A STUDY OF INTERVIEWER-RESPONDENT INTERACTION IN THE

URBAN EMPLOYMENT SURVEY

Final report submitted to:

Manpower Administration
U. S. Department of Labor
Contract No.
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Survey Research Center
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re A STUDY OF INTERVIEWER-RESPONDENT INTERACTION IN THE URBAN
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SUMMARY AND PRINCIPAL FINDINGS

Four sample groups of employed males (Negroes and whites, age groups 18 to 34 years and 35 to 64 years) were interviewed by white, female, middleclass interviewers. Each interview--a revised version of the Urban Employment Survey--was tape recorded, and the discrete items of verbal behavior of both the respondent and the interviewer were coded for analysis. The Urban Employment Survey was initiated by the Department of Labor to obtain information about employment and income problems of persons in urban slum areas. This study was undertaken for the Department of Labor because many aspects of the survey were highly experimental and required careful evaluation in order to better understand the results of the survey as well as to improve the techniques and questions.

On the average, about 500 verbal acts were coded for each of the 181 interviews taken. Forty-four per cent of these were respondent items and 56% were the interviewer. The number of interviewer codes was positively correlated with the number of respondent codes per interview. This suggests the existence of a "behavioral balance" rather than a pattern where the interviewer compensates for a low respondent behavior level by increased activity on her part.

The majority of interviewer behavior fell into three categories: (1) question asking, (2) probing, and (3) feedback. Most questions were asked correctly. Nearly all the probes used were non-directive; these seemed to produce more adequate answers and a wider range of behavior than directive probes did. Interviewers appeared to use feedback improperly, showing approval of inappropriate respondent behavior at least as often as reinforcing adequate responding.

Of the verbal behavior on the respondents' part, about two-thirds was devoted to giving direct answers to questions. There was a moderate amount of elaboration of answers, and a very low level of irrelevant behavior.

About one third of all verbal behavior (both respondent and interviewer) in connection with correctly asked questions came _after_ an adequate response was obtained; this

suggests that there was a large proportion of the interaction process which was not normally allowed for in the training of interviewers.

Negro respondents (of both age groups) and younger respondents (of both races) were asked more questions than were white respondents and older respondents.

Older respondents had a high "behavior activity level"; they exhibited more of almost all kinds of verbal activity than did younger respondents. Interviews with young respondents contained proportionately more questions, a higher percentage of adequate answers, and higher ratios of asking for and receiving clarification. There was a low proportion of other kinds of behavior, such as elaborating, inadequate answers, attempts at interruption, and probing.

The effect of race on verbal behavior was not great (compared to age), although definite differences in interraction patterns can be found between the two race groups. The main difference was: during interviews with Negroes, a higher proportion of interviewer behavior consisted of probing, and a higher proportion of respondent behavior consisted of giving answers requiring probing. In contrast, interviews with white respondents included a higher percentage of question asking and giving answers which did not require probing. While the interviewer-respondent interaction in interviews with Negroes was to-the-point, the interviews with whites showed verbal behavior patterns more typical of informal encounters; e.g., a higher percentage of elaboration and interruption attempts. Interviews with young Negroes showed less "behavior balance" (correlation between total amount of interviewer and respondent behavior) than did interviews with the other three sample groups.

Open-ended questions involved a greater amount of verbal behavior than did closed-ended questions. This was true within all four respondent groups, which indicates that the type of question is an important variable in determining the outcome of the interview.

An attempt was made to use the coded verbal behavior to identify and diagnose problems associated with specific questions. This report includes a list of questions involving problems, and tentative diagnoses of the causes. The results obtained by this approach seem to be reasonable: omission problems are confined mostly to contingency questions or questions which are to be asked only of some of the respondents.

Many of the questions which were incorrectly asked contain ambiguous parenthetical statements or involve awkward syntax. Inadequate answers were frequently given to questions which require the respondent to recall past events, or to questions having objectives which may not have been clear to the interviewers themselves. Inadequate answer rates often characterize questions that require a large number of verbal exchanges in order to obtain an adequate answer, questions that require detailed answers, and questions that present the respondent with difficult forced-choice answers. Further refinements in the diagnostic approach should enable us to pinpoint exactly the problems attending each question, as well as the most likely causes of such problems.

A major participant in all phases of this research was Thomas de Koning. Barbara King assisted. Thomas Tharakan advised on research design and sampling. Elizabeth Baker designed the computer programs. Special acknowledgement is due the interviewers and coders who made a major contribution to this research.

I. INTRODUCTION

From its modest beginnings, the personal interview, incorporated into a survey research design, has become a widely used vehicle for collection of information about people. Early attempts at collecting data on a mass basis pointed out the fragile nature of this kind of enterprise. If sampling were not done correctly, one might predict the election of a presidential candidate who was really about to experience a landslide defeat. If interviewers were not trained to ask questions correctly, the data would reflect, to a large extent, the expectations and opinions of the interviewing staff.

Today, the demands made on the technique of survey interviewing are enormous. There is a pressing need throughout government, business and the scientific community for the data which only survey interviews can provide. Because of this demand, the content of survey interviews has changed from the relatively simple requests for demographic information of the early decennial censuses to the highly sophisticated attempts to measure attitudes and "motivations," and to collect a wide variety of factual information which is not always easy for the respondent to recall.

While survey sampling theory and application have kept pace with these increasing demands, progress has been slow in the areas of questionnaire construction and techniques of interviewing. Survey sampling is helped tremendously by having solid foundations, such as probability theory. Unfortunately, the practice of interviewing does not have a single, comprehensive theory to draw upon. Thoughts about effective questioning procedures are drawn from the fragments of psychological and social theory or from experiences and common sense. Very little is actually known about what happens during the survey interview, or how the characteristics of the persons who participate affect the outcome of the interview. Before effective theories can be developed, descriptions and classifications of the material to be explained are needed.

The purposes of the study reported here are to provide basic knowledge about the kinds and amounts of behavior in one kind of personal interview, and to investigate the effects of certain respondent demographic characteristics on the verbal behavior of the interviewer and respondent during the interview.

A. PREVIOUS STUDY OF BEHAVIOR IN THE INTERVIEW

A previous study in the Survey Research Center Methodological Research Program was a first attempt to obtain basic descriptive data about what actually occurs during the interview (Cannell, Fowler and Marquis, 1968). Because it was a pioneering attempt, there were certain methodological shortcomings which this present investigation attempted to overcome.

The previous study of behavior in the interview suggested some important hypotheses. The main conclusion seemed to be that a whole spectrum of cognitive variables (attitudes, opinions, level of knowledge about sponsorship, reasons for cooperating and others) bore no simple or detectable relationship to what went on during an interview about family health. In addition, respondent demographic characteristics such as income, race, age, sex, and education did not account for a great deal of variance in the observed behavior. Of all the background variables tested, respondent age seemed to be the most highly correlated with how the interview progressed. Interviews with older respondents contained a high frequency of almost every kind of behavior measured and the interviewers tended to rate these interviews difficult to conduct. The sample for the previous study contained only a small number of non-white respondents. Although the occurrence of several kinds of behavior seemed to be correlated with the respondent's race, these correlations never approached statistical significance very closely. Therefore the present research sought to gain more information about the effects of respondent age and race on what happens during the interview.

Finally, the previous observation study indicated that, if there were any classes of variables which could predict the quality of reporting information, they were most likely to involve the actual behavioral exchanges between the interviewer and respondent while the interview was going on. The previous study was not designed to give a picture of the relative frequencies with which different behaviors took place and it also failed to record certain behaviors which later research has indicated may be crucial determinants of reporting accuracy. The present study, therefore, was designed to obtain a more exhaustive description of interviewer and respondent behavior and to be able to assess the relative frequencies with which each of the behaviors occurred.

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In the absence of a comprehensive theory of behavioral interaction in the interview, basic observational research is needed as a foundation for systematic acquisition of knowledge about the major variables affecting the validity of interview data.

Since two observation studies of the interview are available, comparisons between their results will be made when possible. Comparative data of this sort (if available for a wide variety of interview situations) are potentially useful for generating hypotheses about major cause-and-effect relationships in survey studies. However, the two kinds of interviews observed in the SRC studies are quite different. In the first study, the interview was about family health; most of the respondents were female and resided in 32 areas east of the Mississippi River. In most cases, one respondent reported for the while family and almost all of the questions were open-ended. In the present study, the interview concerned employment. All of the respondents were employed males residing in Detroit. The respondent reported for himself only, and many of the questions were "closed-ended." Methods of coding the behavior, and which behaviors were coded, differed between the studies also. Therefore, inferences from the comparative data should be made cautiously. It is hoped that as more observation studies are done, the comparative data will become increasingly useful and productive of hypotheses.

B. RESPONDENT AGE AND RACE

The extent to which demographic characteristics of interviewer and respondent influence or bias the information obtained in household interviewing is a recurrent question in survey research. Race and age are expected to be causes of response error because they are visible characteristics which may cue certain expectations, prejudices, and behavior patterns for the participants in an interview. Although a variety of studies indicate that race and/or age do affect the outcome of the interview, there are other studies which have failed to find this kind of bias. Such empirical evidence suggests that the relationship between demographic variables and reporting is not direct and simple.

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Cantril (1944) found that Negro respondents reported significantly more resentment over discrimination to Negro interviewers than to white interviewers. Robinson and Rohde (1946) compared the occurrence of anti-Semetic responses of respondents towards four classes of interviewers, and found that as Jewish traits of the interviewer (name and appearance) increased, the frequency of anti-Semetic responses decreased.

Athey et al. (1960) replicated the findings of Robinson and Rohde using Oriental, Negro, and white interviewers. White respondents gave more socially acceptable answers to an Oriental interviewer than to a white interviewer when interviewed on social acceptance of Orientals. Similarly, a Negro interviewer received more socially acceptable answers than a white interviewer from white respondents concerning the effect of integrating neighborhoods on property values.

The literature also contains several studies relevant to response bias attributable to age effects. While the older age range used in our research (35-64) does not include the senile, retired, etc., a few studies on the age effect are mentioned to indicate the kind of hypotheses in the literature. The effect of age difference between interviewer and respondent was reported by Ehrlich and Riesman (1961) who found that adolescent girls reported fewer instances of parental disobedience to older interviewers than to younger interviewers.

Similarly, Benney, Riesman and Star (1956) found that different age and sex combinations of interviewer and respondent resulted in different responses to questions concerning sex habits as a possible cause of mental disturbance. They attribute their findings to the effect of inhibitions related to age and sex roles in a sensitive area of communication.

Gergen and Back (1966) argue that old age disengages a person from society resulting in "no opinion" responses. Also, old respondents have a tendency to avoid fine discriminations and this is reflected in their choosing of only extreme answers. Gergen and Back cite empirical evidence which indicates that "no opinion" and nondifferentiation increase with age and that old respondents (60 years and over) are more likely than others to give extreme answers.

Studies which report no relationship between background characteristics and the results obtained by interviewing are less frequent than those that do report such a relationship. This may be due to the fact that studies which have to report inconclusive results tend not to be published. The number of studies which do report negative or inconclusive results is sufficient to question the direct relationship between demographic variables and reporting. Such studies include the following:

> David, M. Reporting of income by Negro respondents to Negro and white interviewers (1962).

> Bryant, Gardner, and Goldman. Responses concerning social relationships given to white and Negro interviewers (1966).

> Cannell and Fowler. Reporting of doctor visits (1963).

Findings such as the above do not indicate that there is no relation-ship between demographic variables and reporting but rather suggest that an adequate explanation of the effects of demographic characteristics on responses should include mediating variables.

This study is designed to test the hypothesis that demographic character-istics affect the kind of verbal interaction which occurs between interviewer and respondent. If such relationships are found to exist, it will be possible in future studies to discover how demographic characteristics mediated by the behavior taking place in the interview affect the validity of information obtained in surveys.

C. HYPOTHESES

A number of hypotheses about the effects of respondent age and race were derived for this study: in brief --

1. Based on previous research, it is expected that holding the number of questions asked constant, the number of respondent behaviors in the interview will show a high positive correlation with the number of interviewer behaviors.

2. Negroes will have a more difficult time with the questions and inter-acting with the white interviewer and, therefore, are expected to give more inade-quate answers, require more interviewer probing and clarification, and generally show more task-oriented behavior in the interview. White respondents will be more at ease talking to a white interviewer and will show more irrelevant conversation behavior.

3. Being less adept at casual conversation with white females, Negro male respondents are expected to be very task oriented, with higher amounts of all types of answering behavior and lower amounts of irrelevant behavior. Interviewers, recognizing the difficulty in establishing rapport with Negro respondents, will tend to use more feedback than in interviews with whites.

4. Young Negro males, because of hostility to the "White Establishment" will show low levels of behavior and refuse to answer more questions.

II. DESIGN AND PROCEDURES

The essential feature of this study design was a test of the effects of respondent age and race on the behaviors taking place in the Urban Employment Survey. Middle-class white women were the interviewers and employed Negro and white males in two age groups served as respondents. All interviews were tape recorded and every verbal behavior of interviewer and respondent was subsequently coded. A new scheme of categorizing behavior was developed to allow a wide variety of descriptive and analytic conclusions to be drawn.

A. EXPERIMENTAL DESIGN

Respondent race and age are the main independent variables; behavioral interaction between the interviewer and respondent is the dependent variable. Respondent age and race were combined in a 2 x 2 analysis of variance design which included the following four experimental groups of an expected 50 respondents each:

1. Employed younger white males (18-34 years),
2. Employed younger Negro males (18-24 years),
3. Employed older white males (35-64) years),
4. Employed older Negro males (35-64 years).

Attempts were made to control other variables which might otherwise be confused with or interact with respondent age and race. For example, interviewer characteristics were kept as homogeneous as possible and interviewers were assigned an equal number of respondents in each group. All respondents were employed and male. The Urban Employment Survey (UES) questionnaire was re-designed so that all respondents would be exposed to the same number and kinds of questions. Originally it was planned to control respondent education, income and residential area. However, such control was not practical and these variables are allowed to co-vary freely in this study.

B. SAMPLING DESIGN

The objectives of this study called for a research design which would be en efficient basis for making comparisons between the four groups specified above rather than for making overall population estimates. Therefore, four probability samples (one for each experimental group) were drawn from the population of Detroit, Michigan.

The four samples were drawn by classifying all of the city blocks into three groups based on 1960 census estimates; one group consisting of all blocks in which 80% of the dwellings were occupied by white residents, a second group of blocks in which 90% of the dwellings were occupied by non-whites, and a third group of all remaining blocks. A sample of blocks was selected from each of the three groups of blocks and a sample of five adjacent dwellings was selected from each of these blocks.

The following criteria were used to further select respondents within the sample households:

From the selected households in "white" blocks, one respondent from each white and each Negro household was selected. Because of differential sampling ratios used interviews from Negro households in "white" blocks were to be weighted by two in the analysis if population estimates were desired.* Interviews were taken in 100% of the Negro households and 50% of the white households discovered in "nonwhite" and "mixed" blocks.

For all blocks, the following age selection criteria were used to select one male, employed respondent for each household:

If a selected household contained both young and old eligible persons, the age category to be selected was picked at random (50% older, 50% younger). If the household contained only young eligible respondents, an interview was to be taken with an eligible person 100% of the time. If only older eligible respondents were found, an interview was to be obtained 50% of the time.

The resulting samples slightly underrepresented younger respondents in households with both a younger and older employed male.

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*This was not done for the analyses presented in this report. Therefore, behavior patterns of Negroes living in predominantly white neighborhoods are slightly underrepresented, a situation which is felt to make the data more representative of Negroes living in "poverty" areas.

C. RESPONSE RATES

Prior to the field work an analysis of data from previous studies was made as a basis for estimating the size of sample which would be required to meet the very stringent requirements of this study. The estimates proved to be grossly _under_ the number which was eventually needed. Major reasons for low estimates include the fact that there was a larger number of households without eligible respondents than was estimated and the response rate within households with eligible respondents was considerably lower than expected.

Shortly after the beginning of the field work it became evident that the initial sample was inadequate to reach the desired number of interviews and a second one was drawn. Table 1 shows response figures for these two waves in Column 1. Toward the end of interviewing period it again appeared that the sample was too small and two additional small samples, totaling 63 dwelling units were added. These latter were "skimmed" to obtain interviews and total effort for high response was not made. The second column shows response for waves 3 & 4. Because of these problems both the time estimated for the completion of field work and the costs were considerably in excess of estimates. It is for these reasons that total effort was not made for waves 3 & 4.of the sample. Response rates are given for the two partial samples separately. It is especially interesting to study rates for waves 1 & 2. Response rate for households with eligible respondents is very low. It is instructive to recall that interviewers were relatively inexperienced and that they were white middle class females. Since many of the segments were in ghetto areas, it was agreed prior to the study that if the interviewer felt in danger she should not go into a dwelling. In eleven segments (about 6%, see footnote on Table 1), interviewers felt it unsafe to contact people in the dwellings. They were reluctant also to make evening calls for reasons of potential danger, which accounts in large part for the high not-at-home and respondent-absent rates. There are differences in response rates for white, mixed,and Negro blocks. The differences are not due to a high number of refusals in Negro blocks, (most refusals were obtained at white households) but to the inability to locate respondents within daylight hours.

(INSERT TABLE 1)

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TABLE 1

RESPONSE RATES

		Waves 1 & 2	Waves 3 & 4
1.	Addresses in Sample	824*	63*
2.	Non-sample addresses		
	a. No eligible respondent at dwelling	457	39
	b. House vacant	53	1
	c. Address not a dwelling	12	0
	d. Language problem	1	0
	Total non-sample	523	40
3.	Dwellings with eligible respondents	301	23
4.	Non-Interviews		
	a. No one at home	72	11
	b. Respondent absent	16	5
	c. Refusal	23	0
	d. Other	9	0
	Total non-interview	120	16
5.	Number of interviews obtained	181**	7**
6.	Response rates	60%	30%

*Eleven segments (parts of blocks) were eliminated from the sample because interviewers felt too much personal risk was involved.

**Of the 188 interviews obtained 7 were unusable because the recordings were inaudible. The number used in the analysis was 181.

Response rate for each sub-sample (Waves 1 & 2):

    1. Negro Blocks   58%

    2. Mixed Blocks   49%

    3. White Blocks   69%

These figures are instructive and have been presented in some detail because they demonstrate a major problem in different race, different sex interviewers working in central city areas.

D. FIELD SAMPLING PROCEDURES

The following sampling and screening procedures were carried out in the field in order to obtain the correct representation of respondents within each race-age group.

(1) Block listing sheets from "white", "non-white" and "mixed" blocks were randomly assigned in equal proportions to each interviewer.

(2) Half of the block listing sheets for "non-white" and "mixed" blocks were pink and half were blue. If the block listing sheet was blue, interviewers had to interview at Negro households only. If the block listing sheet was pink, interviews were to be taken regardless of whether the dwelling units were Negro or white. The listing sheets for all the "white" blocks were pink.

(3) All males 18-64 years old were to be listed. Specific screening questions[*] were asked to determine whether these listed males were employed or not.

(4) Half of the cover sheets were marked "older" and half were marked "younger". For every dwelling unit, whether Negro or white, if there were only "younger" eligible respondents present, one was interviewed regardless of whether the cover-sheet was marked "older" or "younger". If "younger" was checked and there were only "older" eligible respondents in the household, no interview was to be taken. If both older and younger eligible respondents were present, a respondent was to be selected from the "older" or "younger" group as indicated on the coversheet. Selection between more than one respondent from either the "older" or "younger" group was done by means of a selection table.

E. INTERVIEWERS AND TRAINING

Four white, middle-class, female interviewers were recruited from the suburbs of Detroit and trained especially for this study. The Field Division of the U.S. Bureau of the Census furnished two experienced trainers from their Washington and Detroit staffs to conduct the classroom and self- study

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[*]The screening questionnaire is included in the Appendix.

training of these interviewers. The training given was especially comprehensive and was based upon well-developed program instruction material. The Survey Research Center staff provided training on the modified version of the UES-II questionnaire and provided field supervision and practice interviewing experience.

After completion of the classroom training, each interviewer conducted several role-played interviews which were tape-recorded and discussed with her by the researchers. In addition, each interviewer conducted five practice interviews in the field. These practice interviews were tape-recorded and commented upon before the field work commenced. Once the field work began, no feedback was given to the interviewers on their interviewing styles or mistakes. Specific questions initiated by the interviewers themselves about skip patterns, acceptable answers, etc., were answered, however.

F. QUESTIONNAIRE AND INTERVIEWING PROCEDURES

The questionnaire used by the Bureau of the Census in the 1968 Urban Employment Survey for the Department of Labor was adapted for this study in the following ways:

(1) Section I (UES I), The household listing sheet, was used in unaltered except that questions 16-25 dealing with age, education and service in the Armed Forces were asked of the respondent only. All UES I questions were answered by the selected respondent rather than anyone in the household as is the case in the usual survey.

(2) Section II (UES II), dealing with the respondent's present job and the hours worked on the job, was revised to eliminate the large number of skip patterns which existed in the original UES II. Most of the original questions were dropped.

(3) Section III (UES III, Sect. A.) deals with ways in which the respondent looked for work, job training, income and public assistance, his first regular full time job and place of birth and residency. Apart from changing twelve months to five years as the period in which the respondent looked for a job and certain rules for asking about additional income, this section of UES III was used unaltered.

(4) Section IV (UES III, Sect. B.) deals with the location of the respondent's present job and ways of getting to and from his job. This section of UES III was used unaltered.

(5) Section V (UES III, Sect. ..) deals with the respondent's attitude towards his job, his feelings about life in general and opinions about discrimination. Except for Question 12, dealing with discrimination on the job because of race, which was deleted since it was to be asked for Negroes only, this section was used unaltered[*].

Standard letters on official Survey Research Center stationary were sent out in advance to all selected households telling them briefly about the expected visit of the interviewer and assuring them of the confidentiality of the interview. Interviewers carried identification cards and briefly explained the content of the interview before beginning.

G. RECORDING BEHAVIOR DURING THE INTERVIEW

In order to code all verbal interaction using a detailed system of code categories, each interview in this study was tape recorded. The interviewer used a small, portable Sony TC-100 casette tape recorder (5-3/4" x 2-3/8 x 9-3/8", 3 lbs., 13 ozs.) equipped with automatic volume control and powered by a rechargeable battery pack. (Flashlight batteries or regular house current could be used if the rechargeable batteries failed.)

The interviewer showed the tape recorder to the respondent before beginning the questions and informed him that the interview would be recorded on tape. After receiving permission, the interviewer pushed the start button and placed the bi-directional microphone (cardioid dynamic type) near the respondent on a soft surface. The recording machine ran throughout the interview unless a long interruption occurred.

A 120-minute casette tape cartridge was used (60 minutes on each side). After the interview was completed, the tape cartridge was removed and identifying information written on it. After the day's interviewing assignment was completed, the interviewer ran each of the tapes recorded that day to the end, turned them over, and was ready to record on the reverse side the next day. The recording machines were plugged into a regular 110 v. A.C. outlet overnight (9 hours) to recharge the batteries.

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[*]Copies of the UES I & III may be obtained from the Bureau of Labor Statistics. The revised version of UES II used in this study is included in the Appendix.

Interviewers learned to operate the recorders quickly and benefitted a great deal from the simplicity of operation.

The tape recorders posed no unusual problems in terms of response rate. Only one respondent refused to have his interview tape recorded. Although a few respondents expressed interest in the recording process, most appeared to be unconcerned. Tape recorders apparently have become a widely recognized and accepted item in this country. No attempt was made to determine whether the presence of the tape recorder had any unusual effect on interviewer or respondent behavior. Several unpublished studies are available which indicate no effect of tape recorders on the kinds of answers obtained in the interview. These findings are probably generalizeable to the study reported here.

Most recordings were of high enough quality to be coded directly from tape. The usual intermediate step of typed transcripts was eliminated. The use of medium quality earphones made it possible for several coders to work in the same room simultaneously.

H. CODING OF BEHAVIOR

The system of behavior coding used in the present research was adapted from the one used previously by Cannell et al.(1968). While other behavior coding systems are available, they have not proved especially useful when applied to the personal interview setting.

Most attempts at coding behavior involve category systems in which observers are required to record psychological states such as hostility, regression, affiliation, tension, etc. Although extensive specialized training of observers usually results in reasonably good reliability between observers, results obtained by previous observation techniques have not been very encouraging because the criteria of comprehensiveness, ecomony, reliability, and validity could not be met simultaneously. Validity of the codes, especially, poses serious problems. In order to record high inference psychological states, the observer has to rely upon his own judgment in order to make such inferences, the greater will be the effect of his own idiosyncratic values, knowledge, and beliefs and, consequently, the more difficult it will be to maintain objectivity. Problems of objectivity, complexity, and ambiguity can be expected to increase as one moves away from behavior which is directly observable to behavior which requires making inferences about states within the individual.

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For this study, minimum-inference, directly-observable behavior is coded. Problems of reliability are partially resolved by using an observation system which scored only concrete verbal behaviors such as clarification, probes, and repetition rather than inferred behavior such as hostility. It is hoped that future studies can be designed to permit inferences about psychological states from similarly coded data.

The behavior coding system used in this investigation differs in three important ways from the one used previously: 1) An attempt has been made to increase its comprehensiveness by adding a large number of task-oriented behavior categories. On the other hand, the number of irrelevant behavior categories has been reduced since previous research indicates that attempted distinctions contribute very little to the descriptive and analytic understanding of the interview. 2) All verbal behaviors which took place were coded. The previous study sampled sections of the interview, coding different sets of behavior in different sections. 3) The sequence in which the behaviors occur is preserved in the coding. Previously, only frequencies of each behavior within a section of the interview were available.

It is felt that these three modifications of the coding system permitted a better understanding of what happens in the interview, and now makes it possible to attempt to detect what may be cause-and-effect behavioral contingencies in the overall behavior interactions.

1. Procedures Followed in the Development of the Behavior
   Coding System

Initially, a set of categories for coding basic interviewer and respondent behaviors was constructed. This initial set of categories was arrived at after considerable discussion and listening to a variety of recorded interviews about health. Over a period of approximately four months the system of behaviors was constantly altered as a result of testing the coding system with real as well as role-played interviews. Meaningfulness, discriminability, comprehensiveness, reliability, and amount of inference required were the criteria used to alter the categories.

Since the interviews were tape recorded, speed in discrimination of behaviors was not so crucial an issue as in the case of live observation of interviews. The number of categories was nevertheless restricted in the trade-off between detail and reliability. The use of mnemonic symbols in coding of behaviors also helped to increase speed as well as reliability of coders.

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The final coding system incorporated a number of behaviors which proved relevant and meaningful in the previous observation study as well as additional behaviors. A summary of the coding system is given here. A more detailed coding manual is included in the Appendix. The Appendix also contains a transcription of a randomly selected interview with codes as actually assigned during the coding process.

2. Behavior Codes

The following 36 interviewer and respondent behaviors, singly or in combinations, constitute the dependent behavioral variables.

INTERVIEWER BEHAVIORS

Code	Meaning	Description
Q	Correct question	Question from the questionnaire which is asked essentially as written on the questionnaire.
<	Incomplete question	Part of a question which is correct as far as it goes.
⌐	Inappropriate question	Question from the questionnaire which was asked but should have been skipped due to a skip pattern.
X	Incorrect question	Question from questionnaire in which meaningful word(s) have been altered or omitted.
=	Repeat question	Question from the questionnaire which has already been asked and is asked correctly again.
*	Omitted question	Question from questionnaire which is omitted by mistake, contrary to the questionnaire instructions and for which the relevant information has not been obtained by means of a preceding question.

Interviewer Behaviors (Continued)

Code	Meaning	Description
N	Information previously obtained	Question omitted because adequate information to code an adequate response has previously been volunteered by the respondent in answer to a prior question.
H	Skip pattern	Question omitted because of skip pattern prescribed by the questionnaire instructions.
P	Non-directive probe	Question or statement used by the interviewer to elicit further information. It is a creation of the interviewer and is not on the questionnaire. Classified as "non-directive" if it does not suggest a specific answer or class of answers or does not restrict the frame of reference of the original question.
D	Directive probe	A probe which suggests possible responses or implies that some answers are more acceptable than others. It restricts the frame of reference of the original question.
C	Gives clarification	Gives clarification upon request of the respondent regardless of whether the information supplied is correct or incorrect. Includes also rephrasing or explanations of questions.
V	Volunteers information	Volunteers information relevant to the topic of the question or interview. Includes transition statements.

RESPONDENT BEHAVIORS

Code	Meaning	Description
R	Adequate answer	An adequate response to a correctly asked question which meets the objectives of the question as stated in the Interviewer's Manual. Incorrect clarification does not rule out the occurrence of an adequate answer. May also occur as the result of a probe, provided the response meets the question objective.
W	Inadequate answer	An inadequate response to a (properly asked question) which does not meet the question objectives as stated in the Interviewer's Manual.
K	Don't know answer	Response to a proper question that indicates that the respondent does not know, only if not followed by an attempt to answer the question.
G	Refuses answer	Verbal refusal to answer question.
J	Other answer	Response (to a partial or wrong question or a response to a probe) which does not meet the question objective.
E	Elaboration	Gives reason for a response or supplies more information than required for an adequate answer and is relevant to the question topic.
C	Asks clarification	Requests clarification of a question or question objective.

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BEHAVIORS CODED FOR BOTH INTERVIEWER AND RESPONDENT

Code	Meaning	Description
F	Feedback	Behavior which indicates attention, approval, understanding, or how well the other person is doing; only if not a response to a question or a probe (excluding "Thank You").
U	Ongoing feedback	Ongoing feedback which indicates attention, approval, understanding, or a desire to interrupt while the other is talking without successfully interrupting the speech of the other person.
T	Repeats answer	Repetition of response either exactly or as a summary, or utilization of previous responses for transition to a new topic or for asking a question or a probe.
A	Irrelevant conversation	Statements unrelated to the question or general field of the inquiry. Generally rapport building or personal rather than task oriented behaviors.
S	Gives suggestion	Suggests new kind of behavior which will enhance, interrupt or resume task behavior.
M	Polite behavior	Polite behavior or socially expected courtesies not specifically related to task and not included in the printed question on the questionnaire (e.g. please, thank you).
B	Interruption	Successful interruption. The other person must stop talking. Blocks can't occur at the end of a sentence or at a pause which might be considered the end of a question.
L	Laugh	Audible laugh, chuckle, snicker, etc., which may indicate humor, tension or ridicule.

Behaviors Coded for Both Interviewer and Respondent (Continued)

Code	Meaning	Description
0	Other	Any significant behavior not elsewhere coded or unintelligible verbal behavior.
Y	Extraneous interaction	Interaction of either interviewer or respondent with a third person during the interview.

3. Training of Coders

Five coders from the coding staff of the Survey Research Center were intensively trained for approximately four weeks in the use of the category system. Apart from learning the detailed definitions of the various behaviors, training consisted of coding real interviews, comparing individual codes, and discussion in order to resolve disagreements. Coders actively participated in the final development of the category system not only with regard to discrimination and definition of the various behavioral categories, but also in the adoption of certain coding conventions and priorities. The nature of the category sets required that the coders should have a thorough knowledge of the questionnaire, interviewing rules, and procedures as well as requirements for adequate answers. The coders also learned the same interviewing rules used by interviewers to determine when an answer met the objectives of the question; the basic document used was the "Interviewer's Manual" for the Urban Employment Survey.

4. Reliability among Coders

Percentage of agreement on individual codes was used as an index of reliability among coders: Percentage agreement between two coders was calculated as: $\frac{\text{Number of identical codes}}{\text{Total number of codes}} \times \frac{100}{1}$

Since the above procedure measures agreement, behavior-by-behavior, in terms of presence or absence of codes as well as position of individual codes, a lower percentage of agreement was obtained than would have been the case if agreement was based upon the total number of tallies within a category.

At the end of the training period reliability among coders ranged between 75% and 80% over all codes. A 20% reliability check of the actual interviews coded, indicates an average agreement of 78% among coders.

III. DESCRIPTION OF THE INTERVIEW

    A. TOTAL BEHAVIOR IN THE INTERVIEW

        Previous research has indicated the important descriptive and explanatory power of the total amount of behavior which takes place in the interview. While the expert designing a questionnaire generally thinks mainly about a pattern of behavior in which the interviewer asks a question and the respondent gives an answer, the behavior of both participants in a household interview is just not this constrained. Departures from this format are the rule rather than the exception and potentially can furnish new insights into the multitude of forces which influence the outcome of an interview.

        1. Questions

        In this particular interview (a special version of the 1968 Urban Employment Survey) up to 171 questions could be asked and answered. The revised questionnaire was designed so that almost all questions would be asked of all respondents. In practice, however, despite attempts to design the questionnaire differently, the average respondent was asked approximately 100 questions, and this number varied among interviews.

        2. Total Number of Verbal Behaviors in the Interview

        The average 100-question interview contained 491.26 verbal behaviors of the interviewer and respondent. This is about 2½ times as many as would be expected if interviewers merely asked questions and respondents merely gave the answers they were supposed to give.

        Separating this figure into interviewer and respondent participation, the respondent is responsible for 215.87 behaviors, or 44% of the total, and the interviewer is recorded as behaving an average of 275.39 times per interview, or 56% of the total.

        These ratios of interviewer to respondent behavior are somewhat surprising. In a previous study (Cannell, Fowler & Marquis, 1968) respondent behavior was about 10 times as frequent as that of the interviewer. Matarazzo et al. (1965) suggests that the speech length of the respondent is about 5 times that of the interviewer. The previous observation study used a much cruder observation-recording scheme than the present research. The interview observed was about the physical health of a predominantly female sample. It is possible that the dissimilarties in observation procedure, question content, and the largely female population may account for this difference.

Obviously further research will be necessary to explain a discrepancy so large and so fundamental.

The average behavior figures obtained in the current study are summarized in Figure 1.

