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THE GARY EXPERIMENT IN WELFARE REFORM

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A primary goal of the Carter administration is to reform welfare programs in order to reduce work disincentives, promote family stability, improve the fairness of benefits (by providing a uniform level of benefits to all families, with a minimum level of adequate benefits available in all states), alleviate the loss of self-respect associated with welfare payments, and simplify the administration of payments (by consolidating several programs). As a result, Congressional debates on revamping welfare are again raising the issues of work incentives and income adequacy that were heard in 1970 when Nixon's Family Assistance Plan was proposed. A unique feature of the current debates, however, is the presence of a wealth of experience and first-hand knowledge about welfare reform gained over the past decade from a series of federally-sponsored welfare reform experiments. While general agreement exists about the number of families that would be covered and the size of their initial support payments under alternative welfare reform proposals, estimates of the work disincentive effects of alternative plans have varied widely, resulting in uncertainty about the long-run costs of these plans. We describe here a welfare reform experiment conducted in Gary, Indiana, between 1971 and 1974 and present initial results on the effect of that experiment on the participants' incentive to work and family well-being.

The Gary Income Maintenance Experiment was one of a coordinated series of experiments supported by the U.S. Department of Health, Education, and Welfare (HEW) and the Office of Economic Opportunity and designed to test the work incentive effects and other consequences of alternative income support plans. The experiments were conducted with different population

groups in different parts of the country.^{1/} The Gary experiment was conducted by Indiana University at its Northwest (Gary) campus, under contracts with the Indiana State Department of Public Welfare and HEW. The income support plans tested in Gary were similar in structure to those of existing welfare and transfer programs, except that the benefit formulas were simplified and eligibility was universal, depending only on family income and family size, and the presence of a dependent child. Benefits were determined by the support level, that is, the basic benefit provided to a family with no other source of income, and an implicit tax or benefit reduction rate, that is, a rate at which the benefit is reduced as other sources of income increase. Under such a plan the size of the benefit decreases as family income rises, but total family income always increases as earnings from work increase. The largest benefits go to those families with the lowest incomes, and benefits are phased out through the benefit reduction rate.

Four different income support plans, combining two implicit tax rates and two support levels, were tested in Gary. The tax rates were 40 or 60 percent, and the support levels were equal to either the poverty level or to about three-fourths of the poverty level annual income for each family size. In 1972, for example, when the official poverty threshold for a four-person, nonfarm family was \$4,275, the two Gary support levels were \$4,300 and \$3,300 for that family size. Benefit schedules were adjusted every six months to compensate for increases in the cost of living.

^{1/}The experiments took place in five cities in the New Jersey - Pennsylvania area, rural counties in Iowa and North Carolina, and in Gary, Indiana, Seattle, Washington, and Denver, Colorado.

The income maintenance experiments were experiments in the sense that otherwise similar families were randomly assigned either to an experimental group which was eligible for payments, or to a control group which received no payments. By comparing the behavior of the experimental and control families, it is possible to determine statistically the effects of the income support plans, because the only important difference between the two groups was the randomly assigned experimental status.

The experimental group families were eligible for the income support payments for three years. All participating families in both the experimental and control groups filed monthly reports of income and family composition changes, and were interviewed before the experiment, about three times a year during the experiment, and after the experiment. Selected families were eligible for child care subsidies at various subsidy rates, and for experimental information-referral services.

Characteristics of the Participating Families

Each of the experiments studied the responses of different population groups. The Gary experiment focused on black families in an urban environment and eligibility was limited to families with at least one child under age 18. Of the 1,799 families who enrolled (voluntarily), 57 percent were assigned eligibility for experimental income support payments, while the remainder were control subjects. Almost 60 percent of the participating families were headed by women (that is, they were families without a male head of household present).

The families with a male head of household present (almost all of which were intact husband-wife families) usually had low incomes but

generally were not extremely poor. The husbands were typically full-time workers who were able to earn enough to keep their families out of poverty--only 10 percent of these families had incomes below the poverty line. The wives, on the other hand, typically did not work outside the home--only 13 percent were employed at the start of the experiment. In the relatively few families where both the husband and the wife were employed, the wife's earnings usually raised family income so high that the family no longer qualified for the receipt of income support payments.

The husband-wife families studied in Gary would not be considered typical welfare families both because of their attachment to the labor force and their income levels, and because public assistance payments were not generally available to husband-wife families in Indiana. However, under the income support plans tested in Gary, many of these families were eligible to receive modest income supplements. The analysis of the Gary experiment can therefore provide insight into the consequences of extending an income supplement program to working but low-income families, as under the Carter welfare reform proposal.

