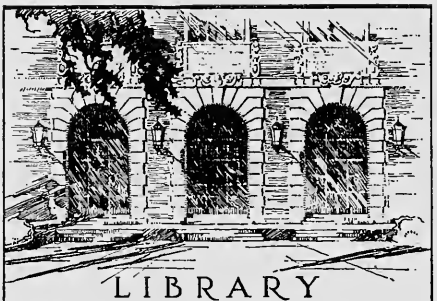
SURVEY RELIABILITY AND INTERVIEWER COMPETENCE



SURVEY RELIABILITY AND INTERVIEWER COMPETENCE

Studies in Consumer Savings

No. 1 Collecting Financial Data by Consumer Panel Techniques. *Robert Ferber*

No. 2 An Investigation of Response Error. *John B. Lansing, Gerald P. Ginsburg,* and *Kaisa Braaten*

No. 3 The Composition of Consumer Savings Portfolios. *Henry J. Claycamp*

Studies in Consumer Savings, No. 4

CONSUMER SAVINGS PROJECT
INTER-UNIVERSITY COMMITTEE FOR
RESEARCH ON CONSUMER BEHAVIOR

SURVEY RELIABILITY AND INTERVIEWER COMPETENCE

Mathew Hauck and *Stanley Steinkamp*

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PREFACE

This monograph is the fourth in a series of technical reports presenting findings of the Consumer Savings Project of the Inter-University Committee for Research on Consumer Behavior. The first and second publications in this series presented methodological results of the project, while the third publication related to consumer savings behavior.

This fourth monograph presents some further methodological findings, focusing on the role of the interviewer in affecting the quality of data obtainable on personal interview surveys. The validation of financial information reported by the respondents represented a unique opportunity to evaluate interviewer effectiveness in obtaining accurate and complete financial data. The selection, training, and supervision procedures employed on the project studies are described and evaluated in this monograph, with the validation information being used to provide objective measures of interviewer effectiveness. On the basis of these findings, Dr. Steinkamp and Mr. Hauck present some thought-provoking hypotheses on procedures which may help improve data on future financial surveys.

This project has been financed by a grant from the Ford Foundation, with supplemental assistance from the United States Department of Agriculture. Financial support for additional work currently under way has been provided by the National Science Foundation and by the United States Department of Labor. Robert Ferber, Research Professor of Economics at the University of Illinois, is director of the project.

The members of the Inter-University Committee for Research on Consumer Behavior are:

Lincoln Clark, New York University, Secretary-Treasurer
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George Katona, University of Michigan
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Raymond Goldsmith was a member of the Committee until he left in June, 1963, for an OECD assignment in Paris.

The monographs in this series are research reports. The Inter-University Committee, as sponsor of this research, makes every effort to ensure both the quality of the reports and their orientation toward meeting a real need. Nevertheless, the findings reported in this way summarize conclusions arrived at by project staff and do not necessarily represent the individual or collective views of the members of the Inter-University Committee.

GUY ORCUTT, *Chairman*
Inter-University Committee
for Research on Consumer Behavior

ACKNOWLEDGMENTS

The writers wish to express their gratitude to Henry Claycamp, Ann Harper, and Laura Hauck for reading early drafts of the monograph and for making many helpful comments and suggestions. We also wish to thank the many research assistants who have worked on the Consumer Savings Project and aided in the preparation of materials included in this monograph. The interviewers on whose work the analysis is based aided in the preparation of the monograph through their frank and thoughtful comments on problems encountered in the field.

Above all, we wish to acknowledge the important contribution of Robert Ferber, Director of the Consumer Savings Project, in offering advice and guidance in the analysis of the material and the writing of the monograph. Finally, we want to acknowledge the contribution of the editor, Mrs. Virginia Speers, in readying the manuscript for publication.

However, criticism of the monograph or inadequacies in its presentation should be directed toward the authors, who take full responsibility for its contents.

MATHEW HAUCK
STANLEY STEINKAMP

Champaign, Illinois
October 19, 1964

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I. BACKGROUND AND INTRODUCTION

The survey method is unique in its ability to obtain information concerning individual decision-making units. The variety of information obtained about each unit permits the study of relationships between different aspects of financial behavior. Thus, information about income, assets, debts, savings, and the like permits generalizations concerning the economic behavior of the whole population or of groups in the population. Knowledge so gained gives insights into the nature of aggregate relationships and forms the basis for simulations of the economy. Yet this advantage of survey methods may be largely nullified if the information obtained is not accurate and reliable.

One approach to evaluating the accuracy and reliability of survey data is the comparison of aggregates derived from surveys with those derived independently by the Departments of Commerce, Labor, and Agriculture and other sources. Such comparisons indicate underreporting of certain holdings, especially liquid assets and personal debt.[1] However, these comparisons frequently involve heroic efforts through adjustments to make the data comparable, although they offer little insight into the reasons for the discrepancies.

The accuracy and completeness of sample surveys can also be evaluated at the level of the individual sample members. Using institutional records, information about the true holdings of sample members can be compared with the information obtained at the sample addresses. This approach gives insights into the reasons for bias in aggregates prepared from survey data. Such bias may result from failure to obtain an interview at the address of the sample member or may result from the persons interviewed giving incomplete or inaccurate information. In addition, bias in the sample variance, which affects the reliability of tests of significance, can be evaluated.

The Consumer Savings Project

The Consumer Savings Project was set up primarily to evaluate the reliability of data obtained by sample surveys. The methodological aims

[1] Robert Ferber, *The Measurement and Control of Errors: Savings Data,* Chapter 3, manuscript in preparation.

of the project were first to evaluate the completeness and accuracy of financial survey data, and second to develop methods of improving the completeness and accuracy of information obtained from consumer financial surveys. The project was carried out by means of a series of panel operations conducted in different parts of the country and at different times.

Some of these operations were conducted by the Survey Research Center of the University of Michigan, and others were conducted under the direct supervision of the project staff at the University of Illinois. Each of the operations had specific objectives relating to some aspect of collecting financial data from consumers. In most instances the accuracy and completeness of the survey data was evaluated in terms of records made available through the cooperation of financial institutions. In many of the studies these records served as a frame for sample selection.

The reason for the sequential procedure in conducting the panel studies was to permit the design of each succeeding operation to be modified in accordance with the results obtained from the prior studies. In particular, knowledge of the results of the experiments in one study could serve as the basis for new, and, it was hoped, more useful experiments in a later study. Results obtained regarding the accuracy of financial survey data are discussed in detail elsewhere.[2] A brief summary of validation results for time deposits in one study is sufficient to provide some idea of the magnitude of the errors which occurred. It represents an extreme though important example of the kinds of errors which may occur. The existence of the validated savings account was ascertained for about 60 percent of the sample addresses where contact was made. In addition, the total amount reported by respondents who mentioned validated accounts was a little over two-fifths of the total holdings of persons at the sample addresses where contact was made. Possibly of greater importance was the finding that the computed sampling variances were biased estimates of the true variances.[3] As a result, tests of significance had limited meaning. Results of this nature serve to emphasize the importance of the second methodological objective of the project, that of improving the accuracy and reliability of survey data.

The accuracy and completeness of information obtained by the use of survey techniques can be improved through two interrelated approaches. One is to improve survey methods. This approach emphasizes improved

[2] See J. B. Lansing, G. P. Ginsburg, and Kaisa Braaten, *An Investigation of Response Error,* Studies in Consumer Savings No. 2 (Urbana: University of Illinois, Bureau of Economic and Business Research, 1961); Robert Ferber, *The Measurement and Control of Errors: Savings Data, op. cit.*

[3] See Robert Ferber, *ibid.*

methods of pre-interview contact; of selecting, training, and supervising interviewers; and of questionnaire construction. The second approach is to develop techniques for correcting and adjusting information obtained from population samples and validation samples in terms of each other.[4]

The present monograph is concerned with the first of these approaches, specifically with interviewer selection, training, and supervision, and with the extent to which survey reliability appears to depend on the interviewer variability. In the latter respect, the availability of validation data presented a unique opportunity to evaluate interviewer performance and to use an objective measure of the quality of information obtained in the interview as a basis for such an evaluation.

The Individual Studies

This monograph is based on four panel studies with which the authors were involved. These studies constituted a major part of the over-all project.[5]

In each of the four studies, the respondents were interviewed five times at regular intervals three or four months apart. In this way, problems of obtaining savings information on a continuing basis could also be studied.

The unit studied was the savings unit. A savings unit was defined as one or more related persons living in the same dwelling unit who pooled half or more of their income and savings. A dwelling might therefore have had more than one savings unit. Savings of minors were combined with those of their legal guardians whether or not the minors had separate savings. This definition had two implications for the data collected. First, the savings unit was a decision unit, thus facilitating the study of saving behavior. Second, the head of the savings unit or some member of it usually had complete and accurate information about the holdings of the unit as well as knowledge about changes in the holdings of the savings unit.

The studies were undertaken in four different areas in the Midwest. The first study, referred to as M1, was made in a large metropolitan center. The second study (M2) was undertaken in another metropolitan center. The third study (M3) was conducted in a smaller urban center, and the last study (M4) was conducted in three farm counties in the Midwest. A brief summary of each of these studies follows.

[4] For further details on this approach, see *ibid.*

[5] The other studies were carried out by the Survey Research Center, University of Michigan. See J. B. Lansing *et al., op. cit.*

Study M1[6]

Study M1 was intended to test the feasibility of obtaining income, savings, and other financial data from consumers on a continuing basis. More specifically, the objectives were (1) to estimate costs and response rates on consumer financial panel operations, (2) to gain insights into the problems of obtaining financial data on a continuing basis and to explore different methods of doing so, and (3) to explore the use of internal means of assessing reliability of these data.

A probability sample of 300 names was selected from the population of the metropolitan area in the fall of 1956. Census tracts were classified into three income strata based on data from the 1950 Census Tracts volume for the area. A systematic selection of census tracts from each stratum was made with a disproportionately high number of tracts from the higher income strata. Names and addresses were selected from each sample tract through the use of voter registration lists and telephone directories.

Each of the sample families was sent a personal letter on University of Illinois stationery notifying it of the general nature of the survey and the forthcoming call by a named interviewer. Personal advance letters were also sent at the beginning of each succeeding wave of interviews. The letters for subsequent waves differed for some respondents since they were used as a means of answering questions raised during the interviews of the previous wave.

The actual interviewing was largely subcontracted to two survey organizations. For purposes of obtaining comparative information, some interviews were assigned to two interviewers hired directly by the project.

Each panel member was asked numerous questions about his financial situation, about record-keeping, and about the use of budgets. In addition, one segment of the sample was asked to keep records or diaries provided by the project. On succeeding interview waves, the panel member's financial situation was reviewed and changes in it were recorded. The interviews were conducted with the head of the savings unit or with the member of the family who was familiar with the savings unit's finances.

Study M2

Study M2 was begun in mid-1958 with a sample of 308 names. The sample was an area probability sample with disproportionate representa-

[6] For complete details on this study, see Robert Ferber, *Collecting Financial Data by Consumer Panel Techniques,* Studies in Consumer Saving No. 1 (Urbana: University of Illinois, Bureau of Economic and Business Research, 1960).

tion given to high-income sample members. Over 40 percent of the savings units were estimated to have had incomes in 1959 exceeding $10,000; the corresponding 1950 Census estimate for the sample area was 10 percent.

Respondents were interviewed a total of five times over the period of a year and a half. The respondent for each savings unit was asked questions about all the assets and debts of the savings unit. Included were checking accounts, savings accounts, life insurance holdings, annuities, pensions, brokerage accounts, and the ownership of businesses. The field operation was conducted by interviewers hired, trained, and supervised by a field director.

A number of experiments relating to the different interview approaches were conducted in the course of the five waves of interviews. When more than one experiment was conducted on a single wave, the sample was divided by systematic selection into as many random segments as there were combinations of experiments and each segment received a different combination — a factorial design. The experiments of the first wave were the following, with the response rates for each experiment in parentheses.[7]

1. Use of a short letter of introduction (76 percent) versus use of a long detailed letter (90 percent).

2. Use of a highly structured questionnaire (72 percent) versus use of no questionnaire, i.e., unstructured interviews (87 percent).

3. Request for dollar amounts in the interview (77 percent) versus no request for dollar amounts (81 percent).

4. Request for assets first in the interview (72 percent) versus request for debts first (73 percent).

Two types of financial holdings reported by the persons interviewed were validated, personal debt and life insurance holdings. Secondary-type validation was employed in each case. Holdings reported by the sample members were sent to cooperating financial institutions who reported the correct amount held by the sample members on some specified date, usually the date of the interview. This amount was then used to evaluate the accuracy of the amount reported by the sample member. Secondary validations provided no information about sample addresses where no contact was made or where the respondent refused to be interviewed. In addition, they provided little or no information about holdings which interviewed sample members failed to report.

[7] Further details on the experiments are presented in Robert Ferber, *The Measurement and Control of Errors: Savings Data, op. cit.*, Chapter 13.

Study M3

In interviews undertaken in 1959 in a smaller urban center, panel members in Study M3 were interviewed five times at three-to-four-month intervals. The study began with 316 interviews on Wave 1 and finished with 205 interviews on Wave 5. The following split-run experiments were conducted on the first wave, with the response rates for each experiment shown in parentheses.[8]

1. Use of a regular advance letter (81 percent) versus use of the same letter but including an attempt to involve the panel member by seeking his suggestions and aid in the conduct of the interview (81 percent).

2. Use of a questionnaire form on which answers were recorded (77 percent) versus use of an unstructured type of interview with reminder cards to aid the interviewer (82 percent).

3. Request for dollar holdings of assets and debts on the day of the interview (73 percent) versus request for only the changes that had taken place over the past three months (81 percent).

4. Request for information on all assets and debts (80 percent) versus request for information on specific assets only (78 percent).

Experiments conducted on later waves included the following:

1. Rotation of interviewers among selected panel members on the third wave.

2. Request to each respondent on the third wave to sign a form authorizing the institution to report the current balance in his savings account.

3. Use of a mail questionnaire sent to part of the sample on the fourth wave. As with the earlier study, a factorial design was employed.

The initial sample of 316 persons was selected from the time deposit records of savings institutions in the area. When an interview was obtained, the balance on the day of the interview was reported to the project by the cooperating institution. For a sample address where there was no contact or where there was a refusal, a midpoint date for the field operation was selected and the institution reported the person's balance for that day. Interviewer effectiveness was evaluated in terms of these validation data.

Two secondary validations were also undertaken. One involved life insurance holdings. As in the earlier study, all policies were validated when the respondent mentioned the name of a cooperating institution. The other secondary validation involved demand deposits mentioned by

[8] *Ibid.*

respondents at two of the financial institutions. Because of the volatile nature of demand deposits and because of the existence of float (checks which have not cleared the institution), a balance reported by the validating institution for the date of the interview could not be directly comparable with that reported in the interview. However, corrections made for these differences indicated a fairly good correspondence between reported and true holdings.

Study M4 (The Farm Study)

The farm study was begun late in 1960 in three counties in the Midwest. Half of the roughly 400 farm panel members were interviewed three times at about six-month intervals, and the other half were interviewed five times at about three-month intervals. Two experiments were conducted on the first wave and as in earlier studies, a factorial design was used.[9] These experiments and the response rates for each (in parenthesis) were as follows:

1. Use of a letter of introduction which made a straightforward appeal based on the need for information about how farmers handle their finances (90 percent) versus use of another letter with the same basic approach but in addition an appeal to sample members to aid in improving the data-collection procedure, as in Study M3 (90 percent).

2. Use of one questionnaire requesting the farmers to report their holdings of assets and debts, including the farm as a business, on the day of the interview (86 percent) versus another questionnaire requesting information about the change in holdings over the previous three months (93 percent).

In this study, a somewhat more extensive pretest was used to refine the questionnaires and to evaluate interviewer performance. The sample was selected from institutional records of five different types of assets and debts: time deposits, demand deposits, short-term debt, intermediate-term debt, and long-term debt. As in Study M3, names selected were checked in telephone books and county directories, and only those so located were used.

It was found that cooperation differed substantially between sample members selected from one validation source and those selected from other sources. As a result, data from individuals selected from different validation sources could be combined only to a limited extent in the same analysis. This severely limited the number of comparable contacts made by each interviewer and accordingly limits the scope of the analysis of these data presented in this monograph.

[9] *Ibid.*

Organization of the Monograph

Knowledge that each savings unit owned a certain amount of a specific asset or debt on the date of the interview provided several interrelated criteria for evaluating interviewers. Utilizing such data, an attempt is made here to understand and to measure the relationship between interviewer effectiveness and techniques of interviewer selection, training, and supervision. In Chapter II interviewer variability and the problems of measuring interviewer performance will be discussed. Interviewer selection methods will be presented in Chapter III. The procedures employed in the project will be reviewed and evaluated, followed by a discussion of a quantitative method used in selecting interviewers. The training of interviewers will be covered in Chapter IV. In Chapter V interviewer supervision and the controls used to maintain high response rates with quality data will be discussed. The identification of effective interviewers, based on their interviewing performance when no validation data are available, will be included in the discussion.

An effort will be made throughout the monograph to identify effective interviewers, a problem which has been the subject of much previous research.[10] However, a direct comparison of the findings of such research with those discussed here presents one or more of the following problems.

1. Much of the earlier research was concerned with interviewer effectiveness in attitudinal studies. In such studies, interviewer biasing of respondent answers or bias in recording them is of primary importance. In factual studies of the kind reported here, this type of bias is less important and other types become more important. In the absence of tie-in studies, generalizing from one to the other type of study must be limited.

2. Earlier studies were frequently based on validation information such as age, voter registration, or ownership of a driver's license, about which respondents are less sensitive than about financial holdings. The project studies were based primarily on validated information about which respondents are often highly sensitive. When less sensitive information was validated, it was observed that interviewer variability was much smaller. This suggests that factors influencing interviewer effectiveness in seeking sensitive data may not be so important when less sensitive data are sought.

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[10] A good summary of past research is presented in Herbert H. Hyman, *Interviewing in Social Research* (Chicago: University of Chicago Press, 1954). Also, see Robert Ferber and H. G. Wales, *A Basic Bibliography on Marketing Research*, AMA Bibliography Series No. 2 (rev.) (Chicago: American Marketing Association, 1963), Section IX.

3. The criteria of interviewer effectiveness in many earlier studies were based on the percentage of persons contacted who refused or on the number of times information was not ascertained, refused, or reported as not known in the interview. The present analysis indicates that these show little relationship to the criteria of effectiveness employed here. Other criteria such as ratings by field supervisors, by the field director, or by coders similarly show little correlation with the measures of effectiveness employed. A criterion employed on some studies is interviewer variability relative to the average variability of interviewers. Such analysis-of-variance designs, as is readily admitted by those using them,[11] do not discriminate between good and poor interviewers.

4. In some cases, the field staffs were very different from those employed in the project research. For example, Caplow points out that the field staffs used in many of the earlier studies were poorly trained, had high turn-over rates, and had limited supervision.[12] The method of selecting the field staff may also have influenced findings. If the interviewers selected were homogeneous with respect to some characteristic, that characteristic as well as related characteristics could not have been analyzed.

5. Quota sampling was frequently employed in these earlier studies. As a result, the nature of the sample may have influenced the factors discovered as well as the weight attached to them.

In view of these differences, the findings of earlier studies will be reported only when they are relevant in terms of these five dimensions.

Since 1954 some studies have been made with which the project studies may be directly compared. One of these made in the Netherlands compared the completeness and accuracy with which savings accounts were reported to a staff of interviewers.[13] Another made by the Federal Reserve Board and reported by Broida described the accuracy of reports of new car debt.[14] However, neither of these studies attempted to identify the characteristics of the more effective interviewers.

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[11] For example, Robert H. Hanson and Eli S. Marks, "Influence of the Interviewer on the Accuracy of Survey Results," *Journal of American Statistical Association,* Vol. 53, No. 283 (September, 1958), p. 648.

[12] Theodore Caplow, "The Dynamics of Information Interviewing," *American Journal of Sociology,* Vol. 62, No. 2 (September, 1956), p. 167.

[13] W. Horn, "Reliability Survey: A Survey on the Reliability of Response to an Interview Survey," *Het PTT-bedrijf,* Vol. 10, No. 3 (October, 1960), pp. 105-56.

[14] Arthur L. Broida, "Consumer Surveys as a Source of Information for Social Accounting: The Problems," in Conference on Research in Income and Wealth, *The Flow-of-Funds Approach to Social Accounting: Appraisals, Analysis and Applications,* Studies in Income and Wealth, Vol. 26 (Princeton: Princeton University Press for the National Bureau of Economic Research, 1962), pp. 335-81.

The findings of the project studies made by the Survey Research Center at the University of Michigan relating to interviewers and of interaction between interviewers and respondents are integrated into the present discussion.[15]

[15] J. B. Lansing, *et al., op. cit.*

II. INTERVIEWER VARIABILITY

Measurement of Interviewer Performance

Criteria of interviewer effectiveness employed in surveys for which validation data are not available include the contact rate (percentage of eligible assignments contacted), the response rate (percentage of contacts interviewed), measures based on ambiguous answers in the questionnaire, or measures of promptness in completing assignments, cooperativeness, and related factors. These criteria, while they may reflect failure to obtain an interview and failure to obtain meaningful answers, do not reflect respondent failure to mention holdings or the accuracy with which they give the amounts of their reported holdings. The latter, however, may introduce as serious a bias into survey data as the former.

Interviewers may also be evaluated by using an analysis of variance method in which the variation in results obtained by different interviewers is compared with the variation between respondents queried by the same interviewer.[16] However, with this approach "it is not possible to state that one result represents 'good' performance and another result 'bad' performance. We can state that Interviewer A's performance differed from that of Interviewer B, but we do not know whether the direction of difference was towards 'better' or towards 'worse'."[17] In addition, this approach reflects only the differences in the bias of interviewers without saying anything about the amount of bias. For example, "between interviewer variance" may be no larger than "within interviewer variance" where all interviewers introduce the same, but large, amount of bias. Without validation information about the true characteristics of the respondents, the amount of bias cannot be known.

In this chapter, criteria of interviewer effectiveness based on validation data are defined and discussed. Using these criteria, interviewer differences are measured.

In the present analysis, an interviewer's assignment will be defined as all persons who maintain their home at the sample address. Since the problem of replacing movers in the sample is a sampling problem, this

[16] For example, see Robert H. Hanson and Eli S. Marks, *loc. cit.*, pp. 635-55.
[17] *Ibid.*, p. 648.

definition of assignments is the one applicable for evaluating interviewer effectiveness.

