment (1969), explains that because husbands in our society are usually able to earn more in the labor market than their wives, they are usually expected to work while their wives remain at home. This, on average, makes women's budget
constraints closer to the origin than men's. This, in a sense, creates a traditional division of labor at home, where men devote more time to market work and women more time to home production. Also, women may have steeper indifference curves due to social conditioning regarding the role of women in the home and in the workplace. The flatter budget constraint coupled with the steeper indifference curve increases the chance for a corner solution, like that described by Ehrenberg and Smith.

Durbin's theory is important for my research for a number of reasons. Since my study includes only women, the impact of welfare dependency on future labor force participation should be especially strong. The chance of a corner solution would also increase, because women, on average, have more inelastic indifference curves. I thus expect that welfare dependency should have a large negative impact on the number of hours worked and total net family income, while increasing the likelihood of remaining in poverty.

Julius Wilson is important for my analysis for very different reasons. In *The Truly Disadvantaged* (1987), he looks at why inner city residents, mostly minorities, are more likely to become and remain welfare dependent. Wilson also believes an underclass has formed but he feels that it has formed for different reasons than argued by Murray.

Julius Wilson sees the underclass problem not as being caused by welfare disincentives, but more the result of a change in the urban composition of industry. He promotes the idea that
many people fell into an underclass way of life as urban areas became increasingly de-industrialized. The flight of jobs out of inner cities also triggered an outmigration of whites and middle class blacks which left the lower, less mobile population behind. Outmigration of jobs decreased the slope of the budget constraint for those left behind, not due to decreases in human capital, but instead because of the relatively few job opportunities they now had.

The outflow of role models that exited with the middle class, accelerated the underclass problem in central cities. The outflow also indirectly affected budget constraint curves because these role models, who once pushed young and influenceable individuals to strive for greatness through investments in human capital and perseverance, left with the outflow of jobs. The less mobile poor now had few representatives among them to look up to for encouragement and advice. The lack of role models could arguably have made indifference curves more inelastic at the same time because the poor now felt like they were relegated to this underclass way of life as other options disappeared.

Wilson is critical of Murray’s welfare disincentive argument. As evidence that welfare disincentives were not the prime cause for family breakup and reduced supply of labor, he examines some of Murray’s arguments. Murray stated that perverse welfare incentives in the late 1960’s actually led to family dissolution and black unemployment. Wilson believes that if this was the case then this trend should have reversed itself when the
relative advantage of work over welfare increased sharply, through the decline in the real value of AFDC benefits. This did not happen, as female headed households, surged, while black unemployment increased (Wilson Chapter 1).

**V. Empirical Model**

The fact that Wilson and Murray offer opposing views is important in that these views give us hypotheses to test and a foundation for understanding results. Wilson’s argument suggests that minorities, due to changes in the urban composition of industry that leave them concentrated in areas with few jobs, will face a more elastic budget constraint curve. This should make minorities more likely to become welfare dependent because low earnings potential signify very elastic budget constraint curves. The formation of the underclass, it would seem, also increases the probability of welfare dependency. If underclass behavior creates values which steepen indifference curves, the probability of corner solutions increases.

The difference between Murray and Wilson is that Murray believes that an underclass has resulted from faulty government programs, whereas Wilson feels that underclasses result from market failures. Examples of the market failures mentioned by Wilson are discriminatory real estate practices and the departure of manufacturing firms from central cities.

To determine how AFDC dependency affects labor force participation and which factors make one more or less likely to escape welfare dependency, I have created both a sample and a
control group from the National Longitudinal Survey of Youth database. This database includes over 12,800 individuals who were interviewed annually from 1979-1990. To make sure the subjects in the two groups had similar characteristics and were equally representative, I established some sample selection guidelines. First, in my control group, only women born in 1957 or 1958 were included. I did this because I wanted the group of people that would be on their own or starting a family for the longest period of time. This gave me women that would age from 21-32 during the study. Then, so I did not mix the rich and the poor, I only included women who were below the poverty level in 1979 and had not received welfare benefits for more than 2 years between 1980-1984. My test group consisted of 294 women who met the control group criteria, but had received welfare benefits three out of five years between 1980-84. I labeled this group welfare dependent.