The families with female heads of household were generally much poorer than the husband-wife families studied. Over 80 percent were receiving welfare benefits from the Aid to Families with Dependent Children (AFDC) program immediately prior to the experiment. About three-fourths of the families that switched from AFDC to the experiment had incomes below the poverty line. The female heads of household receiving AFDC at enrollment were very dependent on welfare: 86 percent of their monthly income came from public transfers, with AFDC grants alone accounting for slightly more than half of their incomes. As with the wives studied, only 13 percent of these women were employed.

The families headed by women who did not receive AFDC prior to the experiment were somewhat better off; only 38 percent had incomes below the poverty level. Approximately 60 percent of the income of such families came from earnings (40 percent of the female heads in these families were employed), while most of the rest of their income came from Food Stamps, Social Security, and other transfer programs.

The income support plans tested in Gary were considerably more generous than AFDC. Average experimental payments to female-headed families by the end of the second year of the experiment were \$258 a month, as compared to \$159 for AFDC payments. Thus, the Gary experiment can provide information about the potential effects of the Carter proposal to increase welfare payments to female-headed families and extend eligibility for income support to female family heads who do not currently receive AFDC.

The research reported here is based on limited data from the first two years of the experiment. Because the analysis exploited only a small portion of the available data, these initial findings are still tentative. Once all of the data have been analyzed, the tentative conclusions summarized here may be revised. Nonetheless, several conclusions emerge from the data with strong statistical support.

INITIAL FINDINGS ON WORK EFFORT RESPONSE TO THE EXPERIMENT

The initial analysis focused on the work effort of household heads who were of working age and capable of working.^{1/} The work effort response at the end of the first and second years of the experiment was estimated

^{1/}The full results on work effort are reported in Kenneth C. Kehrer and Robert A. Moffitt (eds.) The Gary Income Maintenance Experiment: Initial Findings Report, Volume I, Initial Labor Supply Findings (Indiana University, 1976).

using multiple regression analysis--a statistical technique that took into account the effects of major differences among families likely to influence work effort (e.g., age and education of household heads, family size, and labor market conditions). The available data have been subjected to numerous alternative specifications to test the sensitivity of the work effort response. While these sensitivity tests do not exhaust all possibilities, the narrow range of the response estimates do provide support for the tentative conclusions summarized here.

The initial analysis detected little difference in the work effort response among alternative income support plans. That is, the various support levels and implicit tax rates tested in Gary did not appear to result in greatly varying levels of work effort. Thus, the initial findings summarized here compare individuals eligible for the experimental support payments--regardless of the specific plan--with individuals who were control subjects.

Summary of Findings on Work Effort

The initial findings indicate that the experiment had a modest disincentive effect on the work effort of household heads by the end of the second year. In intact families, husbands reduced their total hours worked by an average of 7 percent, and wives reduced their hours of work by 17 percent. These estimates are quite similar to those of the work effort response of husbands and wives in the other income maintenance experiments. Female family heads who switched from AFDC to the NIT reduced their hours of work by 5 percent. However, because both these women and wives worked few hours prior to the experiment--about six hours a week on the average--their reductions in work effort had only a small impact on total family

labor supply and earnings. Our findings indicated that female heads of families not receiving AFDC at enrollment actually increased their hours of work slightly relative to controls, but we have little confidence in the findings for this group, because there were very few of them in the sample.

We also examined the work response of the entire family because experimental payments were based on family income and family size. For intact families, the reduction in total work hours, which included the work hours response of husbands, wives, and other adult family members, was 12 percent. This result is again quite similar to comparable estimates from the other experiments.

Families headed by women are divided into two categories: families that received AFDC payments prior to the experiment and those that did not. The response of female heads of household was small in absolute hours (see Table 1), but large in percentage terms. The initial estimates suggest that female-headed experimental families previously on AFDC reduced their work effort by 12 percent while similar families which had not received AFDC prior to the experiment reduced theirs by 16 percent.

The impact of an NIT on total family work effort thus suggests a reduction in the hours worked by families, but these estimates vary considerably. We, therefore, have significantly more confidence in the estimates of the work effort response of household heads than in the response of the families as a whole in predicting the consequences of introducing the experimental plans on a nationwide scale.

TABLE 1
SUMMARY OF INITIAL FINDINGS ON WORK EFFORT
FROM THE GARY INCOME MAINTENANCE EXPERIMENT:
HOURS WORKED AT THE END OF THE SECOND YEAR

	Effect of the Experiment on Total Hours Worked per Week	Mean Hours Worked by Control Group	Work Effort Response as a Percentage of Control Group Mean
Individual Response:			
Husbands	-2.5	36.0	- 7
Wives	-1.0	5.7	-17
Female Heads of Household			
On AFDC Prior to the Experiment	- .3	6.5	- 5
Not on AFDC Prior to the Experiment	.3	14.7	+ 2
Family Response: ^a			
Husband-Wife Families	-5.8	48.0	-12
Female-Headed Families			
On AFDC Prior to Experiment	-1.0	8.4	-12
Not on AFDC Prior to the Experiment	-2.8	17.2	-16

^aIncludes sum of work response of all adult family members.