The interviewer may have failed to obtain information about a sample member for a number of different reasons. First, he may not have made contact with a responsible person at the sample address because some people repeatedly sent children or servants to the door to say that "no one else is at home."[18] A more likely situation was that the sample member was away from home at the times the interviewer could make a call, especially when the interviewer was not allowed to telephone for appointments as was the case on the first wave of the various studies. Clearly the one situation did not reflect interviewer effectiveness, though the other may have indicated insufficient effort to contact the sample member at different times of the day.

Second, the interviewer may have made contact with a responsible member of the savings unit but may have failed to obtain information about the savings unit because he was refused an interview. Here, interviewer performance became important. It was the interviewer's job to explain the nature of the study, its purpose, its importance, and the confidential treatment of the data and to answer any questions which might arise.

Third, although an interview was obtained, the information elicited from the respondent may have been incomplete. This may have occurred because the respondent forgot about a holding, because he did not understand what information was wanted, or because he wished to conceal the existence of a holding. In each case, the interviewer's performance was likely to be a relevant factor. In the first instance, the interviewer may have been hurrying the respondent or not using sufficient probes. In the second instance, the interviewer may not have been asking the questions in such a way that the respondent understood what was wanted. In the last case, numerous factors relating to interviewer technique and personality may have explained the respondent's withholding of information.

Fourth, even where the holding was reported there may have been an error in the amount reported. Inaccuracy of report may have occurred because of memory error or because of intentional distortion. Both of these were subject to interviewer influences. Memory error could have been eliminated through the use of records. Even when records were not used, the accuracy of recall was likely to be a function of the motivation of the respondent.

[18] An excellent discussion on this is to be found in H. Lawrence Koss, "The Inaccessible Respondent: A Note on Privacy in City and Country," *Public Opinion Quarterly,* Vol. 27, No. 2 (Summer, 1963), pp. 269-75.

Interviewer effectiveness in such situations as these four depends somewhat on different aspects of interviewer performance. The following criteria relate to these aspects.

1. *Contact rate (K).* The percentage of eligible assignments in which the interviewer makes contact with a responsible person. The interviewer's persistence in making a contact is measured by this rate.

2. *Response rate (R).* The percentage of times an interviewer obtains interviews at sample addresses where contacts are made, i.e., $\frac{\text{Number of interviews}}{\text{Number of contacts}}$. Since a contact must be either an interview or a refusal, the response rate is also equal to $1 - \frac{\text{Number of refusals}}{\text{Number of contacts}}$. This rate reflects interviewer effectiveness at the door.

3. *Completeness rate (C).* The completeness rate is the percentage of interviews in which the validated holding is mentioned by the respondent. This rate reflects in part interviewer effectiveness in the interview. However, it is not independent of the response rate. A low response rate may imply that the respondents interviewed are more likely to be cooperative than is the case with a high response rate. In a sense, the interviewer with a low response rate can be thought of as disposing of his uncooperative sample members at the door and interviewing only the relatively cooperatively ones, therefore obtaining a higher completeness rate.

4. *Accuracy rate (A).* For a savings account that is reported, this rate measures the accuracy with which the amount is reported, arbitrarily defined as the percentage of respondents who cite amounts within plus or minus 5 percent of the true amount. A range of 10 percentage points was selected because even among the most cooperative project respondents there was a tendency to fail to report interest payments which had not been added to the passbook.

When change information is requested, the accuracy rate is defined as the percentage of respondents reporting change in the balance of the account within plus or minus 25 percent of the true change. The use of different standards for change and holdings data reflects the fact that change is generally of a smaller magnitude than holdings and thus is likely to yield a larger accuracy ratio for a given amount of error.[19] The accuracy rate is dependent on the response and the completeness rates. The interviewer with low response and completeness rates is likely to

[19] An alternative to using the accuracy rate for evaluating interviewer effectiveness in obtaining accurate data would be the average accuracy ratio, based on cumulation of dollar totals. However, it is not employed because of the disproportionate impact on the average of a single wealthy respondent who reports inaccurately.

have only the most cooperative respondents left to report on the amount of their holdings or change. As a result, on a priori grounds, one would expect higher levels of accuracy.

From these basic rates other rates can be computed. One over-all criterion of interviewer effectiveness could be the product of all four of these measures: $K \times R \times C \times A$. This rate reflects the percentage of times an interviewer obtains, relative to the number of his total eligible assignments, reports of the amounts of the validated accounts to within plus or minus 5 percent of the true amount.

The over-all criterion actually selected was determined by the nature of the studies. A policy was employed of requiring each interviewer to make at least five attempts to contact a sample member before turning in a noncontact report. When an interviewer was unable to make contact the sample member was reassigned to a different interviewer. In Study M3, on all except one reassignment, the second interviewer was also unable to make contact. Analysis of the 13 noncontacts in this study revealed that they were evenly distributed among most of the interviewers. For these reasons, it was felt that noncontacts did not reflect interviewer ineffectiveness, and the contact rate should not be included in the criterion of effectiveness. Hence, the over-all measure of interviewer effectiveness was based on sample addresses where contact was made with a responsible person.

An experiment undertaken in Study M3 assigned "change" questionnaires to half of the sample and "holding" questionnaires to the other half. Subsequent analysis revealed that errors in reporting the amount of change were not comparable with errors in reporting amount of the holding on either an absolute or a relative basis. As a result, a criterion which included the accuracy rate could be applied to one or the other half of the sample at a time, but not to the whole sample. In view of the small average number of contacts (17) made by each interviewer, it was decided to exclude the accuracy rate from the criterion of over-all effectiveness. When the contact rate and the accuracy rate are excluded, the criterion of the interviewer effectiveness employed in this analysis is the pick-up rate (P) which is the percentage of contacts in which the interviewer picked up the validated account (the product of the response rate and the completeness rate, i.e., $P = R \times C$).

It should be stressed that the value of this or related criteria depends on the accuracy of the information obtained from the validation source, which is not necessarily assured. Inaccuracies may have occurred because an employee at the validating institution recorded the balance for the wrong date or recorded it incorrectly for the correct date. A second type of error may have occurred in matching accounts reported

by respondents with those reported by the institution. To reduce this possibility, the names of all financial institutions with whom the respondent had assets or debts were requested in the interview. The impression gained from working with the validation process was that very few errors could be attributed to the validating institution or to the matching process. Moreover, errors discovered in the validation procedure on subsequent waves were corrected in the data for earlier waves and any completed analysis was rerun.

Problems of Generalization

Interviewer effectiveness in eliciting information about one characteristic may not be indicative of effectiveness in obtaining information about other characteristics. For example, interviewers who are effective in eliciting information about the size of the family may be ineffective in obtaining data about the family's savings accounts. In generalizing from a characteristic which was validated to other characteristics which were not validated, the sensitivity of people to different characteristics must be considered.

Nor is sensitivity a unidimensional concept. People's sensitivity to reporting information may vary from one characteristic to another. It may also vary by the kind of information requested. For example, people appear to be less sensitive about reporting a change in balance than they are about reporting an actual balance. They also appear to be more sensitive about reporting a large holding than about reporting a small holding. Finally, the apparent sensitivity of persons in reporting a characteristic depends on the distribution of the characteristic in the population. For example, people with given wealth or income may be less sensitive about reporting a given amount of stocks and bonds than they are about reporting a similar amount in savings accounts, but if stocks and bonds are predominantly distributed among uncooperative higher-income and wealthier persons, the completeness and accuracy with which they are reported may appear to be lower than is the case for savings accounts.

Generalizing from interviewer effectiveness with a set of assignments to general effectiveness also necessitates consideration of the following three problems. The first is individual differences. The set of assignments received by each interviewer is, in effect, a sample taken from the population studied. Since people in one sample may differ in their willingness to cooperate from those in another sample, sampling variation must be considered, particularly when interviewers or interviewer groups are compared. Underlying the statistics for evaluating sampling variation

is the assumption of randomization of sample addresses among interviewers, which was not a feature of the project studies.

The second is the likelihood of interaction between persons contacted and interviewers. For example, lower-income sample members may be more effectively interviewed by lower-income interviewers or by interviewers with specific personality characteristics. The observed effectiveness of a group of interviewers may then depend on the method of selecting interviewers as well as on that of selecting sample addresses.

The third problem involves generalizations from the relationships observed for the interviewers employed in the project to all interviewers. This type of generalization assumes the random selection of these interviewers from some undefined population of interviewers.

Interviewer Variability: Studies M1 and M2

Unfortunately, no primary validation was available in either of these studies. As a result, interviewer variability could only be investigated in terms of response rates. On Wave 1 of Study M1, the response rate was 78 percent, with interviewers' response rates ranging from 45 percent to 93 percent. The response rates of interviewers on Wave 1 of Study M2 ranged from 50 percent to 94 percent with an average of 77 percent.[20]

Interviewer Variability: Study M3

The interviewer selection procedure was extensive, employing letters of recommendation, applicant interviews, evaluation checklists, and evaluation of pretest interviews. Out of 150 applicants, only 23 were employed. Nevertheless, considerable interviewer differences did appear.

One difference which became apparent was in the honesty of the interviewers. Three interviewers were detected through the validation data as having falsified some of their interviews. These interviewers were excluded from the analysis. Two interviewers who made less than 10 contacts were also excluded. These interviewers had been hired on a stand-by basis to fill in if interviewing help was needed.

Analysis of the remaining 18 interviewers still indicated much variability. These interviewers made 309 contacts on Wave 1, or an average of about 17 each. The proportion of contacts in which an interviewer ascertained the existence of the validated savings account, the pick-up rate (response rate $\times$ completeness rate), ranged from 32 percent to 64 percent with an average of 50 percent.

[20] Excluded from the response rates in Study M2 were two interviewers who falsified interviews. Because of the panel nature of the study with repeated interviews with the same people, an interviewer faking data was likely to be discovered on subsequent waves.

As indicated earlier, an interviewer might fail to obtain mention of an account because of a refusal or because of the incomplete reporting of savings unit holdings. Response rates of interviewers varied from 46 percent to 91 percent, and the completeness rate ranged from 50 percent to 90 percent.

To what extent may field procedures have produced the observed differences between interviewers? In 11 cases, a panel member was reassigned to a different interviewer before the original interviewer made contact. Such reassignments resulted when an interviewer was delinquent in completing assignments. The exclusion of such reassignments had no effect upon the results presented.

A second type of reassignment occurred when the person talked to at a sample address refused to be interviewed. In these cases, the initial interviewer was credited with a refusal. The new interviewer was credited with an interview if one was obtained, but if he was refused he was not credited with a refusal. Ten such reassignments occurred and four interviews were obtained by the interviewers. A review of these four cases showed that they did not significantly influence the measures of interviewer effectiveness.

A possible weakness of the present analysis stems from the process of assigning sample addresses to interviewers. For reasons of economy and convenience, there was a tendency to assign interviewers addresses ranging from the center of the area outward. As a result, interviewers tended to have a pie shaped cross-section of the area involving varying socioeconomic levels. However, an examination of the location of the assignments of the more effective interviewers and the location of the assignments of the less effective interviewers did not indicate concentrations for either group in areas with known socioeconomic characteristics.[21]

Interviewers were split into three groups based on the pick-up rate. There tended to be some natural breaks in the rates which, in part, determined the grouping of interviewers.

Group	*Response rate*	*Completeness rate*	*Pick-up rate*	*Number of interviewers*	*Average contacts per interviewer*
I	78%	80%	62%	4	19.3
II	72	72	52	6	17.2
III	68	50	41	8	16.1

When over-all effectiveness is broken into its two components, effec-

[21] Further insights into the heterogeneity of interviewer assignments can be gained by comparing the distribution of the size of the validated time deposits of sample members assigned to the interviewers. Presentation of these results will be postponed until after the grouping of interviewers has been discussed.

TABLE 1. DISTRIBUTION OF ACCOUNTS, BY SIZE AND BY INTERVIEWER GROUP, STUDY M3
(PERCENTAGES)

Size of account	Interviewer group[a]			Total
	I	II	III	
Under $1,000	34	36	34	35
$1,000–$4,999	45	43	39	42
$5,000 and over	21	21	27	23
Total	100	100	100	100
Number of contacts	77	103	129	309

[a] Group I was more effective than Group II and Group II in turn was more effective than Group III as measured by the pick-up rate.

tiveness at the door as reflected by the response rate and effectiveness in the interview as reflected by the completeness rate, we observe that interviewers in Group I were more effective in both respects than were interviewers in the other groups. Those in Group II were more effective than Group III interviewers in both respects. However, the pattern as we move from group to group suggests that the less effective interviewers may have been relatively better at getting past the door than the more effective ones.

Let us turn now to the question of the heterogeneity of the interviewer assignments. To what extent did the distribution of the size of savings accounts differ by various interviewer groups? All of the differences among interviewer groups as presented in Table 1 could have occurred by chance. Therefore, the assignment procedure employed did not create significant differences in the size-of-account distribution.

Although the differences in Table 1 are not significant, there was some tendency for the less effective interviewers to receive more assign-

TABLE 2. RESULTS OF CONTACTS FOR ALL INTERVIEWERS, BY SIZE OF ACCOUNT, STUDY M3
(PERCENTAGES)

Measure	All accounts	Under $1,000	$1,000–$4,999	$5,000 and over
Response rate	73	71	82	62
Completeness rate	69	72	67	64
Pick-up rate	50	51	55	40
Number of contacts	309	107	130	72

TABLE 3. PICK-UP RATE (RESPONSE RATE × COMPLETENESS RATE), BY SIZE OF ACCOUNT AND BY INTERVIEWER GROUP, STUDY M3 (PERCENTAGES)

Size of account	Interviewer group[a]		
	I	II	III
Under $1,000	65 (26)[b]	62 (37)	34 (44)
$1,000–$4,999	63 (35)	57 (44)	49 (51)
$5,000 and over	56 (16)	32 (22)	38 (34)
All contacts	62 (77)	52 (103)	41 (129)

[a] Group I was more effective than Group III as measured by the pick-up rate.
[b] Number of contacts on which percentage is based is shown in parentheses.

ments with savings units having validated savings accounts of $5,000 and over and fewer assignments with those members having accounts of $1,000 to $4,999. As Table 2 shows, savings units with large accounts were the least cooperative, exhibiting significantly lower response rates than all other savings units. Though one would expect larger savings account holders to be more cooperative in the interview on the assumption that the uncooperative ones had refused at the door, they were less cooperative. As a result, the over-all cooperativeness of the larger savings account holders as measured by the pick-up rate was also significantly below that of other savings units.

Table 3 shows how interviewer groups differed in their performance at sample addresses where members had different sizes of validated savings accounts. It brings out a consistent pattern in which Group I interviewers were more effective with holders of all sizes of savings accounts than either Group II or Group III interviewers. They were significantly more effective than Group III interviewers with contacts having under $1,000 in the validated account and for all contacts.

These findings suggest that the differences between the interviewer groups cannot be explained in terms of differences in the assignments received by each interviewer. In the remainder of this monograph it will be assumed that interviewer differences were due to interviewer characteristics and interviewer performance at the door and in the interview.

Interviewer Variability: Study M4

Experience gained in Study M3 was utilized in planning and carrying out Study M4. However, extensive analysis of the urban interviewers had

TABLE 4. REPORTING OF DIFFERENT ASSETS AND DEBTS, STUDY M4 (PERCENTAGES)

Status	All types[a]	Savings accounts	Checking accounts	Long-term debt	Intermediate-term debt	Short-term debt
Interviewed	89	75	92	96	91	91
Account reported	*68*	*52*	*89*	*77*	*82*	*58*
Account not reported	*21*	*23*	*3*	*19*	*9*	*33*
Refused	11	25	8	4	9	9
Total	100	100	100	100	100	100
Number of cases	326	64	38	69	32	116
Percentage of cases	100	20	12	21	10	37

[a] Includes seven savings units where two or more assets were validated which do not appear in breakdown.

not been completed and thus did not influence to a large extent the selection and training of interviewers for the farm study. Because of the likelihood that comparisons will be made between these two studies, emphasis in the subsequent discussion will be placed on pointing out major differences between them.

Farm Validation

Three types of debt institutions as well as savings institutions were used as sources of sample names in the farm study. About a third of the names were selected from savings institutions, some from time deposit records, and some from demand deposit records. Another third of the farm sample addresses were selected from an institution offering a short-term revolving-type debt, and the final third was selected from two institutions offering longer-term debt.

The type of sample persons selected and their willingness to discuss the asset or debt validated varied by validation source. As shown in Table 4, the pick-up rate for persons selected from savings account holders was 52 percent; for those selected from checking account records it was 89 percent; and for those selected from debt validation sources it ranged from 58 percent for short-term debt to 82 percent for intermediate-term debt.

If the pick-up rate is broken down into its components, the response and completeness rates, further differences appear. Farmers selected from savings account records and those selected from short-term debt records

both had low pick-up rates, but the response rate of the former group was 75 percent in contrast to 91 percent for the latter group. In view of similarity in the pick-up rates of these two groups, this meant that farmers with short-term debt had a lower completeness rate than did farmers with savings accounts. Farmers selected from demand deposit records and from long- and intermediate-term debt records displayed a third pattern of behavior; for them, response rates and completeness rates were both high.

These results indicated two basic differences in the validation groups used. First, the low response rate for time-deposit holders indicated that they were different. An analysis shows that they were largely older, higher-income farmers or very young farmers. This low response rate probably reflected the opinion expressed by some middle-aged farmers when asked whether they had savings accounts. After saying, "no," they made comments such as that made by one farmer, "It doesn't make sense to put money in a savings account when I can invest it here on the farm and get a higher return."

The second difference was found in the sensitivity of persons about reporting a holding. A comparison of farmers selected from short-term debt records with those selected from other types of debt records revealed similar response rates of approximately 92 percent, but the short-term debt group showed a completeness rate of 63 percent while that for the other debt groups was 85 percent, a difference significant at the 2 percent level. Sensitivity about mentioning short-term debt may have arisen because farmers may not like to admit the dependency implied in a short-term loan whose repayment hinges on a good crop in the fall. In contrast, a longer-term loan does not represent a threat to the yearly solvency of the farmer.

The implications of the different response and completeness rates for the study of interviewer effectiveness are obvious. An attempt will be made to take this factor into account in the following analysis by setting up two groups of assets and debts. The one, called sensitive assets, is made up of time deposits and short-term debt. The other, called less sensitive assets, is composed of demand deposits and long- and intermediate-term debts.

Comparison of Interviewer Variability

The selection of interviewers for the farm study was influenced to some degree by preliminary findings from Study M3. The principal influence was a change in the perceived stereotype of the good interviewer from the socially aggressive type to the more matter-of-fact, pleasant type. This undoubtedly tended to alter the type of persons hired and to create greater homogeneity among the farm interviewers. Twenty interviewers

were selected from 139 applicants. However, one of these was suspected on the first wave of falsifying parts of interviews and was excluded from the present analysis.

As stated earlier, the farm sample was randomly split and half the names were assigned a change questionnaire and the other half a holdings questionnaire. Consistent with the findings in Study M3, a higher response rate was obtained on the change than on the holding approach (93 percent versus 86 percent). This appears to reflect the attitude of interviewers that the change approach is less prying and less difficult to use.

Response rates of interviewers ranged from 75 to 100 percent with a median of 93 percent on the farm study, well above the 69 percent of the previous study. This difference undoubtedly reflected the differing situations and types of persons involved. Farmers working by themselves most of the day tended to welcome personal interaction. They were frequently found at the barn or in the fields where a door could not be closed in the interviewer's face. Thus, less difficulty was encountered in obtaining interviews, and door-entrance techniques were of less importance, in marked contrast to Study M3.

In the farm study limited variability in response rates was observed, but there was considerable variability in completeness rates. Since the farmer by circumstances or nature was not prone to refuse to be interviewed, a question arises as to whether his refusals may possibly have come more subtly by failing to report information in the interview. The completeness rate for all interviews in the farm study was 76 percent. This, however, was a misleading figure for two reasons. First, it included the validation of less sensitive assets and debts for over 45 percent of the farmers. If these were excluded and only sensitive assets and debts were used, the completeness rate would drop to 64 percent, which is below the 69 percent on Study M3. However, this would understate the true rate obtained by the farm interviewers because of the second reason, an ambiguity in the change questionnaires.[22]

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[22] Part of this difference may be due to the questionnaire format for the change approach on the farm study (Appendix D).

In the section of the change questionnaire dealing with the debt holdings of the farmer, the lead-in question read, "Do you have . . . loans secured by mortgages, sales contracts, or other loans on . . .:" This was followed by a list of assets on which the farmer might owe money. There was a single box for "no" answers for each asset. The interviewer could interpret such "no" answers in three ways:

1. The farmer does not own the particular asset.
2. The farmer owns but has no debt on the asset.
3. The farmer owns and has debt, but there has been no change in the amount owed.

The interviewer was instructed in the training sessions to check the "no" box

The change approach for all validations yielded a completeness rate of 65 percent, while the rate for the holdings approach was 87 percent. Comparable rates for Study M3 were 67 percent and 69 percent.

The pick-up rate on the farm study depended on the base used. The over-all rate was 68 percent, which may have been unduly low because of the possible ambiguity in the change approach. The rate for the holdings approach only was 75 percent, but this included validation of less sensitive assets and debts for almost half of the farmers. Possibly the rate which allowed the most direct comparison with Study M3 was the pick-up rate for the holdings approach on sensitive assets and debts. This figure was 61 percent, compared with 43 percent on Study M3.

The pick-up rate for the holdings approach on the less sensitive assets was 90 percent, indicating something of the magnitude of differences in cooperation for sensitive and less sensitive assets and debts.

Limitations of Analysis of Interviewer Effectiveness

Multiple validation sources, useful for certain aspects of the study, became a handicap in evaluating interviewer effectiveness. Since the proportion of holdings to change assignments and of sensitive to less sensitive validation assignments varied from one interviewer to another, meaningful criteria could not be developed unless these effects could be removed. Yet when the average of 17 contacts per interviewer was split four ways, there was an average of about four contacts per cell, which was obviously inadequate for evaluating interviewers in view of respondent variability.

The number of cases could be doubled if only one split was considered at a time. Pick-up rates were computed for the sensitive assets and debts and for the less sensitive ones for each interviewer. Similar rates were prepared on the basis of the holding-change splits. It was hoped that the more effective interviewers would tend to appear near the top of each of these four lists and the less effective ones near the bottom. Except for a few interviewers, this expectation was not met. Coefficients of determination for each combination of pick-up rates were as follows:

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for situation 2 and to write "not applicable" for situation 1. Situation 3 should not have been elicited until after the name of the person or institution to whom the debt was owed has been obtained and entered on the questionnaire. However, in answering the preceding questions, a respondent may have thought in terms of change and anticipated questions. Thus, a respondent may have said in response to the initial question, "Yes, I owe some money on my tractor, but that hasn't changed." Unless the interviewer understood what was wanted, he might have checked the "no" box and failed to obtain information about the creditor. Such a questionnaire was coded as not mentioning the validated asset or debt.