The theories discussed earlier allowed me to formulate a number of hypotheses to test. My hypotheses were derived from theories that draw on the neoclassical theory of labor supply. The first five hypotheses deal with the determinants of welfare dependency and the second four with effects of welfare dependency.

H01: Growing up in a traditional family reduces the chance of being welfare dependent.

Rationale- A traditional family (father-mother, father-stepmother, mother-step-father) should be able to impart more knowledge and experience, on average, than a female-headed
family. This increases human capital and makes the budget constraint steeper according to the neoclassical model. A steep budget constraint curve makes one more likely to work as the opportunity cost of not working is great. This is illustrated in Figure 2.

![Figure 2](image)

Ho2: Minorities will be more likely to be welfare dependent.

Rationale—Relative to whites, blacks have acquired human capital that is most suitable to occupations which have not grown rapidly in recent years. For example, manufacturing jobs have decreased rapidly in inner city neighborhoods where many blacks are concentrated. This has created a serious mismatch between the current education distribution of minority residents and the changing education requirements of their rapidly transforming industry bases (Wilson Chap 3). Because those minorities are not able to earn as much with the same skills their budget constraint
has become flatter. This raises the possibility of a corner solution. (See Figure 2).

Ho3: The higher the parents' education the less likely one will become welfare dependent.

Rationale- The more education an individual's parents have the more human capital these parents should be able to provide to their children. This makes the budget constraint steeper, leading to more hours of work, higher income potential, and a lower probability of becoming welfare dependent. (See Figure 2).

Ho4: Negative attitudes towards work will make one more likely to be welfare dependent.

Rationale- In terms of the neoclassical model, negative attitudes would make the slope of the indifference curves more inelastic, thus, fewer hours would be worked and corner solutions are more likely. This is illustrated in Figure 3a and 3b.

Figure 3a

Figure 3b
Ho5: A respondent with less than 12 years of education will be more likely to be welfare dependent.

Rationale- Individuals with less than a high school education should possess less human capital than individuals with more schooling, causing this person to have a budget constraint with less slope than a more educated person. This smaller slope will lower income potential and raise the possibility of becoming welfare dependent. (See Figure 2)

The next four hypotheses relate to the effect welfare dependency during the early 1980’s has on economic outcomes as measured in 1989.

Ho6: Welfare dependency between 1980-84 will negatively effect the number of hours worked in 1989 and total net family income in 1989, while increasing the likelihood of still being in poverty in 1989.

Rationale- The neoclassical model is altered in a number of ways by being welfare dependent between 1980-84. Diminishing skills decrease the slope of the budget constraint (See Figure 2), while indifference curves increase in slope as illustrated in Figures 3a and 3b. Both of these factors would decrease the number of hours worked and increase the chance of a corner solution.

Ho7: Marriage should help one escape poverty, increase total net family income, but decrease number of hours worked.

Rationale- Marriage helps one escape poverty because now the female can choose to supplement her husband’s income or, if her partner’s income is sufficiently high, she can rely solely on his income and concentrate her energy on increasing household production. This results in an income effect as described earlier, which according to the neoclassical model should
decrease the number of hours worked. It is possible that the husband's income alone could increase the probability of escaping poverty and raise net income. This is illustrated in Figure 4.

Ho8: Growing up in a traditional family should increase number of hours worked, raise net family income, and increase the probability of escaping poverty.

Rationale- If for some reason a child from a traditional family was welfare dependent from 1980-84, he or she should have a better chance to escape poverty than an individual from a traditional family because, on average, two parents can impart more human capital than one. This should raise the budget constraint and give this individual the ability to earn a higher income. (See Figure 2).
Ho9: Education will increase total net family income, number of hours worked, and lower the probability of remaining in poverty.

