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ATTRIBUTION OF RESPONSIBILITY
FOR ERROR IN AFDC PAYMENT
DECISIONS

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Attribution of Responsibility for Error in AFDC Payment Decisions

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The reduction of fraud, waste, and abuse in government programs is certainly a desirable goal. These efforts need, however, to be guided by systematic data analysis if they are to be successful and efficient. Available data for Wisconsin suggest that client fraud in the AFDC program is not a significant problem. Administrative errors, on the other hand, occur with much greater frequency. Multiple regression analyses were performed regressing four types of error (overpayments due to agency errors, overpayments due to client errors, underpayments due to agency errors, underpayments due to client errors). Variables included those describing the individuals involved (directors, supervisors, workers, and clients) and the decision-making context (organization and community). Our results indicate that case complexity resulting primarily from earned income in the household is the major contributor to all types of error. Although attitudes of case workers and their supervisors are associated with different types of errors, there is no evidence in our data suggesting that certain types of clients manipulate the system for their own gain.
INTRODUCTION

While the vulnerability of publicly funded programs to fraud has always stirred interest and controversy, in recent years it has gained increasing emphasis. In 1976 the General Accounting Office (GAO) initiated a review to ascertain whether federal agencies had instituted effective policies and procedures for combating fraud. In summarizing the subsequent report, the GAO's Group Director for Governmental Audit and Fraud Prevention concluded that "while no one knows the magnitude of fraud and abuse against the Government, all indicators are that it is a problem of critical proportions." As a result, in 1979 the Comptroller General established within the GAO a Task Force for Prevention of Fraud to determine the scope of the problem, to operate a nationwide, toll-free hotline, and to develop a risk profile of the susceptibility of agency programs to fraud and other illegal activities. In 1980 the first National Conference on the Prevention of Fraud, Waste, and Abuse in Government was held, sponsored by the University of Pittsburgh's Graduate School of Public and International Affairs.

This type of activity will, it is hoped, provide systematic data concerning the scope of the problem and its causes, which will in turn help focus and direct the public's emotional response to the more sensationalized journalistic reports of individual cases of fraud or abuse in government programs. This paper is intended to promote that objective through an analysis of error in payment decisions in the Aid to Families with Dependent Children (AFDC) program in Wisconsin.
The data set used in this analysis was generated as part of a major study of the administration of public welfare in Wisconsin. The study attempted to provide a comprehensive examination of public welfare administration by looking at the individuals involved in the operation of public welfare agencies (directors, supervisors, and workers), the context in which they operate (organization and community), the clients being served, and the various decision points in the administration of public assistance programs (eligibility and payment determination, redetermination, and discontinuance). Program results were examined along several dimensions, including decision-making accuracy, equity, efficiency, and client satisfaction. Our concern here is with the first of these topics.

Evidence of client misrepresentation has seldom been documented in the AFDC program. For our sample of 4806 cases, only 2.4 percent involved client misrepresentation. Nationwide, figures for 1976 indicate that in only 1.8 percent of all AFDC cases are there facts sufficient to support a question of fraud. Nevertheless, as Bendick points out, client fraud and abuse represent only one way in which public funds may be mistargeted (i.e., benefits are not delivered to the intended, "truly needy" recipients). Other ways include administrative errors, failure to enroll clients who are legally entitled to benefits, excessively high administrative costs, and the inequitable exercise of administrative discretion. It is in fact the case in AFDC that administrative error is a much more serious problem than client fraud. For our sample, 21.8 percent of the cases were found to be in error by the state’s Quality Control (Q.C.) audit. This compares closely with national figures from the Department of Health, Education and Welfare for the same period (21.5 percent in July–December 1976). For this reason
our analyses have focused primarily on error in welfare case decision-making. We have attempted to identify variables describing the various individuals involved in the decision-making process and variables describing the decision-making context which are associated with different types of error (overpayments, underpayments, and eligibility).

It is possible, however, to go one step further with these data. In the Q.C. audit the reviewer made a judgment for each error case, attributing responsibility for the error to either the client or the agency. Client error in this sense is not to be confused with fraud in that the former does not necessarily imply willful misrepresentation. It refers to cases where the client, for whatever reason, has failed to report information, or has reported incomplete or incorrect information. Judging intent is, of course, difficult, and some client errors may actually involve fraud. Similar gray areas exist in the judgment attributing errors to either the agency or client. Agency errors involve computational errors, failure to take indicated actions (verification, follow-up, or use of reported information) and incorrect use of policy or use of the wrong policy. The categories (agency and client) are mutually exclusive, and all errors are attributed to one or the other category. In situations where both the client and agency are in error, or where it is unclear who is responsible, the error is attributed to the agency. Despite the subjective nature of these judgments, the stability of the distribution of errors over time suggests some reliability in their measurement. Roughly two-thirds of all error cases are attributed to the agency during our study period (1975-76), and this distribution has held over the last five years.