	Sensitive validations	*Less sensitive validations*	*Holdings approach*	*Change approach*
1. Sensitive validations	....	.003	.004	.053
2. Less sensitive validations	....	....	.372	.291
3. Holdings approach	....	....	....	.004
4. Change approach	....	....	....	....

On the whole, the coefficients of determination are small, even among pairs of variables where there is overlap, such as Variables 2 and 3, which have in common all holdings forms which deal with less sensitive validations. Three interrelated explanations may be offered for these low correlations. First, distribution of sensitive and less sensitive validation assignments varied widely among interviewers, which influenced pick-up rates on the holdings approach. Similarly, the distribution of change and holdings approaches varied among interviewers. Second, while the average number of contacts made by each interviewer was 17, the numbers ranged from 12 to 22. An interviewer with 12 contacts might only have had 3 or 4 contacts involving the holdings approach. Finally, the rates for the less sensitive validations did not distinguish among interviewers. Thus, there were 8 interviewers with 100 percent rates and of the remaining 11, 7 had rates of over 80 percent. With the small number of cases, these limited differences are likely to be unreliable measures of interviewer effectiveness.

Without any reliable measure of interviewer effectiveness in the farm study (M4), a rigorous evaluation of the selection, training, and supervision methods employed cannot be made. Much of the following evaluation of methods is based on the M3 Study. This is regretted because it is felt that there was considerable improvement in the methods used in the farm study over those employed in Study M3.

Summary

Considerable interviewer variability on pick-up and completeness rates is evident. This suggests that there was room for improvement in the techniques and methods of selecting, training, and supervising interviewers which were utilized in this study, yet they are representative of the methods employed in most surveys of this type. The following chapters describe the methods used and suggest which were more effective in selecting the better interviewers. Obviously, with only one study from which to draw conclusions, the findings represent hypotheses for future testing.

Very little information is available about the applicants rejected. As a result, the effectiveness of the methods employed in selecting potentially

better interviewers from among the applicants cannot be determined. This must be kept in mind in evaluating the findings presented.

The reader must also keep in mind the nature of the asset, savings accounts, which was validated in the M3 Study. Some indication of people's sensitivity to reporting this asset can be gained from the farm study. While the pick-up rate using the same interviewers was 89 percent for checking accounts, it was only 52 percent for savings accounts. This represents differences in similar people's attitudes toward reporting these two types of information to an interviewer.

III. INTERVIEWER SELECTION

Interviewer selection procedure varies greatly. As a rule, the degree of effort expended on this activity depends in part on the type of study and in part on the researcher himself. In a relatively simple study with structured questionnaires and not many questions, less effort is devoted to interviewer selection. In more complicated studies, greater care is needed to select interviewers who are able to handle the details involved.

More generally, past experience seems to be the principal guide used in recruiting interviewers. Each organization develops its own approach to this task based to a large extent on its experiences rather than on controlled experiments. In relatively small organizations the selection procedure is more informal and is less likely to make use of personality tests and other written examinations. The latter techniques appear to be used extensively by the large survey organizations, although the effectiveness of most of these tests has not been demonstrated.[23]

This chapter reports the methods, procedures, and techniques employed in selecting interviewers for the four project studies. In general, it is felt that these procedures, with a few noted exceptions, were very useful in selecting effective interviewers. However, such subjective evaluations are open to possible bias. To complement these evaluations, the selection techniques used in Study M3 were evaluated, where possible, in terms of their relationship to a measure of interviewer effectiveness, the pick-up rate.

The absence of a significant relationship between these methods, procedures, and techniques and the pick-up rate should not be interpreted as indicating that these methods were of no use in identifying potentially effective interviewers. Most of these variables were employed in deciding

[23] For a description of these testing procedures, see Beatrice F. Dvorak, Frances C. Fox, and Charles Meigh, "Tests for Field Survey Interviewers," *Journal of Marketing,* Vol. 16, No. 3 (January, 1952), pp. 301-6; Stanley Womer and Harper Boyd, "The Use of a Voice Recorder in the Selection and Training of Field Workers," *Public Opinion Quarterly,* Vol. 15, No. 2 (Summer, 1951), pp. 358-63; *Principal Data Collection Forms and Procedures* (Washington: U.S. Bureau of the Census, 1961); H. H. Lamale, *Methodology of the Survey of Consumer Expenditures in 1950* (Philadelphia: University of Pennsylvania Press, 1959), especially pages 63-65; H. H. Hyman *et al., Interviewing in Social Research* (Chicago: University of Chicago Press, 1954), especially pages 362-63.

which applicants would be hired. As a result, a variable may have been useful in successfully rejecting undesirable applicants but may have been of no value in discriminating among those hired. Thus, the absence of a relationship may only reflect that the characteristics of interviewers on which the analysis is based were homogeneous with respect to a variable because that variable was employed in selecting them.

Interviewer Selection Procedures

The discussion in this chapter refers only to interviewer selection for the panel operations of the Consumer Savings Project. The other studies, which were carried out by the Survey Research Center, utilized their already-established field staff.

Most of the field work for Study M1 was subcontracted to two well-known interviewing organizations, and the selection of interviewers was the responsibility of these organizations. In addition to their usual selection procedures, both organizations placed stress on procurring interviewers with a financial background and with some knowledge of financial terminology.

In the remaining three panel operations, the field staff was recruited by project personnel in each of the areas being sampled. A review and evaluation of the recruiting procedures used will be given under the following headings: interviewer qualifications, sources of applicants, evaluation of applicants, selection of interviewer candidates, evaluation of candidates, and final selection. Each of these aspects will be covered separately in the first part of this chapter. The second part will present a quantitative method for selecting interviewers based on information available before applicants are formally hired.

Interviewer Qualifications

For the first two studies the qualifications sought in applicants for interviewing positions were based on prior experience of the project personnel. Included were good grooming, pleasant appearance, good handwriting, age between 25 and 55 years, availability for at least 15 hours a week, availability of an automobile, and permanency in the area.

The first three of these were obviously necessary qualifications. The age range was based on current marketing literature. "Those who are too young lack tact and the ability to approach people properly. Those who are too old are usually not willing to follow instructions carefully and are not sufficiently aggressive."[24] The availability for at least 15 hours a week

[24] Lyndon O. Brown, *Marketing and Distribution Research* (3rd ed.; New York: Ronald, 1955), p. 301.

TABLE 5. RECORD OF APPLICANTS

Item	Study M3	Study M4
Number of Applicants	141	136
Given a personal interview	109	101
Offered training	50	39
Hired as interviewers	23	20
Retained on all five waves	15	15

was required so that the time schedule of the field operation could be maintained. Since it would be necessary for the interviewers to travel considerable distances to obtain interviews, a car was essential.

Permanency in the sample area and willingness to remain on the project staff for the duration of the study were considered particularly important because the same respondents were to be reinterviewed four or five times. In addition, loss of an interviewer could have meant new training problems and could have led to antagonizing the respondent by giving a new interviewer access to confidential data. The success of adhering to this requirement is evidenced in Table 5. On Study M3, 15 of the 23 interviewers hired, or 65 percent, remained for all five waves. The retention rate on Study M4 was 75 percent, or 15 of the 20 interviewers hired.

Experience gained in Study M1 indicated that a financial background was not essential. More important was a college education plus the ability to grasp many concepts and new ideas; an interviewer with these qualifications could be taught all the financial terminology that was needed.

A final prerequisite added in Studies M3 and M4 was confidence that financial data could be obtained in the interview process. The manner in which this characteristic was evaluated is described in a later section of this monograph.

Sources of Qualified Applicants

School systems, state employment offices, and local colleges and universities were the primary sources of interviewer applicants. Applicants were also located through such miscellaneous sources as the Farm Bureau, local marketing research organizations, recommendations from distinguished people in the area, and other previous studies.

The state employment offices were of assistance in a number of ways. They scanned their files to see if any of the registered job-seekers had the necessary qualifications. Those who did have were asked to come into the employment office for a personal interview. The offices also placed ads in the local newspapers on behalf of the study. In addition, the

offices provided the project staff with desks for personal interviews and telephones so that incoming inquiries could be handled immediately. Considerable time and weeding-out were required to find qualified interviewers through this source. For example, the following results were obtained through one employment office: of 27 responding to newspaper ads, 17 were rejected for lack of basic qualifications, 10 were considered for the job, but only 2 were actually hired.

Local universities were used to locate likely interviewer applicants for Studies M2 and M3. The heads of the departments of psychology, sociology, and business administration were asked to post announcements of the positions and to request professors and instructors to make verbal announcements of the positions in their graduate classes. University student employment offices were also contacted, and a number of graduate students applied for the interviewing positions. A few interviewers were located in this way.

Locating applicants through the offices of superintendents of schools in the districts and counties where the studies were being made was one of the most productive methods. In all instances, the county superintendents went out of their way to find qualified applicants. As one superintendent remarked, "The experience of being with adults instead of with students would be valuable experience for the teachers and would also give them a chance to earn some needed extra money." The school superintendents were of assistance in numerous other ways. They provided up-to-date listings of teachers' names and addresses so that a postcard describing the interviewing work could be sent to each teacher asking those who were interested to write for further information. In two counties the superintendents of schools sent personal letters informing teachers of the part-time work available. The letter sent by one superintendent of schools asked a subjectively preselected group to return a postcard to him indicating if they were interested in the assignment. Since this was a select group, time was saved in not having to talk to applicants who did not have the basic qualifications. Of 30 teachers to whom letters were sent, 11 indicated interest; 2 of these 11 were selected and became outstanding interviewers. In one county the superintendent included a description of the part-time job in his monthly directive sent to all schools in the county.

Teachers were also reached through teachers' associations. One state teachers' association was extremely helpful in addressing postcard notices of the job openings. In view of the excellent cooperation obtained from the school systems, it is not surprising to note that on the final two panel studies the majority of the applicants were either school teachers or were connected with the school system, e.g., principals or other administrators.

Thus, in Study M3, 76 of the 141 applicants (54 percent) came from the school system, and in Study M4 the ratio was 93 of 136 (68 percent). In addition, much less expense and effort were required in obtaining these candidates than were necessary when using other methods.

Various other sources also provided interviewer applicants. These included newspaper ads not linked with the state employment service (Studies M2 and M3), lists of interviewers used on related prior studies (Study M3), and for Study M4, county farm advisers. A further source was the applicants themselves. Those who appeared to be good prospects were told that more people with qualifications similar to theirs were needed and they were encouraged to invite any such other people whom they knew to get in touch with the field director. No records were kept of applicants obtained from these miscellaneous sources.

It is interesting to note that the ratio of applicants to interviewers hired was about 6 to 1 (see Table 5).

In terms of retention for the entire operation, the number of applicants exceeded the number of final interviewers by roughly 9 to 1. Although most of the weeding out occurred at the initial employment interview stage, it is also noteworthy that roughly half of the interviewer candidates did not survive the training sessions, which also served as part of the selection process. This will be discussed in a later section.

Evaluation of Applicants

Four tools were used in the evaluation process, each later converted to a weighted numerical score. These four tools were (1) the application form, (2) the personal interview with an evaluation checklist, (3) a personality test, and (4) references. Each of these tools was in turn evaluated from a methodological standpoint, using correlation measures between it and a measure of performance to determine to what extent the applicant's score measured by these tools was related to subsequent performance measured by his pick-up rate as an interviewer.

Application Form

The application form served two purposes. It supplied facts about the applicant's age, address, marital status, experience, and so on and indicated something about the applicant's ability to follow simple instructions and to do a neat job in completing the application form.

The application form was an important tool of the selection procedure and merits some description. This discussion is built around the application form used on Study M4, shown in Figure 1, although most of the questions appeared on application forms used on earlier studies.

Name in full (please print). The complete name should have been

printed in full with no nicknames or abbreviations unless they were part of the applicant's legal name.

Address. It was advisable to know where the applicant lived in relation to the need for the interviewers and whether he was centrally enough located so as to keep travel time to a minimum. The full address was needed, including an apartment number, if he had one, and his zone number.

How long? If the applicant had lived at his present address less than two years, some explanation was desirable. He may not have been permanent in the area, or he may not have been a stable individual. This was one measure of the applicant's permanency which was discussed previously. However, no relationship between this and the interview pick-up rate was found for Study M3.

Home phone. The exchange and number should have been clear and legible, inasmuch as the applicant may have had to be reached quickly to clear up problems if he became an interviewer.

Office phone. If the answer was "none," this should have been stated.

Marital status. In all studies of the project, married applicants were given preference over single ones if other qualifications were met. In line with common belief, it was felt that married people would be relatively more stable and more mature and thus make better interviewers. However, the response rates and the pick-up rates did not substantiate this belief, for both groups did equally well. The coefficient of determination did not differ significantly from zero on Study M3.

Children and ages. If there were any children, there may have been a demand for the applicant at home, thus reducing possible interviewing time. If the applicant was a woman with very young children, there was little likelihood of hiring her unless she had a baby-sitter or unless some other child-care arrangements could be made. Even if arrangements could be made in such a case, it was felt that demands at home might be overwhelming.

Age. For Study M3 no significant coefficient of determination was found between age and pick-up rate. Because of the basic qualifications requirement, the majority of interviewers selected were between the ages of 25 and 55 — in Study M1, 93 percent; in Study M2, 96 percent; in Study M3, 87 percent; and in Study M4, 90 percent.

State of health. Questionable health had to be explained because it was important for an interviewer to stay with the panel study until completed. If the applicant had obvious handicaps or disfigurements, these were noted because they could have caused bias in the information ob-

FIGURE 1. INTERVIEWER APPLICATION FORM: STUDY M4

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INTERVIEWER APPLICATION FORM

(Please print; answer all questions)

Name in full_____

Address_____ How long?_____

City_____ Home phone_____ Office phone_____

☐ Single ☐ Married ☐ Widowed ☐ Divorced

Number of children____ Ages_____ Your age____ State of health_____

Education: Check highest level attended.

☐ Grade school ☐ High school ☐ Business school ☐ Junior college ☐ College or university ☐ Graduate work

If attended college, university or business school:

Name of Institution	Dates attended From	To	Major field	Minor field	Degrees, if any Name	Date rec'd

Full-time job, if any: ☐ None

Type of work_____

Where employed_____ How long?_____

Part-time jobs, if any: ☐ None

Type of work_____

Where employed_____ How long?_____

Working days_____ Working hours: From_____ To_____

Have you lived on a farm? ☐ No ☐ Yes Dates_____ Where_____

Have you worked on a farm? ☐ No ☐ Yes Dates_____ Type of work_____

Have you held a job involving contact with farmers? ☐ No ☐ Yes Dates_____ Type of work_____

Experience as an interviewer or in related work in past five years: ☐ None

Employer	Location	Type of work	Name of immediate supervisor

Number of hours per week that you could devote to interviewing_____

Are you engaged in any activity (personal or business) which takes you out of the area occasionally? ☐ No ☐ Yes (Explain)_____

Any special time during the day or evening when you would consistently not be available?_____

Any special time of the week when you would consistently not be available?_____

Any special time of the year when you would not be available?_____

Can you drive?_____ Do you have a car?_____ Is it available at all times?

Do you know shorthand now?_____ If yes, approximate words per minute?_____

Can you speak any foreign languages well? If yes, which ones?_____

Why are you applying for this job?_____

_____

References: (Names and addresses of three or more persons, not relatives or personal friends, from whom information concerning your qualifications or interviewing experience may be obtained)

Name	Address	Circumstances of relationship

****

(Leave blank)

Reference results_____

_____

Comments_____

_____

Final evaluation_____

tained. One of two answers was usually given to this state-of-health question, "excellent" or "good." The more effective interviewers were not concentrated in either group.

Education. Applicants with college degrees were preferred. There was no requirement as to the type of degree, although it was preferable that the degree be in a field somewhat related to this work: finance, economics, marketing, accounting, sociology, psychology, and so on. Two other factors to be noted were the time elapsed since the applicant received the degree and whether the college education had been uninterrupted. If it had been interrupted, there should have been some explanation. Following are the average response rates for Study M2 interviewers compared with the level of education completed.

High school or less (7 interviewers)	70.3%
College (6 interviewers)	85.2
Postgraduate work (3 interviewers)	88.3

In the light of these findings, applicants with at least a college education were sought for the two subsequent studies. Of the Study M3 interviewers, 96 percent had at least a college education and of the Study M4 interviewers, 100 percent were college graduates. However, no relationship was discovered between the pick-up rates and education of Study M3 interviewers.

Full-time job, if any. It was expected that the applicant would already have a full-time job unless the applicant was a housewife. It was helpful if the full-time job was in a related field, such as finance or accounting, or in a position where there was some contact with the general public such as sales, social work, or teaching.

Where employed? Where the applicant worked in relationship to where he lived might have caused a travel problem with interviewing work.

How long? This was one measure of the applicant's stability. If he had been employed less than six months, the previous employment was to be specified, together with the reason for leaving the previous job.

Part-time jobs. All part-time jobs were to be listed since they could have interfered with the applicant's ability to work as an interviewer. In Study M3, no significant coefficient of determination between this variable and the pick-up rate was obtained.

Farm background. Three questions related to farming were used only for the farm study. Since the interviewer was to be talking to farm owners and operators, some knowledge of farming was essential. If the applicant had no farm background, he was not qualified as an interviewer for this particular study.

Experience. There was overlapping on this question if the applicant had previously recorded experience under full-time or part-time jobs. It was important that the name of the immediate supervisor be listed so the supervisor could be used as a reference if desired. No relationship appeared to exist between previous interviewing or related experience and the interviewer's pick-up rate for Study M3.

Number of hours. The expected number of hours per week was 15 to 20 even though the interviewer was more likely to work 10 to 15 hours. After Study M3 was completed, the interviewers were queried on the average number of hours a week they actually worked when interviewing. They reported between 12 and 14 hours a week. Since the interviewing was completed, the interviewers had nothing to lose by being honest.

In direct contrast to these reports, on Wave 1 of Study M2 the interviewers worked an average of 17¼ hours a week. This was based on total time actually worked and reported by the interviewers on their time sheets. Since these interviewers were paid by the hour,[25] the results were not very surprising. In addition, the unstructured nature of this study required that the interviewers type up complete details of the interview, thus raising the average hours worked per week.

If, on the application form, less than 15 hours was reported as available for interviewing, the applicant was usually rejected. A report of 20 or more hours a week was considered unrealistic, especially if the applicant had a full-time job and a family.

Some applicants recorded "no limit" or "any amount of time." This was not adequate, and they were pressed for the *number of hours* they could devote to work outside of their regular activities. When pressured, a few such applicants said "five hours" or "five or ten hours," which was clearly not enough. Some applicants did not answer the question directly, but tried to hedge until they found out the number of hours they were expected to work. The number of hours reported on the application blank did not correlate significantly with the pick-up rate on Study M3. Since the purpose of this question was obvious, an effort was made to estimate how much time the interviewer would have, depending on his existing obligations. For each interviewer in Study M3 an over-all estimate of weekly hours available was calculated. This estimate yielded a significant coefficient of determination (.135) with interviewer response rate, although it was not significantly related to pick-up rate.

Engaged in other activities. Other activities, either personal or business, which would take the applicant out of the area occasionally could

[25] See the section beginning on page 81 for the results of paying interviewers by the hour compared with paying them by the completed interview.

have been detrimental to the completion of field assignments. If the answer was "yes" to this question, a complete explanation was required.

Special times not available. Three questions were asked relating to any time during the day or evening, week, or year when the applicant would not be available. If the answer was "yes" to any of these, a full explanation was required. If the applicant said "no" to all three questions, he was asked about special obligations (such as clubs, organizations, meetings, and vacations). "No" was an easy (and the expected) answer to this question, so it was probed carefully. Even if an applicant said "yes" to one or more of these questions it did not mean that he should not be selected, although these obligations might have limited his interviewing activities.

Car. As was mentioned previously, a car was necessary for this type of interviewing, and it had to be available at all times so the interviewer could make and keep appointments. If the applicant was a woman, it was better if the car was her own and not the family car, which might have been needed at the same time she had an interviewing appointment.

Shorthand. Ability to take shorthand was clearly desirable for an interviewer. However, other qualities seemed much more important and this ability was not a prerequisite for hiring and was not taken into consideration unless two interviewers were equal in all other respects.

Foreign language. The purpose of a question on foreign language was to have this information on file in case sample members were encountered who only spoke a foreign language.

Reasons for applying. This question was asked only on the application forms for Studies M3 and M4. Applicants were separated into three groups on the basis of their answers: financial reasons, social or interest reasons, or a combination of financial and social reasons. Response and pick-up rates for both studies were not significantly related to these three groups of reasons.

References. The instructions concerning references specified clearly "three or more persons, not relatives or personal friends." Yet many applicants listed only one or two references or listed relatives or personal friends. All references were reviewed with the applicant and the legibility of names and addresses was checked.[26]

The space at the bottom of the page was used for reference results, comments, and final evaluation of the applicant.

The application was generally completed at the time of the personal interview. The completed form was evaluated and classified into one of

[26] See the section starting on page 44 for further details on the use of references in the selection of interviewers.

the following categories: (1) good prospect; (2) possibly hire; (3) possibly reject; or (4) reject this prospect.

The factors given greatest consideration in this subjective decision were neatness, ability to follow instructions, location, length of time at present address, marital status, age, number and ages of children, state of health, education, type of work at present job, length of time at present job, interviewing experience, weekly hours available, other activities, time not available, car, and reasons for applying.

The value of using an application form was unquestionable. However, no way of compiling answers or of weighting them was discovered which led to a score which was significantly related to interviewer pick-up rates on Study M3.

Personal Interview

The purpose of the personal interview was to gather information about the applicant to aid in the selection of interviewer candidates. For the Consumer Savings Project all personal interviews were conducted by the project director, the field director, and a university graduate assistant. An effort was made to standardize the personal interviewing procedures. The interviews were held in semi-private facilities of the state employment offices, chambers of commerce, and hotels.

The personal interview was comprised of four parts and required 15 to 45 minutes, generally averaging about 25 minutes. Included were a review of the application form, a brief description of the job with an effort to evaluate the interviewer's confidence that he could do the work, a personality test, and an evaluation checklist. Each of these will be covered in order.