Figure 1

AVERAGE FREQUENCY OF VERBAL BEHAVIOR IN THE INTERVIEW


```
                        ┌──────────────────┐
                        │ Total Verbal     │
                        │ Behavior         │
                        │ 491.26           │
                        └──────────────────┘

┌────────────────────┐                    ┌────────────────────┐
│ Respondent         │                    │ Interviewer        │
│ Verbal Behavior    │                    │ Verbal Behavior    │
│ 215.87             │                    │ 275.39             │
└────────────────────┘                    └────────────────────┘
        44%                                        56%
```

N = 181 Interviews
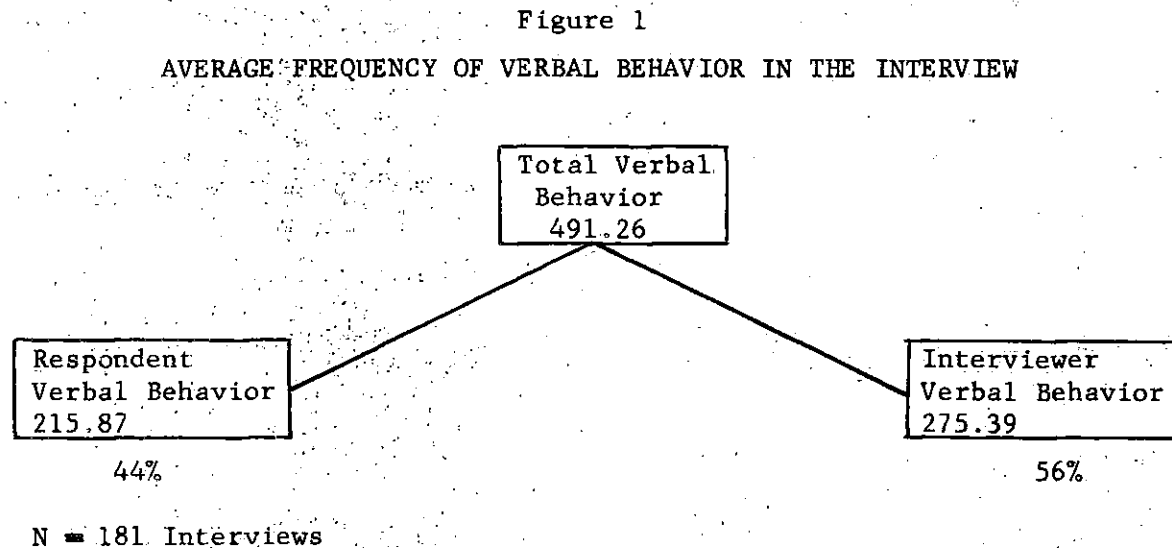
3. Correlation Between Interviewer and Respondent Behavior

Intuitively, one might expect that if the respondent was not being cooperative, was withholding information, etc., the interviewer behavior level would be fairly high since she would be trying to compensate for respondent deficiencies. On the other hand, if the respondent was cooperative, freely volunteering and elaborating upon his answers, the interviewer behavior level would be fairly low. The previous observation study found this not to be true. In the previous study there was a high correlation between the number of interviewer behaviors in the interview and the number of respondent behaviors.

In this study, the high correlation between interviewer and respondent behaviors was again obtained. The correlation based on the 181 interviews was .79 $(p < .01)$.

This finding again suggests the very great mutual dependency of interviewer and respondent behaviors in the household survey. Much behavior is apparently cued or caused by factors in the immediate interview situation as opposed to being strongly influenced by more remote variables such as attitudes or demographic and background characteristics.

B. __PROPORTIONS OF DIFFERENT KINDS OF BEHAVIOR IN THE INTERVIEW__

Despite the widespread use of the personal interview technique
by administrators and scientists, very little is known about the kinds of
behaviors that make up an interview. Exactly what does an interviewer do,
and how does the respondent react?

The following data are presented to give a general picture of the
kinds of behavior which do occur in the interview and their relative
proportions of occurrence.

1. Interviewer Behavior

Nineteen categories of interviewer verbal behavior were coded
for this study and their frequencies of occurrence in the interview are given
in Table 2. The behaviors are also grouped into broader categories to
facilitate discussion.

(INSERT TABLE 2)

According to Table 2, most interviewer behavior (82%) falls into three
distinct groups: questions asking, probing, and given feedback. The remaining
18% of the coded behaviors are distributed over the other ten behavior categories.
Possibly the most surprising aspect of these data (to the reader who is un-
familiar with behavior interaction coding) is the high frequency of behavior
coded as "feedback." This and other interviewer behaviors are discussed below.

a. Question asking

The data in Table 2 indicate that the overwhelming majority
of questions asked were asked correctly. Apparently interviewers did not
deviate significantly from the wording of printed questions despite what
must have been many troublesome or awkward situations. On the other hand,
this adherence to the printed question should be expected since almost all
agencies training interviewers emphasize the importance of asking a question
exactly as worded. Also, for this study the interviewers were aware that
their behavior was being tape recorded and may have made a special effort
to comply with the demands of the study director.

The above data also indicate that some questions were consistently
incorrectly asked. Data presented in Section VI provide some insight into
which questions are most error-prone and especially troublesome for interviewers,
often suggesting that a questionnaire change (rahter than better interviewer
training) is probably appropriate.

b. Probing

All good interviewer training stresses that interviewer
probing is needed and when it is used, it should be "non-directive."

TABLE 2

FREQUENCY AND PROPORTION OF DIFFERENT KINDS OF INTERVIEWER BEHAVIOR

Interviewer Behavior	Frequency (All interviews)	Per Cent of total interviewer behavior
Question Asking		
Correct question	16,687	33.5%
Incomplete question	329	0.7
Inappropriate question	76	0.2
Incorrect question	1,077	2.2
Total	18,169	36.6
Probing		
Repeat question	638	1.3
Non-Directive	4,938	9.9
Directive	1,269	2.5
Repeat answer	4,385	8.8
Total	11,230	22.5
Clarifying		
Gives clarification	3,269	6.6
Volunteers information	1,086	2.2
Total	4,355	8.8
Feedback	11,498	23.1
Irrelevant		
Irrelevant conversation	861	1.7
Laughter	1,377	2.8
Total	2,238	4.5
Blocking		
Ongoing feedback	1,226	2.5
Interruption	141	0.3
Total	1,367	2.8
Other		
Gives suggestion	88	0.2
Polite behavior	358	0.7
Talks to third person	46	0.1
Other	496	1.0
Total	988	2.0
All Behaviors	49,845	100

Non-directive probes are those which do not go beyond the information supplied by the question (or already supplied by the respondent) in suggesting an appropriate answer. The emphasis on non-directive probing is to avoid any possible interviewer bias which might be communicated to the respondent by an inappropriate probe.

In the previous observation study, 42% of all recorded probes (from sampled sections of the interview) were directive. That is, they contained a potential for interviewer bias. In this study the proportion of probes that were directive was much lower, about 19%, as shown in Table 3. The most non-directive kind of probe to use is merely to repeat the original question. This kind of probe occurred 9% of the time in the present study, 13% of the time in the previous research. The previous study found that 45% of the probes were non-directive (other); in this study the percentage of non-directive probes was 72%.

TABLE 3

PERCENT DISTRIBUTION OF PROBES IN TWO OBSERVATION STUDIES BY TYPE OF PROBE

Type of Probe*	Percent Distribution of Probes	
	Previous Study	Present Study
Repeats Question	13%	9%
Other Non-Directive	45	72
Directive	42	19
Total Percent	100%	100%
Number of Interviews	412	181

*Note: "Repeats answer" has been left out of the calculations in this study in order to make the two sets of data compatible.

In this study, it is possible to discover what happens after an interviewer uses each kind of probe. Table 4 shows the probability of certain respondent answer behaviors following certain interviewer probing behaviors. All answer behaviors with a probability of occurrence (p) of .05 or greater are included.

(INSERT TABLE 4)

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TABLE 4

PROBABILITIES OF RESPONSE BEHAVIORS FOLLOWING THREE TYPES OF PROBES

		Type of Probe			
Repeats Question		Other Non-Directive		Directive	
Response	p	Response	p	Response	p
Adequate answer	.38	Adequate answer	.25	Adequate answer	.19
Inadequate answer	.09	Inadequate answer	.08	Other answer*	.65
Other answer*	.05	Other answer*	.42		
Elaboration	.12	Elaboration	.05		
Asks for clarification	.09	Repeats previous answer	.05		
Repeats previous answer	.05				
Talks to 3rd person	.05				

*Code J, an answer to anything but a correctly-asked question (including a probe) which does not meet the objectives of the main question on the questionnaire.

Repeating the question is one of the most non-directive probes and should provide the respondent the widest possible latitude in giving an answer. The data show that repeating the question obtains the highest rate of adequate answers and, in terms of latitude, gets the widest variety of respondent answer behavior.

Other non-directive probing elicits the next highest rate of adequate answers and seems to permit a fairly wide variety of respondent behavior. Both repeating the question and other non-directive probes thus appear to have the effect claimed for them in manuals of interviewing procedure.

Finally, directive probes obtain the fewest adequate answers and apparently are likely to constrain response possibilities a great deal.

Only two respondent behaviors were observed to occur 5% of the time or more. On the other hand, inadequate answers are extremely infrequent. Their probability, which is not given in Table 4, is .015.

It should be remembered also that an interviewer probably does not randomly select the kind of probe to be used. Undoubtedly, her choice is determined by what the respondent has said previously. Interviewers may be more likely to use non-directive probes when there is a reasonable expectation of obtaining an adequate response and directive probes when they anticipate a great deal of difficulty or resistance. This study cannot provide data relevant to such a hypothesis.

    c. Feedback

    So far the two "classic" aspects of interviewer behavior have been discussed: question asking and probing. These behaviors have always been assumed to represent the major interviewer functions and, as a consequence, have received a great deal of emphasis in interviewer training. A third aspect of interviewer behavior, her reaction to the respondent's answer, seems also to be a major factor in the interview and deserves further investigation. These interviewer reactions, called "feedback" in this report and "reinforcement" elsewhere. /Cannell & Marquis (in press) and Cannell, Marquis, and Laurent (1969)_/, have been the focus of two other experimental studies by the Survey Research Center Methodology Program, and the results of these studies indicate that differences in interviewer feedback techniques have important effects on the amount and accuracy of information obtained by personal interview. Previous studies tested such theoretical assumptions. This present study is the first to document that interviewer feedback constitutes a large proportion of interviewer behavior in the "natural" interview (23%, see Table 2).

The two experimental studies of reinforcement assumed that interviewer feedback, not question asking and probing, is largely uncontrolled in the interview. This assumption seems reasonable since survey interview training programs are not known to emphasize feedback procedures. This study thus demonstrates, for the first time, what previously were only assumptions: that giving feedback is a major part of total interviewer behavior and that the feedback is not used optimally. Data in Table 5 show the probability that interviewer feedback will follow certain respondent behaviors. All respondent behaviors which were followed by interviewer feedback more than 15% of the time are included.

TABLE 5

PROBABILITY OF INTERVIEWER FEEDBACK FOLLOWING RESPONDENT BEHAVIOR BY KIND
OF RESPONDENT BEHAVIOR

Kind of Respondent Behavior	Probability That Interviewer Feedback Follows
Adequate answer	.28
Inadequate answer	.24
"Don't know" answer	.18
Refusal to answer	.55
Other answer (Code J)	.34
Elaboration	.30
Repeats answer	.32
Gives suggestion	.33
Other behavior (not classified elsewhere)	.21

The main conclusion from Table 5 is that feedback is used indiscriminantly in a "natural" interview. Indeed, it is not under the tight control of rules of proper interviewing as is question asking or probing. Previous research indicates that better data are obtained when interviewer feedback is used only after adequate answers. For this study, the probability of feedback following an adequate answer was only .28. Many other behaviors were even more likely to be reinforced (e.g., a refusal to answer was reinforced with positive feedback 55% of the time). Feedback for inadequate answers (24%) was just about as likely as feedback for adequate answers (28%).

Feedback was used for elaborations 30% of the time, but interestingly was seldom used after irrelevant conversation. While not shown in Table 5, the probability of interviewer feedback following irrelevant conversation is .08.

These feedback contingency patterns may indicate why several studies have found that the respondent has an ambiguous understanding of his (or her) expected role,and may provide some insight into why controlled interviewer reinforcement has beneficial effects on the validity of personal interview data.

2. Respondent Behavior

Table 6 shows the frequencies and relative proportions of the 17 respondent behavior categories used in this investigation.

TABLE 6

FREQUENCY AND PROPORTION OF DIFFERENT KINDS OF RESPONDENT BEHAVIOR

Respondent Behavior	Frequency (All Interviews)	Percent of Total Respondent Behavior
Answering		
Adequate answer	15,663	40.3%
Inadequate answer	3,099	8.0
"Don't Know" answer	252	0.6
Refusal to answer	20	0.1
Other answer (Code J)	6,380	16.4
Repeats answer	1,041	2.7
Total	26,455	68.1
Asking Clarification	2,431	6.2
Feedback	273	0.7
Blocking		
Ongoing feedback	193	0.5
Interruption	306	0.8
Total	499	1.3
Elaboration	5,520	14.2
Irrelevant		
Irrelevant conversation	850	2.2
Laughter	1,111	2.9
Total	1,961	5.1
Other		
Gives suggestion	72	0.2
Polite behavior	82	0.2
Talks to 3rd person	1,399	3.6
Other, not classified elsewhere	209	0.5
Total	1,762	4.5
TOTAL RESPONDENT BEHAVIOR	38,901	100%

These data indicate that respondent verbal behavior consists mainly of answers to questions and probes. About 68% of the things respondents say may be so classified.

The next most frequent respondent behavior is elaborating, or furnishing information relevant to the general area of the query but not necessarily responsive to the exact intent of the question. The rate of elaborating in this study was 14%; it was 21% in the previous observation study. Considering that different procedures were used, the two results are quite similar.

The remaining 18% of respondent behaviors are distributed among the ten remaining categories. The rate of asking for clarification of a question (6%) is surprisingly high. This may indicate a careful task-orientation on the part of many of the respondents. In the previous study the rate of asking for clarification was only about 2% of coded respondent behavior.

A final surprise was the apparently low rate of irrelevant conversation. The previous study was not designed to allow the computation of the percentage of total behavior devoted to irrelevant conversation but those data suggested both that it was relatively frequent and that it was most often initiated by the respondent. The present observation data indicate that actual respondent irrelevant conversation constitutes only a little over 2% of total respondent behavior. The category "laughter" is also included under the broader "irrelevant" category. Laughter amounted to about 3% of the coded respondent behavior. Thus, the combined categories which represent "deviations from task behavior" make up only 5% of the total. Apparently the employed male respondents in the Urban Employment Survey were much more task oriented than the predominantly female sample which was observed during an interview about personal and family health.

C. NUMBER OF BEHAVIORS TO REACH AN ADEQUATE ANSWER AND THE END OF A QUESTION

Another way of indicating that there is more to the personal interview than asking questions and giving answers is to divide the data into two parts: the average number of behaviors needed to get an adequate answer and the average number of behaviors which occurred between the adequate answer and the beginning of the next question.

Figure 2 data are based only on correctly asked questions. An adequate answer code was never assigned to an incorrect question. The average correctly-asked question, from beginning to end, elicits 4.73 interviewer and respondent behaviors. Of these, 3.15 or 67%, involve getting and giving an adequate answer; 1.58, or 33% take place after the answer has been given.. Thus, even for correctly asked questions with adequate answers, a great amount of "extra" behavior is involved. This "extra" behavior is not anticipated by the questionnaire desgner and may represent a large potential for bias if uncontrolled. It may, however, improve the quality of interview data if used in a constructive way.

FIGURE 2

AVERAGE NUMBER OF BEHAVIORS PER QUESTION TO ADEQUATE ANSWER AND END OF QUESTION
FOR CORRECTLY ASKED QUESTIONS WITH ADEQUATE ANSWERS
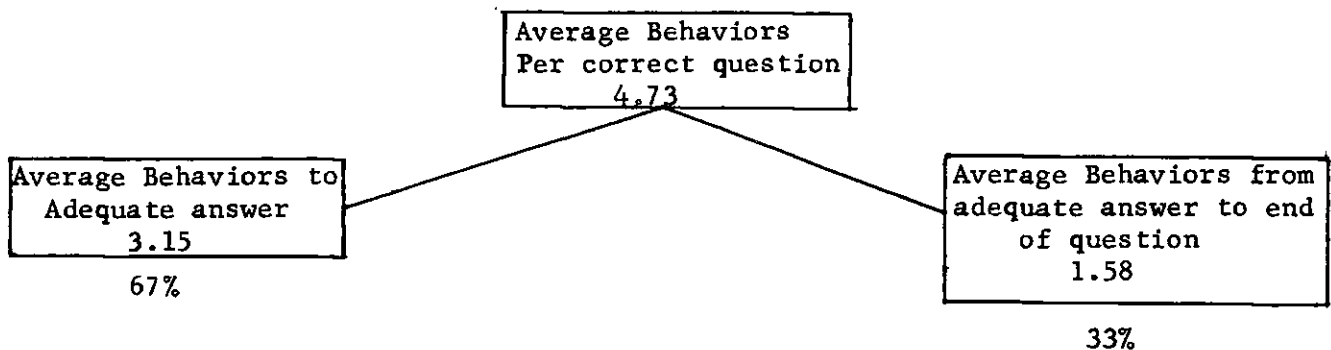
Based on N of 15,609 correct questions
with adequate answers.

IV. EFFECTS OF RESPONDENT AGE AND RACE ON BEHAVIOR

As indicated in the introduction to this report, it was expected that the verbal interaction in the interview would be different if one were to compare younger respondents with older respondents or Negro respondents with white respondents. The importance of investigating the effects of age and race cannot be emphasized too strongly. At the present time, decisions by all levels of government concerning social policy are often based on survey data which are cross-classified by these two demographic variables. If the various respondent groups show different kinds of response bias, decisions based on survey data can be erroneous. Before presenting data from this study, it might be worthwhile to repeat an example of differential response bias recently obtained by Weiss (1968) which might have led to an incorrect policy decision.

The following table of actual data illustrates the effect of "differential" response bias. A sample of mothers living in public housing projects and a sample not in public housing were asked if one of their children had recently failed a subject in school. This information was also obtained directly from school records. According to respondent data, public housing has negative effects on school performance and might lead to a decision to de-emphasize public housing. On the other hand, "actual" data indicate that public housing has a slight positive effect on passing a school subject. The "real" relationship is hidden because one of the groups shows a much different degree of response bias than the other.

	% with child actually failing a subject	% reporting child failed a subject
Public housing resident	48	46
Non-resident	56	36

NOTE: From Weiss, Carol H., Validity of Interview Responses of Welfare Mothers, Bureau of Applied Social Research, Columbia University, New York February 1968, page 20.

The sample for this study of the Urban Employment Survey interview is divided into four groups of employed men:

1. Age 18 - 34, white
2. Age 35 - 64, white
3. Age 18 - 34, Negro
4. Age 35 - 64, Negro

By using the analysis of variance technique, it is possible to look for the separate and combined effects of respondent age and race on the various behavior variables decribed in previous sections of this report.

A. GENERAL DESCRIPTION OF QUANTITY OF BEHAVIOR

1. Total Amount of Behavior

The total number of behaviors in an interview does differ according to age and race of the respondent. These data are presented in Table 7 .

TABLE 7

TOTAL NUMBER OF BEHAVIORS PER INTERVIEW BY AGE AND RACE GROUP

Age - Race Group	Number of Interviews*	Number of Behaviors Per Interview
Older white	43	493.66
Younger white	47	454.63
Older Negro	47	511.49
Younger Negro	44	504.62

*Unless otherwise indicated these N's apply throughout the report when data are classified by demographic group; they are not repeated in the tables which follow.

Interviews with Negro respondents involve more total behavior on the average than interview with white respondents. In addition, disregarding race, there is a tendency for interviews with older respondents to contain a greater amount of interviewer and respondent verbal interaction than interviews with younger respondents. However, it can be seen from the data in Table 7 that the age effect appears only within the white group. The difference between behavior levels in interviews with older and younger Negroes is negligible.

This pattern of results is not what was expected. Further exploration of the data revealed one "confounding" factor which is discussed below.

2. Differences in Numbers of Questions Asked

A special attempt was made in designing this research to ensure that all respondents were exposed to approximately the same number and kind of questions. This was done in order to avoid the possibility that between-group differences in behavior would be attributable to variables other than age and race. In order to avoid confounding the demographic effects, only employed males were interviewed and changes were made in the basic UES questionnaires to avoid questions with extensive "skip patterns," or which were applicable only to some respondents. Data in Table 8 indicate that the average number of questions per interviewer in the four demographic groups came reasonably close to being equal. However, some between-group differences exist and the differences, not unexpectedly, correlate with the total number of behaviors per interview.

TABLE 8

NUMBER OF QUESTIONS ASKED PER INTERVIEW BY AGE AND RACE GROUP

Age - Race Group	Number of Questions Asked per Interview
Older whites	96.86
Younger whites	103.15
Older Negroes	98.19
Younger Negroes	108.14

3. Corrected Index of Behavior Level

Dividing the data in Table 7 by the average number of questions asked per interview (Table 8), an index of total behavior level is obtained which is not influenced by the number of questions asked. The corrected index scores are shown in Table 9.

TABLE 9

CORRECTED INDEX OF BEHAVIOR LEVEL BY AGE AND RACE GROUP

Age and Sex Group	Corrected Index of Behavior Level
Older whites	5.10
Younger whites	4.41
Older Negroes	5.21
Younger Negroes	4.67

Analysis of Variance

Source	d.f.	SS	F	p
Race	1	182.12	9.25	$< .01$
Age	1	1,783.60	90.57	$< .01$
Race x Age	1	31.44	1.60	n.s.
Error	18,382	36,190.00	(MS Error = 19.69)	

The new index scores show a somewhat different set of age and race effects. The age effect for both races indicates that interviews with older respondents involve more behavior per question than interviews with younger respondents; however, the race effect on behavior per question becomes minimal, although the number of behaviors per question is still somewhat greater for Negroes than whites.

The corrected index of behavior level will be used in the remainder of the report where demographic effects are discussed.

The effects of age and race on the corrected behavior level index obtained here are similar to the effects obtained in the past observation study. In the previous study, the non-parametric coefficients of association (gamma) between age and respondent behavior activity levels were around .20 ($p < .05$). There was no significant association between amount of behavior and respondent race.

B. EFFECTS OF AGE AND RACE ON DIFFERENT KINDS OF BEHAVIOR

In the following section the individually coded verbal behaviors
of the interviewer and respondent will be examined to determine whether their
occurrence is influenced at all by the demographic variables.

Two particular problems have been encountered. First, it appears that
the sample sizes of the demographic groups are not quite large enough to
show a wide variety of stable age or race effects on the occurrence of
single types of behavior. Therefore, in addition to discussing statistically
significant age and race effects, an attempt also is made to present the
trends in the data when a meaningful pattern appears. Second, it has already
been demonstrated that some groups exhibit a greater amount of total behavior
than others, due to having been asked more questions and also due to "real"
among-group differences in the amount of behavior exhibited when the number
of questions asked is controlled. These two phenomena suggest that differ-
ences between groups on the frequency of occurrence of any single behavior
may reflect only the general tendency to engage in more of all behaviors.
Since the purpose of the following analyses is to detect qualitative rather
than quantitative differences, a slightly different treatment of the data will
be made. In the following tables, the four demographic groups are compared
on the occurrence of a particular kind of behavior as a proportion of
total behavior. To a large extent this approach will minimize the effects
of respondents having been exposed to different numbers of questions and of
"general activity level."

1. Effects of Respondent Age and Race on Specific Interviewer Behavior

Table 10 shows that with younger respondents a significantly
higher proportion of interviewer behavior is asking questions (correctly)
and that older respondents receive a significantly higher ratio of ongoing
feedback (also thought of as unsuccessful attempts at interruption).

(INSERT TABLE 10)

The only statistically significant race effect on proportion of
interviewer behavior was obtained for correct question asking. Interviewers
devote a higher proportion of their behavior to asking correct questions of
white respondents than of Negro respondents.*

---

*Note that Negro respondents are asked a greater absolute number of correct
questions than whites. However, when the data are corrected for the unequal
number of questions asked, the trend is reversed: a greater proportion of
interviewer behavior is devoted to asking correct questions in interviews
with white respondents.

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TABLE 10

PROPORTION OF CORRECT QUESTION AND ONGOING FEEDBACK BEHAVIOR BY AGE AND RACE GROUP

Age and Race Group	Proportion of Total Interviewer Behavior	
	Correct Question	Ongoing Feedback
Older white	.331	.030
Younger white	.388	.020
Older Negro	.320	.026
Younger Negro	.348	.017

Analysis of Variance - Correct Questions

Source	d.f.	SS	F	p
Race	1	.0308	6.53	$<.05$
Age	1	.0807	17.11	$<.01$
Race x Age	1	.0094	2.00	n.s.
Error	177	.8347	(MS Error = .00041)	

Analysis of Variance - Ongoing Feedback

Source	d.f.	SS	F	p
Race	1	.0007	1.66	n.s.
Age	1	.0044	10.75	$<.01$
Race x Age	1	.0000	0.07	n.s.
Error	177	.0072	(MS Error = .00472)	

Next, the interviewer behavior data have been inspected for trends indicating possible age or race effects which may be "real" but which do not reach statistical significance. A complete summary of the average proportions of all interviewer behaviors for the four groups along with a summary of the obtained F-ratios is given in Appendix Table A1 . The discussion which follows is based on these data.

Inspection of Table A1 indicates that interviewers show a higher proportion of almost all behaviors for older men than younger men. However, younger men are asked a higher ratio of correct questions and are given proportionately more clarification. (Further analyses, reported later, indicate that the younger group asks for more clarification.) Apparently the effect of respondent age on interviewer behavior is quantitative rather than qualitative. Interviewers engage in more of almost every kind of verbal behavior when they are interviewing older men. The interview with younger men seems to be more task oriented: it is carried out with fewer verbal exchanges and is characterized by a significantly higher proportion of correct questions and attempts at giving clarification of the questions.

An inspection of the data in Table A1 reveals a consistent pattern of differences between Negro and white on interviewer probing behavior. The data indicate that interviewers use proportionately more of all kinds of probes for Negro respondents. The average data on interviewer probing behavior are summarized in Table 11 .

TABLE 11

PROPORTION OF INTERVIEWER PROBING BEHAVIOR BY TYPE OF PROBE AND AGE - RACE GROUP

Type of Probe	Proportion of Interviewer Probing Behavior			
	Old white	Young white	Old Negro	Young Negro
Repeats question	.014	.009	.016	.012
Other non-directive	.097	.093	.112	.097
Directive	.025	.022	.029	.023
Repeats answer	.083	.080	.095	.084
Total Probes	.219	.204	.252	.216

An analysis of variance could not be carried out on these data for this report. However, it appears that there are both age and race effects and a possible interaction effect. The interaction would indicate that there was an unexpectedly high proportion of interviewer probes for older Negro men.

Thus it appears that race has an effect on quality of interviewer behavior. Interviewers ask proportionately more correct questions to white respondents and use proportionately more probes for Negro respondents.

Young respondents are asked a higher proportion of correct questions and given a higher ratio of clarification but older respondents receive a higher proportion of almost all other interviewer behaviors.

2. Effects of Respondent Age and Race on Specific Respondent Behaviors

The analyses of variance indicate that respondent age and race significantly affect a few of the proportions of specific respondent behaviors. According to the data in Table 12 the age effects are as follows:

Older respondents give a higher proportion of "other" answers (answers to queries other than correct questions); they repeat answers a greater percent of the time and have a higher ratio of elaborations. None of these behaviors are conducive to the efficient attaining of the interview objectives. Younger respondents give proportionately more adequate answers and ask clarification a higher percent of the time. These behaviors indicate careful attention to the task.

Appendix Table A2 contains the average proportion figures for all respondent behaviors for each of the demographic groups. While the statistically significant data (Table 12) suggest there may be qualitative differences between age groups on behavior styles, inspection of the remaining data suggests that older respondents engage in a higher percent of almost all behaviors except giving adequate answers and asking for clarification. Therefore, the age effect on respondent behavior may be the same as on interviewer behavior. Older age appears to predict a general tendency to engage in more of almost every kind of behavior rather than a selective group of behaviors.

(INSERT TABLES 12 & 13)

In Table 13 it can be seen that Negro respondents give a higher percentage of inadequate and "other" answers than white respondents. These findings nicely complement the obtained race effect on interviewer behavior. Interviewers were shown to probe proportionately more for Negro respondents and now it appears that Negro respondents give more answers requiring probes (inadequate answers) and more answers which are probably responses to probes ("Other" answers).

Ignoring statistical significance and inspecting the data in Table A2 for race-effect trends, it appears that Negroes also give a higher ratio of "don't know" answers, repeat more answers and have a higher proportion of asking for clarification. This kind of behavior pattern may be indicative of conceptual trouble handling the task of the interview. The pattern, viewed as a whole, does not indicate any active resistance or lack of "motivation" to cooperate. Rather it signifies difficulty in meeting the demands of the interview.

TABLE 12

PROPORTIONS OF 5 RESPONSDENT BEHAVIORS BY AGE - RACE GROUP

Age - Race Group	Proportion of Respondent Behavior				
	Adequate Answers	Other Answers	Clarification Requests	Repeats Answers	Elaborations
Older white	.389	.157	.051	.027	.166
Younger white	.466	.152	.065	.022	.113
Older Negro	.381	.190	.056	.031	.147
Younger Negro	.446	.163	.068	.024	.110

Analyses of Variance

Adequate Answers

Source	d.f.	SS	F	p
Race	1	.0092	1.17	n.s.
Age	1	.0230	29.10	<.01
Race x Age	1	.0015	0.19	n.s.
Error	177	1.3967	(MS Error = .0079)	

Other Answers

Source	d.f.	SS	F	p
Race	1	.0217	10.91	<.01
Age	1	.0116	5.84	<.05
Race x Age	1	.0055	2.76	n.s.
Error	177	.3520	(MS Error = .0020)	

Clarification Requests

Source	d.f.	SS	F	p
Race	1	.0007	0.69	n.s.
Age	1	.0079	7.27	<.01
Race x Age	1	.00004	0.04	n.s.
Error	177	.1931	(MS Error = .0011)	

Repeat Answers

Source	d.f.	SS	F	p
Race	1	.00043	1.82	n.s.
Age	1	.00166	7.07	<.01
Race x Age	1	.00002	0.10	n.s.
Error	177	.04158	(MS Error = .00023)	

Elaborations

Source	d.f.	SS	F	p
Race	1	.0054	1.62	n.s.
Age	1	.0902	27.11	<.01
Race x Age	1	.0030	0.90	n.s.
Error	177	.5885	(MS Error = .0033)	

TABLE 13

PROPORTIONS OF RESPONDENT INADEQUATE AND "OTHER" ANSWERS BY AGE-RACE GROUP

Age - Race Group	Proportions of Respondent Behavior	
	Inadequate Answer	"Other" Answer
Older whites	.077	.157
Younger whites	.074	.152
Older Negroes	.089	.190
Younger Negroes	.080	.163

Analyses of Variance

Inadequate Answer

Source	d.f.	SS	F	p
Race	1	.0035	6.88	<.01
Age	1	.0017	3.27	n.s.
Race x Age	1	.0005	1.05	n.s.
Error	177	.0903	(M S Error = .0005)	

"Other" Answer

Source	d.f.	SS	F	p
Race	1	.0217	10.91	<.01
Age	1	.0116	5.84	<.05
Race x Age	1	.0055	2.76	n.s.
Error	177	.3520	(M S Error =.0020)	

TABLE 14

CORRELATION BETWEEN QUANTITY OF INTERVIEWER AND RESPONDENT BEHAVIOR PER INTERVIEW BY AGE AND RACE GROUP

Age and Race Group	Correlation Between Quantity of Interviewer and Respondent Behavior
Older whites	.82
Younger whites	.84
Older Negroes	.82
Younger Negroes	.60

NOTE: All correlation coeffecients are significantly different from zero
(p $\leq$ .05)

Inspecting Table A2 for instances in which whites show higher proportions of specific behaviors than Negroes yields a completely different constellation of behavior. Whites show higher ratios of: adequate answers, refusals to answer, giving suggestions, and ongoing feedback (unsuccessful interruptions). Whites also show higher proportions of polite behavior, feedback, and elaborations.

In summary, it appears that Negro respondents show a pattern of behavior which is characteristic of well-motived performance on a difficult task. White respondents exhibit more facility at the task (giving a higher percent of adequate answers), more ability to interact smoothly with a female interviewer (proportionately more polite behavior, feedback, and elaborations) and something which might be either dominance or resistance to performing the task (higher percentage of refusals, giving suggestions, ongoing feedback).

The age effect seems to be quantitiative rather than qualitative. Older respondents engage in a higher percent of almost every kind of behavior except giving adequate answers and asking clarification. This pattern may be reflecting a low level of task orientation, a high level of interpersonal motivation, and difficulty in carrying out the role of information giver.

C. **EFFECTS OF RESPONDENT AGE AND RACE ON THE CORRELATION BETWEEN INTERVIEWER AND RESPONDENT BEHAVIOR**

It was indicated above that interviewer and respondent behavior levels were "balanced" in that there was a correlation of .79 between the quantity of interviewer behavior and respondent behavior within the interview. This balance phenomenon is examined within each of the demographic groups. Table 14 shows the Pearson product-moment correlations between the number of interviewer behaviors per interview and the number of respondent behaviors per interview. The interesting new finding is that the behavior balance is not quite so likely with young Negro respondents as it is with other respondents.

(INSERT TABLE 14)

D. EFFECTS OF AGE AND RACE ON NUMBER OF BEHAVIORS TO REACH AN ADEQUATE ANSWER AND THE END OF A QUESTION

Earlier in the report it was mentioned that a lot of behavior took place for each question after an adequate answer was obtained. The data given in Table 15 may be used to explore the possibility that there are age or race differences in this extra behavior.

TABLE 15

AVERAGE NUMBER OF BEHAVIORS TO ADEQUATE ANSWER AND END OF QUESTION[1] BY AGE AND RACE GROUP

Age and Race Group	Average Number of Behaviors to:		Number "Extra" Behavior	Proportion Extra Behavior[2]
	Adequate answer	End of Question		
Older white	3.16	4.93	1.77	.36
Younger white	3.02	4.36	1.34	.31
Older Negro	3.33	5.09	1.76	.31
Younger Negro	3.10	4.59	1.49	.32

1. These data include only questions which were correctly asked and adequately answered.

2. Computed as: Number of extra behaviors divided by number of behaviors to end of question.

Although an analysis of variance was not done for this report, it appears that interviews with older respondents contain a higher proportion of extra behaviors than interviews with younger respondents. The age effect is stronger among white respondents than Negro respondents and there appears to be no main effect due to race.