Rationale- Education effects the neoclassical model by adding to human capital and increasing the slope of the budget constraint. According to the neoclassical theory the steeper the budget constraint the more hours of work supplied, which will raise net family income and increase the chance of escaping poverty. (See Figure 2).

I estimated seven equations to test these hypotheses, four to look at the causes of welfare dependency and three to examine the effects. The following signs show the expected relationship between the dependent and independent variables. A plus sign (+) in front of the coefficient indicates an expected positive relationship between the independent and dependent variable, while a negative sign (-) indicates an expected negative relationship.

(1) \[ \text{WELFDEP} = a_1 + a_2(\text{RACE}) \]
(2) \[ \text{WELFDEP} = a_1 + a_2(\text{RACE}) - a_3(\text{TRADFAM}) - a_4(\text{EDMOTHER}) \]
(3) \[ \text{WELFDEP} = a_1 + a_2(\text{RACE}) - a_3(\text{TRADFAM}) - a_4(\text{EDMOTHER}) + a_5(\text{ATTITUDE}) \]
(4) \[ \text{WELFDEP} = a_1 + a_2(\text{RACE}) - a_3(\text{TRADFAM}) - a_4(\text{EDMOTHER}) + a_5(\text{ATTITUDE}) + a_6(\text{HSDROP}) \]
(5) \[ \text{Poverty Status} = a_1 + a_2(\text{WELFDEP}) - a_3(\text{HSGRAD}) - a_4(\text{SOMECAST}) - a_5(\text{COLLGRAD}) - a_6(\text{MARRIED}) - a_7(\text{TRADFAM}) \]
(6) \[ \# \text{ of HRS Worked} = a_1 - a_2(\text{WELFDEP}) + a_3(\text{HSGRAD}) + a_4(\text{SOMECAST}) + a_5(\text{COLLGRAD}) - a_6(\text{MARRIED}) + a_7(\text{TRADFAM}) \]
(7) \[ \text{Total Net} \text{ Family Income} = a_1 - a_2(\text{WELFDEP}) + a_3(\text{HSGRAD}) + a_4(\text{SOMECAST}) + a_5(\text{COLLGRAD}) + a_6(\text{MARRIED}) + a_7(\text{TRADFAM}) \]

Variable definitions and mean statistics can be found in Table 1.
| **TABLE 1** |  |
| **VARIABLE DEFINITIONS** |  |
| **DEPENDENT VARIABLES** |  |
| WELFDEP = 1 FOR WOMEN WHO WERE ON WELFARE 3 OUT OF 5 YEARS BETWEEN 1980-1984, ZERO OTHERWISE. (MEAN = .23) |  |
| POVERTY STATUS = 1 IF BELOW OFFICIAL POVERTY LEVEL IN 1989, ZERO OTHERWISE (MEAN = .29) |  |
| TOTAL NET FAMILY INCOME = ACTUAL 1989 FAMILY INCOME (MEAN = 27052.20) |  |
| # OF HOURS WORKED = ACTUAL TOTAL HOURS WORKED IN 1989 (MEAN = 1123.58) |  |
| **INDEPENDENT VARIABLES** |  |
| MINORITY = 1 IF BLACK OR HISPANIC AND ZERO OTHERWISE (MEAN = .50) |  |
| TRADFAM = 1 IF RESPONDENT LIVED WITH EITHER MOTHER-FATHER, FATHER-STEP-MOTHER, OR MOTHER-STEP-FATHER AT AGE 14, ZERO OTHERWISE (MEAN = .70) |  |
| EDMOTHER = 1 IF RESPONDENT'S MOTHER POSSESSED 12 OR MORE YEARS OF EDUCATION ZERO OTHERWISE (MEAN = .40) |  |
| ATTITUDES = 1 IF RESONDENT ANSWERED YES TO "WOULD GO ON WELFARE IF NEEDED TO SUPPORT FAMILY?", ZERO IF ANSWERED NO (MEAN = .41) |  |
| HSDROP = 1 IF LESS THAN 12 YEARS OF EDUCATION, ZERO IF 12 OR MORE (MEAN = .26) |  |
| H.S. GRAD = 1 IF RESPONDENT HAD 12 YEARS OF EDUCATION, ZERO IF NOT (MEAN = .30) |  |
| SOMECOLL = 1 OF RESPONDENT HAD 13-15 YEARS OF EDUCATION, ZERO IF OTHERWISE (MEAN = .15) |  |
| COLLGRAD = 1 IF RESPONDENT HAD 16 OR MORE YEARS OF EDUCATION, ZERO IF OTHERWISE (MEAN = .18) |  |
| MARRIED = 1 IF MARRIED IN 1989, ZERO IF OTHERWISE (MEAN = .43) |  |
| WELFDEP = 1 FOR WOMEN WHO WERE ON WELFARE 3 OUT OF 5 YEARS BETWEEN 1980-1984, ZERO IF OTHERWISE (MEAN = .23) |  |
VI. Results