The application form was reviewed, with the interviewer probing for further details in areas of interest or wherever the application form had not been filled in adequately. The brief job description covered such subjects as the purpose and objectives of the study, the information being sought, the time and interviewing schedule, the training procedures, the approximate length of the interviews, the number of assignments, the need for confidential treatment of the data, and the compensation. At the same time, in Studies M3 and M4 an attempt was made to ascertain the reaction of the applicants to this type of work and whether obtaining personal financial data was something which they felt could be done. They were asked, "Do you think people will give this information?" "If not, why not?" Although no attempt was made to evaluate interviewers on the basis of their answers, pessimistic or negative attitudes of applicants were noted.

Each applicant was asked to take a personality test. A discussion of

FIGURE 2. EVALUATION CHECKLIST: STUDY M4

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Applicant Evaluation
Personal Interview Check List

Characteristic	Superior	Above average	Average	Below average
Appearance (dress)				
Voice				
Poise				
Self-confidence				
Intelligent questions				
Intelligent answers				
Likable (friendly)				
Attitude towards this study				
Objectivity				
Physical appearance				

Applicant_____ Interviewer_____ Date_____

the evaluation of the results of these personality tests will be covered in the section beginning on page 49. While the applicant was taking this personality test, the project representative was filling out an evaluation checklist, shown in Figure 2. The purpose of this last part of the interview was to call attention to any personal characteristics that might have been overlooked. In addition, if the project representative felt that he did not have enough information about the applicant to rate him on one or more of these characteristics, further questions could be asked after the completion of the personality test.

Immediately after the applicant had left, the project representative reviewed the evaluation form and assigned it one of the following four ratings: (1) hire this applicant; (2) possibly hire; (3) possibly reject; or (4) reject this applicant.

The pick-up rates for Study M3 were used to evaluate this tool in the selection process; however, no significant relationship was discovered. In addition to the over-all checklist evaluation, each characteristic was correlated with the pick-up rates for Study M3. A significant coefficient of determination was not obtained for any of these characteristics.

Personality Tests

For Studies M2 and M3, interviewers were given the *Inventory of Personal Attitudes* (IPA) test, which consisted of 30 statements for which the interviewer was to indicate whether he would "strongly agree," "agree," "disagree," or "strongly disagree." The test was to cover the following attitudes toward life: future time orientation, desirability of stopping to think, originality, opinion that life (world) is predictable, belief in fate, and willingness to try many actions. This test did not prove useful for identifying good interviewers.

After Study M2 interviewers had been hired, they were given the *Edwards Personal Preference Schedule* (EPPS) test, which consisted of 225 sets of two statements. The interviewer was to select the statement which he liked the most or disliked the least. The EPPS was developed to provide measures of 15 relatively independent personality variables. A complete description of each of these variables is presented in Figure 3.

The results of this test were used to aid in the selection of interviewers for Study M4. Each applicant, on the basis of his scores on dominance (high score desirable) and abasement (low score desirable) variables, was put into one of the following four groups: (1) hire this applicant, (2) possibly hire; (3) possibly reject; or (4) reject this applicant. However, this particular semi-subjective approach did not prove an optimal indicator for identifying interviewers with a high pick-up rate.

One question of interest was whether the interviewer selection pro-

FIGURE 3. DEFINITIONS OF VARIABLES AVAILABLE FROM THE EDWARDS PERSONAL PREFERENCE SCHEDULE

1. ach Achievement: To do one's best, to be successful, to accomplish tasks requiring skill and effort, to be a recognized authority, to accomplish something of great significance, to do a difficult job well, to solve difficult problems and puzzles, to be able to do things better than others, to write a great novel or play.

2. def Deference: To get suggestions from others, to find out what others think, to follow instructions and do what is expected, to praise others, to tell others that they have done a good job, to accept the leadership of others, to read about great men, to conform to custom and avoid the unconventional, to let others make decisions.

3. ord Order: To have written work neat and organized, to make plans before starting on a difficult task, to have things organized, to keep things neat and orderly, to make advance plans when taking a trip, to organize details of work, to keep letters and files according to some system, to have meals organized and a definite time for eating, to have things arranged so that they run smoothly without change.

4. exh Exhibition: To say witty and clever things, to tell amusing jokes and stories, to talk about personal adventures and experiences, to have others notice and comment upon one's appearance, to say things just to see what effect it will have on others, to talk about personal achievements, to be the center of attention, to use words that others do not know the meaning of, to ask questions others cannot answer.

5. aut Autonomy: To be able to come and go as desired, to say what one thinks about things, to be independent of others in making decisions, to feel free to do what one wants, to do things that are unconventional, to avoid situations where one is expected to conform, to do things without regard to what others may think, to criticize those in positions of authority, to avoid responsibilities and obligations.

6. aff Affiliation: To be loyal to friends, to participate in friendly groups, to do things for friends, to form new friendships, to make as many friends as possible, to share things with friends, to do things with friends rather than alone, to form strong attachments, to write letters to friends.

7. int Intraception: To analyze one's motives and feelings, to observe others, to understand how others feel about problems, to put one's self in another's place, to judge people by why they do things rather than by what they do, to analyze the behavior of others, to analyze the motives of others, to predict how others will act.

8. suc Succorance: To have others provide help when in trouble, to seek encouragement from others, to have others be kindly, to have others be sympathetic and understanding about personal problems, to receive a great deal of affection from others, to have others do favors cheerfully, to be helped by others when depressed, to have others feel sorry when one is sick, to have a fuss made over one when hurt.

9. dom Dominance: To argue for one's point of view, to be a leader in groups to which one belongs, to be regarded by others as a leader, to be elected or appointed chairman of committees, to make group decisions, to settle arguments and disputes between others, to persuade and influence others to do what one wants, to

supervise and direct the actions of others, to tell others how to do their jobs.

10. aba Abasement: To feel guilty when one does something wrong, to accept blame when things do not go right, to feel that personal pain and misery suffered does more good than harm, to feel the need for punishment for wrong doing, to feel better when giving in and avoiding a fight than when having one's own way, to feel the need for confession of errors, to feel depressed by inability to handle situations, to feel timid in the presence of superiors, to feel inferior to others in most respects.

11. nur Nurturance: To help friends when they are in trouble, to assist others less fortunate, to treat others with kindness and sympathy, to forgive others, to do small favors for others, to be generous with others, to sympathize with others who are hurt or sick, to show a great deal of affection toward others, to have others confide in one about personal problems.

12. chg Change: To do new and different things, to travel, to meet new people, to experience novelty and change in daily routine, to experiment and try new things, to eat in new and different places, to try new and different jobs, to move about the country and live in different places, to participate in new fads and fashions.

13. end Endurance: To keep at a job until it is finished, to complete any job undertaken, to work hard at a task, to keep at a puzzle or problem until it is solved, to work at a single job before taking on others, to stay up late working in order to get a job done, to put in long hours of work without distraction, to stick at a problem even though it may seem as if no progress is being made, to avoid being interrupted while at work.

14. het Heterosexuality: To go out with members of the opposite sex, to engage in social activities with the opposite sex, to be in love with someone of the opposite sex, to kiss those of the opposite sex, to be regarded as physically attractive by those of the opposite sex, to participate in discussions about sex, to read books and plays involving sex, to listen to or to tell jokes involving sex, to become sexually excited.

15. agg Aggression: To attack contrary points of view, to tell others what one thinks about them, to criticize others publicly, to make fun of others, to tell others off when disagreeing with them, to get revenge for insults, to become angry, to blame others when things go wrong, to read newspaper accounts of violence.

cedure obtained people having EPPS scores different from the adult population or from the college population used to set norms for the test. A comparison of Columns 1, 2, and 5 in Table 6 indicates that it did. Interviewers selected on Studies M3[27] and M4 showed significantly more "intraception" and "dominance" than the adult population. The manifest needs associated with intraception as shown in Figure 3 are "to analyze one's motives and feelings," "to observe others, and "to put one's self in another's place." Needs associated with dominance are, "to argue for

[27] Two interviewers used on Wave 1 of Study M3 were no longer working when the EPPS was administered. As a result, the averages for Study M3 were based on 16 instead of 18 interviewers.

TABLE 6. NORMS FOR SELECTED POPULATIONS AND AVERAGE INTERVIEWER SCORES ON THE EDWARDS PERSONAL PREFERENCE SCHEDULE

EPPS variables	Adult sample (1)	College sample (2)	Study M3 (3)	Study M4 (4)	Studies M3 and M4 (5)	Study M4 rejects (6)
Achievement	14.1	14.4	15.5	14.5	15.0	15.2
Deference	14.5	11.8	14.8	14.6	14.7	14.8
Order	15.2	10.2	13.2	14.3	13.8	13.4
Exhibition	12.1	14.3	12.6	12.7	12.7	14.4
Autonomy	13.0[a]	13.3[a]	12.9	9.7[b]	11.2	10.3
Affiliation	16.3	16.2	15.0	16.5	15.8	16.7
Intraception	14.8[c]	16.7[c]	18.8	19.0	18.9	18.3
Succorance	11.9[c]	11.6[c]	7.9	9.2	8.6	9.7
Dominance	12.2[c]	15.8	15.5	17.2	16.3	15.7
Abasement	15.9[c]	13.7	12.2	11.9	12.0	13.3
Nurturance	17.2[a]	15.2	14.5	15.9	15.2	14.8
Change	15.1	16.4	17.8	15.2[b]	16.5	16.2
Endurance	16.7	12.6[c]	14.6	19.2[b]	17.1	16.7[d]
Heterosexuality	10.5	16.0[c]	14.4	10.2[b]	11.3	9.2
Aggression	11.5	11.7	10.4	9.8	10.1	11.6
Consistency	11.5	11.6	11.4	11.0	11.2	11.5
Sample size	8,963	1,509	16	19	35	37

[a] Significant difference at the 5 percent level between Study M4 and Study M3 interviewers and the college and/or adult population as indicated.
[b] Significant difference at the 5 percent level between Study M4 and Study M3 interviewers.
[c] Significant difference at the 1 percent level between Study M4 and Study M3 interviewers and the college and/or adult population as indicated.
[d] The lower endurance scores of the Study M4 rejects as compared with those accepted is significant at the 5 percent level.

one's point of view," "to be a leader in groups to which one belongs," and "to be regarded by others as a leader."

The interviewers used on the two studies showed less of the following than the general adult population: autonomy, succorance, abasement, and nurturance. Autonomy is associated with a need "to be independent of others in making decisions," "to feel free to do what one wants," "to criticize those in positions of authority," or "to avoid responsibilities and obligations." Succorance is associated with a need "to seek encouragement from others," "to have others provide help when in trouble," or "to have others feel sorry when one is sick." Needs associated with abasement are, "to feel guilty when one does something wrong," "to accept blame when things do not go right," and "to feel that personal pain and misery suffered does more good than harm." Clearly, excessive amounts of these characteristics are not desirable in interviewers. Nurturance is associated with the following needs: "to help friends when they are in trouble," "to treat others with kindness and sympathy," and "to show a great deal of affection toward others." While at first it may be thought that this is a

desirable characteristic for interviewers, there is a possibility that persons with this characteristic are too expressive and have strong needs for nurturance themselves.

A comparison of the selected interviewers' scores with those of the college population showed that the former had significantly more intraception and endurance. Endurance is described as the need "to keep at a job until it is finished," "to work hard at a task," or "to stick at a problem even though it seems as if no progress is being made." The selected interviewers showed less of the following than the college population: succorance and heterosexuality. The latter is associated with needs "to go out with members of the opposite sex," and "to kiss those of the opposite sex." This attribute probably reflects the stage of the life cycle and, hence, social maturity.

Thus, the selection process appeared to have obtained persons with desirable interviewer traits. If so, what part of the selection procedure was responsible? Some insight into this question can be gained by comparing the applicants hired on the farm study with those rejected. A review of Columns 4 and 6 in Table 6 indicates that with the exception of endurance, the applicants rejected did not differ significantly from the applicants hired.

It appears then that the selection of interviewers who differed from the general adult population in characteristics measured by the EPPS primarily occurred not because of letters of recommendation or personal interview evaluation or other aspects of the formal selection procedure, but because of the nature of the newspaper ad and the ad sent to school teachers, and because a certain type of person tends to apply for interviewing jobs.[28] These findings should not be interpreted to mean that the letters of recommendation, evaluations of the applicants in personal interviews, and test scores were not useful in selecting effective interviewers but rather that they were generally ineffective in further selection based on the characteristics measured by the EPPS.

A comparison of the characteristics of the Study M4 interviewers with those of the Study M3 interviewers shows that the former had significantly higher scores on the endurance test and lower scores on the autonomy, change, and heterosexuality tests. Of these, only change has not been described. It involves the need "to do new and different things," "to travel," "to meet new people," "to experience novelty and change in daily routine," "to experiment and try new things," and "to participate in new fads and fashions." On the surface, it would seem that these are desirable

[28] This is not completely true since a few applicants were not given the EPPS because they were too young or too old or because they were obviously unfit for the job.

characteristics for interviewers. They are continually meeting new people and experiencing new situations. However, change has a second dimension, and this one relates to instability, immaturity, and the like. The absence of the latter characteristics is possibly of greater importance in an interviewer than the presence of the former ones. The characteristics of the Study M4 interviewers when contrasted with those of the Study M3 interviewers were not inconsistent with the change in interviewer stereotype from the more emotional, socially aggressive type of interviewer to the friendly, matter-of-fact type which occurred as a result of the analysis of the interviewers used in Study M3.

Of the 15 attributes measured by the tests comprising the EPPS, only one, dominance, was significantly related to the pick-up rates of interviewers. A coefficient of determination of .36 was obtained. In other words, the dominance scores of the 16 interviewers explained 36 percent of the variance in their pick-up rates. Subsequent analysis, reported later, indicated an interaction between dominance scores and abasement scores.

References

All references other than personal friends and relatives were sent a mimeographed one-page letter requesting "a frank statement on the enclosed sheet concerning this person's qualifications for this work with particular reference to the characteristics listed." The sheet enclosed, shown in Figure 4, sought ratings of the applicant with regard to a number of different characteristics that were thought to be related to interviewer ability. In addition, a blank space at the top of the sheet provided room for the reference to write comments in his own words about the applicant's fitness for the job.

The applicant evaluations were scored by assigning numerical values to the ratings for each characteristic, ranging from four for "superior" down to one for "below average." These scores were averaged and each applicant was then assigned to one of the same four groups mentioned in connection with the evaluation which resulted from the personal interview. However, no relationship was observed between this measure and the pick-up rate.

Coefficients of determination were prepared for all the characteristics on the evaluation forms in relation to the pick-up rates for interviewers used on Study M3. Of these, the references' evaluations of self-confidence and of appearance, manner, and poise were significantly related to pick-up rates. The coefficient of determination for self-confidence was .34, indicating that 34 percent of the variance in the interviewers' pick-up rates was explained by this variable. The coefficient of determination for appearance was .29. This suggests that further refinements in a reference

FIGURE 4. REFERENCE EVALUATION FORM: STUDY M4

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Bureau of Economic and Business Research

APPLICANT EVALUATION

Personal evaluation of_____

A. Information about the applicant which you believe would be valuable in evaluating this individual for work as an interviewer:

_____

_____

_____

_____

_____

_____

_____

B. Following is a list of characteristics which all individuals have in varying degrees. For each of these, please indicate how you would rate this applicant.

Characteristic	Superior	Above average	Average	Below average	Inadequate basis for judgment
Ability to make friends					
Honesty					
Self-confidence					
Attention to detail					
Tendency to procrastinate					
Ability to think on feet					
Appearance, manner, and poise					
Initiative					

Signed_____ Date_____

evaluation form might yield high returns in terms of selecting or identifying potentially effective interviewers.

Selection of Interviewer Candidates

The selection of interviewer candidates was based on the following scoring system (using each of the four tools employed in the evaluation of applicants) with the following weights:

Method of evaluation	*Hire*	*Possibly hire*	*Possibly reject*	*Reject*
Application form	8	6	4	2
Checklist evaluation	16	12	8	4
Personality test (M4 only)	8	6	4	2
References	16	12	8	4

As is evident from this weighting system, at the time the selection was made more reliance was placed on the checklist evaluation and on the information obtained from references than on the personality test or on the application form. The actual procedure consisted of ranking the applicants by their total scores and selecting as many as were needed beginning from the top of the list. At the same time, certain additional factors were taken into consideration, such as the location of the applicant relative to the concentration of the sample members.

Whether this selection procedure did in fact select the most effective interviewers could not be determined. Since no measure of performance was available for those applicants who were rejected, it could not be shown that the best interviewers were selected.

That this selection procedure was effective could only be measured in the response and completeness rates obtained on the later studies where the selection process was much improved and used effectively. What was apparent from the interviewers selected was that much interviewer variability remained, and thus there was much room for improvement in the selection procedure.

Once selected, applicants were sent a letter offering them training[29] (with pay) and the possibility of being hired if they performed satisfactorily in the training sessions. A letter was also sent to applicants who were rejected, leaving open the possibility that they might be hired at a future time.

Evaluation of Candidates Based on Training Experience

Candidates were evaluated on the basis of their conduct at the training sessions, on their scores on a qualifying examination, and on their

[29] Refer to Table 5 for a breakdown of the numbers offered training on Studies M3 and M4.

performance in trial interviews. Interviewer candidates were expected to attend all training sessions and were penalized for lack of attendance unless unusual circumstances were involved. In addition, each candidate's general conduct was observed and evaluated. Did the candidate dress appropriately, take written notes, listen attentively, ask questions, get along with the other candidates, and prepare for the meetings? No attempt was made to score each of these points. However, a candidate's performance in these respects was used as a guide in deciding whether or not to hire him as an interviewer. The specific content of these training sessions will be discussed in the following chapter.

After the first three training sessions, candidates were given a take-home "Interviewer Qualifying Examination," shown in Appendix A.[30] This examination was to be completed and returned to the project office within one week. The examination was designed in such a way that the majority of the questions could be answered directly from the written training materials. However, some of the questions related to situations described verbally in the meetings, and other questions introduced problem situations similar, though not identical, to those covered in the meetings.

Essentially, the qualifying examination served two purposes. On the one hand, it brought out how well the candidate had familiarized himself with the training materials and had absorbed the discussions at the training sessions, relating not only to interviewing techniques but also to acquaintanceship with financial terminology. On the other hand, the examination forced the interviewer to consult the written materials (if he expected to pass) and thus become better acquainted with this material, thereby serving as an additional training device.

The qualifying examination was scored before the fourth training session and was returned and discussed at that session. The scores served as a basis for weeding out poor candidates as well as a basis for highlighting areas in which other candidates were weak. The examination also caused some candidates to drop out of the study because they felt it was too hard. Although the main purpose of the examination was its use as a training device, it was also used in the selection process. For those interviewers who were selected for Study M3, correlation was not significant between their test scores and their interviewing ability as measured by their pick-up rates. This, of course, should not discredit the value of the qualifying examination since its main purpose as a teaching tool was satisfied.

Trial interviews served as an additional means of candidate evalua-

[30] This examination was used in Study M4. Essentially the same examination had been used in Studies M2 and M3.

tion. Three to five such interviews were assigned to each candidate at the end of the third training session. The completed interviews were to be returned to the project office within ten days. These interviews were conducted in the same manner as regular interviews, with the same advance letter. After being checked and edited, they were returned to the candidate. They, too, served as a basis for discussion in the fourth training session.

In Study M2, some of the trial interviews were dummy interviews in the sense that arrangements were made beforehand with people in the sample area to act as respondents. These people were not coached on what answers to give. They were told to act natural and report only what the interviewer requested, if they were so inclined. Following the interview, these respondents informed the field director about the information reported to the interviewer. In addition, they reported on the attitude of the interviewer. An evaluation was then made of the interviewer's ability. Although this experiment was adopted only in the pilot study, it proved to be of assistance in selecting interviewers as well as in providing insights into the interview situation from the point of view of the respondent. Numerous problems involved in using the device limited its value. The first problem which really had two aspects, was that of locating respondents to play the role and briefing them. Second, and probably more important, was the problem of developing an adequate standard of evaluation for the dummy interviews. Two other minor problems were those of time and cost. However, taking these problems into consideration, it was felt that the dummy interviews were a valuable tool in selecting effective interviewers.

In Studies M3 and M4 no dummy interviews were attempted because time and other restrictions prevented the making of necessary arrangements.

Final Selection of Interviewers

Candidates were selected as interviewers only if they performed satisfactorily on all three aspects of the evaluation process. In Study M3, 23 interviewers were selected from 50 candidates; in Study M4, 20 interviewers were selected from 39 candidates (Table 5). The majority of the candidates who were not selected eliminated themselves by quitting because of the pressures of training sessions, qualifying examinations, and trial interviews.

Once an interviewer was selected, he was asked to read and sign an "Interviewer Agreement," which outlined the nature of the interviewing task, the duties, and the arrangements for compensation (see Appendix B). At the same time, it was made clear verbally that continuation on the project was contingent on satisfactory interviewing performance.

TABLE 7. DISTRIBUTION OF PROJECT INTERVIEWERS BY SELECTED CHARACTERISTICS AND BY STUDY (PERCENTAGES)

Characteristic category	Study M1	Study M2	Study M3	Study M4
Sex				
Male	29	58	70	70
Female	71	42	30	30
Age				
Under 25	7	4	9	5
25–40	71	73	57	60
41–55	22	23	30	30
56 and over	0	0	4	5
Education				
High school or less	43	27	4	0
College	50	62	44	80
Postgraduate	7	11	52	20
Occupation				
Teacher	0	11	39	45
Other professional	36	31	22	5
Housewife	43	31	9	20
Other	21	27	30	30
Base (number of interviewers)	14	26	23	20

Table 7 shows the distribution of interviewers hired for the various studies by selected characteristics. As is evident from this table, the great majority were men (except in Study M1), between the ages of 25 and 40 years of age, college educated (an appreciable number had postgraduate work), and employed in professional occupations. The heavy ratio in favor of men was surprising because no attempt had been made to favor one sex over the other.

A Quantitative Method for Selecting Interviewers

To what extent can the information obtained about applicants and trainees be utilized to select the potentially more effective interviewers? The method employed for predicting interviewer effectiveness was linear regression using an equation of the following form:

$$y = a + b_1 z_1 + b_2 z_2 + \cdots + b_k z_k + u,$$

where y was the measure of interviewer effectiveness, the z's were applicant data variables, and u was a random variable. The b's were estimated from the n observations of interviewer characteristics on z_1 and y. If the u's were normally distributed, the least squares method also yielded a maximum likelihood estimate.