To our knowledge, no analysis of the different factors associated with client and agency error has ever been reported. We believe this
analysis may provide useful insights into the nature of AFDC error which, in turn, may point to strategies for corrective action.

In order to put the research in perspective, we need briefly to say something about the administration of public welfare in Wisconsin at the time of our study and the specific aims of the investigation itself.

Setting

Wisconsin operates a county-administered, state-supervised Aid to Families with Dependent Children (AFDC) program. Although the state is largely rural, it has two major urban centers. One is the large industrial area comprising Milwaukee and surrounding communities in the southeast sector of the state. The other is Madison, a community which is heavily populated by university faculty and students as well as state civil servants.

In 1975, Wisconsin implemented a flat grant policy (a consolidated grant to cover basic needs) in the awarding of benefits under AFDC. At about the same time it began a computer reporting network (CRN), which made possible more rapid processing of AFDC grant requests, more complete and systematic recordkeeping, and more accurate eligibility determination for AFDC, Food Stamps, and Medical Assistance. During the time that this study was in the field, in 1976, the overall AFDC case-decision error rate in the state was approximately 22 percent.

Design

The intent of the research was to determine whether and how variation in local administrative practices, personnel, and case factors influenced AFDC case payment errors. Our interest was not in state policy variation, nor was it in global error rates. Rather, we were interested
in the size of payment errors, looking at overpayments and underpayments separately. We used this approach on the assumption that the two forms of error may have different origins. The range of phenomena studied in the analysis was broad. It included characteristics of agencies, staff, and recipient families. It also involved attributes of the communities in which the agencies were located.

In view of the fact that our data were collected in 1976, an initial question that may be asked concerns the relevance of our findings to AFDC in 1981. We think its relevance is as strong now as at the time of data collection. Essentially our interest is in administrative forces, personnel attributes, and case characteristics that influence the decision-making process. We think these are relatively invariant to specific policy contexts. On the other hand, it is true that our data are only from Wisconsin. Perhaps Wisconsin decision-makers and AFDC families are different from those elsewhere. We have doubts on this score, but only additional studies can verify or disprove the possibility.

There are, however, some warnings that need to be made concerning our research findings. First, there are clear constraints on the possible effects we might legitimately expect from the phenomena we have studied. The fact is that we studied possible effects resulting from naturally occurring variations, whose range could not be manipulated, rather than the large and pure types of variations found in controlled experiments and demonstrations. Thus, when we report that different variables "had no effect" on payment errors, this means only that the normal variation was not such as to suggest that they were relevant to the variation in payment errors. It does not necessarily imply that these factors are irrelevant to error. We emphasize this point because it turns out that many, in fact most, of the phenomena we examined did not prove to be
relevant to the pattern of case payment errors we observed. A listing of these variables appears in the Appendix. They include those community, agency, and human attributes that social scientists have long regarded as important to organizational operation.

The sample we employed included 4806 cases contained in the Wisconsin AFDC Quality Control (Q.C.) samples of 1975 and 1976. We used the Q.C. reviewers' reports to determine whether and to what extent each case involved payment error, to whom responsibility for the error was attributed, and a variety of characteristics of the family involved in the case. At the time these Q.C. data were being collected we toured the state of Wisconsin, administering questionnaires to case aides, their supervisors, and agency directors. The questionnaires were intended to provide information on the staff, agencies, and communities we studied. Finally, during the course of our agency visits we abstracted from case files data concerning the adequacy with which workers performed their redeterminations. All these segments of information were linked where possible to the Q.C. sample of cases. By "link" we mean that we were able to supply, for each Q.C. case, information pertaining to the workers, families, agencies, and other actors involved with the case.

Our analysis has been complicated by missing data problems and by the large number of variables involved. The normal problems of missing data associated with survey studies were compounded in this study by the linking process described above. We were able to identify the case worker for 3440 cases and the supervisor for 1827 cases. In addition, one data collection instrument involving a telephone interview with the client was administered only to a subset of 1521 cases. Our sample, then, changes dramatically depending upon which type of independent variables are included in the analysis.
The sample size also varies with the choice of dependent variables. Our analyses, therefore, actually involve four different dependent variables and four different samples. As mentioned above, we analyze overpayments and underpayments separately. We also wish to distinguish client errors from agency errors. Crossing these two factors, we obtain four error types: (1) overpayment due to client error; (2) underpayment due to client error; (3) overpayment due to agency error; and (4) underpayment due to agency error. To analyze each of these separately, we create four files by combining each error type with the cases having no error. The dependent variable in each case is the dollar amount in error.