I separate my results into two sections. The first section presents the results in which welfare dependency is explained as a function of background characteristics such as attitudes, family structure, respondent's education, mother's education, and race. In this section welfare dependency is the dependent variable. The second section reports the results derived from equations in which welfare dependency is an explanatory variable. In this section, I attempt to determine whether welfare dependency, during the early 1980's was a determinant of poverty, net family income, and number of hours worked in 1989.

PREDICTING WELFARE DEPENDENCY

Table 2 presents the results of the regression analysis I ran for the four equations predicting welfare dependency. The first equation is a simple regression of RACE against welfare dependency (WELFDEP). The second, third, and fourth equations add additional explanatory variables to the model. The major reason for this approach is to see if race is as significant a predictor when background and attitudes are controlled for as it is alone.

In the complete model (Model 4), two of the five explanatory variables were found to be statistically significant predictors of welfare dependency. Only the TRADFAM variable was consistently not significant in any equation. To double check the results I also ran the regression using a logit analysis. These results were very similar to the results I obtained using ordinary least squares.
<table>
<thead>
<tr>
<th>MODEL #</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEP. VARIABLE</td>
<td>WELFDEP</td>
<td>WELFDEP</td>
<td>WELFDEP</td>
<td>WELFDEP</td>
</tr>
<tr>
<td>IND. VARIABLE</td>
<td>MINORITY (+)</td>
<td>.099*</td>
<td>.043</td>
<td>.040</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(2.029)</td>
<td>(.805)</td>
<td>(.769)</td>
</tr>
<tr>
<td></td>
<td>TRADFAM (-)</td>
<td>-.041</td>
<td>-.034</td>
<td>-.019</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(-.747)</td>
<td>(-.638)</td>
<td>(-.366)</td>
</tr>
<tr>
<td></td>
<td>EDMOTHER (-)</td>
<td>-.135*</td>
<td>-.102*</td>
<td>-.067</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(-2.56)</td>
<td>(-1.95)</td>
<td>(-1.25)</td>
</tr>
<tr>
<td></td>
<td>ATTITUDES (+)</td>
<td></td>
<td>.173*</td>
<td>.156*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(3.53)</td>
<td>(3.175)</td>
</tr>
<tr>
<td></td>
<td>HSDROP (+)</td>
<td></td>
<td></td>
<td>.142*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(2.50)</td>
</tr>
<tr>
<td></td>
<td>CONSTANT</td>
<td>.178</td>
<td>.289</td>
<td>.201</td>
</tr>
<tr>
<td></td>
<td>N =</td>
<td>294</td>
<td>294</td>
<td>294</td>
</tr>
</tbody>
</table>

* Indicates significance at the 10 percent level
RACE was significant at the ninety-five percent level when run solely against my WELFDEP variable (Model 1), but when run in conjunction with variables linked to human capital investments it turned up insignificant. Model 1, for example, indicates that black respondents have about a ten percentage point higher incidence of welfare dependency than whites. However, in models 2 through 4, race became insignificant as a predictor when other background variables were included. It would appear that the conditions under which the respondent grows up are a more important determinant of welfare dependency than race. Especially important may have been the level of education of both the respondent and parent(s).