V. THE EFFECT OF OPEN AND CLOSED QUESTIONS ON BEHAVIOR

Each of the 171 possible questions in the revised version of the
Urban Employment Survey used for this study has been classified as either an
open or a closed question. Closed questions are those requiring simple
answers such as agree-disagree or yes-no. Open questions are those requiring
the respondent to formulate the answer in his own words, such as the amount
of yearly income or a description of his present job. It is expected that
open questions would involve more behavior than closed questions since
most open questions require the respondent to recall the answer from memory;
closed questions usually ask the respondent to recognize the appropriate
answer from those provided by the question.

In the average interview, the interviewer asked about 41 open questions
and 61 closed questions. Table 16 summarizes the effects of type of question
on the various total behavior indices discussed up to this point. It is
clear from these results that open questions involve more behavior than closed
questions (between 50% and 100% more). Surprisingly, the biggest difference
in terms of percentages is in the category of "extra" behaviors, the number
of behaviors between the adequate response and the end of the question
for correctly asked questions. Open questions elicit about twice as many
extra behaviors as closed questions.

TABLE 16

AVERAGE NUMBER OF BEHAVIORS FOR 3 TOTAL BEHAVIOR INDEXES BY AGE AND RACE GROUP
AND BY OPEN AND CLOSED QUESTIONS

Total Behavior Index	Total Number of Questions		Average Number of Behaviors per Question	
	Open	Closed	Open	Closed
Total Behavior, All Questions	7,417	10,969	6.32	3.81
To Reach Adequate Answer*	6,182	9,437	3.94	2.63
"Extra" Behavior*	6,182	9,437	2.29	1.17

* Includes only questions correctly asked and adequately answered.

The following table shows age and race effects on total behavior for open and closed questions. Although statistically significant, the race effect is small for each type of question. The total behavior for both open and closed questions is greater for older respondents than it is for younger respondents. Somewhat surprisingly, the age effect is more stable for closed questions than open questions. This probably reflects the fact that open questions are prone to many sources of difficulty which are not necessarily correlated with age, while age (or variables correlated with age) may be the only sources of difficulty in giving answers to the more structured closed questions.

(INSERT TABLE 17)

These data suggest that "type of question" may represent another important class of variables which influence behavior in the interview (and, consequent the validity of survey data). One study done by the Survey Research Center Methodology Program (not yet published) systematically varied the type of question asked of respondents and found this variable to be more predictive of accuracy and completeness of reporting than the other variables tested (friendly-unfriendly atmosphere, content of question, respondent personality). However, according to that study the effect of type of question leads to a troublesome set of decisions for the question designer. Open-ended questions get responses which are most valid but only a small (incomplete) amount of information is reported. Structured or "closed" questions elicit a large amount of information if enough of them are asked, but the answers tend to contain more response error. Therefore, in deciding which kind of question to use in a personal interview, one must take into account the trade-off between accuracy and completeness.

TABLE 17

AVERAGE NUMBER OF BEHAVIORS PER QUESTION BY AGE AND RACE GROUP AND BY
OPEN AND CLOSED QUESTIONS

Age and Race Group	Average Number of Behaviors Per Question	
	Open questions	Closed questions
Older whites	6.55	4.05
Younger whites	5.77	3.47
Older Negroes	6.80	4.10
Younger Negroes	6.19	3.70

Analyses of Variance

Open Questions

Source	d.f	SS	F	p
Race	1	202.25	6.73	<.05
Age	1	886.44	29.49	<.01
Race x Age	1	13.16	2.44	n.s.
Error	7,413	22,286.00	(MS Error = 30.06)	

Closed Questions

Source	d.f	SS	F	p
Race	1	56.06	5.52	<.05
Age	1	632.19	62.21	<.01
Race x Age	1	22.69	2.23	n.s.
Error	10,965	11,143.00	(MS Error = 10.16)	

VI. SPECIFIC QUESTION PROBLEMS

The data can be used to infer the existence of problems with specific questions in an interview. This section presents a first attempt at using such data for molecular diagnostic purposes. The approaches used below to spot troublesome aspects of certain questions and to try to understand the causes of the apparent weaknesses are by no means exhaustive. But they are indicative of the kinds of analyses which might be done; for example, with pilot study or pretest data before data collection on a wide-scale is begun.

There are three general classes of errors: those attributable to the interviewer, those that reflect respondent difficulty such as failing to understand a question or trouble in recalling information, and problems caused by the questions themselves, such as poor syntax, difficult-to-follow skip instructions, or obscure placement on the interview schedule. An attempt is made to trace question problems to one or more of these sources.

For this study, behaviors for each of the 171 questions used in this version of the Urban Employment Survey were examined for the existence of two kinds of "symptoms:"

1. A high proportion of behavior codes which, in themselves, indicate deviation from accepted practice (e.g., high proportion of "x" codes -- asking question incorrectly).

2. A large number of behaviors, regardless of type, involved in getting an answer.

Because this is the first time this behavior coding scheme has been used for question-by-question diagnosis, there are problems defining what is a "high proportion" of a particular behavior code or a "large number of behaviors" to get an answer. In the absence of an established set of norms, a high proportion of a particular behavior code is defined by using the upper tail of the frequency distribution of that behavior code per question. The same approach is used to define a high number of behaviors to obtain an adequate answer.

All questions were not asked of all respondents, primarily because the questionnaire contained "skip patterns" requiring that certain questions be asked only if the answer to a previous question fell into

a certain category. Therefore, the frequency with which a behavior code occurred for a given question is divided by the number of times the question should have been asked. Since a question could be asked a maximum of 181 times (there were 181 respondents), the number of times the question was asked is calculated as 181 minus N(H), where N(H) is the number of times the question was skipped correctly according to instructions in the questionnaire. This denominator does contain some "error" to the extent that some questions which should have been skipped were actually asked. Since such inappropriate questions occurred only 76 times out of a total of 19,893 questions (less than 0.38%), their effect is assumed to be inconsequential.

The following individual behavior codes are used in this analysis:

1. Incorrectly asked question (X)
2. Question omitted erroneously (*)
3. Question omitted because answer already given (N)
4. Question with a high proportion of inadequate answers (W).

The average number of interviewer and respondent behaviors necessary to obtain an adequate answer is also used as an indicator of question difficulty.

It would be interesting to extend this kind of analysis in future research using more of the behavior codes or more of the total behavior scores. Incorporating the probe codes, for example, might provide additional insights into the kinds of problems questions cause interviewers and respondents, as would the use of the code indicating respondent requests for question clarification.

A. INTERVIEWER OMISSIONS

Two question omission codes, when viewed in combination, show certain kinds of question problems. The logic of the analysis is as follows:

Question Omitted		Suggested Diagnosis
Because answer already given (code N)	By mistake (code *)	
High[1]	High	Interviewer error
High	Low[2]	Questionnaire redundancy
Low	High	Skip pattern or format problem
Low	Low	No problem

[1] Greater than or equal to 10% of questions coded N, (*).

[2] Less than 10% of questions coded N, (*).

1. **Interviewer Error**

Table 18 shows questions which were omitted for both reasons
a high percent of the time. These questions were often skipped by inter-
viewers because respondents had already furnished the answer to them
previously. They were also omitted by mistake often. One probable reason
for this pattern of error is that interviewers may have been too ready to
assume they had already obtained answers to the erroneously omitted questions
from information which the respondent previously provided. Thus, better
interviewer training on the objectives of these questions and on what
constitutes an adequate answer might reduce the erroneous omission rate
somewhat. On the other hand, apparently interviewers cannot be trained to
ask questions for which they feel adequate information has been obtained
already. They say this makes them feel awkward because it suggests to the
respondent that they were not being attentive. (An attempt was made in this
study to get interviewers to ask all questions or at least to confirm an answer
to a question if the interviewer felt adequate information had been supplied
previously. The high number of "N" codes demonstrates the failure to execute
this instruction.) Therefore, when a questionnaire is structured so that
answers are obtained before a question is asked, there is always the danger
that interviewers will bias the data by not asking a question which they
incorrectly assume has already been answered. The questions which appear
to be especially prone to this problem are listed in Table 18.

(INSERT TABLE 18)

2. **Questionnaire Redundancy**

There are several questions which often are not asked because
the relevant information has been supplied already. Table 19 contains a
list of the questions which show this redundancy characteristic and which
are not erroneously omitted especially frequently. Thus, the existence
of redundancy built into a questionnaire does not always result in a high
erroneous omission rate. However, it may be that if this study were repli-
cated, some of these questions would pose the same problems as do those
listed in Table 18.

(INSERT TABLE 19)

3. **Skip Pattern or Questionnaire Format Problems**

Data in Table 20 show questions which were omitted often by
mistake, but were not skipped because of redundancy. These questions

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TABLE 18. QUESTIONS WITH $\geq$ 10% OMISSIONS DUE TO INFORMATION PREVIOUSLY OBTAINED AND $\geq$ 10% ERRONEOUS OMISSIONS

Section of Interview	Question Number	Number of Relevant Interviews*	% Omitted, Information Obtained If $\geq$ 10%	% Omitted by Mistake If $\geq$ 10%	Question Wording
I	9c.	4	50	25	/Are your living quarters--/** Occupied without payment of cash rent?
II	5b.	39	64	13	/Were you--/ a government employee (Federal, State or County)?
II	5c.	19	58	21	/Were you--/ self-employed in own business, profession, or farm?
II	9b.	78	12	27	/If yes to 9a, ask/ How many extra hours did you work?
II	11b.	39	41	15	/If yes to 11a, ask/ How many full weeks of work did you lose?
III	16b.	43	21	21	/If yes to 16a, ask/ What kind of work were you trained for? (occupation)
III	18j-2.	29	34	41	/If yes to 18j-1, ask/ What was that?
III	20d-2.	26	65	19	/Were you/ A GOVERNMENT employee (Federal, State, county, or local)?
III	20d-3-1	15	40	40	/Were you/ SELF-EMPLOYED in OWN business, professional practice, or farm?
III	20d-3-1	12	17	75	/If self-employed, ask/ Is this business incorporated?
III	25f.	26	69	12	/Were you born.../ In open country but not on a farm?
III	25g.	18	78	11	/Were you born.../ On a farm?

TABLE 18. (Continued

III	26b.	27	30	15	/Five years ago did you live.../ In a suburb near a large city?
III	26c.	20	60	15	/Five years ago did you live.../ In a large city (over 250,000 pop.)?
III	26c.	11	45	27	/Five years ago did you live.../ In a medium size city (50-250,000 pop.)?
III	26e.	5	40	60	/Five years ago did you live.../ In a small city or town (under 50,000 pop.)?
III	26h.	28	29	11	In what state or country was that located?
III	27c.	69	62	10	/At age 16 did you live.../ In a large city (over 250,000 pop.)?
III	27d.	50	66	14	
III	27d.	50	66	14	/At age 16 did you live.../ In a medium size city (50-250,000 pop.)?
III	27e.	37	54	22	/At age 16 did you live.../ In a small city or town (under 50,000 pop.)?
III	27f.	20	45	40	/At age 16 did you live.../ In open country but not on a farm?
III	27g.	16	56	25	/At age 16 did you live.../ On a farm?
III	27h.	80	34	10	In what state or country was that located?
III	29b.	61	38	26	/If yes to 29a, ask/ What language was that?
IV	7c-1.	9	11	33	/If rides with someone else in response to 7b, ask/ Do you pay?
IV	7c-2.	7	14	43	/If yes to 7c-1, ask/ How much?

* Total number of interviews minus number of interviews in which question was skipped according to skip instructions on questionnaire. This figure is the base on which percentages are calculated.

**Information in square brackets is provided for the benefit of the reader. It is not part of the question, although it usually precedes the question on the questionnaire.

TABLE 19. QUESTIONS WITH ≥ 10% OMISSIONS DUE TO INFORMATION PREVIOUSLY OBTAINED AND < 10% ERRONEOUS OMISSIONS

Section of Interview	Question Number	Number of Relevant Interviews*	% Omitted, Information Obtained If ≥ 10%	% Omitted by Mistake If < 10%	Question Wording
I	9b.	77	75	3	/9. Are your living quarters.../** Rented for cash?
I	23b.	181	19	1	Did you complete that grade (year)?
II	1b.	16	12	6	/If no to 1a, ask/ Did you have a job or business from which you were temporarily absent or on layoff last week?
II	8b.	43	12	7	/If yes to 8a, ask/ Did you lose any time or take any time off last week for any reason such as illness, holiday or slack work?
III	1b.	14	71	0	/If yes to 1a, ask/ What was this activity?
III	11b.	12	42	8	/If yes to 11a, ask/ What other way did you use?
III	16a.	179	10	5	Did you complete a job training course in the Armed Forces?
III	17b.	38	55	3	/If yes to 17a, ask/ Which one?
III	20d-4.	11	27	5	Working WITHOUT PAY in family business or farm?
III	22.	156	12	4	What kind of industry was that?
III	25b.	104	22	5	/Were you born.../ In a suburb near a large city?
III	25c.	96	50	4	/Were you born.../ In a large city (over 250,000 pop.)?

TABLE 19. (Continued)

III	25d.	72	62	4	/Were you born.../ In a medium size city (50-250,000 pop.)?
III	25e.	58	64	5	/Were you born.../ In a small city or town (under 50,000 pop.)?
III	25h.	103	21	6	In what state or country was that located?
III	27b.	81	48	9	/At age 16 did you live.../ In a suburb near a large city?
IV	7b.	25	72	8	/If yes to 7a, ask/ What do you use?

*Total number of interviews minus number of interviews in which question was skipped according to skip instructions on questionnaire. This figure is the base on which percentages are calculated.

**Information in square brackets is provided for the benefit of the reader. It is not part of the question although it usually precedes the question on the questionnaire.

might have been omitted deliberately or inadvertently. For example, the interviewer may omit a question deliberately because it might prove too embarrassing or awkward for the respondent. These omissions might also be caused by hard-to-follow skip patterns or questions which were placed obscurely on the questionnaire.

Inspection of the data in Table 20 does not lend support to the embarrassment hypothesis. These questions are largely part of "skip patterns," and do not seem to require respondents to divulge information which is excessively personal.

In general, it is usually hypothesized that questions which are part of skip patterns or which are relevant to only sub-samples for other reasons are prone to interview omission errors. This hypothesis receives some support from the data in Table 21. Questions which are supposed to be asked of all respondents are almost never omitted. Questions which are supposed to be asked only of a sub-sample are often omitted either erroneously or because answers were obtained previously. Clearly, the omission problems are most easily traced to skip instructions and other sub-sampling techniques. While these procedures are often necessary in a questionnaire, the questionnaire designer should be aware of the potential for interviewer omission bias whenever sub-sampling procedures are used.

TABLE 21

FREQUENCY AND PERCENT DISTRIBUTION OF QUESTIONS
WITH OMISSION PROBLEMS BY WHETHER OR NOT
SUPPOSED TO BE ASKED OF SUB-SAMPLE OF RESPONDENTS

| | | Rate of * or N code | | |
		Less than 10%	$\geq$ 10%	Total
Questions to be asked of all respondents	Number of questions	70	1	71
	% of questions	99	1	100%
Questions to be asked of sub-sample of respondents	Number of questions	47	55	102
	% of questions	46	54	100%

TABLE 20. QUESTIONS WITH < 10% OMISSIONS DUE TO INFORMATION PREVIOUSLY OBTAINED AND ≥ 10% ERRONEOUS OMISSIONS

Section of Interview	Question Number	Number of Relevant Interviews*	% Omitted, Information Obtained If < 10%	% Omitted by Mistake If ≥ 10%	Question Wording
I	22.	85	4	35	Are you now in the U. S. Armed Forces?
I	24.	9	0	11	/If less than E6 in 23a, ask/ ** Can you read and write English?
I	25.	3	0	33	/If no in 24, ask/ Can you read and write any other language?
I	28a.	75	0	25	(For "rent" or "no cash rent" in item 9.) Is this apartment (house) owned by a private individual, a private corporation, or is it publicly owned? (For example: public housing authority.)
III	16c.	43	7	23	In what year did you complete this program?
III	16d.	178	0	16	Have you ever started in an apprenticeship program?
III	16e.	45	7	67	/If yes to 16d, ask/ What kind of work was that for? (Occupation)
III	16f-1.	43	2	70	Did you complete it?
III	16f-2.	38	0	82	/If yes to 16f-1, ask/ In what year?
III	26f.	3	0	100	/Five years ago did you live.../ In open country but not on a farm?
III	26g.	3	0	100	/Five years ago did you live.../ On a farm?
IV	4b.	12	0	17	/If no to 5a, ask/ Do you report to a different address every time or what?
IV	6b-2.	9	0	11	/If yes to 6b-1, ask/ How much?

* Total number of interviews minus number of interviews in which question was skipped according to skip instructions on questionnaire. This figure is the base on which percentages are calculated.

**Information in square brackets is provided for the benefit of the reader. It is not part of the question, although it usually precedes the question on the questionnaire.

B. QUESTIONS ASKED INCORRECTLY

All interviewer training emphasizes the necessity of asking questions exactly as worded on the questionnaire in order to avoid interviewer bias, respondent misunderstanding, etc. In this study, a question was coded as incorrectly asked only if important words or phrases were changed or omitted. (More stringent criteria were used for Section V of the questionnaire. All questions had to be asked exactly as worded or they were coded incorrectly asked.) Nevertheless, 18 questions were coded as being asked incorrectly in 15% or more of the interviews in which the question was supposed to be asked. The data are given in Table 22.

While the causes of such errors are difficult to pin down, several of the listed questions contain parenthetical phrases, others contain difficult syntax, and still others are extremely cumbersome to handle in verbal form. Questions 8 and 28a of Section I are examples of items which contain parenthetical phrases. Since interviewers are not given consistent rules on how to handle such phrases, it is understandable that sometimes they are erroneously omitted, sometimes erronesouly included included in the original question. Questions 9a (Section I) and 5a (Section II) are examples of awkward syntax. These questions are extremely long and complex; respondents often interrupt at the end of a clause to answer without allowing the interviewer to finish the question. While the data are not presented here, there is some reason to believe that interviewers deliberately change the wording of the questions because they recognize that a simplification in the wording will minimize respondent difficulty and misunderstanding. While such employee initiative is often laudable, in this instance it can be a source of serious bias. A simplification of the written question form is probably the best solution.

(INSERT TABLE 22)

C. QUESTIONS OBTAINING INADEQUATE ANSWERS

There were 39 questions that, when asked correctly, were answered in-adequately more than 14% of the time. (Note: If a question were incorrectly asked, it could never receive an adequate answer code.) These data are presented in Table 23.

(INSERT TABLE 23)

There appear to be two kinds of reasons why a question would receive the inadequate answer code a high percent of the time: 1.) the respondent

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TABLE 22

QUESTIONS WHICH WERE ASKED INCORRECTLY
IN MORE THAN 14% OF THE INTERVIEWS

Section of Interview	Question Number	Number of Relevant Interviews*	% Incorrectly Asked If ≥ 15%	Question Wording
I	8.	181	52	How many rooms are in this unit? (Count the kitchen but not bathroom.)
I	9a.	181	61	Are your living quarters owned or being bought by you or ¨omeone in your household?
I	25.	3	67	/If no in 24, ask/ Can you read and write any other language?
I	28a.	75	15	(For "rent" or "no cash rent" in item 9.) Is this apartment (house) owned by a private individual, a private corporation, or is it publicly owned? (For example: public housing authority.)
II	1b.	16	25	/If no in 1a, ask/ Did you have a job or business from which you were temporarily absent or on layoff last week?
II	5a.	181	78	Were you--an employee of a private, company, business, or individual for wages, salary, or commission?
II	8b.	43	21	/If yes to 8a, ask/ How many hours did you lose or take off last week?
III	20d-1.	177	71	/Were you--/ Working WITHOUT PAY in family business or farm?
III	22.	156	15	What kind of industry was that?
III	25a.	128	24	Were you born...in this city?
III	26a.	123	15	Five years ago did you live... In this city?
III	26h.	28	21	In what state or country was that located?
III	27a.	124	31	At age 16 did you live...In this city?
III	27h.	80	15	In what state or country was that located?
III	28b.	181	23	In what state or country was your mother born?

TABLE 22. (Continued)

IV	3.	181	37	How much did you earn last week from your job(s)?
IV	6b-1.	16	25	/If ride with someone else in 6a, ask/ Do you pay?
V	3b.	54	17	(If more than one category marked in 3a) Which is the thing you dislike (disliked) the most about your job?

*Total number of interviews minus number of interviews in which question was skipped according to skip instructions on questionnaire. This figure is the base on which the percent is calculated.

TABLE 23

QUESTIONS WITH MORE THAN 14% INADEQUATE ANSWERS

Section of Interview	Question Number	Number of Times Asked Correctly	% Inadequate Answer If ≥ 15%	Question Wording
I	12.	167	33	How much did you pay for utilities last month?
I	26c.	163	18	/Have I missed/ --anyone who usually lives here but is away at present traveling, at school, or in a hospital?
I	26d.	166	17	/Have I missed/ --anyone else staying here?
I	18.	128	39	Are you now married, widowed, separated, or have you never been married?
I	23a.	177	36	What is the highest grade (or year) of regular school you have ever attended?
I	23b.	136	15	Did you complete that grade (year)?
I	28.	167	16	What are the monthly payments (other than rents or mortgages) on all debts including loans and installment purchases of cars and furniture?
II	5a.	33	18	Were you--an employee of a private company, business, or individual for wages, salary, or commission?
II	5b.	7	57	/Were you--/ a government employee (Federal, State, or County)?
II	5c.	3	33	/Were you--/ self-employed in own business, profession, or farm?
II	8a.	165	17	Did you lose any time or take any time off last week for any reason such as illness, holiday, or slack work?
II	8b.	26	15	/If yes in 8a, ask/ How many hours did you lose or take off last week?
II	9b.	46	65	/If yes in 9a, ask/ How many extra hours did you work?
II	11a.	166	16	Did you lose any full weeks of work in the past 12 months because you were on layoff from a job or lost a job?
II	11b.	13	31	/If yes in 11a, ask/ How many full weeks of work did you lose?

TABLE 23 (Continued)

III	1b.	3	33	/¯If yes in 1a, ask_/ What was this activity?
III	11b.	5	20	/¯If yes in 11a, ask_/ What other way did you use?
III	15b.	24	17	/¯If yes in 15a, ask_/ What kind of work were you trained for? (Occupation)
III	16a.	151	45	Did you complete a job training course in the Armed Forces? (Exclude Basic Training)
III	16f-1.	11	18	Did you complete it?
III	17b.	12	58	/¯If yes to 17a, ask_/ Which one?
III	17d.	31	19	Did you complete it?
III	19.	131	39	About how much was your total income during the past 12 months from the sources you have mentioned?
III	20b.	145	28	What kind of business or industry was that?
III	20d-1.	40	40	Were you--An employee of a PRIVATE company, business or individualist /¯sic_/ for wages, salary, or commission?
III	20d-3-1.	2	50	/¯Were you--_/ SELF-EMPLOYED in OWN business, professional practice, or farm?
III	22.	108	58	What kind of industry was that?
III	25b.	69	20	/¯Were you born..._/ In a suburb near a large city?
III	25e.	18	17	/¯Were you born..._/ In a small city or town (under 50,000 pop.)?
III	25g.	2.	50	/¯Were you born..._/ On a farm?
III	25h.	68	18	In what state or country was that located?
III	26a.	102	27	Five years ago did you live...In this city?
III	26c.	5	40	/¯Five years ago did you live_/ In a large city (over 250,000 pop.)?
III	26h.	11	27	In what state or country was that located?
III	27b.	31	26	/¯At age 16 did you live_/ In a suburb near a large city?
III	27c.	13	23	/¯At age 16 did you live_/ In a large city over 250,000 pop.)?
III	27h.	33	27	In what state or country was that located?
IV	1.	176	18	Now I'm going to ask you some questions about your present job. How long have you been working at this job?
IV	7c-1.	5	20	/¯If ride with someone else in 17b, ask_/ Do you pay?

is not able to give the answer, and 2.) the interviewer cannot discriminate between an adequate and an inadequate answer, and mistakenly accepts inadequate answers as meeting the objectives of the question. With a little bit of ingenuity, it may be possible to use the behavioral data to gain some insight into the causes of inadequate answers. Although one such analysis was tried it was very complex, was based on several arbitrary assumptions, and was plagued by small-sample problems. Until the problems of that approach are worked out, the reader is invited to guess at the causes of a high percent of inadequate answers.

D. **QUESTIONS REQUIRING A LARGE NUMBER OF BEHAVIORS TO OBTAIN AN ADEQUATE ANSWER**

On the average in this study, a question took about 3.1 interviewer and respondent behaviors (behavior codes) to obtain an adequate answer. For purposes of discussion, all questions which took at least 3.5 behaviors on the average to reach an adequate answer are listed in Table 24.

(INSERT TABLE 24)

From inspection of the question wordings appearing in the table, the questions fall into at least three groups:

    1.) Questions which require complex answers such as listing the persons in the household, mentioning all the things likes and disliked about a job, and giving a social security number.

    2.) Questions which ask the respondent to condense a wealth of information into a single forced-choice answer. (For example: III, 14; IV, 6a, 10; V, 2b, 3b, 5, 7, 9, 10a, and 10b.)

    3.) Questions requiring difficult recall, -the large majority of the remaining questions.

Questions falling into the first category may pose some problems, but probably do not contain a great deal of response error. Questions in the second category put the emphasis on the respondent's ability to interpret a lot of information to make a discrimination between the answer categories provided. To the extent that respondents don't use the same decision criteria, the data are troublesome. Questions requiring complex recall and involving an above-average number of behaviors to reach an adequate answer are probably candidates for some sort of revision. The potential for respondent memory bias to affect the data is possibly somewhat large. Restructuring the questions to aid the recall process might eliminate some of the problems. The following list of questions might receive such attention: I--12, 28; II--9b, 10; III--18a-2, 19, 20a, 20c, 21a; IV--1, 3.

TABLE 24

QUESTIONS REQUIRING AN AVERAGE OF 3.50 OR MORE BEHAVIORS TO OBTAIN
AN ADEQUATE ANSWER WHEN ASKED CORRECTLY BY INTERVIEWER

Section of Interview	Question Number	Number of Questions with Adequate Answers	Average Number of Behaviors to Adequate Answer	Question Wording
I	12.	112	6.43	How much did you pay for utilities last month?
	13a.	135	3.53	What is the name of the head of this household?
	13b.	174	9.32	What are the names of all other persons who are living or staying here?
	28.	140	6.34	What are the monthly payments (other than rents or mortgages) on all debts including loans and installment purchases of cars and furniture?
II	9b.	16	3.69	/If yes to 9a, ask/ How many extra hours did you work?
	10.	143	5.42	In the past 12 months, how many weeks did you work either full time or part time (not counting work around the house?)(INCLUDE PAID VACATIONS AND PAID SICK LEAVE).
III	12.	79	4.53	(Ask if two or more ways of looking for work were mentioned in 3-11) Which (read categories marked "Yes" in 3-11) way did you use the most?
	14.	84	4.94	The last time you looked for a job what was the lowest pay you would have accepted?
	17b.	5	3.80	/If yes to 17a, ask/ Which one?
	18a-2.	137	7.50	/If yes to 18a-1, ask/ How much (before deductions)?
	19.	80	5.18	About how much was your total income during the past 12 months from the sources you have mentioned?
	20a.	169	4.91	What kind of work did you do at your first full-time regular job after leaving school?
	20c.	156	3.51	What were your most important activities or duties?
	21a.	156	3.73	What type of work have you done the longest since leaving school?
	27f.	2	3.50	In what state or country was that located?
IV	1.	145	4.05	Now I'm going to ask you some questions about your present job. How long have you been working at this job.

TABLE 24. (Continued)

IV	3.	104	4.48	How much did you earn last week from your job(s)?
	6a.	171	4.33	How do you usually get from home to work?
	10.	173	4.87	What time do you usually get to work?
V	2a.	167	9.40	What things do (did) you particularly like about your job? Anything else?
	2b.	89	4.90	(If more than one category marked in 2a) Which is the thing you like (liked) the most about your job?
	3a.	168	7.07	What things in particular don't (didn't) you like about your job? Anything else?
	3b.	39	4.20	(If more than one category marked in 3a) Which is the thing you dislike (disliked) the most about your job?
	4.	165	4.35	If you could start all over again what type of work would you try to get into?
	5.	163	3.50	How would you compare your present (last) job to all the other jobs that you have had? Would you say it is (was) your best job, better than most, about the same, not as good as most, or the worst job you've ever had?
	7.	169	5.40	Which is better--a job that doesn't pay enough to live decently (pause) or (pause) getting along without a job?
	9.	172	4.05	Which is better--a job that doesn't give any respect (pause) or (pause) getting along without a job?
	10a.	169	3.64	Please tell me if you agree or disagree with the following statements as they apply to you? "Good luck is more important than hard work for success."
	10b.	167	3.81	"People like me don't have a very good chance to be successful in life."
	16.	156	4.76	What is your Social Security Number?

E. THE EFFECT OF AGE AND RACE ON THE NUMBER OF BEHAVIORS TO OBTAIN AN ADEQUATE ANSWER.

Table 25 shows those questions for which the number of behaviors to an adequate answer differed significantly by either respondent age or race.[*]

(INSERT TABLE 25)

Table 26 contains the wording of the questions which showed these effects organized by type of effect. There are eight questions for which the number of behaviors to an adequate answer was greater in interviews with Negroes compared to interviews with whites. There is only one question on which interviews with white respondents showed more behaviors than interviews with Negro respondents. These questions do not seem to fall into any single question-type category and it is difficult to offer any reasonable explanation for the observed effects.

(INSERT TABLE 26)

As might be expected from the finding that older respondents do more behaving per question than younger respondents, tables 25 and 26 indicate there are 12 questions for which interviews with older respondents contain more behaviors to an adequate answer than interviews with younger respondents; there is only one question when the trend is reversed. Again the pattern of questions does not reflect any one specific question problem which older respondents have.

F. SECTION V OF THE QUESTIONNAIRE

Section V of the questionnaire represents a new approach in collecting labor statistics. The questions are largely attitudinal and ask about a different kind of information than is usually collected in ongoing surveys of the labor force. For this reason, complete diagnostic data are presented for all questions in Section V in Table 27.

(INSERT TABLE 27)

The data are reasonably consistent. Only 2 of the 23 questions were asked incorrectly more than 10% of the time. Despite more rigid standards for correct question codes (in Section V only, the question had to be asked exactly as worded to be coded <u>correctly asked</u>) most questions were asked correctly. Problems with omitted and redundant questions were negligible and the inadequate answer rates were just about average. The main "problem" characteristic, therefore, seems to be reflected in the higher than usual number of behaviors to reach an adequate answer. As noted previously, these

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[*]Questions showing Age and Race interactions only have not been included.

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TABLE 25

QUESTIONS SHOWING DIFFERENTIAL AGE OR RACE MAIN EFFECTS ON NUMBER OF BEHAVIORS TO OBTAIN AN ADEQUATE ANSWER

Section of Interview	Question Number*	Number of Questions Asked Correctly	Mean Number of Behaviors to Adequate Answer				2x2 Analysis of Variance F - value (p ≤ .05)	
			Older Whites	Younger Whites	Older Negroes	Younger Negroes	Race	Age
I	13b.	178	7.00	9.07	12.02	9.14	4.107	
I	18.	128	2.38	2.60	2.09	2.05	4.591	
I	21b.	79	2.06	2.78	2.17	2.61		7.882
I	28.	167	3.97	5.46	8.74	7.08	11.672	
II	6.	177	2.33	2.09	2.27	2.12		4.073
III	13.	83	4.00	2.54	5.00	2.97		7.335
III	16c.	30	2.00	2.00	3.67	3.08	5.455	
III	18c.	175	2.49	2.27	2.51	2.33		3.928
III	20a.	181	4.24	4.18	5.93	5.17	6.288	
III	21a.	171	4.47	3.08	4.07	3.28		5.884
IV	1.	176	4.34	3.66	4.54	3.61		4.087
IV	5b.	110	2.79	2.09	3.59	2.64		4.749
IV	10.	179	4.44	4.62	5.33	5.07	4.964	
V	2b.	95	5.43	4.32	6.29	4.25		5.820
V	4.	181	4.34	3.26	4.88	4.92	3.919	
V	5.	168	3.89	3.05	4.52	2.54		7.339
V	8b.	169	2.35	2.11	2.97	3.50	5.277	
V	9.	180	4.76	3.30	4.27	3.93		3.926
V	10a.	175	2.90	3.05	4.75	3.79	12.973	
V	10b.	176	4.02	3.23	4.55	3.50		4.789

*See Table 26 for wording of questions.

TABLE 26

WORDING OF QUESTIONS SHOWING AGE OR RACE EFFECTS
ON NUMBER OF BEHAVIORS TO OBTAIN AN ADEQUATE ANSWER

Section of Interview	Question Number	Question Wording
Race Effects - Number of Behaviors Greater for Negroes than for Whites		
I	13b.	What are the names of all other persons who are living or staying here?
I	28.	What are the monthly payments (other than rents or mortgages) on all debts including loans and installment purchases of cars and furniture?
III	16c.	$\overline{/I}$f yes to 16a, as$\underline{k}\overline{/}$ In what year did you complete this program?
III	20a.	What kind of work did you do at your first full-time regular job after leaving school?
IV	10.	What time do you usually get to work?
V	4.	If you could start all over again what type of work would you try to get into?
V	8b.	$\overline{/F}$eeling about life in genera$\underline{l}\overline{//I}$f satisfied in 8a, as$\underline{k}\overline{/}$ Would you say--v$\underline{e}$ry satisfied or fairly satisfied? $/$ If dissatisfied in 8a, as$\underline{k}\overline{/}$--somewhat dissatisfied or very dissatisfied?
V	10a.	Please tell me if you agree or disagree with the following statements as they apply to you? "Good luck is more important than hard work for success."
Race Effects - Number of Behaviors Greater for Whites than for Negroes		
I	18.	Are you now married, widowed, divorced, separated, or have you never been married?