The analysis employed the data from Study M3. Although it would have been desirable to test the regression equations obtained from the Study M4 data, this was not feasible in view of the difficulty in identifying the effective interviewers on that study, as was previously discussed. In addition, the interviewers were a fairly homogeneous group. Applicants with adverse letters of recommendation or with adverse evaluation were not hired. Applicants under 25 or over 50 and those with less than a college education were rejected unless they had other compensating characteristics. In general, persons employed in social types of work, such as school teachers, were given preference. Those doing very poorly on the take-home qualifying examination were not hired. For these reasons and because of the small number of interviewers employed in Study M3, the equations presented are little more than hypotheses for future testing.

The following variables, discussed earlier, were evaluated in an attempt to find combinations which might prove useful in the selection of interviewers.

1. Sex.
2. Age.
3. Education.
4. State of health (applicant's evaluation).
5. Length of residence at present address.
6. Length of time at present job.
7. Over-all estimate of number of hours available for interviewing each week.
8. Financial background of interviewer.
9. Previous interviewing experience.
10. Reasons for applying for an interviewing position.
11. Neatness of the application form and extent to which the applicant followed directions in completing the form.
12. Each of the 10 scales making up the evaluation checklist form.
13. Each of the 8 scales making up the reference rating.
14. The EPPS scores on each of the 15 tests.

An IBM 1401 was employed to search for the best regression model. Even so, many combinations of variables could not be evaluated. The variables which in the previous section showed a relationship with the pick-up rate were reference evaluation of "self-confidence," the "dominance" score on the EPPS, and the checklist evaluation of "likableness." Information on some of these variables was not obtained for all interviewers. The first measure was available for all 18 interviewers, the second one for 16 interviewers, and the last one for 11 interviewers. Since most data were available for the 16 interviewers who took the

EPPS, these were used as the basis for the following regression equations.

Several criteria were employed in selecting the regression equations presented. One was the percentage of variance in the pick-up rates of interviewers explained by the regression equation. This was the coefficient of multiple determination. Another was the ratio of net regression coefficients to their standard errors. This ratio combined with an evaluation of beta coefficients gives some indication of the reliability and importance of specific variables. Finally, the reliability of the estimate was evaluated using the standard error of the estimate.

It was found that the two variables, self-confidence (references) and dominance (EPPS), had to be present before the equations proved satisfactory on the basis of the criteria applied. When these two variables were combined with the over-all estimate of the number of hours available for interviewing, the following multiple regression equation was obtained.

$$\text{Pick-up rate} = 2.89 + \underset{(1.727)}{4.217}\, z_1 + \underset{(.281)}{.853}\, z_2 + \underset{(.091)}{.224}\, z_3$$

$$\bar{R}^2 = .71$$

$$\bar{S}_u = 4.58$$

In this equation z_1 was the reference evaluation of self-confidence of the applicant, z_2 was the score on the EPPS dominance test, z_3 was the over-all estimate of hours available for interviewing, and 2.89 was the constant term. The number in parenthesis below each net regression coefficient is the standard error of the coefficient. The $\bar{R}^2$ is the corrected coefficient of multiple determination, and $\bar{S}_u$ is the corrected standard error of the estimate.[31]

The respective beta coefficients were $B_1 = .422$, $B_2 = .538$, and $B_3 = .400$.

These variables explained about 71 percent of the variance in the interviewers' pick-up rates. This differed significantly from zero, as did each of the net regression coefficients.

If the interviewers were divided into thirds on the basis of their predicted pick-up rate, the actual pick-up rate for each group would reflect the effectiveness of the equation in differentiating among interviewers.

Predicted pick-up rate	*Completeness rate*	*Pick-up rate*
Highest third	79%	58%
Middle third	66	49
Lower third	58	41
All interviewers	68	50

[31] Mordecai Ezekiel and Karl A. Fox, *Methods of Correlation and Regression Analysis* (New York: Wiley, 1959), pp. 300-2.

Thus, the pick-up rate for the highest third would be 17 percent above that for the lowest third. In addition, the middle third would be about midway between the two extreme groups, suggesting a continuous differentiation among interviewers.

These findings suggest that the selection process may be made more rigorous. However, the findings presented require further validation on larger groups of interviewers.

IV. INTERVIEWER TRAINING

The amount and intensity of interviewer training required tends to vary with, among other things, the complexity of the study, the familiarity of the interviewers with the subject matter, the type of questionnaire being used, and the availability of time and other resources for adequate instruction. On highly specialized studies, such training may be extensive, especially in the case of a panel operation. Training may be given by mail, by phone, by personal contact with individuals, or in group meetings. As a rule, group meetings are preferable, if feasible, since it is only in this way that standardization of procedures may be achieved.

The training procedures on the later Consumer Savings Project studies evolved out of the experiences gained on the earlier studies. Although it is felt that these training methods were good, the dimensions of a training program are hard to quantify and evaluate objectively.

Various goals may be sought in training sessions. The following warrant particular attention, and were also those to receive the most emphasis in the training sessions for the panel studies of the Consumer Savings Project.

1. To appreciate the value of economic research.
2. To develop an understanding and appreciation of the particular study.
3. To develop the ability to obtain interviews, with special emphasis on the possible approaches to reluctant sample members and to those unwilling to cooperate.
4. To instill an understanding of the need for accurate and complete data and of the techniques and methods by which such information can be obtained.
5. To familiarize the interviewers fully with the questionnaire, with the purpose and nature of the particular questions, and with dimensions within which answers are to be sought.
6. To build morale — to convey to the interviewer the feeling that he is a member of a group.
7. To weed out unqualified interviewers by observing the ability of each candidate to absorb training materials and to conduct satisfactory interviews.

8. To promote standardization of procedures and of the type of answers to be sought for the different questions.

A variety of techniques are available for achieving these objectives, ranging from the assignment of background reading material to the conducting of trial interviews and assigning interviewers to edit and code questionnaires.[32] A number of these procedures were used in the training sessions of the Consumer Savings Project.

Interviewer Training for Consumer Financial Studies

Interviewers employed on the Consumer Savings Project had to be thoroughly trained for two major reasons. First, the study was concerned with savings, assets, and debts, which are subjects about which many respondents are extremely sensitive. Second, because of the experimental nature of the project, its success was highly dependent on good field work. The interviewers had to understand the purpose of the study and had to follow instructions. If they were confronted with new situations not covered in the training, they had to be able to make the correct decision on the basis of their training and understanding of the goals of the project.

The training sessions for each pilot study incorporated the experience gained from the training sessions for the preceding pilot studies.

Instructions for most types of situations were covered in the training manual. They were also reviewed verbally and thus reinforced. At the beginning of each study, the interviewers were given initial training which consisted of four meetings 2½ to 3 hours in length. A training session was also held before each new wave of interviews, followed on some of the waves of later studies by a "review session" after the interviewers had had a chance to complete a few interviews. In addition, meetings were held at the completion of each wave to review experiences on that wave.

Initial Training Sessions

The initial meetings had two purposes: to train each interviewer in the techniques and methods needed to accomplish the objectives of the

[32] For a discussion of some of these approaches see Robert L. Kahn and Charles F. Cannell, *The Dynamics of Interviewing* (New York: Wiley, 1957), pp. 241-51; Lester Guest, "A New Training Method for Opinion Interviewers," *Public Opinion Quarterly,* Vol. 18, No. 3 (Fall, 1954), pp. 287-99; U.S. Bureau of the Census, *Principal Data-Collection Forms and Procedures* (Washington: U.S. Government Printing Office, 1961); Muriel Harris, compiler, *Documents Used During the Selection and Training of Social Survey Interviewers and Selected Papers on Interviewers and Interviewing* (London: Central Office of Information, The Social Survey, 1956).

FIGURE 5. INTERVIEWER GUIDE: STUDY M4

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study and to weed out those who apparently could not learn to obtain good interviews.

In addition to the general goals mentioned earlier, these training sessions had the objective of instructing the interviewers in the meanings of financial terms. When the respondent gave information about specific financial holdings (debentures, endowment life insurance, and so forth), the interviewer needed to know what the respondent was talking about. Knowledge of the financial terms used could serve to facilitate communication between the interviewer and the respondent and make the collection of accurate and complete data more probable.

These objectives were achieved in a number of ways. At the first meeting, each interviewer was given a packet containing an "Interviewer Guide," a set of "Pointers on the Interview Situation," a schedule of material to be covered in all the meetings, and the field forms to be used on the first wave of interviews. Tables of contents of the "Guide" and "Pointers" for Study M4 are shown in Figures 5 and 6; Figure 7 presents the schedule of materials covered in the first three training sessions for that study.

The "Interviewer Guide" was designed and indexed so that interviewers could use it themselves to answer questions after formal training was completed. Its substantive aim was threefold.

1. To convey a clear explanation of what the study was all about —

FIGURE 6. OUTLINE OF "POINTERS ON THE INTERVIEW SITUATION": STUDY M4

its aims and objectives, the types of data needed, and how the data fitted in with the aims and objectives.

2. To present a glossary of financial terms.

3. To discuss the forms to be used in the first wave of interviews, first in general terms to indicate the purpose and functions of each, and then question by question to point out possible sources of misunderstanding and to make clear what information was being sought.

Judging from the interviewers' reactions to the "Guide," it served its practical purpose of helping them obtain complete, accurate information. As one interviewer stated, "Although the initial set of instructions seemed overwhelming, they proved to be highly useful and were of considerable aid."

The pamphlet, "Pointers on the Interview Situation," was designed to supplement the "Interviewer Guide" by focusing on the procedures to be followed in obtaining an interview with the sample member. In addition to discussing means of approaching the sample member, a substantial

portion of this material (Sections A4 to A6 in Figure 6) was devoted to a listing of different contact situations that might be encountered, with specific suggestions for handling each situation. In Studies M3 and M4, these "case situations" were based on actual interview situations experienced in earlier studies. Thus, practical examples were undoubtedly helpful in increasing the number of interviews obtained.

The schedule outlined in Figure 7 indicates the subject matter covered in the first three training sessions and the order of discussion. These sessions were held on successive days (usually in the evening). The first session was devoted to a review of the study, the means of securing the cooperation of the sample member, the time schedule for that wave, and the schedule of interviewer compensation. Special attention was given to the last of these aspects in Studies M3 and M4, payment for which was made on an interview basis geared to an incentive system, as will be explained in Chapter V.

The main focus of the second session was on the forms to be used, with emphasis on an item-by-item review of the questionnaire and of the interviewer report form. The final part of this session was concerned with a discussion of operating procedures both in contacting respondents and in filling out and returning forms.

The third session was devoted to a general review of the study objectives and questionnaire forms and to role-playing. At the end of that session, candidates were handed copies of the qualifying take-home examination and were given pretest interview assignments.

The fourth and final session was held about ten days after the first three. In the interim, the qualifying examination and the pretest interviews had been completed and a decision had been made as to which candidates were to be hired. Only the latter were invited to the fourth session. Even with the care taken at the previous three sessions to give the interviewer a solid background, there were many problems to be discussed at this session. The interviewers benefited from the opportunity to talk over their problems and experiences after they had been exposed to some of the actual field work.

The first part of the meeting was used to further instruct the interviewers in the weak areas indicated by the qualifying examination and the trial interviews. The interviewers were encouraged to discuss the problems they encountered and how they solved them. The corrected copies of the qualifying examination were returned, and there was a review of the most frequently missed questions. Interviewers could also ask about specific questions which were marked wrong but not reviewed.

Next, the meeting turned to reviewing and correcting the trial interviews. Each interviewer was given one of his completed assignments

FIGURE 7. SCHEDULE OUTLINE FOR TRAINING SESSIONS: STUDY M4

I. First Session
- A. Distribution of all materials
- B. Introduction of field staff and interviewers
- C. Discussion of time schedule form
- D. Discussion of interviewer compensation form
- E. Presentation of facts about the study (Interviewer Guide — Part A)
  1. Objectives
  2. Sponsorship
  3. Reason for project
  4. Selection of sample
  5. Panel operation
  6. Experimental aspects
- F. Explanation of terms (Interviewer Guide — Part B)
- G. Suggestions for securing the interview (Pointers on the Interview Situation — Part A)
  1. Paving the way
  2. Credentials
  3. Contacting the respondent
  4. General ways of securing cooperation
  5. Contact situations and how to handle
  6. Noncontact situations and how to handle
- H. Discussion of the interview (Pointers on the Interview Situation — Part B)
  1. Introduction and explanation
  2. Creating and maintaining rapport
  3. Type of data sought
  4. Refusals and "don't know" answers
  5. Completing the interview
  6. Use of records
- I. Summary of material covered

II. Second Session
- A. Question period and discussion of first session
- B. Question-by-question review of Form IV H1 (Interviewer Guide — Part C-1)
- C. Question-by-question review of Form IV C1 (Interviewer Guide — Part C-2)
- D. Explanation of the accuracy card (Interviewer Guide — Part C-3)
- E. Discussion of the interviewer report form (Interviewer Guide — Part C-4)
- F. Discussion of the interview evaluation form (Interviewer Guide — Part C-5)
- G. Explanation of general subjects
  1. Step-by-step interviewing procedures
  2. Spot-checking of interviews
  3. Return of carbon copies of advance letter
  4. General field procedures
- H. Review of list of assignments

III. Third Session
- A. Question period and discussion of second session
- B. Explanation of role-playing (Form IV H1)
- C. Explanation of role-playing (Form IV C1)
- D. Final review
- E. Presentation of pretest assignments
- F. Distribution of copies of take-home qualifying examination

along with a critique sheet and as he checked over his mistakes, the field director answered the interviewer's questions and explained the reasons for some of the corrections. As each assignment was finished, the interviewers were given their other completed assignments one at a time until all were reviewed and corrected.

The last part of the meeting was devoted to a general discussion of any topic or problem which the interviewers felt they did not understand. They were then given two copies of the "Interviewer Agreement," shown in Appendix B. One copy they signed and returned, and the other they kept for their own records. The main purpose of the "Interviewer Agreement" was to outline clearly the working arrangements and the interviewer's job responsibilities. The agreement seemed to have added value in making the interviewers feel obligated to do the job. This last training session was ended by handing out the interviewing assignments.

All training sessions were held in the city where the field operation was being carried out except in Study M4 when two cities readily accessible to the majority of the candidates were used for training sessions. The same material was covered on two consecutive evenings in the two cities; this permitted the interviewer to come to either session.

As a rule, the size of each group was restricted to 15 or 16 candidates. This number was small enough for individual questions to be answered, and yet large enough to reflect a variety of viewpoints. Groups larger than 15 or 16 were divided into separate groups, with sessions for each group.

Present at all training sessions were the project director or his deputy; the field director, who presided over the meeting; and field supervisors, if they were being used on that study. The project director or his deputy conducted the first part of the initial session and was present at later sessions to answer any technical questions that might arise.

The day and time of the training sessions varied with each study. They depended upon the distances the candidates lived from the meeting place, their other activities, when the stores were open in their areas, and so forth. However, the participants generally preferred that the meetings be held in the evenings about 7:30 during the middle of the week,

although in some areas Friday evenings or Saturday mornings were preferred. The meetings were planned to last no longer than three hours, with a fifteen-minute break in the middle.

Compensation for the training sessions varied between $1.50 and $1.65 an hour, depending upon the going rate in each area. At the end of every meeting the candidates filled out, signed, and submitted a bill for the time spent. No travel time or mileage was paid for attendance at the training sessions. Candidates were also paid for up to two hours of study time on their own and for work on the qualifying examination.[33]

No attempt was made to evaluate the training, but some conclusions were based on the subjective judgment of the people involved. The use of detailed, written instructions with specific examples was an absolute necessity; however, they had to be adequately indexed for quick reference in the field. The value of the qualifying examination as a training tool was not to be overlooked. In fact, any means of exposing the interviewer to the written training material was desirable. Trial interviews, although originally intended as a selection device, proved extremely effective in getting interviewers to put training into practice. The interviewer did, however, have to be thoroughly trained before attempting these trial interviews.

Two areas of training which it was thought could be of value on future financial studies were role-playing and the further development of the interviewer's confidence in his ability to obtain the personal financial data.

Inter-wave Sessions

The purpose of the training sessions before each new wave of interviews was threefold: first, to maintain and improve the quality and quantity of data obtained on succeeding waves; second, to stress good interviewing practices and correct poor ones; and third, to train interviewers on any new procedures, experiments, or forms to be used on the current wave. As a rule, these sessions consisted of just one approximately three-hour meeting, although on several occasions when a fairly large amount of material had to be covered, two meetings were held.

Each inter-wave training session was scheduled one week before the start of field operations. At this meeting, the response and refusal rates of the previous wave were reported, since interviewers had expressed interest in knowing how they had done. Also presented were statistics on the quality of the work received, number of blanks, number of errors, percentage of records used, and so forth. This was a logical lead-in to a discussion of how these areas could be improved.

[33] See Chapter V for details on interviewer compensation.

The first part of the meeting focused, therefore, on giving the interviewers additional instruction in areas of poor performance. Also at this time, there was a discussion and review of the purpose and objectives of the study to reinforce the interviewers' confidence in the study and give them additional material to overcome potential refusals on the present wave. Since panel members tended to forget why they were being interviewed and what was being done with the data, the interviewers had to be prepared to answer such questions again, in order to reduce fears and skepticism about the authenticity of the study, the use of the data, or the confidential treatment of answers. The importance of retaining each respondent was emphasized.

Next to be covered were the different aspects of the present wave of interviews, the experiments being used, a question-by-question review of the questionnaires, and any changes in field procedures from those of the previous wave. The discussion of each question included its purpose, possible answers, problems that might arise, and methods of solving these problems. An attempt was made at this point to relate the answers to later data analysis, showing the need for careful field work and the importance of complete and accurate data. For each wave, the interviewers were given new instruction manuals incorporating the procedures to be used on that wave. Verbal presentation supplemented the written manual and was also used to clear up questions raised in the meeting.

On the farm study (M4), some additional training procedures were used. First, a copy of the new questionnaire for that wave and written instructions were included with the letter to the interviewer informing him of the training session. At the meeting, little time was spent in reviewing the questionnaire. Instead, each interviewer was given a copy of the new questionnaire with fictitious feedback information filled in.[34] The field director then gave answers to be filled in for that wave as if he were the respondent. Completed questionnaires were collected and taken back to the office for detailed editing. A record was kept of all mistakes, blanks, and so forth, and memos were sent to all the interviewers pointing out errors and suggesting ways to improve the quality of their work. The filled-in fictitious questionnaires were returned with the memos to the interviewers so they could see their mistakes.

At the end of this review session, the interviewers were given four or five assignments as a start. These had to be completed and edited

[34] For the regular assignments, each interviewer would receive for each panel member information from the preceding interview. This feedback information was filled in on the new questionnaire form and consisted of holdings reported previously and names of institutions. The interviewer was to obtain the current balance in the account (not filled in from previous wave) and bring other details up to date where relevant.

thoroughly by the office before more assignments were given. In this way, many mistakes were caught early in the wave, before they became common practice.

On such a panel-type operation, it appeared that the inter-wave meetings contributed much to obtaining accurate and complete data. This was especially true when there was a time lapse of a few months between waves.

End-wave Meetings

After the completion of each wave, interviewers were requested to attend an end-of-the-wave meeting, which had three purposes: to clear up any field problems remaining from the wave just completed; to determine which areas of the interview and the questionnaire gave the most trouble and how these situations were handled; and to improve interviewer morale through discussion of common problems and the sharing of experiences. An additional purpose was to lay the groundwork for the next wave of interviews to be conducted approximately three months later.

The meetings were held not later than one week from the time the last interview was completed for that wave, while experiences were still fresh in the interviewers' minds. A permissive atmosphere was maintained, so the interviewers would talk openly about their own personal interviewing problems. These individual problems often proved to be general problems.

In contrast to the structured training session at the start of the wave, the end-wave meeting took the form of open discussion. Control was maintained by the field director, who presided at these meetings. In addition, a staff analyst was also present to record weak areas of the just-completed wave and to use these experiences to avoid mistakes in designing the questionnaire and field procedures for the following wave.

The end-wave meeting was especially useful for clearing up any remaining details of the just-completed wave. Problems of completed interviews with blanks, unclear answers, and so forth could be discussed with the interviewers. The interviewers turned in all remaining assignments which were being held in the field, often with the hope of obtaining interviews with panel members so far not available, temporarily out of town, or busy. At the conclusion of this meeting, the wave was officially closed.

The final points covered at the end-wave meeting were the tentative plans for the following wave. Subjects included were the approximate date for the start of interviewing, who would be interviewed, (all panel members or only half of the panel members), the approach to be used, and other known experiments and procedures to be followed. The inter-

viewers were therefore likely to feel more involved with the study, since they knew what to expect on the next wave.

Of all the end-wave meetings, the last one at the end of each study proved to be especially rewarding. The interviewers could then feel free to talk about aspects of the study which they may have suppressed in order to maintain good job relations during the study. Some of the more valuable points mentioned by the interviewers at the last meetings follow.

Study M2

1. Importance of interviewers' knowledge of financial terms. Possibility of having separate briefing sessions with one session on review of terms.
2. Usefulness of a mid-wave meeting to stimulate morale, especially in the early waves of an operation.
3. Completion of one or two assignments by an interviewer and no more until these have been checked by the supervisor.
4. Notification of interviewers as to when to expect pay checks, and promptness in paying them on that date.

Study M3

1. Helpfulness of more instructions placed right on the questionnaire forms, such as instructions to cover all members of the savings unit and to probe for additional holdings.
2. Desirability of more attitudinal questions, since they were extremely useful in maintaining respondent rapport.
3. Possibility of talking with interviewers individually to solve personal problems instead of having mid-wave meetings.
4. Appreciation of the initial set of written instructions which proved to be highly useful even though they seemed overwhelming at first.

Study M4

1. Desirability of having the interviewers in a future farm study interview an actual farmer during the initial training sessions.
2. Possible usefulness of advance training on income tax forms and Farm Bureau Management Records.
3. Damage of some attitudinal questions to rapport.
4. Resolution of possible personality conflicts by having each interviewer rate the cooperativeness of his panel members on the first wave and switching uncooperative members to other interviewers on the next wave.

At the last meeting of Study M4 interviewers, an additional method of obtaining information from them was used. Enclosed with the letter sent to the interviewers informing them of that meeting was a list of

questions about certain aspects of the study. The interviewers were asked to bring their answers with them to the meeting. In this way, they had a chance to give more thought to their answers and to suggest new ideas.

Recommended Training Procedures

The training procedures described on the preceding pages appeared to fulfill all the necessary requirements. Indeed, questionnaires distributed to the interviewers at the end of the initial sessions in Studies M3 and M4, and filled in anonymously, indicated general satisfaction with the procedures and with the time allotted to each topic. The only criticism was that some of the interviewers felt that too much time had been wasted by letting interviewers talk about unimportant subjects and personal experiences. Nevertheless, it was felt desirable to allow considerable discussion of this sort rather than to cut off further questions.