A different type of problem we encountered concerns the sheer numbers of independent variables available for analysis. Guided by a thorough search of the literature and by an advisory panel representing all levels in the Wisconsin public assistance system, the study included virtually all variables thought to be of theoretical or practical importance in explaining the functioning of the public assistance system. Even after employing factor analysis and other scale construction techniques, we are left with over 100 possible explanatory variables. With a listwise deletion procedure for missing data it is impossible to look at all variables simultaneously. Because of the large number of independent variables available and the lack of any well-developed theoretical basis for more detailed model development, we have struggled for logical and consistent methods of data reduction and model testing. From our previous work we had determined that the variable "having earned income in the grant" (i.e., a client's earned income had to be entered into calculation of the grant amount) was significantly associated with overpayments, underpayments, and eligibility error. An examination of the zero-order corre-
lations between the independent variables and the amount of payment error for each of our four subsamples (overpayment due to client error, overpayment due to agency error, underpayment due to client error, and underpayment due to agency error) revealed the earned-income variable to be the single strongest predictor for each type of error here as well. The procedure followed, then, was to look at the first-order partial correlations between the independent variables and each type of payment error, controlling for earned income in the grant. Then for each subsample a stepwise multiple regression equation was run, including all variables found to have a significant partial correlation with the specific payment error variable. The results of this regression analysis are presented in the following section.

Findings

Of our original sample of 4806 ongoing AFDC cases, 21.9 percent were determined to be in error by the Q.C. audit--11.4 percent had overpayments, 8.3 percent had underpayments, and 2.2 percent had totally ineligible clients. Eligibility errors are excluded from this analysis because of sample size limitations.

Payment errors attributed to the agency outnumbered client errors by almost a two-to-one margin (65.4 percent vs. 34.6 percent). Sixty-eight percent of the client errors were overpayments, while only 53 percent of the agency errors were overpayments. However, the amount of payment error for both overpayments and underpayments was lower for client errors than for agency errors ($31 vs. $46 for underpayments and $51 vs. $61 for overpayments).

Converting these figures to dollar costs to the agency and to the client provides a useful summary. For our sample, overpayments attri-
buted to the agency cost the agency $22,152, while overpayments attributed to the client cost the agency $12,554. Agency underpayments cost the client $14,812, while underpayments attributed to the client cost the client $3,596.

Table 1 shows the results from the stepwise regression analyses of the independent variables with significant partial correlations with the payment error variables. The results are reported for one step beyond the last statistically significant variable entered in each equation.

Several noteworthy points emerge from this analysis. First, the overwhelmingly strongest predictor of error of all types is the dummy variable indicating earned income in the grant. The numbers listed here are the unstandardized regression coefficients and therefore represent the change in the dollar amount of error resulting from a one unit change in the independent variable. For the earned-income dummy variable, the coefficients represent the increase on average of payment error for cases with earned income compared to cases with no earned income.

While overall prediction power ($R^2$) is weak for all equations, agency errors are predicted better than client errors. In part, this reflects the fact that there is simply less client error to explain. However, few client-related variables, other than the earned-income variable, are significant predictors of any type of error. The one exception to this is "number of persons in household," used to calculate amount of the grant, which is significantly associated with agency overpayment but also is positively associated with client underpayment. We believe that the influence of both earned income and number of persons in the grant involve increasing complexity in the decision-making process. With earned income in the grant there are many additional parameters to be considered in calculating the grant (e.g., child care expenses, work
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<tr>
<td>Client's Earned Income Calculated in Grant</td>
<td>7.26***</td>
<td>4.64***</td>
<td>6.80***</td>
<td>1.96***</td>
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<td>Case Worker Job Satisfaction</td>
<td>2.30*</td>
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<td>Age of Payee</td>
<td></td>
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<tr>
<td>Supervisor Job Satisfaction</td>
<td></td>
<td></td>
<td>-1.09*</td>
<td></td>
</tr>
<tr>
<td>Number of Persons Covered by Grant</td>
<td></td>
<td>.47</td>
<td>.80**</td>
<td></td>
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<td>Case Worker Concern for Error</td>
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<td></td>
<td>-.83</td>
<td></td>
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<td>Supervisor Experiences Conflicting Demands</td>
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<td></td>
<td></td>
<td>-1.15*</td>
</tr>
<tr>
<td>Pre-CRN</td>
<td></td>
<td></td>
<td>.95*</td>
<td></td>
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<tr>
<td>Supervisor Attitudes toward the Poor &amp; Welfare Recipients</td>
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<td></td>
<td></td>
<td>-.36</td>
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<tr>
<td>Constant</td>
<td>.37</td>
<td>.05</td>
<td>-.25</td>
<td>.84</td>
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<tr>
<td>Adjusted R²</td>
<td>.026</td>
<td>.018</td>
<td>.027</td>
<td>.014</td>
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<tr>
<td>F</td>
<td>11.09</td>
<td>10.45</td>
<td>27.97</td>
<td>6.26</td>
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*Statistically significant at the .05 level.
**Statistically significant at the .01 level.
***Statistically significant at the .001 level.
allowances, variations in income, etc.). Similarly, with more people in the household there are simply more opportunities to make mistakes of all kinds, overpayments as well as underpayments.