TABLE 26 (Continued)

Section of Interview	Question Number	Question Wording

Age Effects - Number of Behaviors Greater for Older than for Younger

II	6.	Do you usually work 35 hours or more a week at this job?
III	13.	/If worked in past 12 months, ask/ Which way of looking for work got you your present (or most recent) job?
III	18c.	/During the past 12 months did you receive/ Unemployment compensation?
III	21a.	What type of work have you done the longest since leaving school?
IV	1.	Now I'm going to ask you some questions about your present job. How long have you been working at this job?
IV	5b.	/If yes to 5a, ask/ What are the names of the two streets of the intersection nearest to your place of work?
V	2b.	(If more than one category marked in 2a) Which is the thing you like (liked) the most about your job?
V	5.	How would you compare your present (last) job to all the other jobs that you have had? Would you say it is (was) your best job, better than most, about the same, not as good as most or the worst job you've ever had?
V	9.	Which is better--a job that doesn't give any respect or getting along without a job?
V	10b.	/Please tell me if you agree or disagree with the following statements as they apply to you?/ "People like me don't have a very good chance to be successful in life."

Age Effects - Number of Behaviors Greater for Younger than for Older

I	21b.	/If yes to 21a, ask/ When did you serve?

TABLE 27

COMPLETE DIAGNOSTIC INFORMATION FOR SECTION V

Question Number	Number Relevant Respondents	% Incorrectly Asked	%Omitted Inf. Already Obtained	By Mistake	% Inadequate Answer	Number Beh. to Adequate Answer
1a.	181	2	0	0	1	2.90
1b.	181	2	1	1	4	2.70
2a.	181	0	0	0	8	9.40
2b.	116	13	0	5	6	4.90
3a.	181	1	0	0	7	7.07
3b.	54	17	0	7	5	4.21
4.	181	0	0	0	9	4.35
5.	181	7	1	0	3	3.50
6.	181	1	0	0	5	3.30
7.	181	0	0	0	7	5.40
8a.	181	1	0	0	2	3.23
8b.	181	2	3	2	7	2.71
9.	181	0	0	1	4	4.05
10a.	181	3	0	1	3	3.64
10b.	181	2	0	1	5	3.81
10c.	181	2	0	1	4	2.97
11.	181	0	0	1	4	2.63
13a.	88	0	0	1	10	3.41
13b.	45	2	0	2	0	2.89
14a.	87	1	0	0	8	3.10
14b.	32	0	0	0	3	2.94
15.	81	0	0	2	1	2.56
16.	181	1	0	1	13	4.76

questions result in a large number of behaviors not because they request information which the respondent has trouble remembering, but because they force the respondent to choose one answer alternative which reflects a multitude of his attitudes, beliefs, and opinions. Whether or not this kind of response problem indicates some sort of response error is a researchable question.

G. DIAGNOSTIC SUMMARY

The question-by-question analysis presented above gives some idea of the kind of approach that might be taken to diagnosing question problems in a survey interview. A summary of these findings is given in Table 28.

(INSERT TABLE 28)

The analysis can be extended even further by using more of the behavior codes or more of the indices of total behavior per question. The diagnostic power can be strengthened by a more complex set of derivations from combinations of diagnostic parameters (an example of the parameter combination approach may be found in the treatment of the question omission data).

The results obtained by this approach seem reasonable. Omission problems are confined mostly to questions with skip-patterns or which are otherwise asked of sub-samples. Many of the questions which were not asked correctly contain ambiguous parenthetical statements or awkward syntax. Inadequate answers appear frequently on questions requiring respondent recall of past events or on questions which interviewers may be unclear as to the definition of an acceptable answer. Questions requiring a large number of behaviors to reach an adequate answer are often the same questions with high inadequate answer rates. They also include questions requiring detailed answers and some questions with difficult forced-choice answer alternatives. With further refinements in the diagnostic approach, it should be possible to pinpoint exactly which problems exits for each question as well as the most likely causes of the problems.

TABLE 28.

SUMMARY OF DIAGNOSTIC INFORMATION

Section, Question Number, & Question Wording	Diagnostic Information --Table Mention	Interpretation
I, 8. How many rooms are in this unit? (Count kitchen but not bathroom)	22	Often asked incorrectly. Interviewers probably unclear on how to treat parenthetical statement.
I, 9a. Are your living quarters-- Owned or being bought by you or someone in your household?	22	Frequently asked incorrectly. Question contains awkward syntax (2 "or's") and interviewers may alter the wording in an attempt to simplify the question.
I, 9b. --Rented for cash?	19	Often not asked because answer given previously. Seldom omitted by mistake.
I, 9c. --Occupied without payment of cash rent?	18	Often not asked because answer given previously and often omitted by mistake when it should have been asked. Interviewers probably unclear on what constitutes an adequate answer when information given previously.
I, 10. What are your monthly mortgage (rent) payments?	*	*
I, 11a. In addition to rent payments, do you pay separately for: Electricity?		
I, 11b. --Gas?		
I, 11c. --Water?		
I, 11d. --Oil, coal, kerosene, wood?		
I, 12. How much did you pay for utilities last month?	23 24	Answered inadequately or with difficulty. Respondents apparently have recall problems and may not be clear on the definition of "utilities," which could result in inaccurate data.
I, 13a. What is the name of the head of this household?	24	High number of behaviors to an adequate answer, -probably to get spelling of name.
I, 13b. What are the names of all other persons who are living or staying here?	24 25	High number of behaviors to adequate answer, highest number of behaviors in interviews with Negroes. Question probably OK, just calls for complex answer.
I, 26a. I have listed (read names in 13). Have I missed: --any babies or small children?		
I, 26 b. --any lodgers, or boarders, who live here?		

*If blank, no potential problems were identified for the question.

TABLE 28. (Continued)

Section, Question Number, & Question Wording	Diagnostic Information --Table Mention	Interpretation
I, 26c. --anyone who usually lives here but is away at present traveling, at school, or in a hospital?	23	High number of inadequate answers. Interviewers probably not probing enough or not waiting for an adequate answer after completing the question.
I, 26d. --anyone else staying here?	23	Same as question 26c., above.
I, 16. What is your date of birth?		
I, 18. Are you now married, widowed, divorced, separated, or have you never been married?	23 25	Often answered inadequately. More behavior to an adequate answer for whites than Negroes. Problem exists but source unclear.
I, 21a. Did you ever serve in U.S. Armed Forces?		
I, 21b. /If yes to 21a, ask/ When did you serve?	25	Young take more behavior to give adequate answer than old. Probably does not indicate any serious problem unless precise information needed for older respondents.
I, 22. Are you now in the Armed Forces?	20	Often skipped when, according to instructions, it should have been asked. Suggest inserting skip instructions which interviewer uses anyway: "If 'no' in 21a., skip to 23a."
I, 23a. What is the highest grade (or year) of regular school you have ever attended?	23	Often answered inadequately. Further study of problems needed. Possibly the K,E,H,C code is a source of trouble, since information necessary to assign the codes is not automatically elicited by the question.
I, 23b. Did you complete that grade (year)?	19 23	Often not asked because answer given previously and often answered inadequately. Interviewer probably accepting inadequate answers assuming they meet the objectives of the question.
I, 24. Can you read and write English?	20	Often erroneously omitted probably because it is supposed to be asked only of a very small sub-sample.
I, 25. Can you read and write any other language?	20 22	Often erroneously omitted and often answered inadequately. A pattern of error which is probably due to the fact that the question is asked of a very small sub-sample.
I, 27. How many cars or trucks do you have for family use?		
I, 28. What are the monthly payments (other than rents or mortgages) on all debts including loans and installment purchases of cars and furniture?	23 24 25	Often answered inadequately, high number of behaviors to an adequate answer, more behavior in interviews with Negroes than whites. Asks for information which respondent cannot provide easily. Data probably contain response error and probably greatest amount of error from interviews with whites.

TABLE 28. (Continued)

Section, Question Number, & Question Wording	Diagnostic Information --Table Mention	Interpretation
I, 28a. (For "rent" or "no cash rent" in item 9.) Is this apartment (house) owned by a private individual, a private corporation, or is it publicly owned? (For example: public housing authority.)	20 22	Often omitted by mistake and incorrectly asked. Probably reflects interviewer uncertainty about when and how to ask. Sub-sampling instructions and format might be improved and parentheses removed.
I, 29. What is your telephone number?		
II, 1a. Did you do any work at all last week, not counting work around the house?		
II, 1b. /If no to 1a, ask/ Did you have a job or business from which you were temporarily absent or on lay-off last week?	19 22	Often skipped because answer obtained previously. Frequently asked incorrectly. Possibly a problem caused by interviewer already knowing this information from screening questions and rephrasing the probe to elicit the "correct" answer.
II, 2. For whom did you work? (Name of company, business, organization, or other employer)		
II, 3. What kind of business or industry is this? (e.g. TV & radio manufacture, retail shoe store, state labor department, farm, etc.)		
II, 4. What kind of work were you doing? (e.g. electrical engineer, stock clerk, typist, farmer, etc.)		
II, 5a. Were you an employee of a private company, business, or individual for wages, salary, or commission?	22 23	Often asked incorrectly, often answered inadequately. A question with very awkward construction which must confuse both interviewer and respondent. Interviewer sometimes tries to ask all parts of question 5 at one time.
II, 5b. --a government employee (Federal, State or County)?	18 23	Frequently not asked by mistake, often skipped because it is redundant, often answered inadequately. Part of a very confusing question sequence.
II, 5c. --self-employed in own business, profession, or farm?	18 23	Same as question 5b, above.
II, 6. Do you usually work 35 hours or more a week at this job?	25	More behavior to get adequate answer for older respondents. Source of problem, if any, unclear.
II, 7. How many hours did you work last week at all jobs?		

TABLE 28. (Continued)

Section, Question Number, & Question Wording	Diagnostic Information --Table Mention	Interpretation
II, 8a. Did you lose any time or take any time off last week for any reason such as illness, holiday or slack work?	23	Frequently elicits inadequate answers. Requirements for an adequate answer may not be clear to interviewers.
II, 8b. /If yes to 8a, ask/ How many hours did you lose or take off <u>last week</u>?	19 22 23	Question sometimes redundant, often asked incorrectly, often answered inadequately. Interviewer probably too ready to accept an inadequate answer as adequate.
II, 9a. Did you work any overtime or at more than one job last week?		
II, 9b. /If yes to 9a, ask/ How many extra hours did you work?	18 23 24	Same as 8b, above, but respondent recall problems may be part of the trouble.
II, 10. In the past 12 months, how many weeks did you work either full time or part time (not counting work around the house)? (Include paid vacations and paid sick leave)	24	High number of behaviors to reach adequate answer. Recall problem. Interviewers may need several tries to read all the parenthetical statements.
II, 11a. Did you lose any full weeks of work in the past 12 months because you were on lay-off from a job or lost a job?	23	Often answered inadequately. Probably recall problems. Restructuring the question may help.
II, 11b. /If yes to 11a, ask/ How many full weeks of work did you lose?	18 23	Often answered inadequately, often omitted erroneously, frequently omitted because information already given. Respondents probably having recall problems and interviewers are either accepting inadequate answers or assuming, incorrectly, that adequate information was provided in answer to 11a.
II, 12. When you were working in the past 12 months, did you usually work full time or part time?		
III, 1a. (If male) During the past 5 years did you engage in any kind of activity for which you received money but which you would not normally consider work?		
III, 1b. /If Yes to 1a, ask/ What was this activity?	19 23	Often redundant. Frequent inadequate answers. Possibly interviewer carelessness in not pursuing an acceptable answer.
III, 2b. During the past 5 years did you look for work at any time?		
III, 3. Now I have some questions about ways you may have looked for work. Did you check with the State Employment Service during the past 5 years?		

TABLE 28. (Continued)

Section, Question Number, & Question Wording	Diagnostic Information --Table Mention	Interpretation
III, 4. Did you apply directly to an employer?		
III, 5. Did you ask your friends or relatives?		
III, 6. Did you check the newspapers?		
III, 7. During the past 5 years did you register with any union?		
III, 8. Did you check with a private employment agency, one supported by fees?		
III, 9. Did you check with organizations such as community action groups, Urban League, and welfare agencies?		
III, 10. (If male) Did you go to special streets or places where employers come to pick up workers?		
III, 11a. Did you use any other way to look for a job in the past 5 years?		
III, 11b. $\overline{/}$If yes to 11a, ask$\overline{/}$ What other way did you use?	19 23	Often redundant, frequent inadequate answers. Possibly interviewer carelessness in not pursuing an acceptable answer.
III, 12. (Ask if two or more ways of looking for work were mentioned in 3-11) Which (read categories marked "Yes" in 3-11) way did you use the most?	24	High number of behaviors to adequate answer. Respondents apparently have difficulty making the required decision.
III, 13. Which way of looking for work got you your present(or most recent) job?	25	Interviews with older respondents contain more behaviors to adequate answer. May reflect special recall or decision difficulty.
III, 14. The last time you looked for a job what was the lowest pay you would have accepted? (If amount given per hour, record dollars and cents, otherwise, round to the nearest dollar.)	24	High number of behaviors to adequate answer. Apparently difficult to report this information.
III, 15a. Did you complete a job training program in high school, trade school, or junior college? (Examples: vocational, business, or technical)		

TABLE 28. (Continued)

Section, Question Number, & Question Wording	Diagnostic Information --Table Mention	Interpretation
III, 15b. /¯If yes to 15a, as<u>k</u>/ What kind of work were you trained for (Occupation)?	23	Frequent inadequate answers. May reflect interviewer uncertainty about what constituted an adequate description of occupation.
III, 15c. In what year did you complete the (most recent) program?		
III, 16a. (If male) Did you complete a job training course in the Armed Forces? (Exclude basic training)	19 23	Often answered inadequately. Possibly because the criteria for an adequate answer are not clear to either interviewer or respondent. Frequently skipped probably because interviewer knows if respondent did not serve in the armed services.
III, 16b. /¯If yes to 16 a, ask¯/ What kind of work were you trained for? (Occupation)	18	High omission by error and often skipped because of redundancy. Skip-pattern problem. Also interviewer probably cannot recognize an adequate description of occupation when given previously.
III, 16c. In what year did you complete this program?	20 25	High omission error. More behavior to an adequate answer in interviews with Negroes. Probably skip-pattern problem.
III, 16d. Have you ever started in an apprenticeship program?	20	High rate of erroneous omission. Probably skip-pattern problem.
III, 16e. What kind of work was that for? (Occupation)	20	Same as 16d, above.
III, 16f-1. Did you complete it?	20 23	Both omitted by mistake and answered inadequately. Probably indicates skip-pattern problem and ambiguity of concept "completion."
III, 16f-2. /¯If yes to 16f-1, ask¯/ In what year?	20	Omitted erroneously. Skip-pattern problem.
III, 17a. Have you ever participated in any other training program? (Examples: Upward Bound, Job Corps, or Neighborhood Youth Corps)		
III, 17b. /¯If yes to 17a, ask¯/ Which one?	19 23 24	Often redundant, frequently answered inadequately and with a high number of behaviors to an adequate answer. Pattern reflects respondent difficulty in providing this kind of information.
III, 17c. In what year did you participate?		
III, 17d. Did you complete it?	23	Frequent inadequate answers. May reflect ambiguity of the concept "completion."

TABLE 28. (Continued)

Section, Question Number, & Question Wording	Diagnostic Information --Table Mention	Interpretation
III, 17e. /If yes to 17d, ask/ Have you ever used any of this training on any of your jobs?		
III, 18a-1. During the past 12 months did you receive any of the following kinds of income: Wages, salary, tips, or commissions, (or net income from your own business)?		
III, 18a-2. /If yes to 18a-1, ask/ How much (before deductions)?	24	Number of behaviors to an adequate answer is high. Probably difficult for respondents to answer in this form. Revision may be appropriate.
III, 18b. --Workmen's compensation?		
III, 18c. --Unemployment compensation?	25	Interviews with older respondents contain more behaviors to adequate answer. May have special difficulty recalling.
III, 18d. Did you (or any member of your family living here) receive any of the following: Social Security (old age, survivors, disability and health insurance)?		
III, 18e. --Other pensions (Veterans, private employer, Government, etc.)?		
III, 18f. --Welfare or public assistance (aid to dependent children)?		
III, 18g. --Rents, including that from roomers or boarders?		
III, 18h. --Interest or dividends?		
III, 18j-1. Do you have any income or assistance, from a source other than those we have already mentioned?		
III, 18j-2. /If yes to 18j-1, ask/ What was that?	18	Redundant and often omitted by mistake. Either skip-pattern effect, effect of obscure placement or due to interviewer assuming, incorrectly, that adequate information has been supplied.
III, 19. About how much was your total income during the past 12 months from the sources you have mentioned?	23 24	Both inadequate answers and high number of behaviors to an adequate answer. Definite respondent recall problems.

TABLE 28. (Continued)

Section, Question Number, & Question Wording	Diagnostic Information --Table Mention	Interpretation
III, 20a. What kind of work did you do at your first full-time regular job after leaving school?	24 25	Number of behaviors to an adequate answer is high, especially for interviews with Negroes. Probably reflects general recall problems which may be especially acute for Negroes.
III, 20b. What kind of business or industry was that?	23	High rate of inadequate answers. Could indicate a lack of understanding of what constitutes an adequate description of the "kind of business or industry."
III, 20c. What were your most important activities or duties?	24	High number of behaviors to an adequate answer. Question requires a complex answer which may take a lot of effort to complete.
III, 20d-1. Were you--An employee of private company, business or individualist (sic) for wages, salary, or commissions?	22 23	Often incorrectly asked, often inadequately answered. A very awkwardly-worded question which interviewers may try to improve upon. Wording may confuse respondents and cause inadequate answers. Sometimes interviewer tries to ask all parts of 20d at once.
III, 20d-2. --A Government employee (Federal, State, County, or local)?	18	Often skipped because of redundancy and often skipped by mistake. Skip-pattern problem. Interviewer may incorrectly assume that information already given in previous answer.
III, 20d-3-1. --Self-employed in own business, professional practice, or farm?	18 23	Frequently omitted because of redundancy and because of error. Same error source as 20d-2, above. Frequent inadequate answers obtained. Probably another symptom of interviewer uncertainty about the criteria for an adequate answer.
III, 20d-3-2. /If yes to 20d-3-1, ask/ Is this business incorporated?	18	Frequently omitted because of redundancy and because of error. Same error source as 20d-2, above, compounded by obscure placement of question on questionnaire.
III, 20d-4. --Working without pay in family business or farm?	19	Often redundant. No other problem apparent.
III, 20e. How long did you work at that job?		
III, 21a. What type of work have you done the longest since leaving school?	24 25	High number of behaviors to an adequate answer, especially for older respondents. Difficult recall task involved. May be more difficult for older respondents.
III, 21b. How long did you work at that?		

TABLE 28. (Continued)

Section, Question Number, & Question Wording	Diagnostic Information --Table Mention	Interpretation
III, 22. What kind of industry was that?	19 22 23	Often redundant (e.g., if same as present job). Frequently asked incorrectly, often answered inadequately. Probably reflects interviewer error due to uncertainty about when an adequate description of "industry" is obtained, especially in response to a previous question.
III, 23a. How many years have you lived at your present address?		
III, 23b. How many times have you moved in the last year?		
III, 24. How many years have you lived in this city?		
III, 25a. Were you born...In this city?	22	GENERAL COMMENTS ON QUESTIONS 25, 26 & 27:
III, 25b. --In a suburb near a large city?	19 23	This series of questions is awkward and cumbersome for both interviewer and respondent. Often the required information may be extrapolated from the answers to questions 23 and 24, but it is not always easy for the interviewer to determine when and to what extent the previous answers are relevant.
III, 25c. --In a large city (over 250,000 pop.)?	19	
III, 25d. --In a medium size city (50-250,000 pop.)?	19	
III, 25e. --In a small city or town (under 50,000 pop.)?	19 23	Further omission problems are created by the skip instructions and format.
III, 25f. --In open country but not on a farm?	18	The "a" part of each question is often asked incorrectly, reflecting the interviewer's confusion. She may try to ask all parts of the question at once, resulting in the "a" part coded as incorrectly asked and the remaining parts coded as omitted by mistake. Other parts of the questions, respondent answers are frequently inadequate either as a consequence of the confusion or because the requested information is too difficult for the respondent to furnish.
III, 25g. --On a farm?	18 23	
III, 25h. In what state or country was that located?	19 23	
III, 26a. Five years ago did you live...In this city?	22 23	
III, 26b. --In a suburb near a large city?	18	
III, 26c. --In a large city (over 250,000 pop.)?	18 23	
III, 26d. --In a medium size city (50-250,000 pop.)?	18	
III, 26e. --In a small city or town (under 50,000 pop.)?	18	
III, 26f. --In open country but not on a farm?	20	
III, 26g. --On a farm?	20	
III, 26h. In what state or country was that located?	18 22 23	

TABLE 28. (Continued)

Section, Question Number, & Question Wording	Diagnostic Information --Table Mention	Interpretation
III, 27a. At age 16 did you live...In this city?	22	SEE GENERAL COMMENTS FOR QUESTIONS 25, 26 & 27, ABOVE.
III, 27b. --In a suburb near a large city?	19 23	
III, 27c. --In a large city (over 250,000 pop.)?	18 23	
III, 27d. --In a medium size city (50-250,000 pop.)?	18	
III, 27e. --In a small city or town (under 50,000 pop.)?	18	
III, 27f. --In open country but not on a farm?	18 24	
III, 27g. --On a farm?	18	
III, 27h. In what state or country was that located?	18 22 23	
III, 28a. (Omit if Mexico or Puerto Rico is person's place of birth.) In what state or country was your father born?		
III, 28b. In what state or country was your mother born?	22	Often asked incorrectly. Source of problem not clear.
III, 29a. (Omit if Mexico or Puerto Rico is entered in items 25 or 28.) Was a language other than English frequently spoken by your parents in your home when you were a child?		
III, 29b. /If yes to 29a, ask/ What language was that?	18	Skipped both because of redundancy and and interviewer mistakes. Probably caused by obscure question placement.
IV, 1. Now I'm going to ask you some questions about your present job. How long have you been working at this job?	23 24 25	Frequent inadequate answers, number of behaviors to an adequate answer is high, especially for older respondents. Apparent respondent recall difficulty especially if respondent is older.
IV, 2. In addition to that job, how many other employers did you work for last week? (NOTE: Domestic day work for various employers is considered one job.)		
IV, 3. How much did you earn last week from you job(s)? Enter to nearest dollar.	22 24	Often incorrectly asked. Number of behaviors to an adequate answer is high. Problem may be due to sensitive nature of the question as well as unavailability of information on the part of the respondent.

TABLE 28. (Continued)

Section, Question Number, & Question Wording	Diagnostic Information --Table Mention	Interpretation
IV, 4a. Do you usually go to the same address to start each day's work?		
IV, 4b. /If no to 4a, ask/ Do you report to a different address every time or what?	20	Frequently omitted by mistake. Possibly due to a sub-sampling phenomenon.
IV, 5a. Do you work within the city limits of (name of this city)?		
IV, 5b. What are the names of the two streets of the intersection nearest to your place of work?	25	Interviews with older respondents take more behavior to get an adequate answer. Problem if any, is not obvious.
IV, 6a. How do you usually get from home to work?	24	Number of behaviors to an adequate answer is high. Probably cannot be answered in the straightforward way implied by the question.
IV, 6b-1. (For ride with some-one else) Do you pay?	22	Frequently asked incorrectly. Source of problem not clear.
IV, 6b-2. /If yes to 6b-1, ask/ How much?	20	Often omitted by mistake. Probably caused by obscure placement of question.
IV, 7a. Do you use any other way at least once a week?		
IV, 7b. What do you use?	19	Frequently skipped because answer already given.
IV, 7c-1. (For ride with some-one else) Do you pay?	18 23	Omitted because of redundancy and by mistake. Also answered inadequately. Apparently interviewers have trouble distinguishing when the question has been answered adequately.
IV, 7c-2. /If yes to 7c-1, ask/ How much?	18	Omitted because of redundancy and by mis-take. Possibly due to not recognizing an inadequate answer given previously or to obscure question placement.
IV, 8. (/If public transporta-tion (categories 1-5) in items 6a or 7b/ --what is the total cost of the one-way trip to work by ...? (Name means used)		
IV, 9. How long does it take to get from home to work?		
IV, 10. What time do you usually get to work?	24 25	Number of behaviors to an adequate answer is high, especially for Negroes. Apparently a difficult abstraction to make.

TABLE 28. (Continued)

Section, Question Number, & Question Wording	Diagnostic Information --Table Mention	Interpretation
V, 1a. Now I have some questions about your (most recent) job. Thinking about your job in general would you say that you are (were) satisfied or dissatisfied?		
V, 1b. /If satisfied to 1a, ask/ Would you say--very satisfied or fairly satisfied? /If dissatisfied to 1a, ask/ Would you say--a little dissatisfied or very dissatisfied?		
V, 2a. What things do (did) you particularly like about your job? Anything else?	24	High number of behaviors to an adequate answer. Question requires complex answer and at least one interviewer probe.
V, 2b. (If more than one category marked in 2a) Which is the thing you like (liked) the most about your job?	24 25	High number of behaviors to an adequate answer, especially for older respondents. Apparent difficulty in making the required discrimination, especially for older respondents.
V, 3a. What things in particular don't (didn't) you like about your job? Anything else?	24	Same as 2a, above.
V, 3b. (If more than one category marked in 3a) Which is the thing you dislike (disliked) the most about your job?	22 24	Often incorrectly asked, number of behaviors to an adequate answer is high. Respondent problems in making required decision. Interviewer may anticipate this and try to rephrase the question.
V, 4. If you could start all over again what type of work would you try to get into?	24 25	High number of behaviors to an adequate answer, especially Negro respondents. Calls for complex answer.
V, 5. How would you compare your present (last) job to all the other jobs that you have had? Would you say it is (was) your best job, better than most, about the same, not as good as most or the worst job you've ever had?	24 25	High number of behaviors to an adequate answer, especially for interviews with older respondents. Requires difficult judgment.
V, 6. Thinking ahead to the future, do you expect to have a better job, worse job, or a job about the same as the one you have now (the last job you had)?		
V, 7. Which is better--a job that doesn't pay enough to live decently (pause) or (pause) getting along without a job?	24	High number of behaviors to an adequate answer. Requires difficult judgment and has a "flabergasting" effect because this is the first "morality" question in the interview.

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TABLE 28. (Continued)

Section, Question Number, & Question Wording	Diagnostic Information --Table Mention	Interpretation
V, 8a. How do you feel about your life in general? Would you say that you are satisfied or dissatisfied?		
V, 8b. /If satisfied to 8a, ask/ Would you say--very satisfied or fairly satisfied? /If dissatisfied to 8a, ask/ Would you say--somewhat dissatisfied or very dissatisfied?	25	Interviews with Negroes have more behaviors to an adequate answer than interviews with whites. Source of problem, if any, not obvious.
V, 9. Which is better--a job that doesn't give any respect (pause) or (pause) getting along without a job?	24 25	High number of behaviors to an adequate answer, especially older respondents. Possibly a difficult discrimination to make.
V, 10a. Please tell me if you agree or disagree with the following statements as they apply to you? "Good luck is more important than hard work for success."	24 25	High number of behaviors to an adequate answer, especially Negro respondents. Another difficult discrimination.
V, 10b. --"People like me don't have a very good chance to be successful in life."	24 25	High number of behaviors to an adequate answer, especially older respondents. A difficult discrimination.
V, 10c. --"Everytime I try to get ahead something or somebody stops me."		
V, 11. Which is better--a job that isn't steady (pause) or (pause) getting along without a job?		
V, 13a. As far as you know are there employers in this city who discriminate against (Negroes or Spanish-Americans), such as by refusing to hire or promote them or in some other way?		
V, 13b. How many employers in this city discriminate against...(Read appropriate group--Negroes, Spanish-Americans)? Would you say--most, many, some, or a few?		
V, 14a. As far as you know are there employers in this city who discriminate against minority groups such as Negroes, or Spanish-Americans by refusing to hire or promote them or in some other way?		
V, 14b. How many employers in this city discriminate against these minority groups? Would you say--most, many, some, or a few?		

TABLE 28. (Continued)

Section, Question Number, & Question Wording	Diagnostic Information --Table Mention	Interpretation
V, 15. How do you happen to know of this?		
V, 16. What is your Social Security Number?	24	High number of behaviors to an adequate answer. Cause not clear.

CONCLUDING COMMENTS

Since the techniques and procedures of interaction analysis developed for this study are new, it is appropriate to conclude this report with an evaluation of the methods and to discuss some of their other potential applications.

The main body of this report describes how the methods were developed and shows how they were applied to the Urban Employment Survey. These data demonstrate that the method is useful for describing the interview, for comparing interaction patterns of race and age groups, and that it can be used, to some extent, to evaluate questionnaires and various types of questions. This preliminary analysis, however, gives only a hint of what the ultimate value of this interaction analysis procedure might be. Further work with the technique could extend its use and application.

A brief review is perhaps in order. For some time we have been interested in the interaction between respondents and interviewers during a personal interview, since it seems possible that by studying the verbal exchanges we can learn more about some of the sources of bias and of the potential for obtaining accurate information.

This is not the first attempt to develop systematic interaction analysis methods: there are at least two well known methods in the field of social psychology. The technique described here, however, seems to us to be particularly useful in studying the personal interview situation. Our methods differ from those used previously primarily in the level of abstraction at which the coding is performed. The well-known Bales interaction analysis uses a higher level of conceptualization in coding interactions, but the problem is that it requires long training for the coders to be able to perform at an acceptable level of reliability, and questions about the validity of the data still remain. The present method avoids these difficulties by focusing much more directly at the concrete level where each item of interviewer and respondent behavior is coded with a minimum of inference required by the coder. This avoids the need for long training, and has achieved a respectably high level of reliability.

Tabulation of these "molecular" data provides useful information on specific incidents of behavior of both interviewers and respondents, and provides a basis for comparing different patterns of behavior for different kinds of questions, different interviews, different topics, and so forth.

It has, however, the disadvantage that generalizations from this molecular level to higher levels of abstraction are necessarily intuitive and subjective at the present time. For example, inferences about the respondent's affective state (is he irritated, aggressive, wanting to be liked, embarrassed, etc.) are not readily inferred by knowing only such things as the number of times he laughs, answers adequately, etc. It seems likely, however, that special studies could be carried out which would enable us to identify which molecular behavior patterns are associated with more general psychological states. Thus, the procedure might be flexible enough to be molecular (and thereby useful for many analyses) and also to distinguish patterns of behavior which would characterize certain psychological states so that analysis could be done at that level as well. For example, one might be able to discern interacting patterns which represent interviewer domination or interviewer submissiveness; we may be able to identify patterns showing respondent irritation, confusion, or resistance. More experience with the method will suggest how feasible this might be.

But accepting the interaction coding at the present level, we can still anticipate several practical applications of the technique. First, there is the problem of pretesting questionnaires. Social science strives to be a scientific discipline, but the procedures used by social scientists to develop and validate questions and questionnaires are generally crude. One usually sends a group of interviewers into the field with a questionnaire developed in the office. There is then a meeting (or series of meetings) in which interviewers and the researcher discuss the questionnaire, and one hears familiar phrases such as "this question seems to work well" or "this question seems to do what we want it to because we have a distribution of responses." The interviewer might say, "I don't think the respondents really understand this question" or "this question irritates people." It is on the basis of such highly subjective evaluations that we create our questionnaire.

We do not propose that the present method of interaction analysis will produce perfectly valid measuring instruments, and we continue to believe that field instruments should be validated by other means. It does appear, however, that this method shows considerable promise in at least some aspects of evaluation of pretest interviewing, and in establishing whether particular questions are adequate or not. For example, the main body of this report includes a questionnaire analysis which was based on the behavior data; particular patterns were identified which suggested problems associated with

specific questions or with the structure or format of the questionnaire itself.
The analysis of pretest interviews by use of this interaction data could show which
questions were troublesome for either the interviewer or the respondent. Such
analyses can also identify questions which are difficult for the respondents to
understand, which are embarrassing or confusing, questions which the interviewer
is likely to skip, or likely to accept answers which do not meet question
objectives. We conclude that this systematic evaluation of pretest interviews
may be far more useful and helpful than the present subjective method.

Another use of the interaction analysis technique could be to evaluate
training of the individual interviewer or of training in general. The coding
of the interviewer's participation enables us to ascertain how well the inter-
viewer has followed instructions. Frequency distributions of the various code
categories for interviewers shows, for example, how frequently the interviewer
is using directive probes, how often questions are being misworded, how many
times inadequate answers are obtained, and so forth.

A third use of our method is the evaluation of interviewing techniques
themselves. A researcher can train interviewers in particular, specialized
interviewing procedures (usually of an experimental sort) and, through the use
of the interaction data, can ascertain whether or not the interviewer followed
the special procedures properly and whether the special procedures are reducing
the problems which occur when traditional interviewing techniques are used.

A further use, of particular current interest, is to test various kinds of
interviews with important population subgroups. It was for this purpose that
our whole measuring system was created, and it appears to have potential for
providing data on the effects of specific interviewing methods with specific
groups. One might want to know, for example, if ghetto dwellers have particular
problems with some questions, whether the very well-educated found some questions
to be oversimplified, and so on.

In order to explore the potential of the interaction analysis technique,
the first requirement is experience in applying it to other types of interviews.
In our present study, only four interviewers were used and a unique set of respondents
was selected. We would have learned more about the method if we had been able
to carry through the original plan: to use Negro interviewers as well as white
with comparable groups of respondents. Additional knowledge may be obtained by
applying the method to a wider variety of interviewers, and to studies using different
kinds of instruments; e.g., more open questions and more attitude questions. The
results could then be compared with findings from closed, factual questions. It
appears likely that a pattern of interaction will emerge which will differentiate

various kinds of interviews, different kinds of respondents, and different kinds of situations. Broader experience is necessary before we will know if this is actually so.

So far we have discussed the application of this method to survey interviews. We feel that it is equally applicable to non-survey interviews. It would be interesting, for instance, to investigate the interaction between interviewer and respondent in the Employment Service interviews. We are particularly interested in interviews in which the respondent is under some kind of stress in order to see if the interaction patterns develop differently under such circumstances.