The dummy interviews, the qualifying take-home examination, and the practice completion of questionnaires at the later wave meetings appeared to have been particularly useful devices for training the interviewers and for clarifying the type of information being sought. The presence at all sessions of a project analyst, in some cases the project director, also appeared to have been highly worth while, serving to convey to the interviewers more of a feeling of the importance of the study and at the same time making it possible to answer any technical questions that arose.

On the panel aspects of the operation, the inter-wave training sessions seemed to be essential. Such meetings not only helped make sure that the interviewers were fully cognizant of changes in the questionnaire, but had also not forgotten what the survey was all about and how to handle particular situations as they occurred. These meetings also served to maintain interviewer morale, for which purpose it was found of particular value to review the experiences on the previous wave and to point out errors and omissions that might have been made at that time.

The end-wave meetings at the completion of each wave also proved to be worth while. Besides giving the interviewers an indication of appreciation for their services, these meetings were highly useful as a basis for designing the questionnaire for the following wave and for avoiding earlier mistakes. However, such meetings were not treated as a substitute for a pre-wave meeting to review the new questionnaire and operating procedures.

Some means of determining the effectiveness of training came from three distinct areas. The response and pick-up rates comprised the first of these. The improvement in training procedures from wave to wave

was to some degree reflected in these rates. However, many other variables were operative which may have accounted in part for the improved response and contact rates. Since each study was slightly different, it was not possible to compare response and pick-up rates between studies.

The second measure of effectiveness was to be found in the amount of supervision required. As training procedures improved from wave to wave and from study to study, the need for supervision decreased; that is, interviewers tended to become their own supervisors and catch their own errors.

The third evaluation of training effectiveness came from the interviewers themselves. The interviewers' reaction to the training was that it was adequate to good. The few complaints about certain aspects of training were resolved with improvements in the training as the project progressed.

Needless to say, these recommended training procedures need to be tested under controlled experiments to establish their true value. At the same time, other possible training procedures should be investigated to determine the best training to employ in future financial studies.

V. INTERVIEWER SUPERVISION

The purpose of interviewer supervision on a personal interview study is to see that complete and accurate information is obtained from all respondents. There are three functions involved. The first is to see that written and verbal instructions to interviewers are carried out in a manner consistent with the original plan of the study. Interpreting these instructions for handling specific, unusual problems is included in this function.

The second function of supervision is to identify interviewers who are not meeting the standards of completeness and accuracy set for the study. The identification of these interviewers on the basis of their performance has a number of uses. First, more effective interviewers can be selected for succeeding waves on a panel operation. Second, interviewing organizations can improve the effectiveness of their permanent staff of interviewers. Third, it may prove feasible to set up a sequential analysis to identify ineffective interviewers as interviewing progresses on a single interview study.[35] Ineffective interviewers can then receive further training or can be dismissed. Fourth, when trainees are not formally hired until interviewing performance on pilot studies or pretests is evaluated, it is possible to hire only the more effective trainees.

The final function of supervision is maintaining good interviewer morale. This function is interrelated with the other two, and all are necessary for effective supervision.

This chapter will cover these three functions in the following manner. The first part will review the procedures of supervision employed on Study M3 and will present a quantitative method for identifying effective interviewers on the basis of interviewing performance. The second part will cover those aspects of supervision on the other project studies, which differed from the supervision on Study M3. Next, interviewer and supervisor compensation used on the project studies will be discussed. A summary of the findings and recommendations for the future will comprise the last part of this chapter.

[35] A similar type of analysis, though one which is not sequential, is proposed by W. E. Deming in his book, *Sample Design in Business Research* (New York: Wiley, 1960), p. 250.

Supervision in Study M3

A detailed discussion of the procedures of supervision employed on Study M3 will be presented. Unless otherwise indicated, similar procedures and practices were employed on the other project studies. Study M3 was selected because validation data were available which facilitated a more rigorous evaluation of interviewer performance. In addition, Study M3 culminated the work in metropolitan areas since, Study M4 was conducted in a farm area.

Selecting the Supervisor

The function of a field supervisor in Study M3 was limited to editing questionnaires and resolving questions and problems of the interviewers. This was done because the location of the sample area was relatively close to the project headquarters, enabling the field director to maintain close touch with the interviewers.

Two supervisors, hereafter referred to as editors, were hired to help with the field supervision of the 19 interviewers. One editor was a 36-year-old woman with considerable market research interviewing and supervisory experience. The other editor was a 42-year-old woman with a full-time job, a business college background and also considerable interviewing and supervisory experience. The latter editor did not do any interviewing on Study M3, whereas the former interviewed on all five waves. One of the principal experiments of the study consisted of testing a highly structured approach on half of the sample and a highly unstructured approach on the other half of the sample. Interviewers were given both types of assignments and each editor was trained to cope with the problems arising from each approach.

Interview Assignments and Reassignments

Interview assignments were sent from the project office directly to the interviewers in three separate mailings, at one-week intervals. To facilitate supervision, lists of assignments were sent to the editors who urged the interviewers to make personal contact at these sample addresses within a few days. The purpose of this quick contact was to optimize the value of the advance letter sent to all sample members.

On the first wave, all noncontacts and refusals were reassigned by the editors to different interviewers. This procedure resulted in obtaining additional interviews, thereby increasing the response and contact rates. Refusals and noncontacts were not reassigned on later waves unless there appeared to be a possibility that a new interviewer could obtain an interview. The editors also reassigned sample members if an interviewer quit,

was dismissed, or could not complete his assignments by the deadline date for that wave.

Training and Retraining of Interviewers

Interviewers were trained primarily by the field director. However, before each training session, the editors were briefed on the content of the

FIGURE 8. REMINDER NOTES FOR WAVE 2: STUDY M3

Checklist for Handling Each Assignment

A. Before the Interview
   1. Review Wave 1 IRF.
      a. When, where, and who (best time, place, and person to interview).
      b. Attitude of the panel member.
      c. "Summary Comments" and "Interviewer's Notes."
   2. Study "Problems and Comments" sheet if with assignment.
   3. Review "Background Form" (III-2).
      a. Date of last interview.
      b. Family composition.
   4. Look over the "Recording Form" (III HA2, III HS2, III CA2, or III CS2).
      a. Approach being used.
      b. Note if there is any missing information.
   5. Read Wave 2 advance letter.
      a. Correct name and address if in error.
      b. Note any special circumstances in letter.
   6. Have extra cards A, B, and C with you.

B. During the Interview
   1. Follow instructions for the approach being used.
   2. At end of interview review information given, filling in all blanks.

C. After the Interview
   1. Correct name and address on carbon of advance letter and mail directly to Champaign.
   2. Edit thoroughly Wave 2 IRF, the Background Form, and the Recording Form. If any information is missing or not clear, correct before sending to the editor.
   3. Send to the editor:
      a. III-IRF-2.
      b. Background Form (III-2).
      c. Recording Form (III HA2, III HS2, III CA2, or III CS2).
      d. Wave 1 IRF.
      e. Problems and comments sheet, if any is included.
   4. Record of your bill:
      a. Date interview completed.
      b. Interviewee number.
      c. Interviewee initials.
      d. Rate from lower right hand corner of Wave 2 IRF.

session and their reactions to proposed procedures were secured. In addition, both editors had to train interviewers who could not attend some of the later wave sessions, and in some instances they had to give further training to interviewers who were having particular problems.

As training improved on each wave, a continuing effort was made to have each interviewer be his own editor. For example, on Wave 2 the interviewers were given a one-page instructional sheet called "Reminder Notes," which was a checklist for handling each assignment (see Figure 8). The editors' work was greatly reduced when the interviewers followed the checklist.

Returning Completed Work

Completed assignments, regardless of whether they were interviews, refusals, or noncontacts, were to be sent to the editors by 9:00 a.m. on the day following their completion. This compelled the interviewers to edit and complete assignments before the details were forgotten. This also made it possible for the editors to reassign noninterviews and for the office to send thank-you letters soon after the interviews were completed. To facilitate mailing, stamped envelopes addressed to the editors were enclosed with the assignments when they were given to the interviewers. If completed assignments, upon receipt by the editors, had no editing corrections, they could be sent to the project office. If there were minor errors, these were usually corrected through phone calls to the interviewers. If major omissions of information were involved, the editors returned the assignments to the interviewers for re-editing or for reinterviews with the sample members to obtain the missing data. These procedures, it was felt, forced the interviewers to edit their own questionnaires, and this reduced the frequency with which incomplete questionnaires were sent to the editors.

On Wave 5, the interviewers returned all completed assignments directly to the project office rather than to the field editors. On the previous four waves, the interviewers had been conditioned to look over their work carefully before sending it to the editors. On the last wave, it was felt that the time schedule could be better controlled at the office level, and this method proved very satisfactory. In a meeting at the end of the study, the interviewers expressed the feeling that editors were essential for the first wave and possibly for the second wave, but that there was no real need for them on subsequent waves.

Identifying Effective Interviewers

Five methods were used in the identification of good interviewers: (1) determining the quality of their work from the evaluations of editors

FIGURE 9. EDITOR'S WEEKLY REPORT: STUDY M3

Wave_____
Week ending Saturday_____

Interviewer																			TOTAL
Assigned																			
Interviewed																			
Deceased or moved																			
Refused																			
Non-contact																			
Still holding																			

WEEKLY REPORT_____

Supervisor_____

in the field and editors and coders in the office; (2) evaluating their work through the use of "The Editor's Weekly Report"; (3) spot checking to estimate the quantity and quality of their work; (4) changing interviewers on a later wave; and (5) employing a quantitative method. The validation data were used to evaluate these five means of identifying effective interviewers.

Editing

Editing consisted of a detailed check of the questionnaire and of the Interviewer Report Form (Appendix C) for blanks, unclear answers, obvious inconsistencies, and unclear explanations of unusual situations. The editors noted excessive "don't know" answers and question refusals in the interviewers' work and discussed this problem with them. Formal records of each interviewer's performance were prepared, based on office coding and editing. The field editors were informed of office tabulations so they could watch or retrain poor interviewers. On each succeeding wave, this record of errors was used as a basis for interviewer training. At the end of each wave the interviewers were given a report of their performance on that wave as well as a summary of the performance of all interviewers.

Editor's Weekly Report

To identify interviewers who were procrastinating in completing assignments, the editors were required to prepare and send to the office the "Editor's Weekly Report" (see Figure 9). As its name implies, this report was sent weekly to the field director, and gave a quantitative picture of the field operations as of midnight Saturday. This form was useful in spotting inactive interviewers and in expediting completion of the field work.

Spot Checking

On Wave 3, a spot-check procedure was instituted on the basis of validation material. If the known financial holding was listed on the questionnaire, it was assumed that the interviewer had made the interview and no check was made. If the known holding in the financial institution was not reported, a post card was sent to the respondent ostensibly seeking information on the length of the interview and on the interviewer's characteristics. Such a post card is shown in Figure 10. A total of 80 cards were sent and 62.5 percent were returned. All of the sample members indicated they were interviewed, although two gave their interviewers a poor rating. Of the 50 returned, 23 gave additional written comments, most of which were favorable. A sample was picked from the 30 who did not return the post card and approximately 15 phone calls were made to check if the interview had actually occurred.

FIGURE 10. SPOT-CHECK POST CARD: STUDY M3

The interview on _____ took No._____

- ☐ less than 15 minutes
- ☐ 15 to 24 minutes
- ☐ 25 to 34 minutes
- ☐ 35 to 44 minutes
- ☐ 45 to 59 minutes
- ☐ one hour or more

The interviewer impressed me as follows:

- ☐ Nice person to talk to
- ☐ Quiet
- ☐ Intelligent
- ☐ Neat, well-dressed
- ☐ Tactful
- ☐ _____
- ☐ Aggressive, pushy
- ☐ Not very bright
- ☐ Overly friendly
- ☐ Talkative
- ☐ Poor appearance

Comments _____

No falsification was uncovered by these calls. It was felt that the primary value of the use of the post cards was in forestalling interviewer cheating, as interviewers were informed during the initial training sessions that this type of spot check would be made.[36]

Changing Interviewers

At the initial training sessions, interviewers were informed that half of their panel members would be reassigned to other interviewers on the third wave. Although the main purpose of this experiment was to explore the possibility that the new interviewer might pick up information missed by the earlier one, the interviewers were undoubtedly aware that this procedure would also serve to uncover falsified interviews. In addition, knowing that this procedure was to be used may well have motivated the interviewers to do a more thorough job of interviewing. No appreciable difference in response and pick-up rates was observed between panel members who were reassigned and those who were not.

Using a Quantitative Method

For Study M3, the pick-up rate (response rate times the completeness rate) was employed as the criterion of interviewer effectiveness. Where such validated criteria are not available, other variables must be employed. The present analysis evaluates the extent to which these other variables could have been used to identify interviewers who had a high pick-up rate on Study M3.

[36] Based on a recent experiment, a question may be raised as to the value of postcards to detect interviewer cheating. "In this experiment, ten people selected at random from the Chicago telephone directory were sent thank-you letters, on University of Illinois stationery, for granting an interview on their finances. Although these people were not actually interviewed, five returned the postcard indicating the length of the interview and their opinion of the interviewer!" Robert Ferber, *The Measurement and Control of Errors: Savings Data, op. cit.*, Chapter 13.

The following variables may be calculated for most survey field studies:

1. Response rate.
2. Percentage of ambiguous (unclear) answers.
3. Percentage of refusals of specific information.
4. Percentage of respondents using records.
5. Percentage of questionnaires evaluated as "less than fully complete" (interviewer evaluation).
6. Average length of interview.
7. Variability in length of interview.
8. Percentage of interviews in which husband and wife both participated.
9. Mean number of specific holdings reported.

The relationship between each of these variables and each interviewer's pick-up rate will be evaluated first. Two types of statistical analysis will be employed. The first is correlation analysis, using the coefficient of determination corrected for degrees of freedom (r^2).[37] The other test employed is the Mann-Whitney U Test.[38] This is used to test the significance of the difference between the scores of one interviewer group and those of another. Its primary drawback is that the difference between only two groups of interviewers can be tested at a time.

1. *Response rate.* The response rate is frequently employed as an indicator of interviewer effectiveness,[39] since it is assumed that the interviewer who does well at the door will also be effective in the interview. Although significant, an r^2 of only .18 was obtained between the pick-up rate and the response rate. The direction of this relationship was positive. In addition, an r^2 of .05 was obtained between response rates and completeness rates. This did not differ significantly from zero.

In view of the importance attached to the response rate as a means of evaluating interviewer effectiveness on sample surveys, these findings suggested that a much more vigorous examination of the relationship between response rates and interviewer effectiveness was needed.

2. *Percentage of ambiguous answers.* The most frequent type of ambiguous answer occurred when the interviewer left a question blank

[37] Since the sample size is the same for the coefficients of determination presented in this section, it might be noted that an r^2 of .121 differs significantly from zero at the 5 percent level, and an r^2 of .266 is significantly different from zero at the 1 percent level. In this section, all r^2 values are corrected values and, if reported significant, are significant at the 5 percent level unless otherwise stated.

[38] See Sidney Siegel, *Nonparametric Statistics* (New York: McGraw-Hill, 1956), pp. 116-27.

[39] Donald M. Hobart, *Marketing Research Practice* (New York: Ronald, 1950), p. 102.

where some explanation was required. It may have occurred because the respondent did not own an asset or had "no change" in the asset and the interviewer, under the pressure of the interview situation, failed to check the appropriate box. An ambiguous answer may also have occurred because the interviewer failed to do adequate probing. The number of ambiguous answers in a questionnaire tended to indicate something of the interviewer's thoroughness in work habits, either in terms of whether the questionnaire was edited or in terms of the thoroughness of the editing.

Ambiguities on four types of holdings were counted: savings accounts, checking accounts, life insurance, and debts. The number of these as a percentage of four times the number of interviews taken by an interviewer was the criterion used. The average per interview was 2 percent.

The corrected coefficient of determination for the percentage of ambiguities was zero for the pick-up rate, which suggested that the use of this variable to indicate over-all interviewer effectiveness was questionable.

3. *Percentage of refusals on specific information.* Some respondents granted interviews but then refused to answer certain questions. A "don't know" response was classified for the purposes of this analysis as a refusal. While in some cases a "don't know" answer may have been a truthful one, in others it was another way of refusing information. The measure used was the number of refusals and "don't know" answers recorded by an interviewer under the sections dealing with savings accounts, checking accounts, life insurance, and debts as a percentage of four times his number of interviews. A corrected coefficient of determination of zero was obtained between this measure and the pick-up rate.

4. *Percentage of respondents using records.* Two measures of the use of records were prepared. One was based on the percentage of reported holdings where records were used, including all types of assets and debts except charge accounts. The measure employed was the percentage of an interviewer's respondents using records on 25 percent or more of their reported holdings. An r^2 of .02 was obtained between this measure and the pick-up rate. This coefficient did not differ significantly from zero.

Of some interest was the fact that an r^2 of .01 was obtained between the use of records and the percentage of refusals on individual holdings. An r^2 of .01 was also obtained with the percentage of ambiguous answers.

5. *Percentage of questionnaires evaluated as "less than fully complete."* The measure used was the percentage of respondents whose reports of holdings of savings accounts were evaluated by the interviewers as "less than fully complete" (see Appendix C). An r^2 for this variable with the pick-up rate was zero.

A corrected coefficient of .33 was obtained between use of records and evaluation of completeness. The regression coefficient was negative. This indicated, as would have been expected, that the use of records by a respondent influenced the interviewer's evaluation of respondent cooperation.

6. *Average length of interview.* The length of the interview expressed in minutes was not related to the pick-up rate. The length of interview, however, did show a significant adjusted coefficient of .21 with the response rate. The regression coefficient was negative, indicating that interviewers with high response rates tended to take a shorter length of time in the interview. This may have reflected the inclusion of less cooperative panel members or basic differences in interviewer characteristics and techniques.

7. *Variability in length of interview.* This measure was prepared as follows. The mean length of interview with respondents in four different size categories of total financial holdings was computed for each interview. The time required for each interview was subtracted from the average for the size category and squared. These squared deviations were summed for each interviewer across all size-of-holdings groups. This can be summarized as

$$\sum_{i=1}^{m} \sum_{j=1}^{n} (X_{ij} - \bar{X}_i)^2,$$

where X_{ij} was the jth interview in the ith size-of-holdings category, n was the number of interviews taken by the interviewer in the ith size-of-holdings group, and m was 4.

The coefficient of determination for this variable with pick-up rate did not differ significantly from zero. However, a significant r^2 of .16 was obtained between this measure and the percentage of ambiguous answers.

8. *Percentage of interviews in which husband and wife both participated.* Interviewers were instructed to obtain joint interviews with husband and wife whenever possible. It was felt that more accurate reporting would be obtained in this type of interview. The findings from the study indicated that this was, in fact, true. Those interviews in which both husband and wife participated were significantly more accurate than those in which only one member of the savings unit participated.

The percentage of interviews in which both husband and wife participated was prepared for each interviewer. However, an r^2 of zero was obtained between this measure and interviewer pick-up rate.

Interviewer response rate was significantly related to the percentage of interviews in which both husband and wife participated. The r^2 was .22 and the regression coefficient was positive.

9. *Mean number of specific holdings reported.* Since one characteristic of the more effective interviewers was their ability to obtain mention of holdings more frequently than the less effective ones, the mean number of holdings reported by their respondents may have been larger. The holdings used were those with a minimum of respondent variability where the number held by a respondent was limited and where most respondents owned holdings. Three types of holdings were included: checking accounts, savings accounts, and non-charge-account debts. An adjusted coefficient of determination of zero was obtained for each of these holdings, yet the mean number of each of these holdings reported by respondents of the more effective interviewer groups was larger, though not significantly larger, than that for the less effective interviewer groups.

The criteria of interviewer effectiveness frequently employed on surveys for which no validation data are available are response rates, percentage of ambiguous answers, and percentage of refusals of specific information. The following regression was obtained using these variables.

$$\text{Pick-up rate} = 8.7 + \underset{(.245)}{.621z_1} - \underset{(.557)}{.285z_2} - \underset{(.253)}{.281z_3}$$

$$\bar{R}^2 = .18$$

$$\bar{S}_u = 8.6$$

In this equation $z_1$was the response rate, z_2 was the percentage of ambiguous answers, z_3 was the percentage of refusals of specific information, and 8.7 was the constant term. The number in parentheses below each net regression coefficient is the standard error of the coefficient. The $\bar{R}^2$ is the corrected coefficient of multiple determination, and the $\bar{S}_u$ is the corrected standard error of the estimate.

These variables explained about 18 percent of the variance in the pick-up rate of the interviewers, which was significantly different from zero. The net regression coefficient for response rates was the only one which differed significantly from zero. The reliability of estimates obtained with this equation, as reflected by the standard error of the estimate, was low when compared with that obtained with subsequent equations employing other variables.

If the interviewers were divided into thirds on the basis of their predicted pick-up rates, the actual pick-up rates for these groups could be compared. The results of such a grouping are presented below.

Predicted pick-up rate	*Completeness rate*	*Pick-up rate*	*Number of interviewers*
Highest third	67%	54%	6
Middle third	67	48	6
Lowest third	72	47	6
All interviewers	68	50	18

While in terms of the pick-up rate there was some tendency to select the most effective interviewers, this equation did not distinguish among the lower two-thirds of the interviewers. In fact, there was a tendency for the equation to eliminate the interviewers who would be more effective in the interview as indicated by the higher completeness rate of the lowest third of the interviewers.

An interviewer's performance in the interview once he is past the door is frequently evaluated by the percentage of ambiguous answers and the percentage of refusals of specific data. The measure of interviewer effectiveness in the interview employed in this study was the completeness rate. To what extent could the percentage of ambiguous answers (z_2) and of refusals (z_3) be used to identify the interviewers who were effective in the interview? The following equation was obtained.

$$\text{Completeness rate} = 74.7 - \underset{(.663)}{.430z_2} - \underset{(.308)}{.560z_3}$$
$$\bar{R}^2 = .08$$
$$\bar{S}_u = 11.0$$

The small amount of variance explained by these two variables indicates that studies in which they are used as criteria of interviewer effectiveness are measuring something different from what is measured by the completeness rate employed in the present analysis.