The results suggest that there is a lot of colinearity between independent variables. Crosstabs, for example, reinforce this belief as there is a significant relationship between RACE and my human capital variables such as EDMOTHER, HSDROP.

The EDMOTHER variable was significant in Model 2 and Model 3. This conforms to hypothesis three, which suggests that the higher the level of education possessed by the mother the less likely one would become welfare dependent. The one regression in which EDMOTHER was not significant was when HSDROP variable a measure of the education of the respondent was added. This can be explained by the high degree of colinearity between the mother’s educational attainment(EDMOTHER) and her child’s educational attainment(HSDROP). For example, when crosstabs were ran on these two variables it was found that mothers with less
than a high school education are much more likely to have kids with less than a high school education level.

HSDROP was also found to be a very significant determinant in whether one would become welfare dependent. This supports hypothesis four in which I suggest that low levels of education would increase the likelihood of welfare dependency.

My most consistent and significant variable is the attitude variable. It is significant in all four WELFDEP equations. This result strongly suggests that if a person has a predisposition towards welfare they are much more likely to become welfare dependent. This goes along with Murray's theory that the availability of social programs such as welfare has created disincentives to work.

The only insignificant result was the TRADFAM variable, which was never significant in any of my results. This indicates that family structure is not a major factor in determining whether one will be welfare dependent.

**EFFECTS OF WELFARE DEPENDENCY**

Table 3 presents the results of the regression analysis I ran for models 5, 6, and 7. In these models welfare dependency during 1980-1984 (WELFDEP) becomes an explanatory variable of three economic outcomes in 1989 (Poverty Status, Net Family Income, and # of hours worked). Overall, I felt they supported my hypotheses and the theories I drew them from. Only TRADFAM was consistently not significant, while the other explanatory variables generally were significant.
<table>
<thead>
<tr>
<th>DEP. VARIABLES</th>
<th>Poverty Status In 1989</th>
<th>Net Family Income 1989</th>
<th># of Hrs Worked 1989</th>
</tr>
</thead>
<tbody>
<tr>
<td>IND. VARIABLES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H.S.GRAD</td>
<td>-0.28* (-4.20)</td>
<td>7966* (2.107)</td>
<td>508.79* (3.480)</td>
</tr>
<tr>
<td>SOMECOLL</td>
<td>-0.29* (-3.67)</td>
<td>10900* (2.412)</td>
<td>673.43* (3.730)</td>
</tr>
<tr>
<td>COLLGRAD</td>
<td>-0.39* (-4.97)</td>
<td>24772* (5.528)</td>
<td>743.35* (4.146)</td>
</tr>
<tr>
<td>MARRIED</td>
<td>-0.34* (-6.47)</td>
<td>17941* (5.868)</td>
<td>-80.61* (-.673)</td>
</tr>
<tr>
<td>WELFDEP</td>
<td>0.143* (2.27)</td>
<td>-5543 (-1.53)</td>
<td>-242.9* (-1.718)</td>
</tr>
<tr>
<td>TRADFAM</td>
<td>0.002 (.027)</td>
<td>-1865 (-.56)</td>
<td>18.56 (.140)</td>
</tr>
</tbody>
</table>

* Indicates significance at the 10 percent level
The main finding of those regressions is that welfare dependency in the early 1980's appears to have the expected effect on economic outcomes in 1989, even after controlling for the influences of educational attainment (HSGRAD, SOMECOLL, and COLLGRAD), current marital status (MARRIED), and family structure at age 14 (TRADFAM). This provides further support for Murray and Goodwin's welfare disincentive theory as it relates to the neoclassical theory of labor supply. The fact that there was a link between welfare dependency and the dependent variables indicates that welfare does decrease mobility out of the lower class.