Case worker job satisfaction is a factor score measuring several dimensions of workers' attitudes toward their jobs. Greater satisfaction is associated with higher agency overpayments. On the other hand, greater supervisor job satisfaction is associated with lower client overpayments. Satisfied personnel might be expected to do better work, be more careful, and obtain better information from clients, yet the direction of the worker satisfaction scale runs counter to this expectation. Given the large number of variables considered in this analysis, we cannot ignore the possible role of chance findings. We will therefore simply note that some associations run counter to expectations, and we will not attempt to offer plausible ex post facto hypotheses explaining these relationships.

The relationship between conflicting demands experienced by the supervisor and client underpayments suggests that supervisors who see themselves as being more motivated than other agency people to help clients may as a consequence get better information from clients and avoid underpayments.

The final variable of interest in Table 1 is a dummy variable indicating whether the application form was filed by the client before or after the operation of the Computer Reporting Network (CRN). One of the functions of the CRN involved a new application form designed to get more complete information from the client. The coefficient in Table 1 indicates that this effort was successful in reducing client underpayments.
Discussion

Considerable emphasis is now being placed on the elimination of fraud, waste, and abuse in government programs. This effort can be of most benefit if it is guided by reliable knowledge of the nature and scope of the problem and factors contributing to it.

The extensive case audits carried out by Wisconsin's Quality Control program suggest that evidence of willful misrepresentation by clients occurs in only a small percentage of AFDC cases. Payment error, on the other hand, presents a relatively greater problem for the accurate delivery of program benefits. Our analyses suggest that for the most part these errors arise from case complexity associated with the rules and regulations of the AFDC program. This is primarily the situation for cases involving earned income. In those cases, further discretion and complexity are introduced by attempts to provide work incentives and by the fluctuations that occur in household income. These inevitably lead to more error of all types. There is nothing in our data to suggest that certain types of clients manipulate the system for their own gain. On the other hand, the data do suggest that attitudes of case workers and their supervisors may be associated with different types of errors. Finally, it should be noted that administrative changes such as the use of a computerized reporting system like the CRN can achieve intended results in reducing payment errors.
NOTES

1John J. Adair, "How Vulnerable are Federal Agencies to Fraud, Waste and Abuse?" National Conference on Fraud, Waste, and Abuse (University of Pittsburgh, Graduate School of Public and International Affairs, October 7, 1980), mimeo.


3Ibid., p. 4.

4Ibid., p. 6.

APPENDIX

Variables Used in the Analysis

As organized here, we have four levels of variables. They are

I. County/Agency: This includes data from the county questionnaire, agency questionnaire, and the directors' interview.

II. Supervisor: Supervisor questionnaire.

III. Worker: Worker questionnaire.

IV. Client: Selected variables from QC review schedule.

Breakdowns of these variables within each level are as follows.