Another thing which was not looked into during our study is how a stable pattern of interaction becomes established (if, indeed, it does), at what point in the interview does this take place, what kinds of "steady-state" patterns can emerge, and what antecedent conditions predict their appearance? To do this work, a special experimental interview will have been required in which the type of questions asked and the sensitivity of the subject matter can be controlled. Such information would be particularly helpful to people who design questions and questionnaires; it would be valuable for them to know where the interaction is the smoothest, at what point fatigue sets in (and whether it does), and at what point the interaction is developed so that more sensitive issues could be introduced.

UNCONTROLLED INTERVIEWER BEHAVIOR

The reader ought not think that all of the value of this study is to be realized in the future. There are, in fact, some most interesting and significant findings from this study which should be followed up.

The findings of greatest significance for interviewing in general can be summarized simply: a high proportion of the interaction that takes place between the interviewer and the respondent is instigated by interviewer behavior which is outside of the researcher's control, and which was not part of the interviewer's training.

The interview is usually thought to go as follows: the interviewer asks a question as worded on the questionnaire; the respondent answers inadequately or incompletely. The interviewer then uses a nondirective probe or repeats the question, and the respondent gives an adequate response. It is to these two aspects of interviewer behavior (question wording and probing) that nearly all interviewer training is directed. Studying the frequencies of interviewer behavior, however, shows clearly that a great deal of the interviewer's behavior

lies outside these two categories; in fact, only 60% can be classified broadly as question-asking behavior or probing behavior.

Of special interest (because of its particular effects on response patterns) is the finding that one-quarter of the interviewer's behavior can generally be classified as "feedback." This behavior is as frequent as probing behavior. "Feedback" can be described as interviewer behavior which is characterized by some type of _evaluation_ or of response to respondent's behavior. Such feedback may be a simple "uh-huh" in response to an answer by the respondent, or it may be a more complete statement like "I'm interested in that," "that's good," "this is just the sort of information we want," "you are doing a good job," or even "I like talking with people like you." Any of these responses serve, in one way or another, to let the respondent know how the interviewer is reacting to his (the respondent's preceding behavior. Clearly, the reactions may inform the respondent of different things. Some feedback lets the respondent know how well he is performing in his role; i.e., it teaches him his role, lets him know what is expected of him, and informs him when he is performing adequately. Previous research shows that respondents are not likely to have a clear idea of what is expected of them, or to know what constitutes satis- factory performance.

Feedback also serves to encourage, reinforce, and motivate the respon- dent to greater activity. That is, the apparent approval which the inter- viewer shows for adequate performance gives the respondent an evaluation of his performance and is (according to other studies) a motivating technique. It encourages more performance of the same kind.

Feedback may also give some affective evaluation to the respondent. That is, the interviewer may indicate (by what he says or how he reacts) that he does--or does not--_like_ the person personally. This is the basis of rapport-type interview.

Feedback of some kind follows almost all kinds of respondent behavior. It is not limited to times when the respondent gives adequate responses, but is likely to follow an inadequate answer. The general impression one has from this analysis is that feedback is being used indiscriminantly; that it is not being used effectively either to teach a role or to motivate the respondent. The respondent is probably no better informed of his role nor is he encouraged in his efforts, because he is just as likely to receive feedback from inadequate as from adequate answers.

The other serious implication of the existence of this pattern of feedback behavior is that it provides a considerable potential for bias. If, for example, the respondent is doing a poor job of answering and he receives positive feedback, he probably perceives that poor performance is actually acceptable to the interviewer. This kind of respondent role perception may lead to bias. If, for example, the respondent is being reinforced on a personal affiliative basis, it may suggest to him that the interviewer approves of what he is presently reporting and, by implication, disapproves of some other behavior which was not reinforced. The respondent is thereby encouraged to do more of whatever he is getting approval for (assuming that he values the relationship with the interviewer, which seems to be the case in most interviews).

We are particularly concerned about this because two of our experimental studies show that controlled feedback effectively increases the number and validity of particular response classes. In those studies, each time a respondent reported a symptom or illness, the interviewer gave some sort of reinforcement statement like, "this is the kind of information that we need," or "thank you for telling me that." No other type of behavior was reinforced. The results of these studies show a sharp increase in the quality and quantity of reporting of the kinds of things which were reinforced. This demonstrates that feedback procedures do have an effect on the outcome of the interview and, by implication, the danger of bias which could be introduced by improperly used or uncontrolled feedback.

These are some of the implications for further research and suggestions for applications of these procedures of interaction analysis. The technique naturally needs further refinement in order to be of optimum use, but we do believe that it is a particularly powerful way of studying the interaction between two people in the interview situation.

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BEHAVIOR TRANSITION PROBABILITIES

The analyses presented in this report are largely in terms of frequencies (or proportions) with which a behavior occurs. It is possible to take the analysis one step further to indicate how one person (e.g. interviewer) reacts to a specific kind of behavior of the other person (e.g. respondent). Information of this kind provides additional understanding of what happens during a survey interview.

While these "reaction" data have not been used extensively here, the possibilities for use are illustrated in tables 4 (page 28 - how respondents react to different kinds of interviewer probes) and 5 (page 30 - the probabilities of interviewer feedback reactions to different kinds of respondent behavior).

While time and other resources did not permit further use of these data, a full analysis could be done, such an analysis might include explorations of whether interviewers react differently to different respondent groups, whether the type of question or section of the interview affect how respondents react to certain interviewer behaviors, how often interviewers use probes after obtaining adequate answers, under what conditions is the interviewer likely to clarify rather than use a probe, etc.

The reaction data might also be used as a basis of more sophisticated analyses of major cause and effect patterns over the entire interview. While it does not seem feasible to extend this sequence analysis much beyond the first order (e.g. to sequences of 3, 4, or more behaviors) because the probability of any particular sequence pattern becomes extremely low, it does seem possible to discover meaningful clusters of codes which could be used as basic data for different strategies of causal analysis.

The following tables (A3-A12) present one kind of result which is possible to obtain because the sequence in which interview behaviors take place has been preserved in the coding. The tables show, in original and combined form, the first-order transition probabilities of one behavior following another. The data are given for all experimental groups combined (unweighted) and for each of the age-race groups separately.

The first behaviors in a two-behavior sequence are listed in the rows at the left of the table, the behaviors which follow are listed in the columns at the top of the table. The numbers in the tables indicate the average proportion of time that the second behavior followed the first behavior. The proportions in each row add to 1.00*. For example, the combined-code data

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*Since the data add to 1.00 in each row, they do not reflect the relative frequency with which the first behaviors occur in the interview. This

indicate (for all interviews) that an adequate answer (R) followed a correctly-asked question (Q) 69% of the time (row 1, column 8, Table A3). On the average, correctly-asked questions were 18.8% of all behaviors in the interview (bottom of column 1).

The ability to analyze the sequence in which behavior occurs allows a better descriptive understanding of what goes on in the interview and holds a great potential for the understanding of the major cause and effect patterns to be found in survey interviewing. Some of these descriptive data have been presented in previous section (see interviewer feedback and probing). The causal analysis require much more sophisticated statistical treatment both to discover meaningful clusters of codes and the ways in which such clusters are related to each other over time. Several analysis models which have been programmed for computer processing, are currently available, and can be adapted to these data.[**]

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information may be obtained by looking at the "total" proportion for each column at the bottom of each page.

[**]For example:

> Bobbitt, Gourevitch, Miller and Jensen; Dynamics of Social Interactive Behavior: A computerized Procedure for Analyzing Trends, Patterns, and Sequences, *Psychological Bulletin*, 1969, 71, 110-121.

> Pelz, Magliveras and Lew: Interim Report No. 1, Correlational Properties of Simulated Panel Data with Causal Connections between Two Variables, Survey Research Center, December 1968 (mimeograph).

APPENDIX TABLE A1

AVERAGE PROPORTION OF TOTAL INTERVIEWER BEHAVIORS PER INTERVIEW FOR EACH TYPE OF INTERVIEWER BEHAVIOR BY EXPERIMENTAL GROUP

Behavior Description	Code	Experimental Group				F - Score		
		Old White	Young White	Old Negro	Young Negro	Race	Age	Race-age Interaction
Correct question	Q	.331	.388	.320	.348	6.53*	17.11**	2.00
Incomplete question	<	.006	.007	.007	.006	0.04	0.01	4.17*
Inappropriate question	¬	.002	.001	.002	.002	0.02	0.02	0.23
Incorrect question	X	.023	.021	.022	.022	0.12	0.16	0.18
Repeat question	=	.014	.009	.016	.012	0.78	3.42	0.03
Nondirective probe	P	.097	.093	.112	.097	2.38	2.41	0.95
Directive probe	D	.025	.022	.029	.023	1.65	3.53	0.67
Gives clarification	C	.062	.063	.062	.068	0.51	0.70	0.47
Volunteers information	V	.025	.021	.021	.021	1.43	1.54	0.73
Feedback	F	.228	.218	.225	.234	0.50	0.00	0.93
Ongoing feedback	U	.030	.020	.026	.017	1.66	10.75**	0.07
Repeat answer	T	.083	.080	.095	.084	2.75	2.14	0.55
Irrelevant conversation	A	.016	.013	.019	.016	2.30	1.78	0.30
Gives suggestion	S	.001	.002	.002	.002	0.16	0.01	0.83
Polite behavior	M	.008	.007	.007	.008	0.02	0.01	0.31
Interruption	B	.004	.002	.003	.002	0.05	3.83	1.75
Laughing	L	.032	.023	.023	.026	1.12	1.05	4.00*
Other, not classified elsewhere	Q	.001	.001	.000	.001	0.94	0.00	4.23*
Talks to third person	Y	.012	.008	.007	.012	0.03	0.02	2.72

*p < .05   (F ≥ 3.90)

**p < .01   (F ≥ 6.78)

APPENDIX TABLE A2

AVERAGE PROPORTION OF TOTAL RESPONDENT BEHAVIORS PER INTERVIEW FOR EACH TYPE OF RESPONDENT BEHAVIOR BY EXPERIMENTAL GROUP

Behavior Description	Code	Experimental Group				F - Score		
		Old White	Young White	Old Negro	Young Negro	Race	Age	Race-age Interaction
Adequate answer	R	.389	.466	.381	.446	1.17	29.10**	0.19
Inadequate answer	W	.077	.074	.089	.080	6.88**	3.27	1.05
Don't know answer	K	.006	.006	.007	.006	0.48	0.14	0.29
Refusal to answer	G	.001	.001	.000	.000	1.78	0.18	0.12
Response to a question type other than correct	J	.157	.152	.190	.163	10.91**	5.84*	2.76
Elaboration	E	.166	.113	.147	.110	1.62	27.11**	0.90
Asks clarification	C	.051	.065	.056	.068	0.69	7.27**	0.04
Talks to third person	Y	.045	.030	.023	.035	1.13	0.03	2.84
Feedback	F	.008	.008	.006	.006	2.56	0.00	0.05
Ongoing feedback	U	.006	.005	.005	.004	1.50	0.94	0.03
Repeats answer	T	.027	.021	.031	.024	1.82	7.07**	0.10
Irrelevant coversation	A	.022	.017	.023	.015	0.04	3.37	0.10
Gives suggestion	S	.002	.002	.001	.001	3.14	0.07	0.01
Polite behavior	M	.003	.002	.001	.002	4.06*	0.49	3.07
Interruption	B	.008	.008	.008	.006	0.66	0.83	0.67
Laughing	L	.028	.025	.027	.028	0.03	0.10	0.22
Other, not classified elsewhere	O	.004	.004	.005	.006	2.15	0.02	0.27

*p < .05   (F ≥ 3.90)

**p < .01   (F ≥ 6.78)

KEY TO BEHAVIOR CODE GROUPS

used in following tables of behavior transition probabilities
for each experimental group and total

Interviewer Behaviors		Respondent Behaviors	
Q	Correct question.	**R**	Adequate answer to properly asked question.
<, ¬, X	Incomplete, inappropriate, or incorrect question.	**W, K, G**	Inadequate or "don't know" answer or refusal to answer.
=, P, D	Repeated question or nondirective or directive probe.	**J, T**	"Other" answer or repeated answer.
T	Repeated answer.	**E**	Elaboration.
C, V	Clarification or volunteered information.	**C**	Clarification request.
F	Feedback.	**F**	Feedback.

"Other" Behavior Codes

Other
(U,A,S,M,B,L,O,Y)

Ongoing feedback, irrelevant conversation, suggestion, polite behavior, successful interruption, laugh, other behavior, or interaction with a third person.

NOTE: These codes are not included in any of the matrices presented: * (omitted question), N (information previously obtained, and H (question skipped according to instruction).

BEHAVIOR TRANSITION PROBABILITIES FOR ALL INTERVIEWS

Initial Behavior	Following Interviewer Behavior							Following Respondent Behavior							I + R TOTAL
	Q	<¬X	=PD	T	CV	F	Other	R	WKG	JT	E	C	F	Other	
Interviewer															
Q	.011	.000	.006	.005	.022	.004	.004	.690	.102	.002	.047	.072	.001	.035	1.001
<, ¬, X	.014	.001	.027	.016	.063	.003	.036	0	.001	.598	.024	.113	.006	.098	1.000
=, P, D	.008	.001	.006	.007	.008	.014	.007	.254	.078	.470	.051	.032	.003	.060	0.999
T	.127	.016	.059	.007	.019	.156	.013	.021	.008	.506	.034	.004	.007	.023	1.000
C, V	.242	.017	.088	.024	.013	.012	.032	.190	.054	.075	.074	.092	.026	.063	1.002
F	.502	.051	.114	.065	.067	0	.029	.019	.023	.018	.084	.004	.001	.023	1.000
Other	.125	.015	.122	.053	.057	.174	.112	.021	.015	.023	.038	.014	.011	.219	0.999
Respondent															
R	.389	.021	.052	.088	.024	.282	.026	0	0	.001	.090	.003	.000	.025	1.001
W, K, G	.029	.001	.382	.083	.030	.237	.076	.000	0	.001	.097	.010	0	.054	1.000
J, T	.170	.019	.137	.136	.024	.336	.050	.004	.004	.068	.084	.004	.001	.023	1.000
E	.091	.010	.094	.062	.031	.305	.158	.103	.061	.011	0	.013	0	.060	0.999
C	.020	.000	.100	.004	.686	.021	.032	.064	.014	.010	.018	0	.001	.029	0.999
F	.260	.038	.096	.038	.092	.092	.077	.050	.061	.054	.042	.034	0	.065	0.999
Other	.098	.029	.060	.019	.038	.082	.318	.091	.029	.060	.076	.030	.004	.067	1.001
TOTAL	.188	.017	.077	.049	.049	.130	.052	.176	.038	.084	.062	.027	.003	.048	1.000

BEHAVIOR TRANSITION PROBABILITIES FOR ALL INTERVIEWS WITH OLDER WHITES

Initial Behavior	Following Interviewer Behavior							Following Respondent Behavior							I + R TOTAL
	Q	<, ¬, X	=, P, D	T	C, V	F	Other*	R	W, K, G	J, T	E	C	F	Other*	
Interviewer															
Q	.010	0	.006	.004	.025	.003	.003	.674	.107	.002	.058	.063	.000	.046	1.001
<, ¬, X	.018	0	.023	.009	.070	.009	.041	0	0	.606	.023	.088	.009	.105	1.001
=, P, D	.009	.001	.008	.009	.011	.014	.007	.243	.077	.458	.058	.028	.006	.073	1.002
T	.148	.020	.056	.009	.024	.140	.008	.021	.006	.490	.035	.002	.009	.034	1.002
C, V	.248	.027	.101	.024	.016	.008	.029	.175	.044	.090	.065	.066	.032	.074	0.999
F	.460	.047	.107	.067	.075	0	.026	.019	.022	.021	.123	.004	.002	.027	1.000
Other*	.126	.015	.120	.051	.055	.182	.114	.018	.015	.018	.037	.016	.006	.227	1.000
Respondent															
R	.364	.018	.048	.086	.025	.266	.029	0	0	.002	.125	.004	0	.034	1.001
W, K, G	.029	0	.352	.065	.033	.240	.088	0	0	.003	.129	.003	0	.058	1.000
J, T	.163	.018	.114	.130	.021	.319	.061	.003	.005	.010	.124	.006	0	.025	0.999
E	.101	.011	.099	.053	.028	.311	.164	.091	.047	.008	0	.012	0	.074	0.999
C	.020	0	.114	.004	.667	.014	.038	.066	.016	.014	.016	0	0	.032	1.001
F	.292	.056	.111	.028	.056	.028	.069	.028	.056	.097	.056	.028	0	.097	1.002
Other*	.093	.024	.065	.017	.043	.081	.331	.092	.022	.054	.079	.032	.003	.066	1.002
TOTAL	.177	.016	.075	.047	.049	.128	.060	.165	.037	.082	.078	.024	.004	.058	1.000

* "Other" behavior codes include U, A, S, M, B, L, O, Y.

BEHAVIOR TRANSITION PROBABILITIES FOR ALL INTERVIEWS WITH YOUNGER WHITES

Initial Behavior	Following Interviewer Behavior							Following Respondent Behavior							I + R TOTAL
	Q	<,¬,X	=,P,D	T	C,V	F	Other	R	W,K,G	J,T	E	C	F	Other	
Interviewer															
Q	.015	.000	.003	.006	.018	.004	.002	.715	.092	.001	.038	.070	.001	.034	0.999
<, ¬, X	.009	0	.029	.009	.058	.006	.032	0	.003	.638	.029	.096	.003	.090	1.002
=, P, D	.010	.001	.005	.007	.004	.017	.006	.261	.073	.479	.038	.042	.003	.055	1.001
T	.153	.014	.054	.007	.017	.167	.013	.022	.005	.475	.042	.006	.005	.019	0.999
C, V	.249	.011	.070	.022	.012	.016	.037	.189	.053	.057	.079	.107	.029	.069	1.000
F	.536	.053	.104	.065	.065	0	.030	.020	.018	.015	.064	.005	.001	.024	1.000
Other	.137	.011	.100	.052	.069	.189	.112	.022	.015	.020	.031	.020	.018	.201	0.997
Respondent															
R	.438	.020	.050	.078	.025	.273	.023	0	0	.000	.070	.002	.000	.021	1.000
W, K, G	.037	.003	.416	.068	.036	.233	.058	0	0	.001	.076	.007	0	.065	1.000
J, T	.187	.020	.144	.133	.026	.331	.046	.006	.003	.008	.071	.003	.001	.021	1.000
E	.105	.012	.092	.068	.037	.268	.143	.129	.060	.012	0	.020	0	.053	0.999
C	.025	0	.088	.005	.637	.026	.043	.084	.016	.011	.025	0	.002	.039	1.001
F	.225	0	.028	.014	.127	.183	.070	.113	.042	.042	.014	.056	0	.084	0.998
Other	.092	.034	.064	.023	.037	.085	.286	.109	.033	.042	.093	.040	.006	.065	0.999
TOTAL	.209	.016	.070	.046	.049	.125	.045	.197	.036	.078	.053	.030	.004	.044	1.002

BEHAVIOR TRANSITION PROBABILITIES FOR ALL INTERVIEWS WITH OLDER NEGROES

Initial Behavior	Following Interviewer Behavior							Following Respondent Behavior							I+R TOTAL
	Q	<, ¬, X	=, P, D	T	C, V	F	Other	R	W, K, G	J, T	E	C	F	Other	
Interviewer															
Q	.011	.001	.008	.005	.023	.004	.006	.666	.113	.002	.058	.077	.000	.025	0.999
<, ¬, X	.017	.002	.019	.017	.053	0	.036	0	.002	.582	.031	.126	.007	.106	0.998
=, P, D	.006	.001	.006	.007	.010	.006	.006	.245	.083	.482	.061	.026	.002	.058	0.999
T	.097	.019	.066	.005	.015	.133	.014	.020	.010	.563	.029	.005	.005	.019	1.000
C, V	.236	.011	.109	.027	.012	.012	.033	.178	.072	.080	.078	.081	.020	.052	1.001
F	.459	.048	.131	.066	.065	0	.030	.021	.033	.024	.096	.003	.002	.023	1.001
Other	.110	.020	.139	.061	.053	.176	.109	.023	.012	.020	.046	.008	.010	.214	1.001
Respondent															
R	.373	.024	.059	.099	.024	.274	.024	0	0	.001	.097	.002	.000	.022	0.999
W, K, G	.024	.001	.360	.099	.030	.240	.079	.001	0	.001	.096	.012	0	.056	0.999
J, T	.163	.024	.154	.145	.023	.320	.048	.005	.003	.007	.083	.002	.001	.022	1.000
E	.074	.009	.089	.070	.029	.310	.161	.100	.071	.013	0	.011	0	.062	0.999
C	.020	.002	.122	.003	.702	.021	.026	.049	.013	.010	.013	0	0	.018	0.999
F	.323	.048	.113	.048	.129	.097	.032	.016	.048	.016	.048	.032	0	.048	0.998
Other	.106	.026	.064	.016	.032	.087	.314	.071	.031	.083	.080	.016	.004	.070	1.000
TOTAL	.172	.017	.087	.055	.047	.129	.052	.161	.042	.097	.068	.025	.003	.044	0.999

BEHAVIOR TRANSITION PROBABILITIES FOR ALL INTERVIEWS WITH YOUNGER NEGROES

Initial Behavior	Following Interviewer Behavior							Following Respondent Behavior							I + R TOTAL
	Q	<, ¬, X	=, P, D	T	C, V	F	Other	R	W, K, G	J, T	E	C	F	Other	
Interviewer															
Q	.009	.001	.006	.004	.021	.004	.004	.702	.097	.001	.037	.078	.001	.037	1.002
<, ¬, X	.010	0	.037	.026	.071	0	.034	0	0	.574	.013	.137	.005	.092	0.999
=, P, D	.008	.002	.006	.005	.007	.020	.011	.270	.075	.458	.045	.034	.002	.057	1.000
T	.122	.010	.057	.007	.022	.190	.017	.022	.008	.480	.032	.005	.007	.019	0.998
C, V	.234	.018	.070	.021	.011	.011	.032	.217	.046	.073	.073	.111	.024	.059	1.000
F	.553	.055	.113	.061	.064	0	.030	.019	.018	.012	.054	.004	.001	.018	1.002
Other	.129	.015	.124	.047	.055	.149	.112	.023	.019	.036	.035	.012	.011	.233	1.000
Respondent															
R	.376	.023	.051	.092	.021	.312	.026	0	0	.000	.072	.003	0	.024	1.000
W, K, G	.027	0	.407	.094	.022	.231	.077	0	0	0	.085	.016	0	.040	0.999
J, T	.169	.012	.132	.134	.027	.378	.045	.004	.004	.009	.060	.005	0	.022	1.001
E	.084	.008	.098	.060	.032	.328	.159	.100	.068	.010	0	.009	0	.045	1.001
C	.016	0	.080	.004	.731	.022	.024	.058	.010	.007	.019	0	.002	.027	1.000
F	.196	.054	.143	.071	.054	.054	.143	.036	.107	.054	.054	.018	0	.018	1.002
Other	.101	.033	.057	.022	.040	.074	.338	.094	.034	.057	.050	.032	.002	.066	1.000
TOTAL	.195	.017	.075	.049	.052	.136	.050	.185	.036	.079	.049	.030	.003	.044	1.000

APPENDIX TABLE A8

Following Behavior - INTERVIEWER Codes

Initial Behavior	Correct question	Incomplete question	Inappropriate question-- should have been skipped	Incorrect question	Repeated question	Nondirective probe	Directive probe	Clarification given	Volunteered information	Feedback	Ongoing feedback	Repeated answer	Irrelevant conversation	Suggestion	Polite behavior	Successful interruption	Laugh	Other behavior	Interaction with a third person
	Q	<	¬	X	=	P	D	C	V	F	U	T	A	S	M	B	L	O	Y
INTERVIEWER CODES																			
Q	.011	.000	.0	.000	.000	.002	.004	.020	.001	.004	.0	.005	.001	.000	.001	.0	.002	.000	.000
<	.027	.0	.0	.0	.0	.015	.0	.161	.024	.0	.0	.009	.009	.006	.049	.0	.036	.0	.003
¬	.013	.0	.0	.0	.0	.0	.013	.105	.0	.0	.0	.0	.0	.0	.013	.0	.0	.0	.013
X	.009	.0	.0	.001	.0	.005	.027	.019	.003	.005	.0	.019	.001	.001	.005	.0	.009	.0	.0
=	.002	.0	.0	.002	.0	.025	.002	.039	.002	.002	.0	.011	.0	.0	.0	.0	.002	.002	.0
P	.005	.0	.0	.001	.002	.000	.002	.004	.002	.011	.0	.007	.001	.000	.000	.0	.006	.0	.000
D	.024	.001	.0	.002	.001	.002	.0	.0	.002	.032	.0	.007	.002	.0	.0	.0	.002	.0	.001
C	.187	.002	.0	.005	.028	.022	.008	.001	.006	.010	.0	.009	.001	.001	.001	.0	.014	.0	.001
V	.401	.005	.001	.041	.106	.060	.010	.029	.004	.017	.0	.066	.013	.003	.033	.0	.027	.001	.001
F	.501	.013	.003	.035	.007	.086	.021	.029	.038	.0	.000	.065	.008	.001	.011	.0	.007	.001	.001
U	.111	.001	.002	.007	.006	.159	.042	.046	.012	.431	.0	.095	.024	.001	.001	.014	.034	.001	.004
T	.127	.002	.000	.013	.002	.043	.014	.009	.010	.156	.0	.007	.002	.0	.003	.0	.007	.0	.001
A	.115	.003	.0	.008	.003	.030	.012	.008	.017	.029	.002	.020	.0	.005	.006	.0	.164	.0	.002
S	.068	.011	.0	.0	.034	.034	.011	.011	.023	.045	.0	.068	.057	.0	.0	.0	.148	.0	.0
M	.173	.006	.003	.014	.003	.059	.014	.017	.070	.022	.0	.053	.056	.003	.0	.0	.022	.003	.003
B	.028	.0	.0	.0	.021	.291	.078	.206	.028	.099	.0	.128	.035	.028	.028	.0	.014	.0	.014
L	.134	.005	.0	.014	.012	.072	.014	.036	.025	.141	.0	.038	.091	.006	.009	.0	.002	.003	.007
O	.087	.0	.0	.0	.022	.022	.022	.0	.022	.043	.0	.022	.0	.0	.065	.0	.065	.0	.0
Y	.129	.004	.002	.018	.002	.048	.006	.012	.010	.006	.0	.018	.002	.002	.002	.0	.024	.0	.0
RESPONDENT CODES																			
R	.389	.005	.001	.015	.001	.042	.009	.013	.011	.282	.013	.088	.003	.000	.003	.001	.005	.000	.000
W	.029	.0	.0	.001	.009	.330	.059	.018	.009	.239	.042	.088	.002	.002	.003	.007	.014	.000	.000
K	.028	.0	.0	.0	.008	.183	.024	.060	.012	.175	.044	.028	.008	.012	.0	.016	.048	.0	.004
G	.100	.0	.0	.0	.0	.100	.0	.050	.0	.550	.0	.0	.0	.0	.0	.0	.100	.0	.0
J	.182	.005	.002	.014	.002	.104	.036	.015	.010	.339	.027	.119	.005	.000	.003	.004	.008	.001	.001
E	.091	.003	.000	.007	.004	.074	.017	.020	.011	.305	.100	.063	.009	.001	.002	.008	.038	.001	.000
C	.020	.000	.0	.0	.070	.024	.005	.676	.009	.021	.012	.004	.002	.001	.001	.004	.012	.001	.000
Y	.079	.001	.0	.001	.013	.056	.003	.032	.017	.059	.016	.031	.014	.003	.003	.001	.034	.001	.305
F	.249	.015	.0	.022	.011	.062	.018	.037	.051	.088	.0	.037	.022	.004	.004	.004	.033	.004	.004
U	.150	.010	.0	.005	.0	.005	.0	.026	.005	.026	.0	.005	.005	.0	.005	.0	.0	.0	.0
T	.096	.001	.0	.007	.001	.077	.030	.010	.009	.317	.037	.238	.007	.001	.003	.002	.010	.0	.0
A	.081	.004	.001	.004	.005	.018	.004	.013	.015	.080	.032	.007	.366	.002	.002	.002	.176	.001	.002
S	.014	.0	.0	.0	.028	.014	.0	.042	.042	.333	.014	.0	.028	.056	.028	.014	.014	.014	.0
M	.110	.0	.0	.0	.024	.024	.012	.012	.037	.122	.024	.024	.037	.012	.146	.0	.085	.0	.0
B	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
L	.106	.003	.001	.009	.007	.066	.014	.028	.007	.113	.034	.024	.028	.0	.002	.002	.176	.001	.004
O	.067	.005	.005	.029	.024	.120	.033	.029	.014	.206	.019	.024	.029	.0	.014	.019	.172	.019	.0
+	.442	.011	.0	.492	.0	.0	.0	.0	.050	.0	.0	.0	.0	.0	.0	.0	.006	.0	.0

TRANSITION MATRIX PROBABILITIES FOR ALL INTERVIEWS

APPENDIX TABLE A8

Following Behavior - RESPONDENT Codes

Initial Behavior	Adequate answer to properly asked question	Inadequate answer	"Don't know" answer	Refusal to answer	Answer to anything other than a correct question	Elaboration	Clarification request	Interaction with a third person	Feedback	Ongoing feedback	Repeated answer	Irrelevant conversation	Suggestion	Polite behavior	Successful interruption	Laugh	Other behavior	End of interview	Interviewer + Respondent
	R	W	K	G	J	E	C	Y	F	U	T	A	S	M	B	L	O	+	SUM
INTERVIEWER CODES																			
Q	.690	.095	.006	.001	.001	.047	.072	.013	.001	.002	.000	.005	.001	.000	.000	.010	.004	.0	0.999
<	.0	.0	.006	.0	.328	.018	.125	.021	.024	.003	.003	.012	.0	.003	.106	.006	.003	.0	0.997
¬	.0	.0	.0	.0	.658	.026	.092	.013	.0	.0	.026	.0	.0	.0	.0	.026	.0	.0	0.998
X	.0	.0	.0	.0	.673	.026	.110	.013	.001	.002	.001	.006	.0	.002	.051	.007	.005	.0	1.001
=	.379	.089	.011	.002	.050	.116	.094	.053	.008	.019	.050	.014	.0	.0	.003	.014	.009	.002	1.002
P	.254	.080	.010	.001	.415	.052	.030	.021	.003	.007	.052	.003	.001	.001	.017	.007	.005	.000	1.000
D	.191	.014	.0	.0	.653	.015	.008	.009	.001	.002	.013	.002	.0	.001	.012	.002	.002	.0	1.001
C	.250	.062	.007	.001	.071	.091	.117	.023	.018	.013	.019	.006	.001	.0	.013	.010	.005	.000	1.003
V	.007	.006	.0	.0	.023	.022	.013	.008	.050	.009	.005	.009	.0	.002	.006	.003	.003	.017	1.001
F	.019	.022	.001	.0	.008	.084	.004	.007	.001	.002	.010	.007	.001	.001	.001	.003	.003	.001	1.002
U	.0	.0	.0	.0	.0	.005	.0	.001	.002	.0	.0	.001	.0	.0	.0	.001	.0	.0	1.001
T	.021	.007	.000	.0	.418	.034	.004	.007	.007	.005	.088	.002	.001	.0	.004	.003	.001	.0	0.998
A	.017	.013	.001	.001	.015	.034	.012	.027	.017	.008	.003	.343	.005	.002	.010	.046	.003	.016	0.997
S	.023	.034	.0	.0	.057	.068	.034	.091	.068	.023	.011	.023	.034	.011	.0	.011	.0	.0	0.998
M	.008	.003	.003	.0	.011	.014	.022	.011	.036	.011	.025	.020	.008	.034	.003	.008	.0	.263	1.001
B	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0.998
L	.046	.024	.003	.0	.028	.084	.025	.023	.007	.002	.011	.054	.001	.001	.001	.076	.007	.001	1.003
O	.043	.022	.0	.0	.087	.043	.0	.0	.022	.0	.0	.022	.0	.0	.283	.022	.087	.0	1.001
Y	.020	.024	.0	.0	.024	.014	.014	.587	.006	.002	.002	.008	.002	.002	.0	.002	.0	.006	0.998
RESPONDENT CODES																			
R	.0	.0	.0	.0	.000	.090	.003	.009	.000	.000	.001	.004	.000	.001	.0	.011	.000	.0	1.000
W	.0	.0	.0	.0	.0	.088	.008	.016	.0	.0	.001	.005	.001	.000	.0	.027	.000	.001	0.999
K	.004	.0	.0	.0	.0	.214	.032	.036	.0	.0	.0	.012	.012	.0	.0	.040	.004	.0	1.004
G	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.100	.0	.0	1.000
J	.004	.003	.0	.0	.0	.083	.004	.011	.000	.0	.007	.003	.0	.001	.0	.007	.000	.000	1.000
E	.103	.054	.007	.000	.008	.0	.013	.016	.0	.0	.002	.009	.000	.001	.0	.033	.000	.0	1.000
C	.064	.013	.001	.0	.009	.019	.0	.010	.001	.0	.002	.002	.0	.002	.0	.014	.001	.000	1.000
Y	.119	.031	.006	.0	.035	.061	.034	.0	.0	.0	.008	.011	.004	.004	.0	.013	.003	.001	0.999
F	.048	.059	.0	.0	.029	.040	.033	.015	.0	.0	.022	.004	.004	.022	.0	.018	.0	.044	1.003
U	.218	.041	.005	.0	.161	.073	.052	.016	.062	.0	.047	.021	.005	.0	.016	.010	.005	.026	1.000
T	.006	.007	.0	.0	.017	.093	.006	.009	.003	.0	.0	.005	.001	.0	.0	.009	.002	.0	1.004
A	.028	.009	.006	.0	.001	.020	.007	.019	.0	.0	.001	.0	.0	.001	.0	.089	.0	.002	0.998
S	.014	.028	.0	.0	.0	.167	.042	.083	.0	.0	.0	.014	.0	.014	.0	.0	.0	.0	1.003
M	.037	.0	.0	.0	.012	.061	.037	.037	.0	.0	.012	.0	.012	.0	.0	.012	.0	.110	0.999
B	.121	.013	.007	.0	.402	.248	.092	.013	.007	.0	.039	.033	.010	.007	.0	.0	.010	.0	1.002
L	.106	.033	.007	.001	.011	.106	.028	.017	.002	.0	.008	.042	.003	.002	.0	.0	.007	.003	1.001
O	.029	.005	.0	.0	.005	.014	.010	.033	.0	.0	.0	.005	.0	.005	.005	.057	.0	.005	1.001
+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.001