Note: These estimates of the work effort response were obtained using a statistical technique (regression analysis) that controlled for family composition, other family income, earnings of other family members, the individual's age, education, normal wage rate, and pre-experiment work effort and AFDC status, and the unemployment rate and season at the time of the interview.

The Work Effort Response of Husband-Wife Families

A major focus of public debate over welfare reform has been the potential disincentive effects of extending coverage to all husband-wife families, or of increasing existing welfare benefits for these families. Currently only about half of the states provide benefits (under AFDC-UF) to intact, husband-wife families where the husband is unemployed.^{1/}

The income support plans tested in the Gary experiment provided higher payments than existing AFDC benefits in Indiana and covered more husband-wife families.

The work effort response of intact families to the support plans tested in Gary was centered among the husbands, who reduced their total hours worked by 2.5 hours a week in response to the experiment. This disincentive was largely the result of the complete withdrawal of a few individuals from the labor force rather than of small reductions in work effort by most of the husbands. Those who were not well established in the labor market prior to the experiment were most likely to withdraw from the labor force.

The wives responded to the experiment by reducing their total hours worked by one hour a week. This decline in work effort was caused by a few wives who ceased to work and an across-the-board reduction in hours worked by those who continued to work. However, many of the wives who stopped working remained in the labor force since they continued to look for work. In general, the estimates of the work effort response

^{1/} However, eligibility for AFDC-UF benefits depends not only on income, but also on attachment to the labor force or on previous employment. All states provide benefits under AFDC to intact families where one of the parents is incapacitated.

of wives are statistically insignificant, partly due to the small number of working wives in our sample.

If the work effort of the entire family is considered, the impact of the experimental payments was to reduce family hours worked an average of six hours per week. Most of this differential is attributable to reductions in work effort by families where at least one member remained at work, but some families, especially low-income families, stopped work entirely. The negative response of six hours per week for experimental intact families is an average family response which is found by including all work adjustments by different family members. Reductions in work hours by husbands and other adult members were the main cause of the net six-hour differential.

The Work Effort Response of Families Headed by Women

When women heading a household switched from AFDC to the experimental support plans, only a modest reduction in work effort resulted--.3 hours worked per week on the average--despite the relative generosity of the experimental payments. The response resulted primarily because a few female heads of household stopped working rather than because there was an across-the-board reduction in hours worked. The modest disincentive effect--somewhat smaller than the negative experimental response of husbands in the sample--may reflect the work disincentive effects of the AFDC program, which enables mothers to reduce their work effort in order to care for their children. Switching from AFDC to a more adequate income support program may not lead to large reductions in work effort because many women who head households may have already reduced their hours of

work under AFDC. In any case, these estimates suggest that increasing the support levels of the AFDC program along the lines of the income support plans tested in Gary would result in only a modest decline in the work effort of female heads of household.

Female household heads who were not on AFDC prior to the experiment appear to have increased their work effort slightly--by about .3 hours a week--in response to the experiment. However, the estimated responses for this group are statistically insignificant and unstable over time. The group's sample size is quite small and may not be large enough to permit us to estimate the effect of the experiment on the work effort of its members with confidence.

Separate analyses of the work response of AFDC and non-AFDC female-headed families were also completed. Hours worked for those receiving AFDC prior to the experiment was one hour per week less than control families after two years in the experiment. This result is largely due to an increase in the number of hours worked by AFDC control families during the observation period, rather than a reduction in hours worked by families receiving the experimental payments. Women in the experimental families who did not receive AFDC prior to the experiment worked 2.8 hours less than similar control families after two years. Because the latter worked an average of 17.2 hours per week, the observed disincentive effect for families not on AFDC is large in relative terms. Among control families, the relationship between the AFDC program and work effort can be seen in the differences in work effort between the female-headed control families that did not receive AFDC in Gary and their counterparts who received AFDC--17.2 hours versus 8.4 hours.

While suggestive, these preliminary findings for families headed by women who did or did not receive AFDC were not statistically significant.