In particular, Table 3 shows that welfare dependency in 1980-84 increased the likelihood that a respondent will be poor in 1989 by about 14 percentage points. This is shown in the first column of results. The second column of results suggests that there may be a negative relationship between WELFDEP and Net Family Income in 1989, but the coefficient is not quite significant at the 10 percent level. The 3rd column of results show WELFDEP to be a significant predictor of the number of hours worked in 1989. The coefficient indicates welfare dependency in the early 1980's, ceteris paribus, is associated with a decline of about 243 hours of work in 1989.

Although not central to the purposes of this study, the coefficients to the control variables are interesting. For example, education did prove to be an excellent way to overcome poverty. This conformed to hypothesis nine as education did seem
to influence the dependent variables to a high degree.

Marriage, was also very significant for the most part. The extra income gained from a dual income family served to increase total net family income and raise one out of poverty. The one regression in which marriage was not significant, was # of hours worked in 1989.

A surprising result is that the family structure under which the respondent lived at age 14 (TRADFAM) was not a significant predictor of economic outcomes in 1989. This could be a positive sign because it indicates that being raised in a traditional two parent family is not needed for one to escape poverty and the underclass. The results indicate that both education and current marital status, however, are important determinants of poverty status.

In summary the results strongly support 3 of my research hypotheses, provide weak support for 4 research hypotheses, and no support for 2 hypotheses. Strong support (significant coefficients with correct signs) is provided for:

Ho4: Negative attitudes towards work will make one more likely to be welfare dependent.

Ho5: A respondent with less than 12 years of education will be more likely to be welfare dependent.

Ho9: Education will increase total net family income, number of hours worked, and lower the probability of remaining in poverty.

Weaker support (correct signs and nearly significant coefficients) is provided for:

Ho2: Minorities will be more likely to be welfare dependent.
Ho3: The higher the parents’ education the less likely one will become welfare dependent.

Ho6: Welfare dependency between 1980-84 will negatively effect the number of hours worked in 1989 and total net family income in 1989, while increasing the likelihood of still being in poverty in 1989.

Ho7: Marriage should help one escape poverty, increase total net family income, but decrease number of hours worked.

No support (incorrect signs or nonsignificant coefficients) is provided for:

Ho1: Growing up in a traditional family reduces the chance of being welfare dependent.

Ho8: Growing up in a traditional family should increase number of hours worked, raise net family income, and increase the probability of escaping poverty.

VII. Conclusions

When looking at causes of welfare dependency my most important finding was that levels of human capital, not race, are the most important determinant of whether one would become welfare dependent. This does not necessarily mean that race has no influence on welfare dependency. Racial discrimination could, for example, influence the quality and quantity of education available for blacks. However, the results do suggest that more education for the economically disadvantaged could significantly decrease the number of both blacks and whites on the welfare rolls by increasing hours worked and increasing net family income.

The most important implication of my results concerning the effects of welfare dependency was that being welfare dependent in
early years produces a strong negative effect on future income and labor supply. The statistical significance of WELFDEP (when used as an explanatory variable) lends support to the welfare-disincentive argument.

My TRADFAM variable was surprising but encouraging. While being insignificant, it did indicate that family structure as a youth was not an influence that would cause an individual to become welfare dependent or impede one's ability to rise out of poverty.

The rest of my results did turn out as expected. Education was especially significant, indicating that additional education may be an extremely important way to avoid welfare dependency for many people. Young people and their parents need to be made aware of the importance of education so that they can choose to pursue enough education to escape poverty.

Overall, the results are consistent with the neoclassical theory of labor supply and Murray's "welfare-disincentive" theory. The finding that welfare dependency does affect future economic outcomes such as poverty status, net family income, and number of hours worked, suggests the need for further research on welfare reform.
VIII. References