TRANSITION MATRIX PROBABILITIES FOR ALL INTERVIEWS WITH OLDER WHITES

APPENDIX TABLE A9

Following Behavior - INTERVIEWER Codes

Initial Behavior	Correct question	Incomplete question	Inappropriate question-- should have been skipped	Incorrect question	Repeated question	Nondirective probe	Directive probe	Clarification given	Volunteered information	Feedback	Ongoing feedback	Repeated answer	Irrelevant conversation	Suggestion	Polite behavior	Successful interruption	Laugh	Other behavior	Interaction with a third person
	Q	<	¬	X	=	P	D	C	V	F	U	T	A	S	M	B	L	O	Y
INTERVIEWER CODES																			
Q	.010	.0	.0	.0	.001	.001	.004	.022	.002	.003	.0	.005	.001	.0	.001	.0	.001	.0	.000
<	.044	.0	.0	.0	.0	.029	.0	.191	.044	.0	.0	.015	.015	.0	.044	.0	.044	.0	.0
¬	.0	.0	.0	.0	.0	.0	.0	.158	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
X	.012	.0	.0	.0	.0	.0	.023	.016	.004	.012	.0	.008	.0	.0	.008	.0	.020	.0	.0
=	.0	.0	.0	.0	.0	.030	.0	.043	.0	.006	.0	.012	.0	.0	.0	.0	.0	.006	.0
P	.007	.0	.0	.0	.002	.002	.001	.007	.002	.009	.0	.009	.0	.0	.0	.0	.007	.0	.001
D	.020	.0	.0	.003	.0	.010	.0	.0	.0	.038	.0	.007	.003	.0	.0	.0	.0	.0	.0
C	.204	.005	.0	.009	.034	.016	.009	.001	.011	.003	.0	.007	.0	.0	.001	.0	.009	.0	.001
V	.355	.0	.0	.058	.116	.072	.017	.027	.0	.020	.0	.068	.010	.0	.048	.0	.014	.0	.0
F	.460	.011	.003	.034	.008	.079	.020	.032	.043	.0	.000	.067	.003	.001	.010	.0	.009	.002	.001
U	.116	.003	.0	.005	.003	.146	.057	.043	.013	.420	.0	.092	.024	.0	.003	.011	.043	.0	.008
T	.148	.002	.0	.018	.004	.040	.012	.010	.014	.140	.0	.009	.002	.0	.001	.0	.005	.0	.0
A	.112	.015	.0	.005	.0	.036	.015	.005	.030	.025	.0	.010	.0	.010	.005	.0	.168	.0	.005
S	.0	.0	.0	.0	.0	.0	.0	.0	.0	.188	.0	.125	.0	.0	.0	.0	.063	.0	.0
M	.161	.0	.0	.0	.0	.034	.034	.023	.103	.023	.0	.057	.057	.0	.0	.0	.011	.011	.011
B	.044	.0	.0	.0	.0	.311	.044	.178	.044	.156	.0	.133	.044	.0	.022	.0	.0	.0	.022
L	.152	.005	.0	.018	.003	.062	.021	.018	.028	.140	.0	.023	.103	.005	.010	.0	.003	.005	.013
O	.0	.0	.0	.0	.056	.0	.0	.0	.0	.056	.0	.056	.0	.0	.111	.0	.0	.0	.0
Y	.114	.0	.0	.019	.0	.051	.006	.006	.006	.0	.0	.032	.0	.0	.0	.0	.025	.0	.0
RESPONDENT CODES																			
R	.364	.003	.001	.013	.001	.040	.007	.016	.009	.266	.016	.086	.004	.0	.003	.000	.006	.000	.000
W	.029	.0	.0	.0	.007	.312	.052	.019	.010	.238	.047	.068	.003	.001	.006	.013	.017	.001	.0
K	.0	.0	.0	.0	.018	.105	.018	.053	.018	.246	.035	.035	.0	.0	.0	.0	.053	.0	.0
G	.250	.0	.0	.0	.0	.125	.0	.125	.0	.375	.0	.0	.0	.0	.0	.0	.125	.0	.0
J	.174	.004	.004	.014	.002	.086	.033	.011	.011	.314	.037	.119	.006	.001	.003	.005	.005	.001	.001
E	.101	.003	.0	.008	.004	.075	.020	.017	.011	.311	.103	.053	.008	.0	.002	.010	.040	.001	.0
C	.020	.0	.0	.0	.084	.030	.0	.661	.006	.014	.014	.004	.002	.0	.002	.004	.014	.002	.0
Y	.076	.002	.0	.002	.006	.051	.006	.030	.019	.059	.027	.027	.013	.008	.0	.002	.044	.002	.289
F	.284	.014	.0	.041	.014	.081	.014	.041	.014	.027	.0	.027	.027	.014	.0	.0	.027	.0	.0
U	.091	.0	.0	.018	.0	.018	.0	.036	.018	.018	.0	.018	.0	.0	.0	.0	.0	.0	.0
T	.104	.0	.0	.0	.0	.067	.011	.007	.007	.343	.049	.187	.004	.0	.004	.015	.0	.0	.0
A	.058	.012	.004	.0	.008	.021	.0	.012	.025	.087	.033	.004	.264	.004	.0	.004	.248	.0	.004
S	.045	.0	.0	.0	.045	.0	.0	.045	.045	.409	.0	.0	.0	.045	.0	.0	.0	.045	.0
M	.152	.0	.0	.0	.030	.0	.0	.0	.0	.152	.061	.030	.030	.0	.091	.0	.152	.0	.0
B	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
L	.128	.0	.0	.007	.007	.084	.018	.029	.007	.113	.029	.018	.033	.0	.004	.007	.186	.004	.0
O	.060	.0	.0	.020	.020	.200	.020	.040	.040	.160	.040	.020	.020	.0	.020	.0	.180	.020	.0
+	.442	.0	.0	.465	.0	.0	.0	.0	.070	.0	.0	.0	.0	.0	.0	.0	.023	.0	.0

TRANSITION MATRIX PROBABILITIES FOR ALL INTERVIEWS WITH OLDER WHITES

APPENDIX TABLE A9

Following Behavior - RESPONDENT Codes

Initial Behavior	Adequate answer to properly asked question	Inadequate answer	"Don't know" answer	Refusal to answer	Answer to anything other than a correct question	Elaboration	Clarification request	Interaction with a third person	Feedback	Ongoing feedback	Repeated answer	Irrelevant conversation	Suggestion	Polite behavior	Successful interruption	Laugh	Other behavior	End of interview	Interviewer + Respondent
	R	W	K	G	J	E	C	Y	F	U	T	A	S	M	B	L	O	+	SUM
INTERVIEWER CODES																			
Q	.673	.099	.006	.002	.002	.058	.063	.019	.000	.003	.000	.009	.001	.000	.000	.009	.005	.0	1.000
<	.0	.0	.0	.0	.279	.0	.088	.015	.044	.0	.0	.029	.0	.015	.103	.0	.0	.0	0.999
¬	.0	.0	.0	.0	.842	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.000
X	.0	.0	.0	.0	.676	.031	.094	.023	.0	.004	.0	.008	.0	.004	.043	.008	.008	.0	1.002
=	.335	.098	.012	.006	.037	.104	.085	.067	.012	.012	.073	.030	.0	.0	.006	.018	.006	.0	0.998
P	.242	.079	.009	.0	.404	.063	.025	.034	.007	.005	.054	.004	.002	.001	.016	.005	.004	.001	1.002
)	.191	.014	.0	.0	.631	.010	.007	.017	.0	.007	.017	.003	.0	.0	.014	.003	.003	.0	0.998
C	.239	.054	.005	.0	.086	.083	.089	.032	.022	.019	.023	.005	.001	.0	.020	.003	.005	.001	0.997
V	.010	.007	.0	.0	.031	.017	.007	.020	.058	.007	.010	.0	.0	.003	.007	.003	.003	.010	0.998
F	.019	.021	.001	.0	.009	.123	.004	.008	.002	.001	.011	.009	.001	.001	.001	.002	.003	.000	0.999
U	.0	.0	.0	.0	.0	.003	.0	.003	.005	.0	.0	.0	.0	.0	.0	.003	.0	.0	1.001
T	.021	.006	.0	.0	.398	.035	.002	.013	.009	.005	.092	.003	.0	.0	.008	.005	.0	.0	1.002
A	.010	.015	.0	.0	.0	.036	.020	.051	.015	.020	.010	.294	.010	.0	.015	.041	.005	.015	0.998
S	.0	.0	.0	.0	.250	.063	.063	.188	.0	.063	.0	.0	.0	.0	.0	.0	.0	.0	1.003
M	.023	.0	.0	.0	.023	.0	.023	.023	.023	.023	.023	.023	.011	.034	.011	.011	.0	.218	0.994
B	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0.998
L	.039	.026	.008	.0	.016	.083	.026	.031	.0	.003	.0	.057	.003	.005	.0	.085	.008	.003	1.002
O	.056	.056	.0	.0	.056	.0	.0	.0	.0	.0	.0	.0	.0	.0	.389	.056	.111	.0	1.003
Y	.013	.013	.0	.0	.032	.032	.019	.595	.006	.0	.006	.013	.006	.0	.0	.0	.0	.006	1.000
RESPONDENT CODES																			
R	.0	.0	.0	.0	.000	.125	.004	.013	.0	.0	.001	.007	.000	.001	.0	.012	.0	.0	0.998
W	.0	.0	.0	.0	.0	.117	.001	.017	.0	.0	.003	.007	.0	.0	.0	.031	.0	.001	1.000
K	.0	.0	.0	.0	.0	.298	.018	.035	.0	.0	.0	.018	.018	.0	.0	.035	.0	.0	1.003
G	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.000
J	.003	.003	.0	.0	.0	.123	.004	.015	.0	.0	.008	.004	.0	.0	.0	.007	.0	.001	0.999
E	.091	.043	.004	.0	.006	.0	.012	.028	.0	.0	.002	.010	.0	.002	.0	.034	.0	.0	0.999
C	.066	.016	.0	.0	.010	.016	.0	.010	.0	.0	.004	.002	.0	.004	.0	.016	.0	.0	1.001
Y	.114	.030	.004	.0	.038	.065	.040	.0	.0	.0	.006	.008	.004	.006	.0	.013	.006	.0	0.997
F	.027	.054	.0	.0	.041	.054	.027	.041	.0	.0	.054	.0	.014	.027	.0	.014	.0	.027	1.006
U	.291	.055	.0	.0	.182	.073	.036	.0	.036	.0	.018	.036	.0	.0	.0	.0	.018	.036	0.998
T	.0	.011	.0	.0	.019	.131	.019	.007	.0	.0	.0	.0	.004	.0	.0	.011	.0	.0	1.000
A	.045	.004	.012	.0	.004	.021	.017	.021	.0	.0	.004	.0	.0	.004	.0	.070	.0	.008	0.998
S	.045	.045	.0	.0	.0	.091	.0	.091	.0	.0	.0	.0	.0	.045	.0	.0	.0	.0	0.996
M	.0	.0	.0	.0	.030	.061	.061	.0	.0	.0	.030	.0	.0	.0	.0	.030	.0	.091	1.001
B	.120	.012	.0	.0	.277	.337	.096	.036	.012	.0	.036	.060	.0	.0	.0	.0	.012	.0	0.998
L	.084	.011	.0	.0	.018	.102	.018	.011	.004	.0	.007	.051	.004	.004	.0	.0	.004	.007	0.999
O	.020	.0	.0	.0	.0	.0	.0	.040	.0	.0	.0	.0	.0	.020	.020	.040	.0	.0	1.000
+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.000

TRANSITION MATRIX PROBABILITIES FOR ALL INTERVIEWS WITH YOUNGER WHITES

APPENDIX TABLE A10

Following Behavior - INTERVIEWER Codes

Initial Behavior	Correct question	Incomplete question	Inappropriate question—should have been skipped	Incorrect question	Repeated question	Nondirective probe	Directive probe	Clarification given	Volunteered information	Feedback	Ongoing feedback	Repeated answer	Irrelevant conversation	Suggestion	Polite behavior	Successful interruption	Laugh	Other behavior	Interaction with a third person
	Q	<	¬	X	=	P	D	C	V	F	U	T	A	S	M	B	L	O	Y
INTERVIEWER CODES																			
Q	.015	.0	.0	.000	.000	.001	.002	.017	.001	.004	.0	.006	.000	.000	.000	.0	.001	.000	.0
<	.024	.0	.0	.0	.0	.012	.0	.153	.035	.0	.0	.012	.0	.0	.047	.0	.035	.0	.0
¬	.063	.0	.0	.0	.0	.0	.063	.063	.0	.0	.0	.0	.0	.0	.063	.0	.0	.0	.0
X	.0	.0	.0	.0	.0	.008	.025	.012	.0	.008	.0	.008	.004	.0	.0	.0	.008	.0	.0
=	.0	.0	.0	.0	.0	.026	.009	.0	.009	.0	.0	.026	.0	.0	.0	.0	.0	.0	.0
P	.007	.0	.0	.001	.001	.0	.002	.003	.001	.015	.0	.006	.001	.001	.0	.0	.006	.0	.0
D	.026	.0	.0	.0	.0	.0	.0	.0	.004	.030	.0	.004	.0	.0	.0	.0	.0	.0	.0
C	.179	.001	.0	.001	.025	.020	.005	.0	.006	.011	.0	.013	.0	.0	.0	.0	.019	.0	.001
V	.459	.008	.0	.027	.071	.055	.004	.027	.0	.027	.0	.051	.020	.008	.020	.0	.031	.004	.004
F	.536	.017	.002	.034	.006	.079	.019	.029	.036	.0	.0	.065	.006	.000	.014	.0	.008	.001	.002
U	.113	.0	.0	.0	.004	.125	.023	.078	.016	.488	.0	.098	.008	.004	.0	.012	.023	.0	.004
T	.153	.0	.001	.013	.002	.033	.019	.007	.010	.167	.0	.007	.002	.0	.003	.0	.007	.0	.001
A	.114	.0	.0	.006	.0	.024	.012	.0	.012	.024	.006	.012	.0	.0	.0	.0	.169	.0	.0
S	.160	.040	.0	.0	.080	.0	.0	.0	.0	.0	.0	.040	.040	.0	.0	.0	.280	.0	.0
M	.169	.0	.012	.024	.0	.060	.0	.0	.060	.024	.0	.036	.084	.012	.0	.0	.024	.0	.0
B	.048	.0	.0	.0	.048	.286	.048	.238	.0	.095	.0	.095	.048	.0	.0	.0	.095	.0	.0
L	.156	.003	.0	.010	.017	.060	.013	.046	.036	.129	.0	.043	.093	.010	.007	.0	.0	.0	.007
O	.111	.0	.0	.0	.0	.0	.0	.0	.0	.111	.0	.0	.0	.0	.0	.0	.222	.0	.0
Y	.129	.0	.0	.011	.0	.043	.022	.011	.022	.022	.0	.022	.0	.0	.0	.0	.032	.0	.0
RESPONDENT CODES																			
R	.438	.005	.000	.015	.000	.040	.010	.013	.012	.273	.011	.078	.003	.001	.002	.001	.005	.000	.000
W	.033	.0	.0	.003	.003	.371	.061	.023	.003	.234	.035	.074	.003	.004	.0	.007	.007	.0	.0
K	.083	.0	.0	.0	.0	.233	.017	.133	.017	.167	.017	.017	.0	.0	.0	.017	.050	.0	.0
G	.0	.0	.0	.0	.0	.0	.0	.0	.0	.833	.0	.0	.0	.0	.0	.0	.0	.0	.0
J	.205	.005	.003	.014	.001	.118	.029	.016	.009	.336	.025	.113	.002	.001	.002	.001	.009	.001	.0
E	.105	.003	.002	.008	.002	.074	.017	.019	.018	.267	.100	.068	.003	.001	.002	.005	.032	.0	.0
C	.025	.0	.0	.0	.050	.033	.006	.624	.012	.026	.019	.005	.0	.003	.003	.002	.015	.0	.002
Y	.074	.0	.0	.0	.013	.052	.003	.045	.006	.055	.003	.042	.026	.0	.003	.0	.029	.0	.255
F	.213	.0	.0	.0	.0	.027	.0	.040	.080	.173	.0	.013	.013	.0	.0	.0	.053	.0	.0
U	.122	.020	.0	.0	.0	.0	.0	.041	.0	.041	.0	.041	.0	.0	.0	.0	.0	.0	.0
T	.064	.0	.0	.010	.0	.069	.039	.020	.015	.296	.049	.271	.005	.005	.015	.0	.005	.0	.0
A	.077	.0	.0	.0	.006	.012	.0	.012	.024	.065	.024	.0	.375	.006	.006	.0	.167	.0	.0
S	.0	.0	.0	.0	.042	.0	.0	.0	.0	.208	.042	.0	.042	.083	.083	.0	.0	.0	.0
M	.056	.0	.0	.0	.056	.056	.056	.0	.056	.167	.0	.0	.0	.0	.167	.0	.056	.0	.0
B	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
L	.093	.004	.0	.012	.004	.053	.016	.036	.004	.150	.032	.036	.024	.0	.0	.0	.198	.0	.004
O	.079	.0	.026	.053	.053	.132	.0	.0	.0	.211	.0	.0	.0	.0	.053	.0	.158	.053	.0
+	.447	.021	.0	.511	.0	.0	.0	.0	.021	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

TRANSITION MATRIX PROBABILITIES FOR ALL INTERVIEWS WITH YOUNGER WHITES

APPENDIX TABLE A10

Following Behavior - RESPONDENT Codes

Initial Behavior	Adequate answer to properly asked question	Inadequate answer	"Don't know" answer	Refusal to answer	Answer to anything other than a correct question	Elaboration	Clarification request	Interaction with a third person	Feedback	Ongoing feedback	Repeated answer	Irrelevant conversation	Suggestion	Polite behavior	Successful interruption	Laugh	Other behavior	End of interview	Interviewer + Respondent
	R	W	K	G	J	E	C	Y	F	U	T	A	S	M	B	L	O	+	SUM
INTERVIEWER CODES																			
Q	.715	.086	.005	.001	.001	.038	.071	.012	.001	.002	.000	.004	.001	.000	.0	.012	.003	.0	0.999
<	.0	.0	.012	.0	.376	.035	.106	.024	.012	.0	.0	.0	.0	.0	.106	.0	.012	.0	1.001
¬	.0	.0	.0	.0	.625	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.125	.0	.0	1.002
X	.0	.0	.0	.0	.730	.029	.098	.008	.0	.0	.0	.012	.0	.004	.045	.0	.0	.0	0.999
=	.474	.026	.017	.0	.034	.095	.155	.069	.009	.017	.017	.0	.0	.0	.0	.0	.017	.0	1.000
P	.259	.083	.009	.001	.422	.037	.038	.017	.003	.009	.048	.003	.001	.002	.020	.001	.004	.0	1.001
D	.175	.007	.0	.0	.695	.019	.011	.004	.0	.0	.004	.0	.0	.004	.015	.0	.004	.0	1.002
C	.247	.059	.008	.003	.053	.094	.135	.023	.025	.013	.017	.004	.001	.0	.020	.009	.006	.0	0.998
V	.008	.004	.0	.0	.016	.031	.020	.0	.039	.016	.0	.004	.0	.0	.012	.008	.004	.024	1.002
F	.020	.018	.0	.0	.006	.064	.005	.009	.001	.003	.009	.005	.002	.001	.001	.003	.002	.001	1.004
U	.0	.0	.0	.0	.0	.004	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.000
T	.022	.005	.0	.0	.395	.042	.006	.005	.005	.004	.080	.001	.002	.0	.004	.002	.001	.0	0.997
A	.018	.012	.006	.0	.0	.018	.018	.030	.024	.006	.0	.404	.006	.006	.0	.054	.0	.018	0.999
S	.0	.0	.0	.0	.040	.040	.0	.080	.160	.0	.040	.0	.0	.0	.0	.0	.0	.0	1.000
M	.0	.012	.0	.0	.0	.024	.024	.012	.048	.012	.0	.0	.024	.024	.0	.0	.0	.313	0.998
B	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.001
L	.040	.020	.003	.0	.036	.073	.040	.033	.013	.003	.007	.060	.0	.0	.003	.036	.003	.0	1.000
O	.0	.0	.0	.0	.111	.0	.0	.0	.0	.0	.0	.0	.0	.0	.333	.0	.0	.0	0.999
Y	.054	.032	.0	.0	.032	.0	.022	.495	.011	.0	.0	.011	.0	.011	.0	.011	.0	.011	1.004
RESPONDENT CODES																			
R	.0	.0	.0	.0	.0	.070	.002	.008	.000	.0	.000	.002	.0	.0	.0	.011	.0	.0	1.000
W	.0	.0	.0	.0	.0	.069	.006	.026	.0	.0	.001	.003	.001	.001	.0	.032	.0	.0	1.000
K	.0	.0	.0	.0	.0	.167	.017	.033	.0	.0	.0	.0	.0	.0	.0	.033	.0	.0	1.001
G	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.167	.0	.0	1.000
J	.006	.003	.0	.0	.0	.068	.004	.008	.001	.0	.007	.003	.0	.001	.0	.006	.001	.0	0.998
E	.129	.053	.007	.0	.008	.0	.020	.017	.0	.0	.004	.005	.002	.0	.0	.028	.001	.0	1.000
C	.084	.015	.0	.0	.011	.025	.0	.017	.002	.0	.0	.005	.0	.0	.0	.015	.002	.002	1.003
Y	.158	.039	.016	.0	.006	.084	.055	.0	.0	.0	.010	.013	.003	.0	.0	.010	.0	.0	1.000
F	.107	.040	.0	.0	.027	.013	.053	.013	.0	.0	.013	.013	.0	.027	.0	.027	.0	.053	0.998
U	.224	.0	.0	.0	.184	.102	.041	.020	.102	.0	.0	.020	.0	.0	.020	.041	.0	.020	0.998
T	.0	.005	.0	.0	.010	.089	.0	.015	.005	.0	.0	.010	.0	.0	.0	.005	.0	.0	1.002
A	.012	.030	.012	.0	.0	.030	.0	.018	.0	.0	.0	.0	.0	.0	.0	.125	.0	.0	1.001
S	.0	.0	.0	.0	.0	.292	.083	.125	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.000
M	.0	.0	.0	.0	.0	.111	.0	.0	.0	.0	.0	.0	.056	.0	.0	.0	.0	.167	1.004
B	.208	.013	.013	.0	.273	.234	.143	.0	.0	.0	.065	.013	.013	.013	.0	.0	.013	.0	1.001
L	.105	.020	.004	.0	.004	.109	.024	.020	.004	.0	.0	.032	.008	.0	.0	.0	.0	.0	0.996
O	.053	.0	.0	.0	.0	.026	.026	.026	.0	.0	.0	.0	.0	.0	.0	.053	.0	.0	1.002
+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.000

APPENDIX TABLE A11

Following Behavior - INTERVIEWER Codes

Initial Behavior	Correct question (Q)	Incomplete question (<)	Inappropriate question—should have been skipped (¬)	Incorrect question (X)	Repeated question (=)	Nondirective probe (P)	Directive probe (D)	Clarification given (C)	Volunteered information (V)	Feedback (F)	Ongoing feedback (U)	Repeated answer (T)	Irrelevant conversation (A)	Suggestion (S)	Polite behavior (M)	Successful interruption (B)	Laugh (L)	Other behavior (O)	Interaction with a third person (Y)
INTERVIEWER CODES																			
Q	.011	.0	.0	.001	.000	.002	.006	.022	.001	.004	.0	.005	.001	.001	.001	.0	.003	.0	.000
<	.029	.0	.0	.0	.0	.010	.0	.127	.020	.0	.0	.0	.010	.020	.049	.0	.020	.0	.010
¬	.0	.0	.0	.0	.0	.0	.0	.050	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
X	.014	.0	.0	.003	.0	.0	.024	.021	.0	.0	.0	.024	.0	.003	.007	.0	.003	.0	.0
=	.0	.0	.0	.005	.0	.024	.0	.052	.0	.0	.0	.009	.0	.0	.0	.0	.005	.0	.0
P	.003	.0	.0	.001	.003	.0	.002	.003	.003	.005	.0	.007	.001	.001	.0	.0	.005	.0	.0
D	.022	.0	.0	.0	.0	.0	.0	.0	.005	.015	.0	.007	.002	.0	.0	.0	.0	.0	.0
C	.193	.0	.0	.006	.035	.029	.012	.001	.002	.013	.0	.009	.001	.001	.004	.0	.012	.0	.001
V	.363	.004	.0	.022	.144	.061	.004	.036	.004	.011	.0	.079	.007	.004	.032	.0	.032	.0	.0
F	.458	.015	.002	.031	.007	.101	.023	.028	.037	.0	.0	.066	.011	.001	.010	.0	.007	.000	.0
U	.102	.0	.005	.011	.008	.191	.035	.035	.003	.414	.0	.108	.038	.0	.0	.013	.030	.0	.003
T	.097	.005	.0	.014	.002	.051	.013	.008	.008	.133	.0	.005	.001	.0	.006	.0	.006	.0	.001
A	.088	.0	.0	.007	.007	.018	.011	.011	.018	.035	.004	.032	.0	.004	.011	.0	.124	.0	.004
S	.036	.0	.0	.0	.036	.071	.0	.036	.036	.0	.0	.107	.036	.0	.0	.0	.071	.0	.0
M	.160	.021	.0	.021	.011	.085	.021	.032	.064	.021	.0	.064	.085	.0	.0	.0	.032	.0	.0
B	.0	.0	.0	.0	.048	.310	.095	.238	.024	.024	.0	.143	.0	.095	.024	.0	.0	.0	.0
L	.124	.009	.0	.021	.012	.080	.006	.038	.012	.139	.0	.033	.101	.0	.009	.0	.006	.0	.003
O	.333	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Y	.136	.011	.0	.011	.0	.080	.0	.034	.011	.011	.0	.0	.0	.0	.0	.0	.023	.0	.0
RESPONDENT CODES																			
R	.373	.006	.002	.017	.001	.047	.011	.011	.012	.274	.014	.099	.003	.0	.003	.001	.003	.001	.000
W	.026	.0	.0	.001	.013	.293	.066	.017	.014	.248	.047	.105	.001	.003	.003	.004	.013	.0	.001
K	.013	.0	.0	.0	.0	.192	.026	.026	.0	.128	.064	.026	.013	.026	.0	.038	.026	.0	.0
G	.0	.0	.0	.0	.0	.250	.0	.0	.0	.500	.0	.0	.0	.0	.0	.0	.0	.0	.0
J	.173	.006	.002	.019	.007	.112	.046	.016	.009	.323	.027	.125	.005	.0	.003	.006	.006	.0	.001
E	.074	.002	.0	.007	.005	.072	.012	.021	.009	.310	.104	.070	.014	.001	.001	.006	.034	.001	.001
C	.020	.002	.0	.0	.094	.020	.008	.687	.015	.021	.005	.003	.003	.0	.0	.005	.012	.002	.0
Y	.045	.0	.0	.004	.028	.081	.0	.040	.012	.065	.016	.024	.012	.0	.0	.004	.0	.020	.304
F	.313	.016	.0	.031	.0	.078	.031	.031	.094	.094	.0	.047	.031	.0	.0	.0	.0	.0	.0
U	.132	.019	.0	.0	.0	.0	.0	.0	.0	.038	.0	.019	.0	.0	.0	.0	.0	.0	.0
T	.103	.0	.0	.006	.0	.083	.038	.009	.006	.298	.035	.260	.009	.0	.0	.003	.009	.0	.0
A	.114	.0	.0	.007	.004	.025	.007	.018	.004	.096	.029	.018	.393	.0	.0	.0	.125	.004	.0
S	.0	.0	.0	.0	.0	.077	.0	.0	.077	.308	.0	.0	.077	.077	.0	.0	.077	.0	.0
M	.167	.0	.0	.0	.0	.0	.0	.0	.0	.167	.0	.0	.083	.0	.250	.0	.0	.0	.0
B	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
L	.109	.006	.0	.006	.006	.054	.013	.026	.006	.099	.045	.006	.032	.0	.0	.0	.192	.0	.003
O	.097	.0	.0	.032	.032	.065	.065	.032	.016	.242	.032	.065	.016	.0	.0	.048	.145	.0	.0
+	.553	.021	.0	.383	.0	.0	.0	.0	.043	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

TRANSITION MATRIX PROBABILITIES FOR ALL INTERVIEWS WITH OLDER NEGROES

APPENDIX TABLE A11

Following Behavior - RESPONDENT Codes

Initial Behavior	Adequate answer to properly asked question	Inadequate answer	"Don't know" answer	Refusal to answer	Answer to anything other than a correct question	Elaboration	Clarification request	Interaction with a third person	Feedback	Ongoing feedback	Repeated answer	Irrelevant conversation	Suggestion	Polite behavior	Successful interruption	Laugh	Other behavior	End of interview	Interviewer + Respondent
	R	W	K	G	J	E	C	Y	F	U	T	A	S	M	B	L	O	+	SUM
INTERVIEWER CODES																			
Q	.666	.106	.007	.0	.002	.058	.077	.007	.000	.001	.000	.004	.000	.000	.001	.007	.004	.0	0.998
<	.0	.0	.010	.0	.314	.020	.137	.029	.020	.010	.010	.020	.0	.0	.137	.0	.0	.0	1.002
¬	.0	.0	.0	.0	.550	.100	.200	.0	.0	.0	.100	.0	.0	.0	.0	.0	.0	.0	1.000
X	.0	.0	.0	.0	.664	.031	.116	.003	.003	.003	.003	.003	.0	.0	.062	.007	.003	.0	0.997
⋈	.354	.108	.039	.0	.057	.127	.090	.052	.0	.024	.038	.014	.0	.0	.005	.009	.014	.005	1.001
P	.241	.085	.009	.001	.436	.063	.021	.016	.003	.007	.052	.003	.001	.001	.018	.007	.005	.0	1.003
D	.201	.020	.0	.0	.648	.020	.012	.002	.002	.002	.020	.002	.0	.0	.017	.0	.0	.0	0.997
C	.233	.083	.009	.0	.074	.092	.102	.015	.011	.015	.022	.007	.0	.0	.006	.008	.004	.0	1.000
V	.004	.007	.0	.0	.025	.032	.014	.011	.047	.007	.004	.022	.0	.0	.004	.0	.0	.022	1.002
F	.021	.032	.001	.0	.011	.096	.004	.005	.002	.001	.013	.007	.001	.0	.000	.004	.005	.002	1.002
U	.0	.0	.0	.0	.0	.005	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.001
T	.021	.009	.001	.0	.456	.029	.005	.002	.005	.007	.107	.002	.0	.0	.004	.002	.002	.0	1.002
A	.021	.0	.0	.004	.021	.053	.0	.011	.025	.004	.004	.396	.0	.0	.014	.057	.004	.018	1.006
S	.036	.107	.0	.0	.0	.071	.071	.036	.0	.036	.0	.071	.107	.0	.0	.036	.0	.0	1.000
M	.011	.0	.0	.0	.011	.0	.011	.011	.021	.011	.011	.021	.0	.032	.0	.021	.0	.223	1.001
B	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.001
L	.050	.015	.0	.0	.027	.104	.018	.009	.006	.003	.015	.065	.0	.0	.003	.086	.009	.0	1.003
O	.167	.0	.0	.0	.0	.167	.0	.0	.0	.0	.0	.167	.0	.0	.0	.0	.167	.0	1.001
Y	.023	.068	.0	.0	.011	.023	.011	.534	.011	.0	.0	.0	.0	.0	.0	.0	.0	.0	0.998
RESPONDENT CODES																			
R	.0	.0	.0	.0	.0	.097	.002	.006	.000	.0	.001	.005	.0	.001	.0	.010	.001	.0	1.001
W	.0	.0	.0	.0	.0	.086	.007	.014	.0	.0	.001	.006	.001	.0	.0	.027	.001	.001	0.999
K	.013	.0	.0	.0	.0	.218	.064	.038	.0	.0	.0	.013	.026	.0	.0	.051	.0	.0	1.001
G	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.250	.0	.0	1.000
J	.005	.004	.0	.0	.0	.082	.003	.009	.001	.0	.006	.005	.0	.001	.0	.007	.0	.001	1.005
E	.100	.060	.010	.001	.010	.0	.011	.009	.0	.0	.002	.010	.0	.0	.0	.043	.001	.0	1.001
C	.049	.013	.0	.0	.008	.013	.0	.003	.0	.0	.002	.0	.0	.0	.0	.013	.002	.0	1.000
Y	.121	.032	.0	.0	.057	.073	.016	.0	.0	.0	.008	.016	.004	.004	.0	.012	.0	.0	0.998
F	.016	.047	.0	.0	.0	.047	.031	.0	.0	.0	.016	.0	.0	.016	.0	.031	.0	.031	1.001
U	.113	.057	.019	.0	.189	.075	.075	.038	.075	.0	.075	.0	.019	.0	.019	.0	.0	.038	1.000
T	.006	.003	.0	.0	.015	.086	.0	.006	.006	.0	.0	.009	.0	.0	.0	.009	.003	.0	1.002
A	.014	.004	.0	.0	.0	.011	.004	.018	.0	.0	.0	.0	.0	.0	.0	.107	.0	.0	1.002
S	.0	.077	.0	.0	.0	.154	.0	.0	.0	.0	.0	.077	.0	.0	.0	.0	.0	.0	1.001
M	.0	.0	.0	.0	.0	.0	.0	.167	.0	.0	.0	.0	.0	.0	.0	.0	.0	.167	1.001
B	.079	.022	.011	.0	.618	.202	.022	.0	.0	.0	.022	.022	.0	.0	.0	.0	.0	.0	0.998
L	.099	.045	.010	.0	.006	.137	.022	.010	.0	.0	.010	.051	.0	.0	.0	.0	.003	.003	0.999
O	.016	.0	.0	.0	.0	.016	.0	.016	.0	.0	.0	.0	.0	.0	.0	.065	.0	.0	1.000
+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.000