I. County and agency level

A. Work situation

1. Ratio of income maintenance case-aide positions to clerical positions (Range: 1 to 10)

2. Agency commitment to staff training (Normalized range: -1.2 to 1.3)

3. # Earned-income cases from county in sample / # cases from county in sample (Range: 0% to 67%)

4. Average caseload (Range: 28 to 125)

B. Structural and supervisory

5. Number of agency internal-control mechanisms (Normalized range: -6 to 1.6)

6. Time spent by director with staff (Normalized range: -0.8 to 1.0)

7. Degree of specialization among agency workers (Normalized range: -0.4 to 0.8)
8. Intake interviews scheduled by case aides (Dichotomy: Yes, No)

C. Director's political and social-psychological attitudes
9. Attitudes toward poor (Normalized range: -1.0 to 1.0)
10. Attitudes toward AFDC (Normalized range: -.8 to .8)
11. Sources of political pressure on director (Normalized range: -.4 to .6)

D. Demographics
12. Director's education and training (Normalized range: -1.4 to .6)
13. Percentage of families below poverty level in country (Range: 3% to 21%)

II. Supervisor level

A. Supervisory style
14. Percentage of case-aide cases reviewed (Range: 0% to 100%)
15. Intensity of supervision (Normalized range: -.6 to 1.2)
16. Workers encouraged to be cooperative with clients (Normalized range: -.9 to .7)

B. Concern for error
17. Motivation to avoid overpayment (Normalized range: -.9 to 1.6)
18. Motivation to avoid underpayment (Normalized range: -.2 to 1.7)
C. Work situation—subjective

19. Perception of late notice of policy changes (Normalized range: -1.6 to 1.2)

20. Discomfort from conflict between AFDC regulations and co-workers (Normalized range: -1.2 to 1.8)

21. Poor client experiences (Normalized range: -1.5 to 1.3)

22. Supervisor's influence in agency (Normalized range -1.1 to 1.3)

D. Work situation—objective

23. Experience—current job

24. Experience in agency

25. Percentage of policy information in written form
   (Range: 5% to 100%)

E. Political and social- psychological attitudes

26. Rigidity (Normalized range: -.8 to 1.3)

27. Work ethic (Normalized range: -.9 to 1.6)

28. Economic and political conservatism (Normalized range: -.9 to .8)

29. Attitudes toward AFDC (Normalized range: -.9 to .7)

30. Racial prejudice (Normalized range: -1.2 to 1.0)

F. Social service orientation

31. Overall social service (Normalized range: -1.5 to 1.3)

G. Demographics

32. Sex (Dichotomy: Male, female)

33. Similarity to client (Normalized range: -.9 to 1.6)

34. Union membership (Dichotomy: Yes, no)

35. Age in years (Range: 23 to 65)
36. Whether current or past recipient (Dichotomy: Never a recipient, past or present recipient)

37. Education (Normalized range: -1.0 to 2.0)

III. Case worker level

A. Concerns for error

38. Errors imply supervisor's disapproval (Normalized range: -1.6 to 1.0)

39. Motivation to avoid overpayment (Normalized range: -2.4 to 3.9)

40. Motivation to avoid underpayment (Normalized range: -1.7 to 2.0)

41. Few errors imply supervisor's approval (Normalized range: -1.4 to 1.3)

B. Work situation—subjective

42. Perception of late notice of policy changes (Normalized range: -1.4 to 1.4)

43. Job satisfaction (Normalized range: -2.0 to 1.0)

44. Discomfort from conflict between AFDC regulations and co-workers (Normalized range: -.9 to 1.8)

C. Work situation—objective

45. Percentage of cases with earned income (Range: 0.0% to 100%)

46. Overtime hours per month (Range: 0 to 40 hours)

47. Experience in current job (Range: 1 to 360 months)

48. Worker makes decisions on programs other than just AFDC (Dichotomy: Yes, no)
49. Worker has private office (Dichotomy: Yes, no)

D. Political and social-psychological attitudes

50. Grant level considered too low (Normalized range: -2.5 to 1.9)

51. Pro step-parent aid (Normalized range: -.7 to 1.8)

52. Neighbors believe welfare is too generous (Normalized range: -2.0 to .6)

53. Mothers with young children should work (Normalized range: -1.6 to 1.2)

54. Mothers on AFDC should take any job (Normalized range: -.9 to 1.8)

55. Work ethic (Normalized range: -1.0 to 1.5)

56. Economic and political conservatism (Normalized range: -.9 to 1.2)

57. Attitudes toward poor (Normalized range: -1.0 to 1.2)

E. Social service

58. Overall social service orientation (Normalized range: -1.1 to 1.1)

59. Interest in social service job (Dichotomy: Yes, no)

F. Demographics

60. Family income, annual (Range: $1,000 to $52,000)

61. Current or past recipient of welfare (Dichotomy: Never a recipient, past or present recipient)

62. Age in years (Range: 18 to 72)

63. Union membership (Dichotomy: Yes, no)

64. Education (Normalized range: -2.3 to 2.5)
65. Social worker or social science degree (Dichotomy: Yes, no)

66. Similarity to clients (Normalized range: -1.0 to 1.3)