A number of different combinations of the nine variables were tested in an attempt to explain the varying pick-up rates of interviewers. Since the response rate is a major component of the pick-up rate, it seemed logical to include it. The following equation was the best discovered in terms of the criteria presented in Chapter III.

$$\text{Pick-up rate} =$$
$$20.6 + \underset{(.219)}{1.118z_1} - \underset{(.193)}{.450z_3} + \underset{(.068)}{.165z_4} + \underset{(.059)}{.136z_6} - \underset{(.054)}{.177z_7} + \underset{(.118)}{.231z_8}$$
$$\bar{R}^2 = .63$$
$$\bar{S}_u = 5.3$$

In this equation z_1 was the response rate of each interviewer, z_3 was the percentage refusing specific information, z_4 was the percentage using records, z^6 was the average length of interview, z_7 was the variability in length of interview, and z_8 was the percentage of interviews with both husband and wife.

The respective beta coefficients were as follows:

$B_1 = 1.174$, $B_3 = .420$, $B_4 = .375$, $B_6 = .479$, $B_7 = .539$, and $B_8 = .379$.

The correlation coefficient was significantly different from zero as was each of the net regression coefficients. The response rate stood out as

being of particular importance in selecting effective interviewers. The remaining variables were of about equal importance.

If the 18 interviewers were ranked on the basis of their computed pick-up rate, the highest third would have an observed pick-up rate 18 percentage points higher than the lowest third. In addition, as the following tabulation indicates, the middle third would have a rate midway between the two extreme groups, suggesting a continuous differentiation of interviewers by this regression equation.

Computed pick-up rate	*Completeness rate*	*Pick-up rate*
Highest third	78%	59%
Middle third	67	50
Lowest third	59	41
All interviewers	68	50

Since the completeness rate of the highest third is 18 percentage points above those of the lowest third, this equation did identify interviewers who were more effective in the interview as well as at the door.

These findings suggest several things. One is that effective interviewers can be identified on the basis of interviewing performance, which in turn suggests that more reliable regression equations might form the basis for a sequential analysis model which would signal when interviewers need additional training or possibly dismissal. Such a model could be useful on a one-time survey as well as on a continuing survey operation. The findings also suggest the need for further research on interviewer effectiveness. Since these equations evolved from Study M3 data, the findings presented here would require independent testing to establish their validity and reliability.

Interviewer Morale

An important part of the job of supervision is establishing and maintaining a high level of interviewer morale. Clearly, interviewer morale is an important factor influencing the completeness and accuracy of information obtained by interviewers. Yet, because of its subjective nature, it is difficult to identify the dimensions of interviewer morale and the factors which influence it. Further work on this important problem is needed.

One factor influencing interviewer morale is the interviewer's perception of the importance of the information collected. While the importance of the study can be communicated by the study and field directors, its importance may be indicated with equal or greater force by the actions of supervisors and the standards they set.

Interviewer morale is also influenced by the interviewer's perception of a respondent's willingness to report the information sought. As was

indicated earlier, a function of the training sessions in the project studies was to create favorable interviewer attitudes toward interviewing. The supervisor can influence interviewer attitudes through recognition and discussion of interviewer problems. Close contact between supervisor and interviewer, where problems can frequently be discussed, can contribute to favorable interviewer attitudes.

An interviewer's attitude toward his ability to deal with problems which arise also influences morale. Here again, a part of the supervisor's role can be viewed as an extension of the training program. Inevitably, unforseen problems arise in the field. If a supervisor is available, the interviewer can discuss a problem and resolve it immediately. As a result, on succeeding interviews the interviewer feels that he is able to handle such problems if they arise. In the project studies frequent letters and phone calls from the office were also employed to give the interviewer the feeling that he was being kept up-to-date and that he had expert advice available if problems arose.

As a further means of maintaining a high morale, response and contact rates were discussed at meetings during the wave and at the end of the wave. In this way, interviewers could evaluate their work. At these meetings, interviewers were also encouraged to discuss their problems openly. Not only were answers to these problems worked out, but interviewers could see that the other interviewers had similar problems.

Aspects of Supervision in Other Project Studies Which Differed From Study M3

Field Supervisors Not Used for Study M4

On Study M4, the farm study, all supervision was handled directly by the field director, and no field editors or supervisors were hired. The primary reason for this procedure was that the sample members lived in a three-county area covering approximately 3,000 square miles. As a result, interviewers were scattered correspondingly over a wide area to minimize travel time and expense. Since the sample area was close to the project headquarters, it was felt that little saving would have been achieved by having supervisors or editors maintain contact with the interviewers.

On Study M4, a policy was adopted of giving assignments to the interviewers based on how many assignments they were holding at the time. At no time were the interviewers to have a backlog of unworked assignments. Previous experience had shown that interviewers with many unworked assignments were likely either to do a poor job in order to complete the interviews or not to complete them by the deadline date.

To aid the interviewers in the completion of their assignments and to

reduce travel time, assignments were given by geographic areas. As had been done in the previous studies, a stamped post card addressed to the office was enclosed with each group of assignments sent to the interviewers. The return of this card notified the office that the assignments had been received. To complete the card, interviewers had to look over their material and indicate on the card what had been received. This, it was found, encouraged them to begin interviewing more quickly and, thus, to obtain the benefit of the advance letter. On the later waves, after rapport had been established, contacting the panel member soon after the advance letter had been sent did not seem to be as important as it had been on earlier waves.

On Waves 4 and 5 a deadline date was set for the completion of each assignment in order to obtain still greater control of the time schedule. For the majority of the assignments, the deadline date was approximately one week after the assignment was sent to the interviewer. This allowed time for the interviewer to get in touch with the panel member, make an appointment if necessary, and obtain the interview. If the interviewer was not able to complete an assignment by its deadline date, he had to call the field director and explain the delay. If the explanation was reasonable and if there was a possibility of an interview, the assignment was left with the interviewer and a new deadline date was set. In a few instances the interviewer was requested to send the incomplete assignment to the field office, and it was then either dropped or assigned to a new interviewer.

A close record of deadline dates was maintained so that if an interviewer neglected to call and explain why an assignment was not completed, he would be called by the field director. This procedure proved worth while and was instrumental in getting the field work done in one month compared with two or more months for previous waves and previous studies.

Return of Carbon Copy of Advance Letters, Study M4

On Study M4, the interviewers were requested to return the carbon copy of the advance letter in a separate envelope as soon as the assignment was completed. Therefore, when a carbon copy was received, the field director knew that the assignment had been completed and that the questionnaire could be expected in the mail within the next day or two. Interviewers were contacted and asked for an explanation if the completed assignment was not received within three days after this carbon had been returned.

Interviewer Morale in Study M4

When interviewers work by themselves without close field supervision,

there is a good chance that morale will suffer. In Study M4 interviewers were encouraged to get in touch with the field director at any time of the day or night if they had a problem. They, too, were contacted frequently — at least once a week — by phone, by letter, or by a personal visit. Care was taken not to give the interviewers too many assignments at one time, and pressure to complete assignments was kept at a reasonable level. The quantity and quality of each interviewer's work was kept under close observation, and if either appeared to be deteriorating the interviewer was contacted and the problem discussed with him.

When supervision was handled by the field director, tighter control was possible even though the interviewers worked more independently. The project staff knew what was wanted, and controls were set up so that no time was lost by having the assignments go through field supervisors who were not so familiar with all the needs of the study. Poor-quality field work was caught early and corrected quickly. Time schedules were maintained due to the use of deadline dates for each assignment. In addition, tight control facilitated the prompt payment of interviewers, an important factor in interviewer morale.

Compensation for Field Workers

Supervisors' Compensation

Since field work was subcontracted on Study M1 and because there were no field supervisors on Study M4, this description of supervisors' compensation will be related only to Studies M2 and M3.

Supervisors were paid on an hourly basis plus all mileage and expenses. They turned in a weekly time and expense sheet with an itemized record of all miles traveled each day, phone calls, postage, and supplies. They were not reimbursed for meals or other personal expenses.

For Study M2, the beginning hourly rate was $1.85. This was increased 5 cents on each succeeding wave, so that by Wave 5 the supervisors were earning $2.05 per hour. In addition, they were compensated at this same hourly rate for any interviewing they did outside of their supervisory functions.

For Study M3, a flat rate of $2.00 an hour was paid on all waves. If the supervisors did any personal interviewing besides their supervisory work, they were compensated for this at the same rate per interview as the other interviewers.

Interviewers' Compensation

Two very different methods of compensating interviewers were used. On studies M1 and M2, interviewers were paid on an hourly basis with expenses for mileage, phone calls, and miscellaneous items. On Studies

M3 and M4, interviewers were paid by the interview supplemented by hourly pay for meetings.

The hourly payment method was adopted at the beginning of the project in accordance with general survey practice and in accordance with the dictates of much of the literature on the subject. For Study M1 the interviewers were paid on an hourly basis by the interviewing organizations employed. This practice was continued for Study M2. It is generally argued that payment by the hour encourages interviewers to allow sufficient time to conduct the interviews and not to feel that rushing is necessary. To attract good candidates the rate offered was somewhat above the going hourly rate in the area. Interviewers were offered $1.65 per hour for all time spent on the study, including meeting and study time. In addition, interviewers were reimbursed for phone calls, postage, and stationery, and received 5 cents per mile for mileage (Figure 11). Furthermore, as an incentive to remain with the study, the hourly rate was raised 5 cents on each wave so that by the fifth wave the interviewers were earning $1.85 per hour.

Experience with this method of compensation brought out various shortcomings. For one thing, high variability in the cost per interview was apparent from one interviewer to another. In part, this may have been due to padding of time sheets by some interviewers. More likely, however, was padding of a different sort; namely, stopping at a sample address if it were near the place the interviewer was going, even though he had not really expected to find the sample member at home.

Another problem was that the system of compensation failed to provide an incentive for interviewers to complete assignments on time. Furthermore, the 5 cent increase per wave seemed to provide virtually no incentive for the interviewers to remain with the study. Interviewers who dropped out as well as interviewers who remained throughout the study felt that the additional pay did not influence their decision. Particularly pertinent in this respect were the comments of many interviewers that being paid on an hourly basis was degrading in view of their professional status in their regular jobs. Their feeling seemed to be that payment for work accomplished would be a more appropriate system. Moreover, complaints were registered about the amount of paperwork required to record hours worked and expenses.

After considering these results, it was decided to pay the interviewers on Study M3 by the completed interview. This approach, it was hoped, would offset the objections raised. Moreover, with strict control over the quality of the interviewing, it was felt that such an approach would enable interviewers to earn a more satisfactory hourly rate than was possible in the previous studies and would at the same time yield more

FIGURE 11. TIME AND EXPENSE RECORD: STUDY M2

Week ending Saturday_____

	Hours spent in						*Expenses*		
								Other	
Date	*Travel*	*Inter-viewing*	*Writing, editing*	*Meetings*	*Other (specify)*	*Total*	*Miles driven*	*Item*	*Amount*
Total									

Name_____

Address_____

_____

Date_____

reliable data. The interviewers would not have to spend time on fringe or unproductive activities such as filling in the time and expense record, or making two or three trips to an area for interviews with panel members living close together rather than trying to complete them all on the same trip. In addition it was hoped that they would be more efficient in trying to make contact — going to the back door as well as to the front door in trying to make contact at a sample address. In short, interviewer activities would be directed toward the completion of an interview and the obtaining of accurate and complete information.

The average rates per interview paid by the hour for Studies M1 and M2 were used as the basis for setting the rates per interview for Study M3. The rates established were $10 for each of the first 10 completed interviews, $13 each for all interviews over 10, and $15 for each interview obtained from a panel member who had previously refused another interviewer. Once the $10 or $13 rate was established, it remained constant for the remaining four waves, regardless of the interviewer. If an interviewer persuaded a panel member who had previously refused an interview to grant one, the rate for this respondent moved into the $15 bracket, where it remained. It was possible for this to happen on any wave.

These arrangements were made clear to the interviewers at the training sessions and were contained in the "Interviewer Agreement" (Appendix B), which each interviewer was required to read and sign. Interviewers were also told that payment would be made only after interviews had been completed and the questionnaires had been edited. If a questionnaire was not completed or if it contained many blanks, it was sent back for further work, and the payment of the bill for that interview was deferred.

From Table 8 it is apparent that the rates established for Study M3 were well below the average of Studies M1 and M2. However, the earnings of some of the more effective interviewers in Studies M1 and M2 were consistently below the rates established for Study M3. As a result, it was felt that the $10 and $13 rates were realistic. On Wave 1 of Study M3, the interviewers' reactions to these rates were closely watched. No apparent loss in morale or drop in quality of interviewing was observed. If the rates had proved to be detrimental, they could have been raised to the necessary levels. However, no such problems occurred. In fact, the interviewers seemed enthusiastic about how much they were earning. Much of the wasted time and motion had been eliminated whereas high response and pick-up rates were being maintained.

These rates covered all time and expenses required to obtain an interview, with the exception that interviewers were reimbursed at the rate of

TABLE 8. AVERAGE COST PER INTERVIEW ON ALL WAVES OF ALL STUDIES (DOLLARS)

Wave	Study M1	Study M2[a]	Study M3	Study M4
1	18.87[b]	23.11	16.87	14.79
2	18.46	20.61	13.62	13.15
3	18.23	15.42	13.23	14.35
4	18.19	14.41	12.58	12.49
5	19.02	10.03	13.68	13.92
Average	18.55	16.72	14.00	13.74

[a] The large decrease in the cost per interview of $13.08 from Wave 1 to Wave 5 was due mainly to the improvement of field procedures and control. This was the first study where the field was under the direct supervision of project personnel.

[b] This cost figure is relatively low because this panel operation had been preceded by a so-called "background interview" with the same panel members about six months earlier, so that much of the original contact work was out of the way by the first wave.

8 cents per mile for panel members living more than 10 miles from their homes; the rate applied only to mileage over 10 in any direction. Interviewers were also paid for training and study time at the rate of $1.50 per hour.

The written instructions stated that bills would be processed every three weeks. On those dates, all bills being held were sent to the University Business Office for payment. Interviewers were told to call the office if they had a check coming which had not arrived in a week or 10 days after the payment dates.

The method of payment by interview was also used on Study M4, with two modifications. During each wave the rate per interview was $10 for each of the first 10 interviews and $13 for each interview over 10. Once the $15 rate was established for reluctant panel members, it remained constant on all succeeding waves. The $13 rate after 10 interviews had the effect of speeding up the field operation, since interviewers were encouraged to reach the higher rate. The assigning of additional interviews, however, was at the discretion of the field director. Therefore, if an interviewer was doing work that was hurried and of questionable quality, he was not given more assignments.

A second change was that Study M4 interviewers were paid for excess mileage (over 10 miles) on all assignments worked, regardless of whether the outcome was an interview, a refusal, or noncontact. The purpose of this was to cover some of the interviewer's expenses incurred in attempts to contact panel members living far from the interviewer's home. Reimbursement for excess mileage on this basis seemed proper because farm respondents might be spread over a wide area.

All things considered, the procedure of paying by the completed

interview seemed to be much superior to that of paying by the hour.[40] In large measure, this was undoubtedly due to the professional background of most of the interviewers and the repeated emphasis placed on the necessity of obtaining complete and accurate information. As a result, there was little evidence that interviewers were rushing respondents to shorten the interview. At the same time, there was some incentive for interviewers not to prolong the interviews if they were not obtaining relevant information, because they were not then receiving any additional pay.

In terms of cost per interview, compensation by the interview was more economical than compensation by the hour, as is shown by the schedule of average cost per interview for each wave on each of the four studies in Table 8.

These data cover all costs connected with the interviews, including compensation for meetings, mileage expenses, and trips made by project staff members to the field. As is evident from this tabulation, the average cost per interview in the last two studies was appreciably below that in the first two. The cost shown for Study M1 is not directly comparable with the costs shown for the other studies because it was subcontracted. Nevertheless, this tabulation does suggest that payment by the interview, even at very respectable rates, is likely to be more economical than payment by the hour.

Recommendations for the Future

Continuous contact would appear to be the key to adequate interviewer supervision. If feasible, communication should be handled by a field director who is thoroughly conversant with the purpose and objectives of the study and with the types of data that are being sought. In large-scale studies this is not possible and field supervisors must be used. In such cases, the principle of continuous contact should still be maintained with the lines of communication going from the field director to the supervisors, and from the supervisors to the interviewers. This also indicates the need for extensive and intensive training and involvement of supervisors if they are to perform the functions of the field directors for smaller studies.

Particularly important to the maintenance of the quality of data desired are strict controls at the very beginning of an operation. During the training sessions interviewers should be told of the planned use of such controls, and these controls should be put into effect as soon as the field operation begins. If interviewers are given to understand at the very

[40] For a thorough analysis and comparison of these two methods of interviewer compensation, see Mathew Hauck, "Interviewer Compensation on Consumer Surveys." *Commentary, The Journal of the Market Research Society,* No. 14 (Summer, 1964), pp. 15-18.

beginning that incomplete or careless work will not be accepted and that they will be remunerated only if the interviews do meet certain standards, and if they see that these principles are enforced at the outset, they will be strongly motivated to carry out their assignments in a thorough manner.

In addition, with the maintenance of strict controls on the quality of interviewing, payment by the interview seems to be a much more efficient approach than payment by the hour. This is particularly true if professional people are hired as interviewers, for this method of compensation serves to place extra responsibility on the interviewers, while at the same time offering more rewards.

An important function of proper supervision is to avoid overloading interviewers with assignments. It would seem best to give each interviewer only a few assignments at a time, with a deadline date for these assignments. After *all* of these assignments have been turned in, a new group of assignments may be sent out together with a new deadline date. In this manner, tight control can be maintained over the flow of interviews. Also, this procedure serves to counteract the tendency of many interviewers to put off contacting sample members whom they feel may be difficult to interview. It is not unlikely that at times this very habit of tardiness makes a sample member less cooperative, especially when an advance letter had been received many days or weeks earlier.

If resources permit, a refresher training session after the first few days of interviewing, or after the first five or six interviews, is a very useful device for discovering common problems and for clearing up questions or difficulties that the interviewers may have encountered in the field. Such a meeting can also prove very useful for promoting data standardization.

The practice of having the interviewers edit their own questionnaires, although it is no substitute for office editing, appears to be of real value in reducing omissions and "don't know" answers. This is particularly true if the interviewers know that unsatisfactory questionnaires will be returned to them for additional (noncompensated) work.

Spot-check post cards and the switching of interviewers' assignments can be useful in reducing interviewer cheating, particularly when interviewers are told at the initial training sessions of their planned use.

Finally, a supervisor must evaluate the effectiveness of each interviewer. When interviewers are not meeting project standards of completeness and accuracy, they can be dismissed or retrained.

Thus many different aspects of interviewing performance must be used to obtain a reliable indicator of the completeness and accuracy of the data. The results presented in this chapter suggest that it is possible to develop better means of identifying effective interviewers on the basis of their performance.

APPENDIXES

APPENDIX A

INTERVIEWER QUALIFYING EXAMINATION

Study of Farm Family Finances

1. In your own words, please explain the objective(s) of this study, i.e., what we hope to gain from it._____

2. Suppose a farmer does not believe it is necessary for him to be interviewed. Which of the following explanations would be appropriate?

   _____ a. The selection was done in a purely random manner.

   _____ b. The refusal of even one respondent lowers the amount of information we have available.

   _____ c. We cannot substitute names.

   _____ d. None of the above.

3. Currently there are several reliable sources of family savings data, and this project aims to develop another source to be used as a check. T F

4. In each of the following situations, briefly explain how you would overcome the objections.

   a. A small acreage farmer cannot understand why his name was chosen and not the people down the road._____

   b. A wealthy farmer cannot understand why his name was chosen. Besides, he is too busy._____

c. A sample member states he does not have much savings and therefore does not have to be interviewed.

d. The farm operator and his wife are both at home. They refuse to be interviewed because there have been several "surveyors" around recently who have turned out to be salesmen.

e. The farm house is run down and poor looking. The farmer refuses to be interviewed because he never did like universities and refuses to have anything to do with them.

f. A middle-aged farmer refuses because he believes that the interviewer is just checking on his income tax report.

g. A sample member, while being interviewed, refuses to go any further because the questions are too personal.

h. A harried-looking housewife says, "I'm busy."_____

_____

_____

_____

_____

5. Which, if any, of the following is the recommended approach in contacting the farmer?

_____ a. Go to the respondent's house and attempt either to get an immediate interview or a firm appointment.

_____ b. Telephone the respondent and make an appointment to see him.

_____ c. Go to the respondent's home, fill in the classification data and make an appointment to go back when all the adult family members can be present.

_____ d. Go to the respondent's house and interview them if the entire adult family is present; otherwise, make an appointment to return when they are all present.

_____ e. None of the above.

6. (True or False) The Inter-University Committee for Research on Consumer Behavior is a branch of the Ford Foundation and was organized to conduct this study. T F

7. In your own words explain why the farm study is being done._____

_____

_____

_____

_____

8. During the interview the respondent digresses and goes into a long description of last year's poor production. You should:

_____ a. Change the subject quickly back to the interview.

_____ b. Say, "Yes, that's very interesting, but I know your time is precious so to get back to the interview..."

_____ c. Listen attentively and then ask whatever financial questions may be pertinent to the subject.

_____ d. None of the above.

9. Briefly explain why records are important and why every attempt should be made to get the farmer to refer to them at all times._____

_____

_____

_____

_____

10. If a respondent tries to avoid being interviewed, which of the following, if any, is (are) the wrong method(s) of proceeding?

_____ a. Put on a "hard sell."

_____ b. Say you will call again in two weeks.

_____ c. Make it clear that you are willing to come at any time that is convenient.

_____ d. Always try to forestall an outright refusal.

_____ e. None of the above.

11. Two different experiments are being used on the first wave. List three experiments and briefly tell what you must know before attempting to conduct an interview._____

_____

_____

_____

_____

12. What would you say to a farmer if he said this is his busy time and he has no time to stop and talk?_____

_____

_____

_____

_____

13. If a farmer does not comprehend the importance of the study, which of the following, if any, is (are) the correct way(s) to continue?

_____ a. Explain the fact that this study will bring to light important figures on the savings of the farm population.

_____ b. Restate the fact that their name will not be used.

_____ c. Stress the importance of each farmer in the sample and how he cannot be replaced.

_____ d. Ignore the questions of the farmer and go on with the interview.

_____ e. None of the above.

14. The respondent says he doesn't know how much money he has in his checking account, and it develops that he doesn't know offhand, but his checkbook is lying on top of the dresser upstairs. You should:

_____ a. Ask him to give you an estimate.

_____ b. Tell him that you will call back later for the information.

_____ c. Chide him for not being more cooperative, and try to shame him into looking at his records.

_____ d. Re-emphasize that the study is of nationwide importance, and that we are seeking complete and accurate information.