APPENDIX TABLE A12

Following Behavior - INTERVIEWER Codes

Initial Behavior	Correct question (Q)	Incomplete question (<)	Inappropriate question—should have been skipped (¬)	Incorrect question (X)	Repeated question (=)	Nondirective probe (P)	Directive probe (D)	Clarification given (C)	Volunteered information (V)	Feedback (F)	Ongoing feedback (U)	Repeated answer (T)	Irrelevant conversation (A)	Suggestion (S)	Polite behavior (M)	Successful interruption (B)	Laugh (L)	Other behavior (O)	Interaction with a third person (Y)
INTERVIEWER CODES																			
Q	.009	.000	.0	.000	.0	.002	.003	.020	.001	.004	.0	.003	.000	.000	.000	.0	.002	.0	.000
<	.014	.0	.0	.0	.0	.014	.0	.189	.0	.0	.0	.014	.014	.0	.054	.0	.054	.0	.0
¬	.0	.0	.0	.0	.0	.0	.0	.143	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.048
X	.011	.0	.0	.0	.0	.011	.035	.028	.007	.0	.0	.032	.0	.0	.004	.0	.007	.0	.0
=	.007	.0	.0	.0	.0	.021	.0	.048	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
P	.004	.0	.0	.001	.001	.0	.004	.002	.002	.015	.0	.005	.002	.0	.001	.0	.008	.0	.0
D	.026	.003	.0	.003	.003	.0	.0	.0	.0	.049	.0	.010	.003	.0	.0	.0	.010	.0	.003
C	.174	.0	.0	.003	.017	.021	.007	.0	.005	.012	.0	.008	.002	.001	.0	.0	.015	.0	.0
V	.435	.008	.004	.058	.088	.050	.015	.023	.012	.008	.0	.065	.015	.0	.031	.0	.031	.0	.0
F	.553	.011	.004	.040	.008	.084	.020	.028	.037	.0	.000	.061	.011	.001	.011	.0	.005	.000	.001
U	.115	.0	.0	.013	.009	.167	.053	.035	.022	.410	.0	.075	.022	.0	.0	.022	.040	.004	.0
T	.122	.002	.0	.008	.0	.044	.013	.013	.009	.190	.0	.007	.005	.0	.003	.0	.008	.0	.001
A	.153	.0	.0	.014	.005	.047	.009	.014	.009	.028	.0	.019	.0	.005	.005	.0	.209	.0	.0
S	.053	.0	.0	.0	.0	.053	.053	.0	.053	.053	.0	.0	.158	.0	.0	.0	.158	.0	.0
M	.202	.0	.0	.011	.0	.053	.0	.011	.053	.021	.0	.053	.0	.0	.0	.0	.021	.0	.0
B	.030	.0	.0	.0	.0	.242	.121	.182	.030	.121	.0	.121	.061	.0	.061	.0	.0	.0	.030
L	.103	.003	.0	.006	.017	.086	.014	.043	.026	.154	.0	.054	.066	.009	.009	.0	.0	.006	.006
O	.077	.0	.0	.0	.0	.077	.077	.0	.077	.0	.0	.0	.0	.0	.0	.0	.077	.0	.0
Y	.140	.006	.006	.025	.006	.032	.0	.006	.006	.0	.0	.013	.006	.006	.006	.0	.019	.0	.0
RESPONDENT CODES																			
R	.376	.005	.001	.017	.001	.042	.008	.011	.009	.312	.010	.092	.003	.001	.004	.000	.007	.000	.000
W	.028	.0	.0	.0	.011	.355	.055	.013	.007	.235	.037	.099	.003	.0	.004	.004	.020	.0	.0
K	.018	.0	.0	.0	.018	.193	.035	.035	.018	.175	.053	.035	.018	.018	.0	.0	.070	.0	.018
G	.0	.0	.0	.0	.0	.0	.0	.0	.0	.500	.0	.0	.0	.0	.0	.0	.500	.0	.0
J	.178	.003	.001	.008	.003	.098	.033	.018	.012	.384	.020	.118	.009	.0	.003	.003	.010	.003	.001
E	.084	.004	.0	.005	.003	.076	.019	.023	.009	.328	.088	.060	.007	.003	.002	.010	.047	.001	.001
C	.016	.0	.0	.0	.059	.015	.006	.727	.004	.022	.009	.004	.003	.0	.0	.004	.007	.0	.0
Y	.109	.0	.0	.0	.011	.052	.0	.019	.027	.060	.011	.030	.008	.0	.005	.003	.035	.0	.370
F	.183	.033	.0	.017	.033	.067	.033	.033	.017	.050	.0	.067	.017	.0	.017	.017	.050	.017	.017
U	.306	.0	.0	.0	.0	.0	.0	.028	.0	.0	.0	.0	.0	.0	.028	.0	.0	.0	.0
T	.104	.004	.0	.013	.004	.087	.030	.004	.009	.333	.013	.238	.009	.0	.0	.0	.009	.0	.0
A	.063	.0	.0	.006	.0	.006	.006	.006	.012	.056	.044	.0	.462	.0	.006	.006	.169	.0	.006
S	.0	.0	.0	.0	.0	.0	.0	.154	.077	.462	.0	.0	.0	.0	.0	.077	.0	.0	.0
M	.053	.0	.0	.0	.0	.053	.0	.053	.105	.0	.0	.053	.053	.053	.158	.0	.053	.0	.0
B	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
L	.094	.0	.004	.011	.011	.072	.007	.022	.011	.097	.029	.040	.022	.0	.004	.0	.126	.0	.007
O	.034	.017	.0	.017	.0	.102	.034	.034	.0	.203	.0	.0	.068	.0	.0	.017	.203	.017	.0
+	.318	.0	.0	.614	.0	.0	.0	.0	.068	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

APPENDIX TABLE A12

Following Behavior - RESPONDENT Codes

Column codes and descriptions:

- R — Adequate answer to properly asked question
- W — Inadequate answer
- K — "Don't know" answer
- G — Refusal to answer
- J — Answer to anything other than a correct question
- E — Elaboration
- C — Clarification request
- Y — Interaction with a third person
- F — Feedback
- U — Ongoing feedback
- T — Repeated answer
- A — Irrelevant conversation
- S — Suggestion
- M — Polite behavior
- B — Successful interruption
- L — Laugh
- O — Other behavior
- + — End of interview
- SUM — Interviewer + Respondent

Initial Behavior	R	W	K	G	J	E	C	Y	F	U	T	A	S	M	B	L	O	+	SUM
INTERVIEWER CODES																			
Q	.702	.092	.005	.0	.001	.037	.078	.014	.001	.001	.000	.003	.001	.000	.000	.013	.005	.0	0.997
<	.0	.0	.0	.0	.338	.014	.162	.014	.027	.0	.0	.0	.0	.0	.068	.027	.0	.0	1.003
¬	.0	.0	.0	.0	.619	.0	.143	.048	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.001
X	.0	.0	.0	.0	.632	.014	.130	.018	.0	.0	.0	.0	.0	.0	.053	.014	.007	.0	1.003
=	.390	.103	.007	.0	.068	.130	.062	.027	.014	.021	.068	.007	.0	.0	.0	.0	.027	.0	1.000
P	.276	.074	.011	.001	.392	.044	.039	.019	.001	.006	.055	.002	.002	.0	.013	.013	.008	.0	1.001
D	.191	.013	.0	.0	.645	.010	.0	.016	.0	.0	.010	.0	.0	.0	.0	.003	.0	.0	0.998
C	.277	.051	.006	.0	.071	.092	.140	.023	.015	.005	.016	.007	.0	.0	.008	.019	.006	.0	1.001
V	.008	.008	.0	.0	.019	.008	.012	.0	.054	.008	.004	.012	.0	.004	.004	.0	.004	.015	1.003
F	.019	.018	.000	.0	.005	.053	.004	.006	.001	.002	.006	.006	.000	.000	.001	.002	.001	.0	0.999
U	.0	.0	.0	.0	.0	.009	.0	.0	.0	.0	.0	.004	.0	.0	.0	.0	.0	.0	1.000
T	.022	.008	.0	.0	.411	.032	.005	.008	.007	.005	.069	.002	.001	.0	.002	.002	.0	.0	0.998
A	.019	.028	.0	.0	.033	.014	.014	.023	.005	.005	.0	.270	.005	.005	.009	.033	.005	.014	1.004
S	.053	.0	.0	.0	.0	.105	.0	.105	.105	.0	.0	.0	.0	.053	.0	.0	.0	.0	1.002
M	.0	.0	.011	.0	.011	.032	.032	.0	.053	.0	.064	.032	.0	.043	.0	.0	.0	.298	1.001
B	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0.999
L	.054	.034	.0	.0	.034	.074	.017	.020	.009	.0	.023	.034	.0	.0	.0	.091	.006	.003	1.001
O	.0	.0	.0	.0	.154	.077	.0	.0	.077	.0	.0	.0	.0	.0	.231	.0	.077	.0	1.001
Y	.006	.006	.0	.0	.019	.0	.006	.662	.0	.006	.0	.006	.0	.0	.0	.0	.0	.006	0.994
RESPONDENT CODES																			
R	.0	.0	.0	.0	.0	.072	.003	.010	.0	.000	.000	.001	.0	.0	.0	.011	.001	.0	0.997
W	.0	.0	.0	.0	.0	.079	.016	.009	.0	.0	.0	.003	.001	.0	.0	.021	.0	.0	1.000
K	.0	.0	.0	.0	.0	.175	.018	.035	.0	.0	.0	.018	.0	.0	.0	.035	.018	.0	1.003
G	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.000
J	.002	.003	.0	.0	.0	.059	.005	.013	.0	.0	.007	.002	.0	.0	.0	.007	.0	.0	1.003
E	.099	.061	.006	.0	.009	.0	.009	.010	.0	.0	.001	.010	.0	.002	.0	.023	.0	.0	1.000
C	.058	.007	.003	.0	.006	.019	.0	.010	.001	.0	.001	.001	.0	.003	.0	.012	.0	.0	0.997
Y	.092	.027	.003	.0	.041	.030	.019	.0	.0	.0	.008	.011	.003	.005	.0	.016	.003	.003	1.001
F	.033	.100	.0	.0	.050	.050	.017	.0	.0	.0	.0	.0	.0	.017	.0	.0	.0	.067	1.002
U	.250	.056	.0	.0	.056	.028	.056	.0	.028	.0	.111	.028	.0	.0	.028	.0	.0	.0	1.003
T	.017	.009	.0	.0	.026	.065	.004	.009	.0	.0	.0	.0	.0	.0	.0	.009	.004	.0	1.000
A	.044	.006	.0	.0	.0	.025	.006	.019	.0	.0	.0	.0	.0	.0	.0	.050	.0	.0	0.998
S	.0	.0	.0	.0	.0	.077	.077	.077	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.001
M	.158	.0	.0	.0	.0	.053	.053	.053	.0	.0	.0	.0	.0	.0	.0	.0	.0	.053	1.004
B	.070	.0	.0	.0	.421	.211	.123	.018	.018	.0	.035	.035	.035	.018	.0	.0	.018	.0	1.002
L	.137	.054	.014	.004	.014	.072	.047	.029	.0	.0	.014	.032	.0	.004	.0	.0	.022	.0	1.005
O	.034	.017	.0	.0	.017	.017	.017	.051	.0	.0	.0	.017	.0	.0	.0	.068	.0	.017	1.001
+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.000

EXPLANATION OF CODES - PROJECT 45980

Interviewer Only Codes	Explanation of Codes

Q   **(Q): A Proper Question Properly Asked for the First Time**

Code (Q) when the interviewer reads a question from the interview form. To be coded (Q), the question must be read substantially as printed; no key words or concepts which may affect the meaning of the question may be added, omitted, or changed. However, meaningless "spacefillers, " such as "would you say?", which do not change the meaning or clarify a question are not considered an alteration of the question. Word order may be changed if such does not change the meaning or clarify the question. For example:

Printed Question: "Did you work or look for work during the past twelve months?"
Question Asked: "During the past twelve months, did you work or look for work?"

Code (Q) should also be used when a question which was begun earlier but not completed, and hence not coded (Q) at that time, is finally completed.

Code (Q) should not be used when a question which has already been asked is repeated or a question which should be omitted is asked.

Code (Q) is a code for the interviewer <u>only</u>.

<   **<: Partial of Incomplete Question**

Code (<) when only part of a question, correct as far as it goes, is asked. This applies both when the interviewer simply fails to complete the question and when she is interrupted by the respondent. (<) should be coded each time the interviewer asks another part of the question following some other verbal behavior on the part of either the interviewer or the respondent. When the final part of the question is asked, the one that finally completes the question, (Q) should be coded instead of (<). This applies even though the interviewer repeats all prior parts when asking the final part of the question. Example:

If never
completed or
completed
incorrectly
change last
(<) code to
X.

Printed Question: "What is your total income from all sources, including that of you wife?"
As Asked:
Interviewer: "What is your total income from all sources...(<)
Respondent: $5,000.
Interviewer: "...including that of your wife?" (Q)

(<) is a code for the interviewer only.

¬: Inappropriate Question

Code (¬) when the interviewer reads a question which should have been omitted due to a skip pattern. If the interviewer begins to ask an inappropriate question and then changes to the correct question or otherwise does not complete the inappropriate question, do not code (¬) unless the part of the inappropriate question actually asked expresses an idea which can be interpreted as requesting specified information. Examples:

inappropriate   appropriate

"What are your...uh...How much did you pay for utilities last month?"

Do not code (¬).

inappropriate

"Are your living quarters owned...excuse me...?"
Code (¬), because information was clearly requested.

(¬) is an interviewer code only.

X: Question Incorrectly Asked

Code (X) when a question from the interview form is asked in a significantly altered manner. Key words or concepts have been added, omitted or changed and the meaning of the question may be changed. Code (X) also if enough insignificant changes have been made so that the meaning might be confused.

When a question is broken into parts which are supposed to be asked separately, but they are all asked together, (X) should be coded in the space for the first part.

When a partial question (∠) is never completed, (X) should be coded in place of the last (<).

In Section D of UES-III code (X) for any question, except D-10, which is not asked exactly as worded. Example:

Printed Question: "How much, before deductions, did you earn last week from your job?"
Question Asked: "How much did you earn last week from your job?"(X)
Printed Question: "Were you...

Ask   a. An employee of a private employer,
Separately   b. A government employee,
                   c. Self-employed?"

Question as Asked: "Were you an employee of a private employer, a government employee, or self-employed?" (X)

(X) is an interviewer code only.

=
=: Repeat Question

Code (=) if the interviewer repeats a question from the interview form which has already been asked. The repitition need not be in the exact words of the original question, but it must meet the same criteria as a correct question being asked for the first time. No clarification of the original question is permitted.

(=) is an interviewer code only.

*
*: Omitted Question

Code (*) when the interviewer erroneously omits a question from the interview form. (*) represents no interaction and cannot be followed or preceded by any codes except (ꝣ) (explained later).

(*) is an interviewer code only.

H
H: Skip pattern

 : Question properly omitted due to a skip pattern in the interview form as determined by responses to prior questions. (H) represents no interaction and cannot be followed or preceded by anyother codes.

(H) is an interviewer code only.

N
N: Information Obtained from Previous Question

Code (N) when the interviewer omits a question from the interview form because the information called for in the question has already been supplied by the respondent either in answer to a prior question or volunteered. The omission of such questions is discretionary on the part of the interviewer. Also code (N) for questions omitted because the information was obviously obtained prior to the interview;e.g. the respondent's name.

If the interviewer does not ask a required question, but repeats information already obtained from the respondent which fits the question, neither (*) nor (N) should be coded.

To code (N), all information necessary for an adequate response (R) (explained later) must have been previously supplied.

(N) represents no interaction and cannot be followed or preceded by an other codes except (ꝣ) (explained later).

(N) is an interviewer code only.

P

P: Non-Directive Probe

A probe is an additional question supplementing the primary question in order to obtain more or better information. It is a new question formulated by the interviewer rather than a mere repetition of the original question or a clarification of it. A probe differs. from a clarification in that it takes the form of a question or implied question rather than a statement although both may be given in combination. Example:

Printed and Original Question: "How many hours did you work last week on all jobs?"
Repeat Question: "How many hours did you work on all jobs last week?"
Clarification: "What I want is the total number of hours you worked."
Probe: "Is it more or less than thirty hours?"

To code (P), a probe must be non-directive. That is, the interviewer does not suggest a specific answer to the respondent either directly or by including more information in his probe than the respondent has already supplied. Example:

Question: "What did you dislike about your job?"
Response:"The working conditions."
Probe: "What about the working conditions?"

Exception: The interviewer may suggest the answer to the respondent if he suggests all possible or all reasonably possible answers without limiting the choices to some of them. A repitition of a (P) is also coded a (P).

(P) is an interviewer code only.

D

D: Directive Probe

Code (D) for a directive probe. A directive probe is one which suggests possible answers to the respondent either directly or by giving more information than the respondent or the original question has already given. An exception is if all possible or reasonably possible choices are suggested to the respondent. Example:

Interviewer: "Did you usually work full time or part time?"
Respondent: "Well,..uh.."
Interviewer: "Did you work full time?" (D)

One of the two possible choices is suggested to the respondent without the respondent having suggested that "full time" was the correct answer. A repetition of a (D) is also coded (D).

(D) is an interviewer code only.

V

V: Volunteers Information

Code (V) when the interviewer volunteers information (not on request) relevant to the topic of the question or interview. However, the information must not be a clarification of the question. Examples would be statements of the purpose of the study or question and transition statements; e.g. "Now I am going to ask you some questions about your present job."

(V) is an interviewer code only.

Respondent
Only Codes   **Explanation of Code**

R

R: Adequate Response

Code (R) when the respondent gives a response which meets the objectives of a proper question (Q), as stated in the Interviewer's Manual. The answer need not be correct. The fact that incorrect clarification procedes the (R) does not prevent coding (R) as long as the objectives of the (Q) are met. A response which follows a probe may be coded (R) if it answers a prior (Q) rather than the Probe. Example:

Question: "How much do you earn?"
Respondent: "Between $8,000 and $10,000."
Probe: "Can you be more specific?"
Respondent (R): "$9,600."

(R) is coded here because in answer to the probe, the respondent gave a response which meets the objectives of the question.

Only one (R) can be coded following each (Q). Repeat responses should be coded (T) (explained later).

(R) should be coded at the end of a series of inadequate responses (W) (explained later) when the information given in all the responses together provides the equivalent of an adequate response.

(R) is a respondent code only.

W

W: Inadequate Response

Code (W) responses to proper (Q)'s only which are inadequate in that they do not meet the question objectives as stated in the Interviewer's Manual. Such response fail to answer the question as worded or are not specific enough.

A (W) may follow a probe if the inadequate response is to the question rather than the probe.

As many (W)'s as there are inadequate responses may be coded following a Q.

(W) is a respondent code only.

K

K: Don't Know.

Code (K) when the respondent indicates he does not know the answer to a (Q). However, if the respondent then goes on to answer or attempt to answer the (Q), do not code (K). Do not code (K) as a response to a probe unless the response is clearly in terms of the (Q).

(K) is a respondent code only.

G

G: Refusal
Code (G) when the respondent refuses to answer a (Q). The refusal must be verbal and not followed by a response or attempted response to the (Q).

(G) is a respondent code only.

J

J: Response to a Non-Question
Code (J) for a response to anything asked by the interviewer in question form which does not consititue a (Q). Examples are responses to partial questions (◄), inappropriate questions (→), incorrect questions (X), and probes (P) and (D). (J) should also be coded for responses to repeat responses (T) (explained later) when such are used as probes seeking confirmation. Example:

Interviewer: "You said $60?"   (T)
Respondent: "Yes."   (J)

Code (J) should only be used following a probe when the response is directed at the probe rather than at the questions. Example:

Interviewer: "How much do you earn?" (Q)
Respondent: "Between $6,000 and $7,000." (W)
Interviewer: "Can you be more specific?" (P)
Respondent: "No." (J)

(J) is a respondent code only.

E

E: Elaboration
Code (E) when the respondent gives additional information beyond that required for an adequate response (R). However, the information must be relevant to the general area of the question and contribute to an understanding of the response. It must be task-oriented. Typical elaborations will give reasons for the response or give more comprehensive and detailed information than is called for by the question. Examples:

Interviewer: "Did you complete the job training program?" (Q)
Respondent: "No (R), because I joined the Army." (E)
Interviewer: "What kind of work were you doing?" (Q)
Respondent: "I ran a punch press (R). It's a very dull job." (E).

An (E) may precede or follow an (R) or be coded when no (R) appears. In the latter case it may either stand alone or be coded in conjunction with other codes, such as (J) or (W). When it is coded alone or with codes other than (R), the criteria for determining whether or not to code an (E) are the same as when an (R) is present. The coder should decide whether or not the information would be coded (E) if an adequate response were present.

As many (E)'s as are needed may be coded for any one question provided other behavior, either by the interviewer or the respondent, occurs in between each (E). Attitudinal comments;e. g. "That's a hard question, " should be coded (E).

(E) is a respondent code only.

Codes For Both	
Interviewer and Respondent	Explanation of Code

C   C: Clarification and Requests Clarification
     Code (C) may be used for either the interviewer or the respondent, but it is used differently for each.

The respondent may not give clarification himself (such would be considered an elaboration or a (J): Code (C) in the respondent's box only when he asks the interviewer for clarification of a question. Examples of direct requests for clarification are: "Would you repeat that?" "Please explain" "Do you mean..." etc. Note that a request to repeat a question is a request for clarification. Implied requests, such as "I beg your pardon," should also be coded (C). If the respondent repeats all or part of a question, he is showing uncertainty and should be coded (C).

The interviewer, on the other hand, cannot request clarification. Code (C) in the interviewer's box only when she gives clarification, either on request of the respondent or on her own initiative. An interviewer gives clarification when she increases the comprehension of the question, either by rephrasing, explaining, or interpreting the question.

Clarification can be given in the middle of asking a question. In such cases code ($<$ C Q). It may also precede or follow a question.

In response to a request for clarification the interviewer may simply repeat the question. In such cases code (=) instead of (C).

Behavior which appears to be an interviewer request for clarification from the respondent should be coded as a probe.

A clarification is neither correct nor incorrect. All such behavior should be coded (C) regardless of whether it helps or hinders the respondent in meeting the objectives of the question. Examples:

Interviewer: "Do you usually work 35 hours or more a week at this job?"   (Q)
Respondent: "Do you mean always?"   (C)
Interviewer: "I mean what you do most often." (C)

F

F: Feedback
        Code (F) for any behavior on the part of either the inter-
viewer or the respondent which indicates approval, acceptance,
attention, relevancy, understanding, or how well the other
person is doing. Such behavior is only coded (F) if it is not
in response to a request. To be coded (F), the feedback must
come during a break in the interaction, not while the other
person is talking. Examples of feedback are "yes," "I see,"
"uh-huh," "Okay," etc. Such behavior should only be coded (F)
if it is not given as the answer to a question. Responses such
as "yes" to a request for clarification should be coded (C).
"Thank you" should be coded (M) (explained later) rather than (F).
Code (F) only once if no other behavior comes between
successive feedbacks.
(F) is for both interviewer and respondent.

U

U: On-going Feedback
        Code (U) when feedback occurs while the other person
is talking and is not interrupted thereby. The (U) should
be coded for the person who gives it in the box following the
one where the behavior occurring at the time is coded. Code
(U) only once if more than one on-going feedback occurs
while the other person continues talking. Only code a
second (U) if the person giving the feedback has interspersed
some other behavior between his on-going feedbacks. If one
such feedback occurs while the other person has stopped
talking, code that one (F) and consider it a new behavior.

(U) is a code for both the interviewer and the respondent.

T

T: Repeat Response
        Code (T) when either the interviewer or the respondent
repeats a response previously given by the respondent. If
a repeat response is followed by a request for confirmation; e.g.
"you said you worked for three years, is that right?" code
only the (T), not the (P). The respondent's reply should be
coded as (J). A (T) is still coded when the interviewer
summarizes rather than actually repeats the response or if
the interviewer or respondent repeats only part of the response.
When the (T) is followed by a probe other than a request
for confirmation(e.g. "You said you are a programmer. What
kind of work is that?") a (P) should also be coded. The
interviewer may also repeat the respondent's response as a
transition statement to a new question. Such is also coded (T).
Usually, however, the (T) is in the form of a probe and will
be followed by a (J).

A (T) is also coded when the respondent repeats all or part
of his prior response.

To be a (T), the repetition need not be of an (R); it may also
be a repetition of part of an (W) or a (J).

(T) is a code for both interviewer and the respondent.

A

A: Irrelevant
Code (A) when either the interviewer or the respondent makes statements which are clearly irrelevant. They may serve a rapport-building purpose and be personal in nature, rather than task-oriented. They, when viewed in isolation, are irrelevant to the general area of the question.

Totally extraneous questions which seem to come from nowhere or should not have been asked for reasons other than skip pattersn should be coded (A).

Responses, feedbacks, etc, which are in reply to statements coded (A) should also be coded (A) rather than their normal codes. The only exception is laughter (L) (explained later), which should be coded (L) anytime it occurs.

All irrelevancies stated by either party should be coded with a single (A) until the other party speaks.

(A) is code for both the interviewer and the respondent.

S

S: Suggestion
Code (S) when either the interviewer or the respondent suggests a new kind of behavior which will enhance, interrupt, or resume task behavior. Examples:

"Let's sit at the table."
"Can you turn the T.V. down?"
"Why don't you look at your records?"

M

M: Polite Behavior
Code (M) when either the interviewer or the respondent gives polite behavior. Such behavior consists of socially expected courtesies not specifically related to the task and not included in the original question on the interview form. They are the product of manners rather than the interview situation. Examples are comments such as "Thank you" and "Please."

B

B: Interruption
Code (B) for the person who underlinesuccessfully interrupts the other person. The interruption must make the other person stop talking. It may not occur at the end of a sentence or at a pause which might be interpreted as the end of a sentence. An interruption which occurs during the first two words following a pause should not be coded (B). When one person begins to speak while the other person is talking but stops while the original speaker continues, that is simultaneous speech and should not be coded at all.

on-going feedback (U) is the only simultaneous speech which should be coded. When the end of one person's speech overlaps the beginning of the other's, it should be considered a missynchronization and not coded (B).

(B) is a code for both the interviewer and the respondent.

(B) must be followed by some specific behavioral code.

L

L: Laughter
Code (L) when either the interviewer or the respondent laughs, chuckles, snickers, etc. It must be audible and identifiable as some form of laughter.

(L) is a code for both the interviewer and the respondent.

O

O: Other
Code (O) for any behavior which does not fit the above categories. When in doubt about a specific behavior, code (O) and make a note. Do not code "spacefillers" such as "Uh." Code (O) for unintelligible behavior.

(O) is both an interviewer and a respondent code.

Y

Y: Third Person
Code (Y) denotes interaction with a third person. Code (Y) in the respondent's box whenever the respondent is talking to a third person or a third person is talking to either the interviewer or the respondent. If what the interviewer says could be interpreted as directed to the respondent, do not code (Y). In all cases of third person interaction, code (Y) instead of the specific behavior.

Z

Z: To Be Continued
Code (Z) indicates that the behavior associated with the particular question is continued later. Code (Z) in either the interviewer's or respondent's box depending on who initiates the return to the question. It will either go in the last box in which interaction was coded or in the following box (return to the question involved to code the (Z)). No codes follow the (Z). The behavior for the new part of the question should be coded at the end of the code sheet beginning with the box for the person who initiated the return.

Priorities

Priorities
Although each of the above codes applies to distinct behaviors, there is likelihood of overlap and indecision as to which code to apply. If indecision is extreme, code (O) and make a note. Otherwise, the following priorities apply.

A partial repeat question should be coded (P). However, (C) has priorty over (P) if there has been a request for clarification. (P)has priority over (V). Code (F) if there is doubt between (T) and (F). Use (O) sparingly. Meaningless phrases should be ignored unless they affect the interaction sequence, in which case they should be coded (O). If there is doubt following a (T), code (J) rather than (F). When a response such as "Yes" or "No" would be adequate, code (RE) if more information is given.

APPENDIX

SAMPLE CODED INTERVIEW

Behavior Code Assigned*	Interviewer and Respondent Verbal Behavior
Q	I: /Question 8/ I'd like to know how many rooms are in this unit, and I'd like you to count the kitchen but not the bathroom.
R	R: Five, without the bathroom
T	I: Five?
not coded	R: Mmm.
X	I: /Question 9a/ Are your living quarters owned or being bought by you or someone in your household, rented for cash, or occupied for without payment of rent?
J	R: No,...they're being bought by me.
F	I: All right.
H, H	/Questions 9b and 9c were asked above/
Q	I: /2.10/ What are your monthly mortgage payments?
R	R: A hundred and thirty-five.
H, H, H, H	/Questions 11a, 11b, 11c, 11d skipped/
Q	I: /Question 12/ How much did you pay for utilities last month?
L, E, K	R: (Laughs) see...you should have got me on this sooner because I couldn't tell you offhand..I... On the average of....
C	I: Well....what we're interested in is the past month...(long pause) So, let's see, this is the nineteenth...
B, R	R: Make it 40 bucks a month....that would cover everything.
not coded	I: So last month....
not coded	R: On the average
T	I: So last month you paid about 40 dollars?
J, E	R: Well....yeah, yeah, cause the heat is on the budget, even though it was low.....you'd still pay the budget...
T, F	I: You still pay uh that much, huh?
U	R: Yeah.
not coded	I: O.K.

I-1

Behavior Code Assigned	Interviewer and Respondent Verbal Behavior
Q	I: /Q. 13a/ What is the name of the head of this household?
R	R: John Smith (pseudonym)
D	I: S-M-I-T-H?
J	R: Right
Q	I: /Q. 13b/ And what are the names of all other persons who are living here?
R	R: Carolyn Smith
P	I: And Caroly is your...?
J	R: Wife.
T	I: Wife.
Q	I: /Q. 26a/ I have listed John Smith and Carolyn Smith...Have I missed any babies or small children?
R	R: No.
A,L	I: (laughs) Not yeat huh?
A	R: Not yet, no.
F	I: (silence)
Q	I: /Q. 26b/ Any lodger or boarders who live here?
R	R: No
	I: /Q. 26c/ Anyone who usually lives here but is away at present...
J	R: No
Q	I: ...Traveling...
R	R: Nope
	I: ...At school or in the hospital?
J	R: Nope
Q	I: /Q. 26d/ Anyone else staying here?
R	R: Uh-uh (no).
not coded	I: /Q. 16/ What is the date...
A	R: (interrupts) Not unless you want to count the dogs...
A,L	I: No (laughs)...we won't count that one this time.

Behavior Code Assigned	Interviewer and Respondent Verbal Behavior
Q	I: /Q. 16/ What is uh the date of your birth, Mr. Smith?
R	R: January 28, 1941.
T	I: And your wife told me that you were 27?
J, E	R: Right...28 in January.
F	I: All right.
X	I: /Q. 18/ Are you now married...widowed...divorced...separated?
BJ	R: Married.
T	I: Mm-hmm.
Q	I: /Q. 21a/ Did you ever serve in the United States Armed Forces?
R	R: Mm-hmm.
Q	I: /Q. 21b/ When did you serve?
R	R: 59 to 63. June of 59 to June of 63.
F	I: All right.
Q	I: /Q. 22/ Are you now in the armed forces?
R	R: No
Q	I: /Q. 23a/ What is the highest grade of regular school that you have ever attended?
RE	R: 12A....completion high school.
F	I: Mm-hmm.
N,H,H	/Q. 23b skipped/ /Qs. 24 and 25 skipped/
Q	I: /Q. 27/ How many cars or trucks do you have for family use?
R, E	R: One car.
Q	I: /Q. 28a/ What are the monthly payments, other than rents or mortgages on all debts, including loans and installment purchases of cars and furniture?
L,A,W,E	R: (laughs)....you won't believe this....59 a month on the car.
T	I: 59 on the car?
J	R: Yeah.
P	I: Anything else.

Behavior Code Assigned	Interviewer and Respondent Verbal Behavior
Y,E,W	Wife: Sears.
	R: I've got a, we have a revolving charge with Sears, but that's uh that's almost paid and I only pay that $10 a month anyway.
T	I: It's $10 a month and
not coded	R: Yeah.
not coded	I: and...
J,E,Y	R: Well now....it's below a hundred....it's below a hundred.
	Wife: It's only 80 dollars a month.
P	I: So that....right now....what are you paying per month on it, do you know?
J,E	R: I just pay 'em what I feel like....I always double pay or somethin' that's why it's paid off early....
F	I: Mm hmm.
T	R: I mean....I give 'em 10 bucks a month for that.
T, P	I: So say 10 for Sears....anything else?
J	R: No.
F	I: O.K.
H	/Question 28 b skipped/
Q	I: / Q. 29/ What is your telephone number?
R	R: 123-4567.
F	I: O.K.
Q	I: /Begin Section II, Question 1a/ Did you do any work at all last week not counting work around the house?
R	R Uh uh (no).
C	I: By this we mean....are you employed?
E,L	R: Yeah....oh yeah. (laughs) I thought you meant outside, no.
Interviewer coded L, Respondent coded E.	
H	/Question 1b skipped/
Q	I: /Q. 2/ For whom did you work?