OTHER INITIAL FINDINGS

Work effort was the central focus of the initial analysis, but other interesting responses were also considered. Studies were conducted on experimental responses in four other areas: the effects of income maintenance on family consumption; the demand for housing; the demand for social services; and the choices teenagers make among school, work and leisure. In addition, other studies investigated the utilization of the experiment's subsidized child care and social services information-referral programs, and the degree of participants' understanding of the rules of the experiment and the mechanics of the income support plans.^{1/}

The effect of the experiment on family consumption was investigated by comparing differences between the experimental and control groups in debt, monthly purchases, and the acquisition of durable goods between mid-experiment and the period prior to enrollment. This preliminary analysis suggests that experimental families tended to use their additional income to increase their expenditures on clothing, medicine, and automobile repairs (but not to purchase automobiles), and to reduce their medical debt. In addition, families eligible for experimental payments spent 78 percent more on home production appliances and 64 percent more on furniture than control families.

^{1/}For the full reports on these studies, see Kenneth C. Kehrer (ed.), The Gary Income Maintenance Experiment: Initial Findings Report, Volume II, Other Initial Findings (Indiana University, 1976).

Initial examination of the housing consumption patterns of a subsample of families indicates that the experimental payments did not induce families to move to different housing. On the other hand, among those families that did move during the experiment, public housing residents in the experimental group were about 50 percent more likely to move to private dwellings than similar control families, and experimental families were twice as likely to purchase homes. Thus, the experimental payments appear not to have influenced the decision of families to move but, among those families who would have moved anyway, to have influenced their choice of residence.

Experimental families used social agencies less extensively than did the control families. When other factors are taken into account, families eligible for experimental payments reduced their use of social service agencies by about 13 percent. Thus, the evidence from the Gary experiment suggests that a universal income support program, available to more families and with higher benefits than AFDC in Indiana, may reduce the demand for social services to some extent.

The experimental payments appear to have had a positive effect on school attendance among male teenagers, who tended to reduce their labor force participation and continue their high school education. On the other hand, the experimental income support plans appear to have had no effect on high school continuation for female teenagers and no effect on college attendance by either sex. Of course, black female teenagers are already much more likely to finish high school than black males, so there exists less opportunity for a positive experimental response among females.

Child care subsidies were available to selected experimental participants at varying subsidy rates--100, 80, 60, and 35 percent. For most of these families, the availability of the subsidies was contingent on working (or engaging in a work-related activity). The number of families who used the child care program was much smaller than originally anticipated; less than 5 percent of eligible families used the program during the second year. The rate of utilization generally declined as the subsidy decreased, and utilization was higher among families with preschool children. For these families, the rate of use in the 80 and 100 percent subsidy plans with a work requirement was 15 percent. These initial findings suggest that utilization of a child care subsidy program will depend on the rate of subsidy, and that utilization will be concentrated among families with preschool children.

The Gary experiment also attempted to test the usefulness of "access workers" who provided information and referral services to a subgroup of the study sample. However, utilization of the access workers was much lower than expected and declined to an almost negligible level from the beginning of the program to the end of the first year of the study. Only about 25 percent of the eligible families contacted the access workers at any time during the experiment.

Household heads proved to be highly knowledgeable about the rules that governed a family's eligibility for continued participation in the experiment. However, as had been anticipated, they were considerably less knowledgeable about the mechanics of the income support plans. These results are similar to findings from the New Jersey and Rural experiments.

FUTURE RESEARCH

Research on the Gary experiment is continuing at Mathematica Policy Research, Inc. under a contract with the U.S. Department of Health, Education, and Welfare. Researchers located elsewhere will also analyze data from all four experiments as these data are released for public use. This additional research should provide further evidence of the generalizability of previous findings on the effects of experimental income support programs on work effort and family consumption. Moreover, it will also improve our understanding of the effect of such income support plans in a whole range of other areas, including the school performance of children, the incidence of low birth weight (an objective measure of the effect of the experiment on the health status of infants), family stability, job satisfaction, fertility, health services utilization, and other aspects of the quality of life.

POLICY IMPLICATIONS

President Carter's welfare reform proposal combines income support payments similar to those tested in Gary with a guaranteed job for families eligible for welfare. His proposal is not as generous as the Gary payments--under the Carter plan, the support level is set at only 65 percent of the poverty level. Because the plan guarantees a job and requires work of able-bodied adults not needed for child care in the home, and because the plan offers lower payments than those tested in Gary, work disincentives under the Carter plan might be expected to be smaller than occurred in Gary. The results presented here suggest that only modest disincentives would occur even if the Carter plan were

more generous and did not have a work requirement. Such results may allay many of the fears in Congress and among others that welfare reform implies substantial work effort reductions.

Moreover, the initial findings also indicate that the experimental income support payments improved family well-being and appeared to stimulate less dependency among families when compared to the traditional welfare system. Families reduced their use of social services agencies and moved out of public housing. They increased their savings and stock of home production appliances. Finally, male teenagers tended to stay in school rather than drop out. All of these findings point to a breaking down of the cycle of poverty and dependency.