_____ e. None of the above.

15. (True or False) Under no circumstances should the panel nature of the study be mentioned until the interview is completed. T F

16. Within a given savings unit we want to interview:

_____ a. The oldest person in the savings unit.

_____ b. The person in the savings unit who has the most money.

_____ c. The person who makes the decisions on saving and borrowing.

_____ d. The person who keeps the records on spending and saving.

_____ e. The person who spends the most money.

_____ f. None of the above.

17. In connection with Card D (Dollar Brackets for Broad Asset Holdings), we are interested in obtaining:

_____ a. Only the holdings of the farm operator.

_____ b. An exact dollar amount for each holding from his records.

_____ c. Only in the holdings that the savings unit has. Leave other holdings blank.

_____ d. None of the above.

18. The farm operator is married and has 3 daughters, ages 18, 7 and 4. He indicates that he has only the farm, a checking account, and some government bonds, and his wife owns some stock. What is the next thing you would probe for?_____

_____

_____

19. (True or False) After you find out with Card D what assets the savings unit owns, you will not have to ask about the ones they do not own when you get to detailed asset holdings. T F

20. (True or False) In conducting an interview, always cover all questions in the order in which they are listed. T F

The following statements 21-48 are definitions of some of the terms that you should be familiar with for this study. If the statement is True put a T in the space provided. If the statement is False place an F in the space provided and correct the statement. The question will be counted wrong if it is marked False and not corrected or if the correction is in error.

21. A mortgage bond is held by an individual or a concern._____

22. Dividends paid on common stock are not fixed and usually depend on the profits of the firm during the previous year._____

23. For recording purposes, we want to separate cash from stock holdings in a brokerage account._____

24. Preferred stock pay varying dividends just like common stock. It is "preferred" because its holder has prior claim against the assets of the firm in case of liquidation._____

25. Public authority bonds are issued by a federal authority._____

26. A contract differs from a mortgage in that the purchaser receives title to the real estate after a specified amount is paid off._____

27. Any interest accruing to a Postal Savings account is added to that account and can be withdrawn when the certificate is cashed._____

28. A dwelling unit is a group of rooms with kitchen facilities. Thus, a dwelling unit may be a house, apartment, trailer, etc._____

29. Mortgage insurance is a form of endowment insurance._____

30. An annuity contract provides for the payment of a sum of money in return for which an individual is guaranteed this sum of money plus a stipulated interest in a lump sum at some future period._____

31. Endowment insurance provides a definite sum of money only to the policy holder's beneficiary after his death._____

32. Under straight life insurance, premiums may be payable until death, or premiums may be payable for a specified number of years._____

33. The farm operator is the person earning the largest income in the savings unit. In case of equal earnings, it is the older male in the savings unit._____

34. The denomination of United States Government Bonds is the amount receivable when the bond matures._____

35. Series E Bonds may be cashed in only after 10 years if you want to get any interest. If the bond is cashed before 10 years, the holder only gets back what he paid originally._____

36. Savings and loan associations have two kinds of savings accounts. They are (1) savings share accounts, where the interest is mailed to the owner of the account, and (2) investment share accounts, where the interest is added to the account._____

37. Group life insurance is a form of term life insurance. The members of the group usually hold certificates as evidence of their insurance._____

38. Interest on Series H Bonds, United States Treasury Bills, and United States Treasury Notes is sent periodically to the holder._____

39. If the holder of a savings life insurance policy dies, his beneficiaries receive an amount equal to the balance in the account._____

40. A savings unit consists of one or more related persons living in the same dwelling unit who pool half or more of their income and savings._____

41. A mutual fund sells its stock or shares to investors and then invests the proceeds in stocks and bonds of other corporations. Dividends are paid directly from these corporations to the mutual fund holders just as they pay stockholders direct._____

42. An investment club is a club to which a group of people belong into which each member puts a certain sum of money per week, month, etc. The club splits profits and dividends._____

43. The face value of a life insurance policy is the amount stated on the front of each policy that will be paid in case of death or at maturity of policy._____

44. A paid-up life policy is one for which all the premiums have been paid and therefore the policy is no longer in force._____

45. A checking account may be held in either a bank or a savings and loan association._____

46. Debenture bonds are secured by specific assets of the firm._____

47. If a savings unit owes money to a credit union, it should be recorded as an asset._____

48. If a farm operator does not know the value of his machinery, leave the question blank._____

49. In your own words, how would you explain to a farmer how he happened to be picked for this study?_____

_____

_____

_____

50. (True or False) For savings accounts (holdings and change forms) we want to know, among other things, the date of the last deposit and the date of the last withdrawal. T F

51. (True or False) Expected total income for 1960 is that of the farm operator only. T F

52. (True or False) We want to know the name of a mortgage holder only if the mortgage is owed to an institution. If a mortgage is held by an individual the name is not necessary--merely "mother-in-law," "uncle," etc., will be sufficient. T F

53. (True or False) Carrying charges are not to be included in the present amount owed on a debt. T F

54. In order to keep track of items you may want to recall for the next interview, you should:

_____ a. Write them under "Interviewer's Notes" on the IRF.

_____ b. Not write them under "Interviewer's Notes," because the information in this space is to be tabulated.

_____ c. Not write them under "Interviewer's Notes," because the IRF will not be returned to you on the next wave.

_____ d. Keep a separate file of notes on your panel members.

55. (True or False) A member of the family who is either looking for work or has been temporarily laid off is considered employed. T F

56. The respondent has a savings account, but knows of another institution where he can get a higher rate. He plans to open up a new account there. How would you record this?_____

_____

_____

_____

57. (True or False) The total investment in an annuity is the amount of the down payment. T F

58. (True or False) Only interview sample members who are presently engaged in farming. T F

59. In your own words, describe the step-by-step procedure from the time you receive your assignments until the completed interview is mailed in:

_____

_____

_____

_____

60. Explain briefly the meaning of a personal trust._____

_____

_____

_____

_____

61. If a stock does not sound as if it is on a "Listed Exchange," you should:

_____ a. Look it up in the paper.

_____ b. Not record it.

_____ c. Get the price from the respondent.

_____ d. Write "not listed" instead of the price per share.

_____ e. None of the above.

62. If you find out that a family is away on vacation for the next couple of months, what parts of the Interviewer Report Form do you fill out?_____

_____

_____

_____

_____

63. (True or False) The dollar amount the saving unit expects to receive in 1960 from all sources of income is to be totaled. T F

64. The farm operator owns five Series E Bonds, two of which are $50 denominations, one of which is $100, and two of which are $25; he also owns three $100 Treasury Certificates. Show how you would list these bonds._____

_____

_____

65. (True or False) With regard to insurance premiums, we are interested in what is paid and how often. T F

66. A checking account had a balance of $1538.25 on July 1, 1960, and at the time of the interview has a balance $1423.85. This would mean the balance on the holding form is:

_____ a. Up (U) by $114.40.

_____ b. The same (S).

_____ c. Down (D) by $114.40.

_____ d. None of the above.

67. If a family refuses to be interviewed, what parts of the IRF do you fill out?_____

_____

68. What does "Atyr" mean, and why is it used?_____

_____

_____

69. Explain the differences between accuracy and completeness._____

_____

_____

_____

_____

70. (True or False) The Classification Data (Part 2 of the IRF) can be left blank if an interview is obtained because all of the requested information will be recorded on the other forms. T F

71. (True or False) Someone in the savings unit has two insurance policies, one with Mutual of Omaha and the other with Mutual of New York. It will be sufficient for our purposes if you record them both as "Mutual." T F

72. Suppose you have to visit a family three times before you obtain an interview. The first time, August 23 at 7:00 p.m., no one is at home. The second time, August 25 at 4:00 p.m., the farm operator says he is too busy to be interviewed and you make an appointment for August 27 at 10:00 a.m. The third time, August 27 at 10:00 a.m., you obtain the interview from the farm operator and his wife. How do you record this information under "Contact Report" in the IRF?

Date	Day	Time	Where	Persons(s) talked to	Approx. age	Results of Contact
___	___	___	___	_____	_____	_____
___	___	___	___	_____	_____	_____
___	___	___	___	_____	_____	_____

73. Briefly tell what we want to know about life insurance on the C Form with regard to: Where did the money come from? or What was done with the money?

_____

_____

74. The respondent has bought a new insurance policy since July 1. Among other things on the change form, we want to know:

_____ a. Amount received.

_____ b. Amount that has been piad on the policy since July 1.

_____ c. Amount the policy is worth with a double indemnity clause.

_____ d. Face value of the policy.

_____ e. None of the above.

75. In the change approach if a checking account has been opened since July 1 we want to know the source of the money. If a checking account has been closed since July 1, we want to know the use of the money. If there has been a change in balance we want to know the source. T F

76. Consider the following questions as referring to the following family situation. The farm operator is a man in his late forties. He operates 210 acres. He has a wife and three children: daughter (19) a college junior, son (17) who is just finishing high school and helps the operator on the farm, and daughter (14) who just finished her first year of high school. The family lives in a neatly kept nine-room farm house.

a. On broad asset holdings, the farm operator replies that he and his wife have a checking account. When you are obtaining detailed information, the farm operator gives you the data on the account. Before going on, and in view of the family composition, what should you query about?_____

_____

b. The farm operator replies that he has no savings accounts and has all his investment tied up in the farm. In view of the family composition, what would be the next question?_____

_____

c. List four types of life insurance that the family might own._____

_____

_____

d. The wife says that she has some life insurance that her parents had taken out for her but which she had all but forgotten. She is not sure that it is still in effect. She says that it is just a nominal amount and is very vague about it all. Briefly, what would you do?_____

_____

_____

_____

e. The wife states that she is part owner (with her mother) of some savings bonds. She knows the number and denomination. Briefly, what would you do?_____

_____

f. If only the wife is mentioned as owning savings bonds, what would this prompt you to do?_____

g. The farm operator has to leave the interview situation and the wife says she will answer the questions. After a few questions, it appears she does not have the answers. What would you do?_____

_____

_____

Date_____ Name_____

Address_____

_____

APPENDIX B

INTERVIEWER AGREEMENT

Study of Farm Family Finances

Background and purpose

The study in which you have been engaged as an interviewer has as its objective the collection of accurate, up-to-date information on farm savings practices and attitudes. You have undertaken to cooperate in the study and assist in the performance of a very necessary part of it by utilizing your particular skills in an area of interviewing which demands independence of control and an objectivity at the interview level. The success of this study will be dependent upon the performance of those skills and their utilization by you; therefore, you will be given a great measure of freedom in the selection of time and method. The major concern of the study will be the results achieved by you, the interviewer.

General arrangements

You will have submitted to you the names and addresses of approximately fifteen farmers to be interviewed in your interview area. An attempt will be made to restrict interviews to a 10-mile radius of your home. If a sample member resides outside the interview area, you will be reimbursed at the rate of 5 cents per mile for every mile beyond the 10-mile radius each way necessary to contact the sample member.

You will be paid on a contract basis by the completed interview. The pay schedule for completed interviews is as follows:

a. For each of the first ten completed interviews on each wave, $10.00 per interview.

b. For all completed interviews over ten on each wave, $13.00 per interview.

c. For interviews on which a previous interviewer has received a refusal, $15.00 per interview. In addition, $15.00 will be paid for interviews with this panel member on each successive wave.

As an interviewer for this study, you are functioning as an independent contractor, not as an employee of the University of Illinois. Contract payments will be made to you on receipt of bills without any withholding for income tax, retirement, insurance, Social Security, or any like or dissimilar deductions.

It may be necessary from time to time to meet to discuss the review procedures and developments relating to the study. Ordinarily these meetings will take the form of a general briefing session at the outset of each wave of interviews, a review meeting at about the middle of each wave, and a final meeting at the end of each wave of interviews. The meetings will be set at a time and place most convenient to all interviewers. You will receive the sum of $1.65 per hour for attending these meetings. No travel time or mileage payments will be made for attending these meetings.

Interviewing

To give substance to this study and insure that your skills are advantageously utilized, here are a few general guides:

a. Interviewers are expected to complete about 12 interviews on each wave. In addition, interviewers are expected to attempt to make contact at the designated address within four days after receiving the names and addresses of the interviewees.

b. To produce the best results, all interviews should be conducted in the home of the sample member, or any other place conducive to privacy and convenient to the sample member. Interviews should not be conducted in a public place nor while neighbors and/or relatives are present.

c. A completed interview should cover all questions sought by this study and should contain no unexplained blank spaces.

d. Completed interviews should be transmitted by mail no later than 9 o'clock in the morning of the day following that in which they have been completed.

e. Information obtained from a sample member must not be discussed with anyone other than project personnnel.

f. It is essential that interviewers be available to interview on a part-time basis, principally evenings and weekends, for a period of one year.

I have read and understand the foregoing material included in this Interviewer Agreement.

(signed)_____

Date_____

APPENDIX C

INTERVIEWER REPORT FORM: Study M3

Interviewee_______________ Interviewer_______________

1. CONTACT REPORT (record all attempts)

When			Where				Results of contact					
Date	Day	Time	Home	Office	Other (explain)	Person(s) talked to	Inter-view	Resp. not home	Refusal	Appt. made	Other (explain)	Time in interview
___	___	___	☐	☐	___	___	☐	☐	☐	☐	___	___
___	___	___	☐	☐	___	___	☐	☐	☐	☐	___	___
___	___	___	☐	☐	___	___	☐	☐	☐	☐	___	___
___	___	___	☐	☐	___	___	☐	☐	☐	☐	___	___
___	___	___	☐	☐	___	___	☐	☐	☐	☐	___	___

IF NOT INTERVIEWED: Explain circumstances in detail.______________________________

____

____

2. CLASSIFICATION DATA (Fill in as complete as possible, even for refusals and non-contacts)

TYPE OF DWELLING

If House...	If Apartment...
Approximate value $__________	Approximate monthly rental $______
Condition of exterior__________	Condition of interior__________
Condition of interior__________	
____________________	

Approximate age of main wage earner________

Occupation of main wage earner_______________

Size of family_______________

Nationality_______________

Race_______________

3. ATTITUDE OF PANEL MEMBER

a. In your opinion, how accurate and how complete is the information that was given for each of the following holdings.

		Checking accounts	Savings accounts	Life insurance	Government bonds	Own business	Stock	Debts
ACCURACY	Fully so.....	☐	☐	☐	☐	☐	☐	☐
	Fairly so.....	☐	☐	☐	☐	☐	☐	☐
	Not much.....	☐	☐	☐	☐	☐	☐	☐
	Very little.....	☐	☐	☐	☐	☐	☐	☐
COMPLETENESS	Fully so.....	☐	☐	☐	☐	☐	☐	☐
	Fairly so.....	☐	☐	☐	☐	☐	☐	☐
	Not much.....	☐	☐	☐	☐	☐	☐	☐
	Very little.....	☐	☐	☐	☐	☐	☐	☐
Not applicable.....		☐	☐	☐	☐	☐	☐	☐

b. What was respondent's attitude toward the use of records in supplying the figures requested?_____

c. Did you have the impression at any time that the respondent did not know the figures too well which he gave you? ☐ Yes ☐ No ☐ Not sure Explain___

d. Did you have the impression at any time that any figures were deliberately being "doctored"? ☐ Yes ☐ No ☐ Not sure Explain_____

e. Did you have the impression at any time that any figures were being withheld or suppressed? ☐ Yes ☐ No ☐ Not sure Explain_____

f. Did you leave an interview evaluation form with the panel member?

☐ Yes ☐ No ☐ Not applicable

What was the respondent's reaction?_____

4. SUMMARY COMMENTS

Briefly summarize the respondent's over-all reaction to the interview. Please include any information which you feel may be helpful in understanding and analyzing the data of this panel member._____

_____

_____

_____

_____

_____

_____

_____

5. INTERVIEWER'S NOTES

This IRF will be returned to you on the next wave so use this space to record any information you think you may need. Following are suggestions.

Future contact arrangements

Who_____

When_____

Where_____

How_____

Any information which will make your interview on the next wave easier, touchy data areas or subjects, hobbies or other talking points, personal likes or dislikes, etc.

_____

_____

_____

_____

_____

APPENDIX D

IVCI

QUESTIONNAIRE: STUDY OF FARM FAMILY FINANCES

Budget Bureau No. 40R3150
Approval Expires 12/31/61

University of Illinois in cooperation with the Agricultural Research Service and the Agricultural Marketing Service, U. S. Department of Agriculture

Inter_____

Int'ee_____

I. THE FAMILY

	1 Operator	2	3	4	5	6	7
1. Relation of each family member in household to farm operator (Place * next to those present)							
2. Any others away temporarily? Where? (Add to above list)							
3. Age and sex of each member	____ M F	____ M F	____ M F	____ M F	____ M F	____ M F	____ M F
4. Marital status (M, S, W, D)							
5. Schooling (years)							
6a. Empl. status (E/n, H, R, S, O)							
b. Type of work, if employed							
c. Second job, if any							
d. (If farming) Pct of time on farm	____ %	____ %	____ %	____ %	____ %	____ %	____ %
7a. Social Security coverage?	Y N	Y N	Y N	Y N	Y N	Y N	Y N
b. Other pension plans? What plan?	____ N	____ N	____ N	____ N	____ N	____ N	____ N
8a. Who pay(s) farm bills? (Check)							
b. Who keep(s) track of family savings and debts? (Check)							
9. Family member in S.U.?	Y N	Y N	Y N	Y N	Y N	Y N	Y N

For the purpose of our study, we want to include only you, your wife, your children under 16 years old, and other family members who earn less than $600 per year and who have savings of less than $600 in their own name. Which of these people (besides you and your wife) does this cover? (Check yes or no box for each family member under 9.)

II. THE FARM AND OTHER REAL ESTATE

1. How much farm land are you operating altogether, either personally or with hired labor? _____ acres

a. How much of this land is owned wholly by you? _____ acres

b. How much of this land is owned partly by you? _____ acres

What proportion do you own? _____%

c. How much of this land are you renting or operating on shares? _____ acres

2. Do you own wholly or partly any other farm land--land which you do not operate personally or with hired labor? ☐ Yes, wholly ☐ Yes, partly ☐ No

a. How many acres? _____ _____

b. (If owned partly) What percent do you own? _____% _____%

3. Since 7-1-60, have you acquired or disposed of any land or real estate, that is land which you currently own (O), rent (R), operate on shares (S), or manage (M)? (If yes) For each piece, can you tell me if it was...

	Acq.	Dis?	Is (was) it O, R, S, or M?	Type of property	Where did the money come from? (What was done with the proceeds?)	(If rented) What is the yearly rental?	What is the current value of the. Land and buildings?	Land alone?
a.	☐	☐	_____ N	_____	_____	$_____	$_____	$_____ N
b.	☐	☐	_____ N	_____	_____	$_____	$_____	$_____ N
c.	☐	☐	_____ N	_____	_____	$_____	$_____	$_____ N

4. Since 7-1-60 how much livestock acquired or disposed of, or is number now same as then? (Card A)		Since 7-1-60 Acq.	S	Dis.	How much did you spend (receive)?	Any owned jtly? (If yes) What pct is yours?		Where did the money come from? (What was done with the proceeds?)
	N	☐	☐	☐	$		N	
		☐	☐	☐			N	
		☐	☐	☐			N	
		☐	☐	☐			N	
		☐	☐	☐			N	
		☐	☐	☐			N	
		☐	☐	☐			N	
		☐	☐	☐			N	
		☐	☐	☐			N	
		☐	☐	☐			N	
Any others? Y N								

5. What about machines, including attachments? (Card B) Acquired or disposed of any since 7-1-60?								
	N	☐	☐	☐	$		N	
		☐	☐	☐			N	
		☐	☐	☐			N	
		☐	☐	☐			N	
		☐	☐	☐			N	
		☐	☐	☐			N	
		☐	☐	☐			N	
		☐	☐	☐			N	
		☐	☐	☐			N	
		☐	☐	☐			N	
Any others? Y N								

6. Since 7-1-60, increased or reduced the stored crops on or off the farm?	Net incr	Net decr	On the farm? On	Off	How large a quantity was this?	What was its total current value?	Any owned jtly? (If yes) What pct is yours?	Where did the money come from? (What was done with the proceeds?)
_____ N	☐	☐	☐	☐	___/___	$_____	_____ N	_____
_____	☐	☐	☐	☐	___/___	_____	_____ N	_____
_____	☐	☐	☐	☐	___/___	_____	_____ N	_____

7. Do you have any...	N	Acq. since 7-1-60 or old ones paid off? Acq	S	Dis	Who do (did) you owe this to?	Atyr, what is net change in debt since 7-1-60?	Does this duplicate any other debt that you have mentioned? N	Y	Which	Records Y	N	A
Loans secured by mortgages, sales contracts, or other liens on:												
This farm	☐	☐	☐	☐	_____	$_____	☐	☐→	_____	☐	☐→	_____
Other farm land that you own	☐	☐	☐	☐	_____	_____	☐	☐→	_____	☐	☐→	_____
Town or city real estate that you own	☐	☐	☐	☐	_____	_____	☐	☐→	_____	☐	☐→	_____
Livestock and poultry	☐	☐	☐	☐	_____	_____	☐	☐→	_____	☐	☐→	_____
Autos, trucks, tractors, machinery and equipment	☐	☐	☐	☐	_____	_____	☐	☐→	_____	☐	☐→	_____
Growing crops	☐	☐	☐	☐	_____	_____	☐	☐→	_____	☐	☐→	_____
Appliances & other household goods	☐	☐	☐	☐	_____	_____	☐	☐→	_____	☐	☐→	_____
Other property or business that you own	☐	☐	☐	☐	_____	_____	☐	☐→	_____	☐	☐→	_____
Amounts borrowed on:												
Life insurance policies	☐	☐	☐	☐	_____	_____	☐	☐→	_____	☐	☐→	_____
Stocks and bonds	☐	☐	☐	☐	_____	_____	☐	☐→	_____	☐	☐→	_____
Unsecured debts:												
Cash loans	☐	☐	☐	☐	_____	_____	☐	☐→	_____	☐	☐→	_____
Open accounts owed to merchants and dealers	☐	☐	☐	☐	_____	_____	☐	☐→	_____	☐	☐→	_____
Medical bills, unpaid taxes, etc.	☐	☐	☐	☐	_____	_____	☐	☐→	_____	☐	☐→	_____

Notes to Appendix D:

I6a. "E/n" was the percent of employment based on a 40-hour week. If the interviewer recorded E/1.25, it meant that the family member had a full-time job and in addition worked ten hours a week at another job. "H" meant housewife, "R" equaled retired, "S" stood for student, and "O" meant "Other." The interviewer was to explain what the "O" stood for.

I9. The S.U. was the Savings Unit and was composed of those family members who fit the description following question 9.

II7. "Atyr" meant "According to your records." These words were to be used whenever the interviewer asked for amounts which would normally be found in some form of record.