Behavior Code Assigned	Interviewer and Respondent Verbal Behavior
R	R: Detroit Police Department.
Q	I: /Q. 3/ Now as to what kind of business or industry is this.
W,Y,C	R: No, uh, I guess it's a business....
	Wife: City official?
	R: It's just a, uh, city employee....uh,
not coded	I: It would be....
not coded	R: I don't know how they classify that.
C,V,L	I: Well....I don't either, but I'll go home and look it up in my manual. (laughs)
Q	I: /Q. 4/ And what kind of work were you doing?
R	R: Patrolman for the Police Department.
X	I. /Q. 5a/ (clears throat) Were you an employee of a private company, business or individual for wages, salary or commission? A government employee? or self-employed in your own business or profession? or farm?
C	R: At any time?
C	I: No...we're speaking of last week.
J	R: No....I work for the city.
F	I: O.K.
N,H	/Questions 5b and 5c skipped/
Q	I: /Q. 6/ Do you usually work 35 hours or more a week at this job?
R	R: Yeah.
Q	I: /Q. 7/ How many hours did you work last week at all jobs?
Y,W,Y,E	Wife: You were sick...
	R: Shoot, I don't know....two days off so
	Wife: yeah, you were sick last week)
	R. Well I worked..uh, I worked, uh, I was off Sunday....I worked uh Monday, uh Monday, Tuesday, and that was it.
	Wife: Then you worked Wednesday and you were off Thursday, Friday, Saturday.
	R: I was off Wednesday and Thursday....I worked Monday and Tuesday and Friday....

Behavior Code Assigned	Interviewer and Respondent Verbal Behavior
P	I: So...could you tell me how many hours that came to?
R	R: 24.
T	I: 24?
VQT	I: /Q 8a./ Now...we're going to ask you: did you lose any time or take any time off last week for any reason such as illness, holiday, or slack work? And you told me that you were off....
BW	R: Well....that was Saturday and Sunday....
	I: Mm hmm.
UF	R: ....previous to Monday and Tuesday
	I: I see.
C	R: So. I don't know...when do you start the week from? Monday or what?
C	I: Well, we're talking about last week, which would be from today, Saturday, back to last Saturday.
R,E	R: Well, I was off Saturday and Sunday.
Q	I: /Q. 8b/ All right. How many hours did you lose ot take off last week?
R,E	R: It would be sixteen--two days.
T	I: Thank you.
Y,L	Wife: (laughs) The first time he take off in a year (laughs).
	R: (laughs)
L	I: We have to... (all laugh and mumble)
E,L	R: I don't take off but what, only... I'll betcha I haven't taken 5 sick days in 4 years, and 2 of them were last week (laughs).
L	I: (laughs)
Q	I: /Q. 9a/ Did you work any overtime or at more than one job last week?
R,E	R: No...no overtime.
H	/Question 9b skipped/
⟨,M,Q	I: /Q. 10/ In the past twelve months, how many weeks did you work either full (clears throat), excuse me, either full time or part time not counting work around the house and we'd like you to include paid vacations and paid sick leave.

I-6

Behavior Code Assigned	Interviewer and Respondent Verbal Behavior
EW	R: (whistles)...well...I get 20 days a year off, that's for vacation. Two ten-day periods a year.
C	I: Well, we'd like to...if that's paid then we want you to include that in the number of weeks that you worked.
LR	R: (laughs) Fifty-two weeks a year, then.
F	I: All right.
C	R: If you include that in your working year.
C	I: As long as it's paid vacation.
JT	R: Yes...it's paid...that's 52 weeks a year then.
F	I: All right.
Q	I: /Q. 11a/ Did you lose any full weeks of work in that past twelve months because you were on layoff from a job or you lost a job?
R	R: Nope.
H	/Question 11b skipped/
Q	I: /Q. 12/ When you were working the past twelve months, did you usually work full time or part time?
R	R: Full time.
	/Begin Section III/
Q	I: /Q. 1a/ During the past five years, did you engage in any kind of activity for which you received money but which you would not normally consider work?
C,L,R	R: You mean did I make a bet that I won...(laughs)...no.
H	/ Question 1b skipped/
Q	I: /Q. 2/ During the past five years did you look for work at any time?
Y,R	(wife laughing in background R: Well...yeah.
VQ	I: /Q. 3/ Now I have some questions about ways you may have looked for work...did you check with the state employment service during the past five years?
R	R: Nope

Behavior Code Assigned	Interviewer and Respondent Verbal Behavior
Q	I: /Q. 4/ Did you (clears throat) apply directly to an employer?
R	R: Right.
Q	I: /Q. 5/ Did you ask your friends or relatives?
R	R: Uh, uh (no).
not coded	(phone rings)
Q	I: /Q. 6/ Did you check the newspapers?
R	R: Uh, uh (no).
Q	I: /Q. 7/ During the past five years did you register with any union?
Not coded	(wife answers phone and begins conversation.)
R,C	R: No..not unless you want to call the DPOA as the union..it's not a
P	I: What is the DPOA, I'm not...
J	R: Detroit Police Officers Association.
T	I: Association?
J	R: Yeah.
P	I: Do you consider that a union?
J,E	R: I'd like to, but it's not.
`	I: O.K
	R: I mean, I'd like it to be that because you got, uh, more power through a union but actually it's not.
U,F,P	I: All right. So...during the past five years you didn't register with a union then?
not coded	R: No
Q	I: /Q. 8/ Did you check with a private employment agency, one supported by fees?
R	R: No
X	I: /Q. 9/ Did you check with organizations such as community action groups?
J	R: Nope.
Q	I: Urban League and welfare agencies?
not coded	R: Nope.
Q	I: /Q. 10/ Did you go to special streets or places where employers come to pick up workers?
R	R: No.

Behavior Code Assigned	Interviewer and Respondent Verbal Behavior
Q	I: /Q. 11a/ Did you use any other way to look for a job in the past five years?
R,E	R: No, I just knew what...well, O.K. well, I was a draftsman before I went in the police department.
F	I: Mm hmm.
E,R	R: and, uh, so...if I didn't like where I was working, I just went somewhere else. Because I was working in an open shop....(I: mm, hmm,) ...in other words...if you worked for Ford, GM, or Chrysler... in their plant...it's a closed shop with the union. If you work in what they call a job shop...you can go from one job shop to another (I: mm, hmm) at will, that's the way they work it.
UF	I: I see.
E	R: Yeah, so in other words, if I didn't think I was getting enough money....I just went down the street to another job shop, that's all.
F	I: Mm, hmm.
E	R: Because there's plenty of work in that.
V	I: But that would have been classified as applying directly to an employer?
JE	R: Right...that's what I told you, yeah.
U,D	I: So that, yeah, other than these....that we have mentioned, you didn't use any other way to...(pause).
	(No answer)
not coded	(Wife talking on phone in background)
H,H	/Questions 11b and 12 skipped/
Q	I: /Q. 13/ Which way of looking for work got you your present job?
R	R: Well...I just went down and applied, that's all.
P	I: Just as...we're speaking of your job at the police department...
B,E	R: Police department, yeah. I didn't go to anybody else...I mean I just went down and appeared directly to the city.

Extra codes T for Interviewer, E for Respondent

F	I: O.K. (clears throat)
Q	I: /Q. 14/ The last time you looked for a job, what was the lowest pay you would have accepted?
E,C	R: Well, let me see. When I started in drafting, I got...well, that's going back farther than five years.... Well...how many years are you going back?

Behavior Code Assigned	Interviewer and Respondent Verbal Behavior
C	I: Well, what we're interested in is the last time you looked for a job.
C	R: Before I went to the police department?
C,P	I: Yeah, it must have been when you went to the police department that you were looking for a job with them...you were, weren't you?
UJ	R: Right
F,P	I: O.K. What was the lowest pay you would have accepted?
W,E	R: Well, I didn't have any choice. Their pay was set. I just...I was making better money as a draftsman.
F	I: Mn, hmm.
E	R: and I took a cut in pay.
P	I: So...why don't you tell me then the amount of pay that they first offered you and obviously...
	R: Well, it was...
	I: Well, and would you have accepted anything lower?
J,E	R: If I wanted that job I would have because I couldn't argue with them--they had a set pay and that was it, and I already took a pay cut to take the job.
F,P	I: Mm, hmm. So, what was the lowest pay that, uh you.
W,E	R: I think they...it was 6400 a year when I started, I think. I think that's about what it was, four years ago...but I'm not positive about it, but I think it was around 6400 a year.
Interviewer U,V,= Respondent not coded	I: All right.
	R: That'd be close.
	I: Now....the question, however, is...the last t me you looked for a job...what was the lowest pay you would have accepted?
F,R,E	R: O.K...make it 6400 a year...that's what I took...
F	I: O.K.
Q	I: /Q. 15a/ Did you complete a job training program in high school, trade school, or junior college?
E,W,E	R: Not in high school. I, I took a a specialty in high school. That was architectural drawing...four years in that. In the service I took a college aircraft electrician....
V	I: Well, we'll get to the one about the armed forces later, but this one is, um.
U,B,E	R: In high school I majored in architectural drawing and building.

I-10

Behavior Code Assigned	Interviewer and Respondent Verbal Behavior
D	I: And you.... they considered that as a job training program?
J,E	R: I don't know if they do or not, it's a technical...I went to Cass Tech, and that's...it's a technical school but, in other words, instead of taking, uh, a basic course, like English and math, and stuff like that... (I: Mm, hmm)...you get an extra on the side, in other words, you get a technical course on the side...(I: Mm, hmm) ...so you're actually carrying more than a normal course.
U,F	I: I see.
	R: Yeah, I..,so...but...if...yeah you could go....
not coded	I: For this purpose it would be...
E	R: In other words if I didn't go to college I would still go into that field anyway.
F	I: Mm--hmm.
E	R: But I still, you know, you'd start down lower without going to college, that's all.
FP	I: Right, O.K., so...we'll say. Yes, since you did...and you completed this?
R	R: Yeah, right.
F	I: Mm, hmm.
T:	I: /Q. 15b/ And the type of work that you were trained for, you said was in archi....
B,T	R: Architectural drawing and building.
Q	I: /Q. 15c/ In what year did you complete the program?
W,E	R Well...uh...I got out of high school in 59. I flunked one course so I didn't graduate...I took the one course in 1963. When I got out of the service (I: Mm, hmm)...a English course.
U,P	I: So...actually it would...is that figure that you completed the program?...
B,R	R: Yeah.... the last subject was 63, right.
F	I: All right.
Q	I: /Q. 16a/ Did you complege a job training course in the armed forces?
R	R: Yeah.
Q	I: /Q. 16b/ What kind of work were you trained for?
R	R: Aircraft electrician.

Behavior Code Assigned	Interviewer and Respondent Verbal Behavior
	(Wife's phone conversation still going on)
Q	I: /Q̄. 16c̲/ And what year did you complete this program?
R	R: 1960
F	I: O.K.
Q	I: /Q̄. 16d̲/ Have you ever started in an apprenticeship program?
R	R: Uh uh (no).
H,H,H	/Q̄uestions 16e, 16f-1, and 16f-2 skipped̲/
Q	I: /Q̄. 17a̲/ Have you ever partic...(clears throat)...participated in any other training program?
R	R: No
H,H,H,H	/Q̄uestions 17b, 17c, 17d, and 17e skipped̲/
Q	I: /Q̄. 18a̲/ During the past twelve months did you receive any of the following kinds of income? Wages, salary, tips, or commission.
RE	R: Just salary from the police department.
Q	I: /Q̄ 18a-2̲/ How much before deductions?
SE	R: I'd have to get that out and look at it. Because, you see, these...in the last four years, they've had two different...uh... salary increases and I've only picked up part of them because you can't draw a full pay until you go in your fifth year, which I won't get until January.
F	I: Uh huh.
ER	R: Well...I worked overtime and everything...I don't know...I guess I made around 8, 81, something like that.
P	I: During the past twelve months?
J	R: Yeah
F	I: All right
CQ	I: /Q̄. 18b̲/ During the past twelve months, did you receive any workmen's compensation?
R	R: No
Q	I: /Q̄. 18c̲/ Any unemployment compensation?
R	R: Nope
Q	I: /Q̄. 18d̲/ Did you, or any member of your family living here receive any of the following: social security,...

Behavior Code Assigned	Interviewer and Respondent Verbal Behavior

R   R: Nope

Q   I: /Q. 18e_/ Other pensions?

R   R: Uh uh (no).

Q   I: /Q. 18f_/ Welfare or public assistance?

R   R: Nope

Q   I: /Q. 18g_/ Rents, including that from roomers or boarders?

R   R: Nope

Q   I: /Q. 18h_/ Interest or dividends?

R,E   R: Yeah...I made interest on money in the bank.

F   I: All right.

Q   I: /Q. 18j_/ Do you have any income or assistance from a source other than those we've already mentioned?

R   R: Uh uh (no).

H   /Question 18j-2 skipped_/

Q,C,T,C   I: /Q. 19_/ About how much was your total income, during the past twelve months, from the sources you have mentioned? Now...in that I'm interested in...ah...your wages (R: No) I: ...that you said were 81 hundred dollars, and the interest.

V,E,R   R: Oh...I didn't make over 30 dollars in interest...8130.

R   I: 8130?

CE   R: Except that she quit working in June if you want to add hers in....or you just talking strictly of mine? She worked six months over the last twelve.

P   I: Well...in...do you consider that part of your total income?

J   R: Yeah...if I add that to hers, I'd have to.

FP   I: All right. Would you like to tell me what she made then?

E   R: She made, I don't know...45 I guess. No...she couldn't have made 45 in six months...she made about...oh, over a twelve month period... what's this October, if I go back...she'd have worked more than six months...three...she worked about eight months, nine months. 3000.

T   I: 3000.

E   R: Ah, maybe 3500 at the most...about 35 hundred.

I-13

Behavior Code Assigned	Interviewer and Respondent Verbal Behavior
T	I: 35 hundred
J	R: Yeah
F,P	I: O.K., so... you consider your total income last year as about 86 hundred and 30 dollars?
not coded	R: 86, I: No... R: No, I'm talking...it'd be... I: Oh...11,600 and $30... R: Right I: Right
E	R: Over twelve months, yeah.
F	I: O.K.
Q	I: /̄ Q. 20a/ What kind of work did you do at your first full time regular job after leaving school?
W,E	R: I went in the service...directly...into the military in 59.
P	I: And after...so it was after you got out of service that you really had you first full time regular job?
J	R: Yeah...we don't count what we do when I went to school...
	I: Right
U,F,P	I: O.K., and what kind of...What was your occupation then?
E,R	R: I was a mechanical draftsman. But that no...that wasn't the first job.
T	I: That wasn't the first job.
E	R: The first job was at St. Johns hospital, and I worked in a shipping and receiving clerk..there.
T	I: You were a shipping and receiving clerk?
J	R: Yeah.
T	I: And uh..you said that was at St. Johns hospital?
J	R: Yeah.

Behavior Code Assigned	Interviewer and Respondent Verbal Behavior
Q,D,Q	I: /̄ Q. 20b and 20c̲/ So, as to what kind of business or industry was that...I think the only thing to say is that it is a hospital. And what were the most important activities or duties?
R	R: I checked in all the uh...checked in all the stuff off the dock...everything that came in. And I had a keep it arranged ..and keep all the paper on it...just what the name implies ...actually.
F,P	I: Mm hmm...Now, this stuff that came in from the docks... was what?...primarily
J	R: Everything they used in the hospital.
P	I: All the hospital supplies?
J	R: Everything...yeah.
not coded	(sound of children in background)
Q	I: /Q̄. 20d-1̲/̄ Were you an employee of private company, business or individualist for wages, salary or commissions?
C	R: When?
C	I: When you were working at St. Johns hospital.
R:	R: I don't know, I guess they're private...yeah.
F	I: Mm-hmm
H,H,H,H	/̄ Questions 20d-2, 20d-3a, 20d-3b, 20d-4 skippe̲d/̄
Q	I: /Q̄20c̲/̄ How long did you aork at that job?
W,E,	R: Two or three moths. I'm not sure...two or three months. It wasn't long because then I went tight into drafting.
P	I: Do you think it was closer to two months or closer to three?
R	R: Three...closer to three
Q	I: /Q̄. 21a̲/̄ What type of work have you done the longest? since leaving school?
E,R	R: (laughs)...I was in the military four years. Now I'll be on this job four years in January...I'm not four year on this one yet.
C	I: Well, if we,if we don't consider the um, service...
T	R: This here...police department

Behavior Code Assigned	Interviewer and Respondent Verbal Behavior
T	R: As a patrolman?
	(no answer)
T	I: /Q. 21b/ And you say that you worked at that...it will be four years in January?
J,E	R: A full four yeah...I'll be starting my fifth year in January.
F	I: All right
not coded	R: Yeah
T	I: /Q. 22/ And that's a city police department, right?
J	R: uh huh (yes).
Q	I: /Q. 23a/ How many years have you lived at your present address?
R	R: How many...let's see...about 17 months.
T	I: O.K., seventeen
H	/Q. 23b skipped/
Q	I: /Q. 24/ How many years have you lived in this city?
R	R: All my life.
all coded H	/Questions 252-h, 26a-h, and 27a-h skipped/
Q	I: /Q 28a/ In what state or country was your father born?
R	T: He was born here, I guess he was born in Michigan... I'm not sure...I know he was born here.
T	I: And you think the state was Michigan?
J	R: Yeah.
Q	I: /Q. 28b/ In what state or country was your mother born?
R,E	R: She was born in Ontario, Canada.
Q	I: /Q. 29a/ Was a language other than English frequently spoken by your parents in your home while you were a child?
W,E	R: I don't know how frequently my father spoke German, when he he felt like it, but outside of that it was mostly English.
P	I: Would you say frequently?
R	R: No, it's not that, it wasn't enough to be frequent.

Behavior Code Assigned	Interviewer and Respondent Verbal Behavior
F	I: O.K.
N	/Question 29b skipped/
	/Begin Section IV/
V,T	I: /Q. 1/ Now, I'm going to ask you some questions about your present job: And this is the job that you are working now as patrolman, is that...
J	R: Yeah
T	I; And you said that you had been working at this job for, it will be 4 years in January.
R	R: Right.
Q	I: /Q. 2/ In addition to that job...how many other employers did you work for last week?
R	R: (laughs) None.
⟨	I; /Q. 3/ How much did you earn last week from your job:
E	R: (long pause) Well, that's hard to tell when you're on salary...
F,P	I: I know it is...
	R: Yeah
	I: But if you could figure it ou, why, we'd appreciate it.
U,E,C	R: Well...let's see it's shift premium when you're working afternoons, so...it...before or after taxes?
C	I: Before
R	R: Before?
C	I: Mm-hmm
R	R: Oh $165...that would be close
F	I: All right
Q	I: /Q. 4a/ Do you usually go to the same address to start each days work?
R	R: Uh-huh (yes)

Behavior Code Assigned	Interviewer and Respondent Verbal Behavior
H	/Question 4b skipped/
Q	I: /Q. 5a/ Do you work within the city limits of Detroit?
R	R: Uh huh (yes)
Q	I: /Q. 5b/ What are the names of the two streets of the intersection nearest to your place of work?
R	R: Woodward and Hancock
Q	I: /Q. 6a/ How do you usually get from home to work?
W	R: Car
P	I: Do you drive alone, or share the driving, or...
E,R,E	R: Well, I drive alone right now because I never know when she's got to go,...but normally, I drive with my partner. We split it up.
C	I: Well, what we're interested in is how do you USUALLY?
T,E	R: Usually I drive...I split the driving with him...he'll drive one day and I'll drive another day.
not coded	I: So that, uh, R: Yeah,
P	I: This is what you would consider a car pool?
J,E	R: Yes,...but just two of us,...that's all
F	I: Yeah
H,H	/Questions 6b-1 and 6b-2 omitted/
Q	I: /Q 7a/ Do you use any other way at least once a week?
R	R: Nope
H,H,H,H	/Questions 7b, 7c-1, 7c-2, and 8 omitted/
Q	I: /Q. 9/ How long does it take to get from home to work?
R,E	R: Ten minutes, if there' no traffic
Q	I: /Q. 10/ What time do you usually get to work?
C,L,E	R: This week? Well, I would say...Ha(laugh)...I'm on shiftwork...

Behavior Code Assigned	Interviewer and Respondent Verbal Behavior
L,C	I: (laughs) I know you are. Well, I would say then... what time do you usually get to work? This week....
W	R: 3 o'clock in the afternoon, 3:10
T	I: 3 o'clock in the afternoon or 3:10?
E,W	R: Between, uh, it varys...depending on traffic...most of the time I'd say from 3:10 to 3:30...anywhere in there.
P	I: Well, they want to know what time you USUALLY get there.
R	R: O.K., 3:15
F,T	I: O.K., and you said that was in the afternoon?
J,Y	R: Uh-huh (yes)
	Wife: Would you like some more pop?
Y,L	I: (laughs) No thank you.
Y	W: Do you want anything
	R: Got any coffee
	W: Yeah, (To I) Would you like some coffee?
Y	I: No, thanks.
	/Begin Section V/
Q	I: /Q. 1a/ Now, I have some questions about your job in general, would you say that you were satisified or disatisfied?
not coded	(dog barking)
R	R: I like it.
Q	I: /Q. 1b/ Would you say very satisified or fairly satisified?
R	R: Fairly
Q	I: /Q. 2a/ What things do you particularly like about your job?
W	R: I like people..that's all
P	I: Anything else?
not coded	(dog barking)
W	R: No..Yeah...I like the guys I work with.
P	I: Anything else?

Behavior Code Assigned	Interviewer and Respondent Verbal Behavior
R	R: Uh—uh (No)
T	I: Now...you mentioned that you liked the...liked meeting people and that you liked your...the people that you work with.
J,E	R: Yes...well, I like the challenge too...I mean it changes from day to day, it's nenver the same thing
Not coded	(Dog barking)
F	I: O.K.
E	R: In other words, in order to do the job and to do it good... it takes a little more than walking into a factory and throwing something on the assembly line
F	I: Mm-hmm
E	R: You gotta use your head in order to make out on the job, you gotta be able to out-think the people on the street, otherwise you're lost. If they out-think you...you're behind.
U,T,P	I: ...would you classify that...you said its a challenge...you classify that as interesting work?
J	R: Sure

(interviewer feedback also coded)

C,Q	I: /Q̄. 2b̄/ Well, now we've got three things that you like about your job...which is the thing that you like the most about your job?
R	R: The challenge...
F	I: O.K.
E	R: The interest in the work.
F	I: All right
Q	I: /Q̄. 3a̅/ What things in particular don't you like about your job?
A	R: Where do you want to start?
L,C	I: (laughter) Well...you just start in and I'll put it down
W	R: Well...there's uh, a lot of it's public attitude...I don't like that. It's not what it should be...I don't like Supreme court decisions...I don't like the way (a local) Court operates.....

Behavior Code Assigned	Interviewer and Respondent Verbal Behavior
V,T	I: Well...that's...I just want to get all of these down here. So you don't like public attitude...
J	R: Right
T	I: You don't like the Supreme...
T	R: Court decisions...
T	I: Court decisions
E	R: In other words...their interpretation of the U.S. Constitution right now is too loose
	I: Mmm—hmm
	R: I don't think they interpret it the way it was originally written...
U,F,V,P	I: O.K., I've got that...now there was something else that you...
T	R: (a local) Court..... .....
F	I: All right.
E,W,E	R: I don't like...um...well a lot of it falls in the same category. To single it out is hard to do. But those are the three biggest things right there. I don't like working overtime and not knowing if I'm getting paid for it and nine times out of ten you don't...
U,F	I: All right
W,E	R: Then I have to...I have to go to court on my own time... and they keep it in a book but you...to get that time back is almost impossible...in other words, it just keeps piling up and being short handed you can't hardly get it back and they don't pay you for it...Like when there was the riot, you just went in and worked. You didn't know if you were getting paid for it or not.
T	I: So...this is putting in your time without getting...
B,E	R: In other words...of I worked in a factory, I wouldn't have walked through the front door without knowing if I was getting paid for it. And...I'd know exactly how much... If I was working Saturday, it's time and a half...if I'm working Sundays it's double time.. and if I'm working a holiday, nine times out of ten a factory pays triple time on a holiday... We don't have this.

Behavior Code Assigned	Interviewer and Respondent Verbal Behavior
F	I: O.K.
Q	I: /Q. 3b/ Well which is the thing you dislike the most about your job?
C,R	R: What do I dislike the most? (Long pause)..I..uh...The attitude of the people in general.
Q	I: /Q. 4/ If you could start all over again, what type of work would you try to get into?
R	R: What I'm doing right now.
<	I: /Q. 5/ How would you compare your present job to all the other jobs that you have had...would you say it is your best job...better than most...about the same...not as good as most...
B,C	R: That all depends on what you mean.
V,<,C	I: Well, let me repeat the question...um...How would you compare your present job to all the other jobs you have had - now this is your comparison...um
E	R: Well, its hard to compare because it's not like any other job. You can't classify this job with anything else...
	I: Um hmm...
	R: It's totally different. I mean I've worked... like I say... I've been in the service...I've worked on planes...I've worked in drafting...I worked at the hospital...
	I: Um hmm...
	R: and you can't compare this to any of them.
U,F	I: Well, I realize that you compare it as the type of thing that you're going to do but...
B,E	R: Because it's changing all the time.
<	I: But, could you com...could you tell me...if you think, um, it's your best job? better than most,
B,C,E	R: Well, how do you mean best? Working conditions or what?
	I: Whichever....
	R: It's cleaner to walk into a drafting room and sit down at a board and draw than it is to go out there in the street and fight with people.

Behavior Code Assigned	Interviewer and Respondent Verbal Behavior
V,F	I: Uh huh (yes)
E	R: But, as far as uh, interest...and the variations this has got more than anything.
P	I: Well why don't you think about, about the good and bad things? of...
F,J	R: Okay,
	I: Of all your other jobs...
	R: I still like this one better.
T	I: So that you would say that this is your best job?
J	R: Yeah
Q	I: /Q. 6/ Thinking ahead to the future, do you expect to have a better job, worse job, or a job about the same as the one you have now?
R,E	R: I expect to stay where I'm at. At least I hope to. I don't know what's going to happen in the future...but, I mean I expect to stay right there, right now.
F,T	I: All right, and do you expect to have...You say that you expect to have the same job?
J	R: Mmm-mmmh
D	I: Do you expect to have a better job?
J	R: No...I expect to move up...I'm not going to stay where I'm at.
F	I: Allright.
Q	I: /Q. 7/ Which is better...a job that doesn't pay enough to live decently, or getting along without a job?
A,W,Y	R: You've gotta be kidding. You've gotta have a job that pays you enough to live on...
	W: You can always go on welfare
=	I: Which is better? A job that doesn't pay enough to live decently or getting along without a job?
E,R	R: Well, that depends on how you look at it...I see some people that don't have a job and they're doing pretty good...They are making out. Now...I'm not lying. So...but to may way of thinking, I'd rather work.

Behavior Code Assigned	Interviewer and Respondent Verbal Behavior
C	I: Well, that's what we're interested in...your way of thinking.
T	R: I'd rather work.
F,P	I: So that you would say that a job...
B,E,	R: The money has go nothing to do with it.. If you're working you gotta be happy...it don't matter how much you make, you gotta work.
	I: Right
	R: I mean...you don't have to have a cadillac as long as you've got food. In other words, you don't have to have a big house, as long as you eat and are healthy... it don't matter.
U,P	I: So that you think that a job that doesn't pay enough to live decently....
B,T	R: Is better than no job at all.
F	I: Okay
Q	I: /Q. 8a/ How do you feel about your life in general? Would you say that you are satisified, or disatisfied?
R	R: Oh, I'm satisifed
Q	I: /Q. 8b/ Would you say very satisified or fairly satisified?
R	R: Oh, very
Q	I: /Q. 8b/ Which is better? A job that doesn't give any respect, or getting along without a job?
C,E,R	R: A job with no respect...or no job at all? Now,...that's a... now that's a trick question...it's gotta be. I still say you should be working. It don't matter, you gotta work.
F	I: Okay.
E	R: How can you even... a janitor...if he's working, he's got respect, right?
C	I: Well, we're interested in who you interpret the questions and...
T	R: I'd rather work
F	I: Okay
E	R: It don't matter what it is...you gotta work, that's all.

Behavior Code Assigned	Interviewer and Respondent Verbal Behavior
Q	I: /Q. 10a/ Please tell me if you agree or disagree with the following statements as they apply to you: Good luck i more important than hard work for sucess.
R	R: Nah
P	I: You disagree?
I	R: Yeah
V,Q,	I: /Q. 10b/ The second one is: People like you dont'a have a very good chance to be successful in life. Do you agree?
C	R: I don't know what the odds are...what are the odds?
C,L	I: I don't know...(laughs)
W,E	R: Anybody can succeed if they work at it...put it that way. You gotta work at it. If you don't work at a succeeding... you're going nowhere, Right?
P	I: So you would say that, that in that particular statement you disagree?
R:	R: Yeah

(Interviewer feedback also coded)

V,Q	I: /Q. 10c/ The third one is: Everytime you try to get ahead, something or somebody stops you. Do you agree or disagree?
W,E	R: Oh, I've been stopped...but, ah it don't make any difference.
P	I: But this question...the statement is: every time...
B,R	R: Not every time, no...
P	I: So, that, would you agree or disagree with that?
T	R: Well, if you say everytime, I've gotta disagree. It can't be everytime...
F	I: All right.
Q	I: /Q. 11/ Which is better? A job that is steady, or getting along without a job?
R	R: One that's not steady.
H,H	/Question 13a, 13b skipped/

Behavior Code Assigned	Interviewer and Respondent Verbal Behavior
Q	I: /Q̄. 14a̅/ As far as you know...are there employers in this city who discriminate against minority groups such as Negroes, or Spanish Americans by refusing to hire or promote them, or in some other way?
K,E	R: I don't know...I can't honestly say
F	I: O.K.
E,K	R: I mean I understand from what I read that people do...but I don't honestly know.
C	I: Well, this is what we're asking as far as you know...
E,T	R: It's an assumption...as far as I'm concerned. I don't know.
F	I: All right.
H,H	/Q̄uestions 14b and 15 skippe̅d̅/
Q	I: /Q̄. 16̅/ What is your social security number?
R	R: 000-00-000
T	I: 000-00-000
J	R: Mm-hmm
F,M,Y,S	I: O.K, fine, thank you very much. That's all there is to it.
	R: All right
	I: You want to click that little button
F	R: Yup

REVISION OF UES II

1a. Did you do any work at all <u>last week</u>, not counting work around the house?	☐ Yes (SKIP TO 2) ☐ No (ASK 1b)
1b. Did you have a job or business from which you were temporarily absent or on lay-off <u>last week</u>?	☐ Yes ☐ No (TERMINATE INTERVIEW)
2. For whom did you work? (NAME OF COMPANY, BUSINESS, ORGANIZATION OR OTHER EMPLOYER)	NAME OF BUSINESS OR EMPLOYER: _____ _____
3. What kind of business or industry is this? (e.g. TV & RADIO MANUFACTURE, RETAIL SHOE STORE, STATE LABOR DEPARTMENT, FARM, etc.)	_____ _____
4. What kind of work were you doing? (e.g. ELECTRICAL ENGINEER, STOCK CLERK, TYPIST, FARMER, etc.)	_____ _____
5. Were you -- (a) an employee of a <u>private</u> company, business, or individual for wages, salary, or commission? (b) a government employee (Federal, State or County)? (c) self-employed in <u>own</u> business, profession, or farm?	☐ Private ☐ Government ☐ Self
6. Do you usually work 35 hours or more a week at this job?	☐ Yes ☐ No
7. How many hours did you work <u>last week</u> at all jobs?	☐ None ☐ 1 to 34 hours ☐ 35 or more hours
8a. Did you lose any time or take any time off last week for any reason such as illness, holiday or slack work? **8b.** How many hours did you lose or take off <u>last week</u>?	☐ Yes (ASK 8b) ☐ No (ASK 9a) _____ hours

9a. Did you work any overtime or at more than one job last week? 9b. How many extra hours did you work?	☐ Yes (ASK 9b) ☐ No (ASK 10) _____ hours (CORRECT 7 IF EXTRA HOURS NOT ALREADY INCLUDED)
10. In the past 12 months, how many weeks did you work either full time or part time (not counting work around the house)? (INCLUDE PAID VACATIONS AND PAID SICK LEAVE)	_____ weeks
11a. Did you lose any full weeks of work in the past 12 months because you were on lay-off from a job or lost a job? 11b. How many full weeks of work did you lose?	☐ Yes (ASK 11b) ☐ No (ASK 12) _____ weeks
12. When you were working in the past 12 months, did you usually work full time or part time?	☐ Full time ☐ Part time
	(GO TO UES III)

Survey Research Center
The University of Michigan

Project Number 45980
Sept. - Nov., 1968

1. Interviewer Name or Label

2. Serial Number of this Interview:

HOUSEHOLD SAMPLE:

3. Segment Number _____   4. Line Number _____

5. Address _____ Detroit

6. RECORD OF CALLS:

Call Number	1	2	3	4	5
Time of Day	a.m. ___ p.m.	a.m. ___ p.m.	a.m. ___ p.m.	a.m. ___ p.m.	a.m. ___ p.m.
Date					
Results					

7. CHECK: ☐ Segment listing sheet is blue. INTERVIEW ONLY IF IT IS A NEGRO HOUSEHOLD.

☐ Segment listing sheet is pink. INTERVIEW AT THIS SAMPLE ADDRESS, NEGRO OR WHITE.

8. NON-RESPONSE FORM (Please fill out if no interview was taken at this address.)

☐ House vacant

☐ Address not a dwelling

☐ No eligible responsent (CHECK ONE BELOW)

  ☐ White household on blue listing sheet

  ☐ No employed males under 65

  ☐ No selection because of Selection Table

☐ No one at home

☐ Respondent absent

☐ Refusal

☐ Other reason for non-response (SPECIFY) _____

_____

_____

HOUSEHOLD LISTING TABLE:

(1.) List Males 18 and older	(2.)* a. Work for pay last wk? b. Temporarily absent or on layoff last week?		(3.) Ages of "yeses" in Col. 2, ages 18-34	(4.) Person Number	(5.) Ages of "yeses" in Col. 2, ages 35-64	(6.) Person Number
	No	Yes ⟶				

* Questions for Column 2:

a. Did _____ do any work at all last week, not counting work around the house?

(IF "NO" TO a.) b. Did _____ have a job or business from which he was temporarily absent or on layoff last week?

USE SELECTION-TABLE COLUMN LETTERED:
(From Segment Listing Sheet)

☐ Younger

☐ Older

SELECTION TABLE:

Number of Eligible Persons	No. of the Selected Person					
	A	B	C	D	E	F
1	1	1	1	1	1	1
2	1	1	2	2	2	2
3	1	2	3	2	3	1
4 and over	1	2	3	4	4	4

155 pgs.
4
× 6.20